



ARC WELDING EQUIPMENT TABLE OF CONTENTS

<i>Description</i>	<i>Page</i>
Welding Process Descriptions	IFC
Table of Contents	1
Arc Welding Equipment Selection Guide	2, 3
Compacts (power source with built-in wire feeder)	
Migmaster 173/203/253.....	4, 5
Migmaster 250	6, 7
Migmaster 275	8, 9
MultiMaster 160 Compact.....	10
MultiMaster 260 Compact.....	11, 12
MultiMaster 300X.....	13, 14
MIG, DC Power Sources, CV & CVCC	
ESAB 353 cv	15
ESAB 353E cv	16
ESAB 453 cv	17
ESAB 453E cv	18
ESAB MultiPower 460.....	19, 20
ESAB MultiPower 460-SE.....	21
ESAB 653cvcc	22
ESAB 653cvcc-SE	23
MIG, DC Power Sources, CVCC Inverter	
MTS-3500i	24, 25
SVI 450i cvcc	26
Power Source Rack System	27
Aristo™ Mig 4600c	48, 49
Aristo™ Mig 5000i	44, 45
Aristo™ Mig U5000i.....	46, 47
Aristo™ SuperPulse	58
Wire Feeders - Semi-Automatic	
Ready-to-Weld Feeder Packages.....	28
DuraDrive 4-30	29, 30
DuraDrive 4-48	31, 32
Mig 4HD & 4HD Dual Wire Feeders	33, 34
Mig 4HD Ultra Pulse	35
MobileFeed 200avs.....	38, 39
MobileFeed 300avs	40, 41
MobileMaster IV	42, 43
Aristo™ Feed 3004, MA6	50, 51
Aristo™ Feed 4804, MA6	52, 53
Aristo™ Feed 3004, U6, U8 Pendant	54, 55
Aristo™ Feed 4804, U6, U8 Pendant	56, 57
Power Supply & Feeder Accessories	
Balanced Boom Assembly.....	36
Hanging Brackets, Carts, etc.	37
Counter Balance Mini-Boom/Mini-Boom.....	59
Mig Welding Guns - Gas-Cooled	
MXL - Mig/Mag Torches	60, 61
Gun Master 250 & 400.....	62, 63

<i>Description</i>	<i>Page</i>
Mig Welding Guns - Gasless	
MT-300GL, MT-400GL, MT-500GL	64
Mig Welding Guns - Water-Cooled	
ST-16, ST-21 & ST-21M.....	65, 66
Water Cooled Installation & Accessories.....	67
Mig Welding Guns - Spool-Gun & Push-Pull	
ST-23A Spool Gun/Mig 28A/MT-250SG.....	68, 69, 70
Mig-41/41A Push-Pull Gun.....	71, 72
Tig/Stick, CC DC & CC AC/DC Power Sources	
LHF 405 Pipemaster	73, 74
MiniArc 150 APS	75
CaddyArc 151i/201i	76, 77
CaddyTig 1500i/2200i.....	78, 79
CaddyTig 2200i AC/DC	80, 81
Caddy Selection Guide	82
TXH Air & Water Cooled Torches	83
Heliarc 161 AC/DC.....	84
Heliarc 252/352 AC/DC	85, 86
Genuine Heliarc Tig Torches	
Heliarc Torch Outfits	87
Heliarc Tig Torch Selection Guide	88
Gas-Cooled Torches:	
HW-24, HW-90, HW-9.....	89, 90, 91
HW-17, HW-26.....	92, 93
Water-Cooled Torches:	
HW-20, HW-18, HW-25, HW-27	94-97
Collets & Collet Bodies	98
Cups.....	99
Back Caps & Insulators.....	100
Power Cable Adaptors, Sheaths.....	100
Heliarc Torch Accessory Kits.....	100
Electrodes.....	101
General Accessories	
Water Circulators & Hoses.....	102
Undercarriages & Truck Kits	103
Twist Lock Cable Connectors	103
Hoses & Fittings.....	103
Ground Clamps, Cable Connectors, Splicers & Lugs, Electrode Holder.....	104
Remote Controls	105, 106
Helmets.....	107
Gloves.....	108
Caps, Coats, Helmets, Pads.....	109
Magnaflex Supplies & Accessories	110, 111
Training/Educational Materials	112
Sales Literature	(03-01-09) ARC-23000A

Arc Welding Equipment Selection Guide

	Mig (GMAW)							Tig (GTAW)				Stick (SMAW)			Remote Control, Voltage	Remote Control, Current	Submerged Arc (SAW)	Arc Gouge (ACAG)
	short arc	spray arc	flux cored	pulse arc	super pulse	induc-tance	slope	DC	AC	touch tig	high freq.	DC	AC	arc force				
Compact Packages (built-in wire feeder)																		
Migmaster 173	●	●	●															
Migmaster 203	●	●	●															
Migmaster 253	●	●	●															
Migmaster 250	●	●	●															
Migmaster 275	●	●	●															
MultiMaster 160	●		●					●		●		●	Auto					
MultiMaster 260	●	●	●	Opt		■		●		●		●	Auto		Opt			
MultiMaster 300X	●	●	●	Opt		■		●		●		●	Auto		Opt			
Power Sources																		
353 cv / 353E cv	●	●	●			●	Opt							●				
453 cv / 435E cv	●	●	●				Opt							●				
Multipower 460 cvcc	●	●	●	Opt		●		●		●		●	●	●	●		■	
Multipower 460 Pulse	●	●	●	●		●		●		●		●	●	●	●		■	
653cvcc / 653cvccSE		●	●			●		●				●	Auto	●	Opt	●	●	
MTS-3500i	●	●	●	Opt		●	●	●		●		●	●	●	●		□	
SVI 450i cvcc	●	●	●	Opt		●	●	●				●	●	●	●		●	
Aristo™ Mig 5000i	●	●	●	●		●						●	●	●	●		●	
Aristo™ Mig U5000i	●	●	●	●		●		●		●	●	●	●	●	●		●	
Aristo™ Mig 4600c	●	●	●	●		●		●		●	●	●	●	●	●		■	
LHF-405								●		■		●	●	●	●		□	
MiniArc 150APS								●		●		●	Auto					
Caddy™ Arc 151i/201i								●		●		●	●	●	●			
Caddy™ Tig 1500i/2200i								●		●	●	●	●	●	●			
Caddy™ Tig 2200i AC/DC								●	●	●	●	●	●	●	●			
Heliarc 161 AC/DC								●	●	●	●	●	●	Auto	●		●	
Heliarc 252 AC/DC								●	●		●	●	●	●	●		●	
Heliarc 352 AC/DC								●	●		●	●	●	●	●		●	
Wire Feeders																		
DuraDrive 4-30	●	●	●	●														
DuraDrive 4-48	●	●	●	●														
Mig 4HD	●	●	●	◆														
Mig 4HD Dual	●	●	●	◆														
Mig 4HD Ultra Pulse	●	●	●	●														
MobileFeed 200avs	□	●	●	□														
MobileFeed 300avs	□	●	●	□														
MobileMaster IV cvcc	□	●	●	□														
Mig 35	●	●	●															
Digimig	●	●	●															
Aristo™ Feed 3004, MA6	●	●	●	●		○						○		○	○	○		○
Aristo™ Feed 3004, U6/U8	●	●	●	●	◆	○		○		○	○	○		○	○	○		○
Aristo™ Feed 4804, MA6	●	●	●	●		○						○		○	○	○		○
Aristo™ Feed 4804, U6/U8	●	●	●	●	◆	○		○		○	○	○		○	○	○		○

Legend: ● Standard feature, best performance ■ Adequate performance □ Limited Applications ◆ Use add-on pendant
○ When used on corresponding Aristo Power Supply

Arc Welding Equipment Selection Guide

	Rated Output			Primary Input ²		Physical			
	rated current ¹ @ duty cycle	current range	max. wire feed speed ipm(m/min)	AC voltage	1 or 3 phase	net wt. lbs (kg)	width in. (cm)	length in. (cm)	height in. (cm)
Compact Packages (built-in wire feeder)									
Migmaster 173	170 A @ 20%	30-170	670	(208)230	1 ph	130 (59)	17 (43)	34 (86)	29 (74)
Migmaster 203	200 A @ 20%	30-200	670	208-230	1 ph	159 (68)	17 (43)	34 (86)	29 (74)
Migmaster 253	250 A @ 20%	40-250	748	208-230	1 ph	208 (94)	17 (43)	34 (86)	29 (74)
Migmaster 250	250 A @ 50%	30-280	650 (16)	208-575	1 ph	210 (95)	19.5 (50)	40 (102)	32.25 (82)
Migmaster 275	250 A @ 60%	30-275	750	208-575	1 ph	210 (95)	19.5 (50)	40 (102)	32.25 (82)
MultiMaster 160	160 A @ 60%	5-160	650 (16.5)	208-230	1 ph	33 (14.8)	9.2 (23)	22.4 (56)	15.4 (39)
MultiMaster 260	260 A @ 50%	35-300	675 (17.3)	208-575	1 ph	250 (112.5)	25.3 (64)	39.5 (100)	33.5 (85)
MultiMaster 300X	300 A @ 40%	35-300	675 (17.3)	208-575	1 ph	250 (112.5)	25.3 (64)	39.5 (100)	33.5 (85)
Power Sources									
353 cv / 353E cv	350 A @ 100%	30-450		208-575	3 ph	331 (150)	18.75 (48)	32.5 (83)	25 (62)
453 cv / 453E cv	450 A @ 100%	45-600		208-575	3 ph	355 (161)	18.75 (48)	32.5 (83)	25 (62)
Multipower 460 cvcc	450 A @ 100%	10-500		208-575	3 ph	322 (146)	18.75 (48)	32.5 (83)	25 (64)
Multipower 460 Pulse	450 A @ 100%	10-500		208-575	3 ph	322 (146)	18.75 (48)	32.5 (83)	25 (64)
653cvcc / 653cvcc SE	650 A @ 100%	55-800		208-575	3 ph	493 (224)	18.75 (48)	32.5 (83)	25 (64)
MTS-3500i	350 A @ 60%	25-450		208-575	3 or 1 ph	101 (46)	11.5 (29)	24.5 (62)	16.4 (42)
SVI 450i cvcc	450 A @ 60%	10-600		208-575	3 or 1 ph	155 (70)	15.25 (39)	23 (58)	15.5 (39)
Aristo™ Mig 5000i	500 A @ 60%	16-500		460	3 ph	145.5 (66)	16 (39.4)	25 (62.5)	20 (49.6)
Aristo™ Mig U5000i	500 A @ 60%	(4)16-500		460	3 ph	152 (69)	16 (39.4)	25 (62.5)	20 (49.6)
Aristo™ Mig 4600c	500 A @ 60%	(4)16-500		460	3 ph	322 (146)	18.8 (48.3)	32.5 (81.9)	25 (62.2)
LHF-405	400 A @ 35%	25-400		230-460	3 ph	474 (215)	20.3 (52)	35 (89)	27 (69)
MiniArc 150APs	150 A @ 60%	5-140		115-230	1 ph	20 (9)	5.75 (15)	15 (38)	10.25 (26)
Caddy™ Arc 151i/201i	150 A @ 25%	4-150		230	1 ph	17 (7.7)	11 (27)	15 (38)	11 (27.5)
Caddy™ Tig 1500i/2200i	150 A @ 35%	3-150		230	1 ph	19.6 (8.9)	11 (27)	15 (38)	11 (27.5)
Caddy™ Tig 2200i AC/DC	200 A @ 25%	3-200		230	1 ph	35 (15.7)	11 (27)	15 (38)	11 (27.5)
Heliarc 161 AC/DC	160 A @ 35%	5-160		208-230	1 ph	52 (24)	8 (20)	14.4 (36)	16.4 (41)
Heliarc 252 AC/DC	280 A @ 40%	5-320		208-575	1 ph	375 (170)	18.75 (46)	32.5 (83)	25 (64)
Heliarc 352 AC/DC	50 A @ 40%	5-400		208-575	1 ph	432 (196)	18.75 (46)	32.5 (83)	25 (64)
Wire Feeders									
DuraDrive 4-30			999 (25.6)	42	1 ph	28 (13)	9 (23)	21 (53)	9.25 (23)
DuraDrive 4-48			800 (20.5)	42	1 ph	30 (14)	9 (23)	21 (53)	9.25 (23)
Mig 4HD			750 (19)	42	1 ph	29 (13.5)	9 (23)	21 (53)	9.25 (23)
Mig 4HD Dual			750 (19)	42	1 ph	58 (27)	14 (36)	22 (55)	14 (36)
Mig 4HD Ultra Pulse			750 (19)	42	1 ph	29 (13.5)	9 (23)	21 (53)	9.25 (23)
MobileFeed 200avs			800 (20)	VDC _{arc}	Arc Voltage	26 (11.8)	6.8 (17.1)	18.5 (47)	14 (35.6)
MobileFeed 300avs			800 (20)	VDC _{arc}	Arc Voltage	32 (14.5)	8.6 (21.7)	20.7 (53)	17.2 (44)
MobileMaster IV cvcc			800 (20)	VDC _{arc}	Arc Voltage	26 (12)	10 (25)	14 (36)	30 (76)
Mig 35			999 (25)	115	1 ph	43 (19)	13 (33)	18.5 (47)	16.5 (42)
Digimig			999 (25)	115	1 ph	46 (21)	13 (33)	18.5 (47)	16.5 (42)
Aristo™ Feed 3004, MA6			985 (25)	42	1 ph	35.3 (16)	11 (26.5)	22 (56)	14 (35)
Aristo™ Feed 3004, U6/U8			985 (25)	42	1 ph	35.3 (16)	11 (26.5)	22 (56)	14 (35)
Aristo™ Feed 4804, MA6			985 (25)	42	1 ph	46.3 (21)	11 (26.5)	22 (56)	14 (35)
Aristo™ Feed 4804, U6, U8			985 (25)	42	1 ph	46.3 (21)	11 (26.5)	22 (56)	14 (35)

NOTES: ¹ Rated Output is based on 60 Hz power. Ratings for 50 Hz may be lower. Refer to individual product pages for details.

² Refer to individual product pages for additional details.

Industrial Ready-to-Weld Mig Package



- PSD™ Technology - excellent welding performance for single phase machines
- Easy change of polarity - it may be used with both conventional solid wire and self-shielding cored wire
- Easy setting of welding parameters - welding machines for light industrial shops
- Spot Time – Built-in standard
- Burn-Back – Built-in standard
- ESAB MX Torches™ - designed to provide the utmost in convenience and versatility
- Spool Gun Control - Standard on the Migmaster 203 & 253 with gun-on-demand



The ideal welding machine for every light industrial shop that wants rugged, simple equipment to do welding jobs of high quality. The Migmaster® 173/203/253 are step regulated welding power sources for MIG/MAG welding. Designed for medium and light-duty applications. A built-in wire feeder makes them perfect, practical solutions for fabricators, vehicle repair shops and light production users.

MIG/MAG welding

Migmaster can be used with both conventional solid wire, cored wire and self-shielding (Gasless) cored wire. It is designed for welding steel, stainless steel and aluminum.

Wire diameters from .030" (.6mm) up to .045" 1.2mm) can be used depending on model.

Easy to use

The PSD™ Technology improves welding when CO₂ or Ar/CO₂ gas mixture is used. The units are each equipped with a multi-step voltage switch and wire speed control for easy setting of welding parameters.

Units are fan-cooled and equipped with thermal over-load protection.

The Migmaster 173/203/253 can also be fitted with optional digital meter kit for precise measurement of welding parameters.

PSD™ Technology

Although the Migmaster 173/203/253 are single phase units, Power Smoothing Device™ gives them excellent welding performance in straight CO₂ as well as mixed gas. PSD™ Technology provides the same smooth welding current normally only experienced on 3-phase machines.

ESAB MXL™ Torches

Equipped with ESAB MXL torches featuring enhanced gas-cooling and ergonomic handles. Features spring loaded contact pins in the central connector to eliminate any possibility of pin misalignment.

Optimum cooling of the torches gives extended life time of the goose necks and the wear parts. You can choose gas nozzles in 3 different versions - standard, straight and conical. This provides maximum flexibility and optimum life.

Instruction Manual0349301083
 Service Manual.....0349300050
 Sales Literature(03-01-09) ARC-23180

Technical data	Migmaster 173	Migmaster 203	Migmaster 253
Mains voltage , V, Hz	(208)230Vac 1ph 50/60 Hz.	208/230Vac 1ph 50/60 Hz.	208/230Vac 1ph 50/60 Hz.
Primary input voltage and current at 20% rated load	28A	41.0/37.0A	53.1/48.0A
Rated load at 20% duty cycle, A	170	200	250
30% duty cycle, A	139	163	200
60% duty cycle, A	98	115	140
Setting range (DC) , A/V	30 - 170	30 - 200	40 - 250
Open circuit voltage , V	19.5 - 35.5	17.5 - 33	19.5 - 42.5
Power factor at maximum current	0.9	0.83	0.92
Efficiency at maximum current, %	60	60	60
Wire feed speed, IPM (m/min)	39 - 670 (1.0 - 17)	39 - 670 (1.0 - 17)	74 - 748 (1.9 - 19)
Wire diameter, Fe, Ss	.023" - .030" (0.6 - 0.8 mm)	.023" - .040" (0.6 - 1.0 mm)	.023" - .045" (0.6 - 1.2 mm)
C	.030" (0.8 mm)	.030" - .040" (0.8 - 1.0 mm)	.030" - .045" (0.8 - 1.2 mm)
Al	.040" (1.0 mm)	.040" - 3/64" (1.0 mm - 1.2)	.040" - 3/64" (1.0mm - 1.2)
Burnback time, sec. (adj.on PCB)	0.02 - 0.25	0.02 - 0.25	0.02 - 0.25
Spot welding, sec.	0.2 - 2.5	0.2 - 2.5	0.2 - 2.5
Voltage steps	8	12	12
Dimensions LxWxH, Inches (cm)	34x17x29 (86x43x74)	34x17x29 (86x43x74)	34x17x29 (86x43x74)
Weight, Lbs. (kg)	130 lbs. (59kg)	159 lbs. (68kg)	208 lbs. (94kg)
Operating temperature, °C	-10 to +40	-10 to +40	-10 to +40
Enclosure class	IP 23	IP 23	IP 23
Application classification	S	S	S

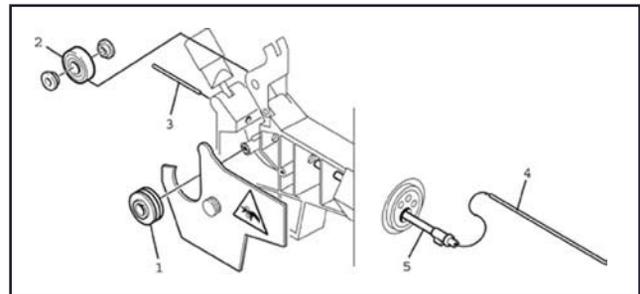
Wear Parts

Wire Dia.	Wire type	Item 1 Drive roll	Item 2 Pressure roll	Item 3 Inlet nozzle	Item 4 Insert tube	Item 5 Outlet nozzle	Groove type
.023/.030 (0.6/0.8)	Fe, Ss, C	0367556001	0455907001	0466074001	0455889001	0455886001	V
.030/.040 (0.8/1.0)	Fe, Ss, C	0367556002	0455907001	0466074001	0455889001	0455886001	V
.040/.045 (1.0/1.2)	Fe, Ss, C	0367556003	0455907001	0466074001	0455889001	0455886001	V
.040/.045 (1.0/1.2)	Al	0367556004	0455907001	0466074001	0455894001	0455885001	U

C=cored wire

Ordering Information

- Migmaster 173, MXL 200 10 ft. Package* 0558005173
- Migmaster 203, MXL 200 13 ft. Package*0558005174
- Migmaster 203, MXL 200 13 ft., MT-250SG
Pool Gun Package*0558005368
- Migmaster 253, MXL 270 13 ft. Package**0558005370
- Migmaster 253, MXL 270 13 ft., MT-250SG
Pool Gun Package** 0558005371



Wear Parts - Migmaster 173, 203 & 253

Optional Accessories

- Digital Meter Kit0349307620
- Spool Spacer - use for 8 in. (20.3 cm) diameter spools 17511
- Spool Spacer - use for 10 in. (25.4 cm) diameter spools 34330
- Primary Extension Cord (25 ft.) 50 amp 37833
- Gas Meter (measures gas flow at the gun) 19043
- Output Power "Tee" connector - 1 male, 2 female 13792804
- Dual Cylinder Kit 0349309312

Delivery Content

* **Migmaster 173/203; MXL 200** - .030 in. (0.8mm), .023 in. -.030 in. (0.6-0.8) drive roll, 10ft. mains cable with plug, 10ft. work cable with clamp, R-33-FM580-HB regulator/flowmeter, 5ft. gas hose, undercarriage, cylinder tray and chain, instruction manual.

** **Migmaster 253; MXL 270** - .030 in. (0.8mm), .023 in. -.030/.035 in. (0.6-0.8/0.9) drive roll, 10ft. mains cable with plug, 10ft. work cable with clamp, R-33-FM580-HB regulator/flowmeter, 5ft. gas hose, undercarriage, cylinder tray and chain, instruction manual.

Industrial Ready-to-Weld Mig Package Migmaster® 250

- Rated 250 amps at 50% duty cycle
- DC welding output from 30 to 280 amps (24 ga >1/2")
- 24 overlapping heat (voltage) steps for accurate fine tuning
- Feeds wire from 20 to 650 ipm; pulse width modulated, solid state speed control
- Built-in spool-on-gun control

Ordering Information

Migmaster® 250 Packages

Each of the following packages includes power source with built-in wire feeder, factory-installed undercarriage and cylinder rack, GM-250cc Mig gun with .035 in. and .045 in. accessories, dual groove (.035 in. – .045 in.) feed roll, gas regulator with adjustable flowmeter, 6 ft. gas hose, 15 ft. work cable and clamp, 8 ft. primary input cable with plug, 10 lb. sample of .035 ESAB Spoolarc 87HP Hi Dep III welding wire, and an ESAB Mig Welding Handbook.

Migmaster® 250 Package w/12 ft. GM-250cc Torch/Argon
208/230/380/400/460/575 vac, 1 phase, 50/60 Hz ... 604563
208/230 vac, 1 phase, 50/60 Hz 604560
Migmaster® 250 Package w/15 ft. GM-250cc Torch/Argon
208/230/380/400/460/575 vac, 1 phase, 50/60 Hz ... 604570
208/230 vac, 1 phase, 50/60 Hz 604561
Migmaster® 250 Package w/12 ft. GM-250cc Torch/CO₂
208/230/380/400/460/575 vac, 1 phase, 50/60 Hz 35763
208/230 vac, 1 phase, 50/60 Hz 35678
Migmaster® 250 Package w/15 ft. GM-250cc Torch/CO₂
208/230/380/400/460/575 vac, 1 phase, 50/60 Hz 37926
208/230 vac, 1 phase, 50/60 Hz 37925

Migmaster® 250 Packages with Spool-On-Gun/Argon

Spool-On-Gun Packages also include the indicated spool gun and all components necessary to install it on the Migmaster® 250. The spool gun is set up to run 3/64 in. wire.

Migmaster® 250 Package w/12 ft. GM-250cc Torch and MT-250SG
208/230/380/400/460/575 vac, 1 phase, 50/60 Hz .....37687
208/230 vac, 1 phase, 50/60 Hz 37685
Migmaster® 250 Package w/15 ft. GM-250cc Torch and MT-250SG
208/230/380/400/460/575 vac, 1 phase, 50/60 Hz 37688
208/230 vac, 1 phase, 50/60 Hz 37686
Migmaster® 250 Package w/12 ft. GM-250cc Torch and ST-23A
208/230/380/400/460/575 vac, 1 phase, 50/60 Hz .....37691
208/230 vac, 1 phase, 50/60 Hz 37689
Migmaster® 250 Package w/15 ft. GM-250cc Torch and ST-23A
208/230/380/400/460/575 vac, 1 phase, 50/60 Hz 37692
208/230 vac, 1 phase, 50/60 Hz 37690

Instruction Manual.....	F-15-087
Sales Literature	(03-01-09) ARC-23040



Shown with optional Spot/Stitch/Anti-Stick Module and Digital Meter Module

Migmaster® 250 Package for use with MIG-41A Push-Pull Gun

Push-Pull Ready Package is set up to accept the Esab MIG-41A Push-Pull gun (order gun separately)

Migmaster® 250 Package w/12 ft. GM-250cc Torch w/ Push-Pull Module Installed

208/230 vac, 1 phase, 50/60 Hz (SCO)0588001145

Specifications

Rated DCCV Output (10 min base)

50% duty cycle, 60 Hz Input.....	250 amps @ 27 vdc
60% duty cycle (NEMA Class I), 60 Hz Input...	225 amps @ 29 vdc
40% duty cycle, 50 Hz Input.....	250 amps @ 27 vdc

Output Current Range.....	30-280 amps
Open Circuit Voltage.....	55 vdc

Primary Input Voltage & Current

@ 250 amp rated load, 50/60 Hz, 1 phase	
208/230/380/400/460/575 vac.....	71/62/37/36/31/25 amps

Wire Feed Range.....	20-650 ipm (0.5-16.3 m/min)
Net Weight.....	210 lbs. (95 kg)
Shipping Weight.....	220 lbs. (100 kg)
W x L x H.....	19.5 in. (50 cm) x 40 in. (102 cm) x 32.25 in. (82 cm)



Table 1. Drive Roll & Guide Tube Selection

Use for: Migmaster 250

Wire Diameter	Description	Drive Roll P/N	Qty	Outlet Guide	Qty	Inlet Guide	Qty
.023 in. (0.6 mm)	V-Solid	21155	1	21163	1	23612461**	1
.030 in. (0.8 mm)	V-Solid	21155	1	21164	1	23612461**	1
.035 in. (0.9 mm)	V-Solid	21156**	1	21165**	1	23612461**	1
.045 in. (1.2 mm)	V-Solid	21156**	1	21165**	1	23612461**	1
.052 in. (1.4 mm)	V-Solid	21157	1	21166	1	23612461**	1
1/16 in. (1.6 mm)	V-Solid	21157	1	21166	1	23612461**	1
.035 in. (0.9 mm)	U-Soft	21158	1	21167*	1	23612461**	1
3/64 in. (1.2 mm)	U-Soft	21159	1	21168*	1	23612461**	1
1/16 in. (1.6 mm)	U-Soft	21159	1	Not Required	1	23612461**	1
.030 in. (0.8 mm)	K-Cored	21160	1	21164	1	23612461**	1
.035 in. (0.9 mm)	K-Cored	21160	1	21165	1	23612461**	1
.045 in. (1.2 mm)	K-Cored	21161	1	21165	1	23612461**	1
.052 in. (1.4 mm)	K-Cored	21161	1	21166	1	23612461**	1
1/16 in. (1.6 mm)	K-Cored	21161	1	21166	1	23612461**	1
5/64 in. (2.0 mm)	K-Cored	21162	1	21166	1	23612461**	1

* Requires support tube 21169. ** Included with unit.

Optional Equipment

- Spot/Stitch/Burn Back Plug-in Module 32858
- Digital Meter Plug-in Module 32857
- Spool Spacer - use for 8 in. (20.3 cm) diameter spools 17511
- Spool Spacer - use for 10 in. (25.4 cm) diameter spools..... 34330
- Drive Rolls and Guide Tubessee Table 1
- GM-250cc Contact Tips, Liners and Nozzles see under Mig Gun Accessories
- Auto FanTM Kit 16781
- ST-23A Spool Gun 19164
- MT-250SG Spool Gun (Must Use Adaptor) 36779
- MT-250SG Spool Gun Adaptor 36833
- Primary Extension Cord (25 ft.) 50 amp..... 37833
- Gas Meter (measures gas flow at the gun)..... 19043

Industrial Ready-to-Weld Mig Package Migmaster® 275

- More power for those tough jobs
- Rated 275 amps at 40% duty cycle - 200 amps continuous 100%.
- DC welding output from 30 amps to 300 amps max - new heavy plate parameters 5/8" and above.
- 24 overlapping heat (voltage) steps for accurate fine tuning.
- Flat and Slope taps for accurate fine tuning of short arc parameters for reduced spatter.
- Feeds wire from 40 to 750 ipm; pulse width modulated, solid state speed control
- Solid State contactor control for high reliability under repetitive short cycle welds.
- Toolless polarity change
- NAS gun connection with built-in torch wrap.
- Built-in spool-on-gun control.

Ordering Information

Migmaster® 275 Packages

Each of the following packages includes power source with built-in wire feeder, factory-installed undercarriage with cylinder rack, GunMaster NAS Mig gun with .035 in. and .045 in. accessories, dual groove (.035 in. – .045 in.) feed roll, R-33 flowmeter-regulator, 6 ft. gas hose, 15 ft. work cable and clamp, 8 ft. primary input cable with plug, 10 lb. sample of .035 ESAB Spoolarc 87HP welding wire, and an ESAB Mig Welding Handbook.

Migmaster® 275 Package w/12 ft. GM-250 NAS Torch/Argon	
208/230 vac, 1ph, 50/60 Hz	0558008708
208-575 vac multi-voltage*, 1ph, 50/60 Hz	0558008709
Migmaster® 275 Package w/15 ft. GM-250 NAS Torch/Argon	
208/230 vac, 1ph, 50/60 Hz	0558008707
208-575 vac multi-voltage*, 1ph, 50/60 Hz	0558008710
Migmaster® 275 Package w/15 ft. GM-400 NAS Torch/Argon	
208/230 vac, 1 phase, 50/60 Hz	0558008711
Migmaster® 275 Package w/o Torch/Argon	
208/230 vac, 1 phase, 50/60 Hz	0558008714

Migmaster® 275 Packages with Spool-On-Gun

Spool-On-Gun Packages also include the indicated spool gun and all components necessary to install it on the Migmaster® 250. The spool gun is set up to run 3/64 in. wire.

Migmaster® 275 Package w/15 ft. GM-250 NAS Torch and MT-250SG / Argon	
208/230 vac, 1 phase, 50/60 Hz	0558008712
Migmaster® 275 Package w/15 ft. GM-250 NAS Torch and ST-23A / Argon	
208/230 vac, 1 phase, 50/60 Hz	0558008713

*Multi-Voltage model is equipped with 208/230/380/400/460/575 vac selections.

Instruction Manual	0558008552
Sales Literature	(03-01-09) ARC-23244



Special Order

Migmaster® 275 for use with MIG-41A Push-Pull Gun
Push-Pull Ready console is set up to accept the Esab MIG-41A Push-Pull gun (order gun, gun fittings and package accessories separately)

Migmaster® 275 console with Push-Pull Module Installed

208/230 vac, 1 phase, 50/60 Hz	0558008621
208-575 vac, 1 phase, 50/60 Hz	0558008622

Specifications

Rated DCCV Output (10 min base)	
100% duty cycle, 60 Hz Input	200 amps @ 27 vdc
60% duty cycle (NEMA Class I), 60 Hz Input...	250 amps @ 29 vdc
40% duty cycle, 50 Hz Input	275 amps @ 27 vdc
Rated Output Current Range.....	30-275 amps
Open Circuit Voltage.....	55 vdc
Primary Input Voltage & Current	
@ 250 amp rated load, 50/60 Hz, 1 phase	
208/230/380/400/460/575 vac.....	71/62/37/36/31/25 amps
Wire Feed Range	20-750 ipm (0.5-16.3 m/min)
Net Weight.....	210 lbs. (95 kg)
Shipping Weight.....	220 lbs. (100 kg)
W x L x H.....	19.5 in. (50 cm) x 40 in. (102 cm) x 32.25 in. (82 cm)

Table 1. Migmaster 275 System - Wear Part Selection Guide

WEAR PARTS	GUNMASTER 250			WIRE FEEDER			
	Wire Size	Contact Tip Std Duty	Contact Tip Heavy Duty	Liner *	DRIVE ROLL	Groove Type	OUTLET GUIDE	INLET GUIDE
.023" (0.6MM) Hard	20543		0558001675	0558008700	V- Solid	0558008651	23612461
.030"(0.8mm) Hard	20544	0558002367	37031	0558008700	V- Solid	0558008651	23612461
.035" (0.9mm) Hard	996995	0558002368	37032	0558008536	V- Solid	0558008650	34615
.040" (1.0mm) Hard		0558002369	37032	0558008536	V- Solid	0558008650	34615
.045" (1.2mm) Hard	37290	37286	37032	0558008536	V- Solid	0558008650	34615
.035" (0.9mm) Cored	996995	0558002368	37032	0558008540	K- Cored	0558008650	34615
.045" (1.2mm) Cored	37290	37286	37032	0558008540	K- Cored	0558008650	34615
.052" (1.4mm) Cored	2075349	17778	37033	0558008541	K- Cored	0558008649	0558001758
.062" (1.6mm) Cored	996997	37291	37033	0558008541	K- Cored	0558008649	0558001758
3/64" (1.2mm) AL	996999	17765	37034**	0558008538	U - Soft	0558008654	23612461
1/16" (1.6mm) AL		948835	37040**	0558008538	U - Soft	0558008654	23612461

* All Liners supplied 15 ft. and must be trimmed to fit the gun per instructions.

** Requires Jumper Liner Sleeve 0558003050

Bold indicates "as supplied from factory".

GUNMASTER-250 STANDARD DUTY NOZZLES & TIP ADAPTER			w/ Std Contact Tips	w/ HD Contact Tips
3/8" Nozzle	0558001609	COPPER	Flush with nozzle	Recessed 1/8" into nozzle
1/2" Nozzle	0558001612	COPPER	Recessed 1/8" into nozzle	Flush with nozzle
1/2" Nozzle	0558001611	COPPER	Flush with nozzle	Extends 1/8" out of nozzle
1/2" Nozzle	0558001613	COPPER	Extends 1/8" out of nozzle	Extends 1/4" out of nozzle
5/8" Nozzle	0558001614	COPPER	Flush with nozzle	Extends 1/8" out of nozzle
5/8" Nozzle	0558001615	COPPER	Extends 1/8" out of nozzle	Extends 1/4" out of nozzle
SPOT Nozzle	0558001602	BRASS	Recessed 3/8" into nozzle	Recessed 3/8" into nozzle
Tip/Nozzle Adapter	0558001608	BRASS		
GUNMASTER-250 HEAVY DUTY NOZZLES & TIP ADAPTER			w/ Std Contact Tips	w/ HD Contact Tips
5/8" Nozzle	0558001599	COPPER	Recessed 1/8" into nozzle	Flush with nozzle
5/8" Nozzle	0558001600	COPPER	Recessed 1/4" into nozzle	Recessed 1/8" into nozzle
5/8" Nozzle	0558001598	COPPER	Flush with nozzle	Extends 1/8" out of nozzle
SPOT Nozzle	0558001602	BRASS	Recessed 3/8" into nozzle	Recessed 1/4" into nozzle
Tip/Nozzle Adapter	0558001888	BRASS		

Optional Equipment

- Spot/Stitch/Burn Back Plug-in Module0558008623
- Digital Meter Plug-in Module0558008585
- Spool Spacer - use for 8 in. (20.3 cm) diameter spools 17511
- Spool Spacer - use for 10 in. (25.4 cm) diameter spools..... 34330
- Drive Rolls and Guide Tubessee Table 1
- GunMaster Contact Tips, Liners and Nozzles see under Mig Gun Accessories
- Auto FanTM Kit16781
- MT-250SG Spool Gun 36779
- ST-23A Spool Gun (must use adapter below) 19164
- ST-23A Spool Gun Adaptor37301
- Primary Extension Cord (25 ft.) 50 amp..... 37833
- Gas Meter (measures gas flow at the gun)..... 19043



Professional Ready-to-Weld Multi-Process Package MultiMaster® 160

- Multi-process - easy to select Mig, Tig, or Stick
- DC welding output from 20 to 160 amps; rated 160 amps at 60% duty cycle
- Adjustable Hot Start feature for Stick mode
- Built-in arc force & anti-sticking
- Carry strap for portability
- Portable - carry it right to the job site - only 33 lbs.
- Touch Tig™ Start capability

Ordering Information

MultiMaster® 160 cvcc Multi-Process Packages

MultiMaster packages listed below include power source with built-in wire feeder with .030/.035 drive roll, primary input cable, welding gun, work cable with clamp, FREE #10 spool of .030 Coreshield® 15 wire, and 1lb. sample 6013LV 1/8" stick electrodes.

MultiMaster® 160 w/13 ft. MXL 200	0558002772
MultiMaster® 160 w/13 ft. MXL 200 & Stinger.....	0558002773
MultiMaster® 160 w/13 ft. MXL 200 & Stinger/HW-17/Reg.....	0558002774

Optional Equipment

MultiMaster® 160 Options & Accessories

Replacement Work Cable 10 ft.....	0369857881
Electrode Holder and Work Cable Kit 25mm 10 ft.	0349501078
Replacement AF-1 Electrode Holder only	882F25
HW-17V 25 ft. w/25mm Connector	0558002690
HW-17 Accessory Kit	999126
R-33 FM 580 Reg/Flowmeter	21557
Primary Extension Cord (25 ft.) 50 amp	37833
Feedroll 023/030 V for Hard Wire.....	21155
Feedroll 030/030 Serrated for Core Wire	21160
MXL 200cc 10 ft. (3m) x .023"-.030"	0700200002
MXL 200cc 13 ft. (4m) x .023"-.030"	0700200003
Gas Nozzle - Standard 7/16" (12mm).....	0700200054
Gas Nozzle - Straight 5/8" (16mm).....	0700200057
Gas Nozzle - Conical 3/8" (9.5mm)	0700200060
Contact Tip .023" (0.6mm)	0700200063
Contact Tip .030" (0.8mm)	0700200064
Contact Tip .035" (0.9mm)	0700200065
Contact Tip .040" (1.0mm)	0700200066
MXL 200 Tip Adapter	0700200072
MXL 200 Nozzle Spring	0700200078
Steel Liner - .023"-.030" (0.6-0.8) x 13 ft. (4m)	0700200086
Steel Liner - .035"-.045" (0.9-1.2) x 13 ft. (4m).....	0700200088
Teflon Liner - .023"-.030" (0.6-0.8) x 13 ft. (4m).....	0700200090
Teflon Liner - .035"-.045" (0.9-1.2) x 13 ft. (4m).....	0700200092
Gas Meter (measures gas flow at the gun)	19043

Instruction Manual	F-15-678
Sales Literature	(03-01-09) ARC-23100



25 mm Connectors - quick-acting twist lock connectors for attaching output power cables or torches to power source:
 Gas/Power Adapter for Heliarc HW-9 & 17 Torches 31758
 Male Quick Connector 13792155

Specifications

Rated DCCV or DCCC Output (10 min base) 60% duty cycle (NEMA Class I)	160 amps @ 23 vdc
Output Current Range	
Mig (GMAW)	20A/13V - 160A/23.0V
Tig (GTAW)	5A/10.2V - 160A/16.4V
Stick (SMAW).....	5A/20.2V - 160A/26.4V
Open Circuit Voltage	
Maximum.....	69 vdc
Primary Input Voltage & Current @ 160 amp rated load	
208/230 vac, 50/60 Hz, 1 ph	30/27 amps
Wire Feed Range	65-650 ipm (1.6 - 16.5 m/min)
Net Weight.....	33 lbs. (14.8 kg)
Shipping Weight.....	38 lbs. (17.1 kg)
W x L x H.....	9.2 in. (23cm) x 22.4 in. (56cm) x 15.4 in. (39cm)



1Phase DC CVCC

MULTIMASTER® 260 COMPACT

Industrial Ready-To-Weld Multi-Process Package MultiMaster® 260

- Advanced SuperSwitch™ technology makes multi-process welding a breeze. Simplified setup makes it easy to select Mig, Tig, or Stick
- DC welding output from 15 to 300 amps; rated 260 amps at 50% duty cycle
- Output pre-set capability for quick set-up
- Two digital meters for easy fine tuning
- Heavy Duty Four Drive Roll stand
- Convenient, large capacity built-in tool box
- Dual “Easy-On” cylinder tray
- Pulse Mig capability with optional module
- Touch Tig™ Start capability
- Fan on demand



Compacts



Ordering Information

MultiMaster® 260 cvcc Packages

Each of the following packages are set ready to run .035/.045 diameter wire. Packages include power source with built-in four roll wire feeder; factory installed undercarriage & cylinder rack; Gun Master 250 Amp Mig Torch; Gas regulator/flowmeter with hose; Electrode holder and plug, Work cable & clamp; Primary input cable; Mig Welding Handbook; 10# sample of .035 87HP III Wire and 5# sample assortment of Stick Electrodes. See next page for options and accessories.

MultiMaster® 260 w/12 ft. GM-250 “NAS” torch	
208/230 vac, 1 phase 50/60 Hz Argon.....	0558001519
208/230 vac, 1 phase 50/50 Hz CO2	0558001523
230-575 vac, 1 phase 50/60 Hz Argon.....	0558001521
230-575 vac, 1 phase 50/60 Hz CO2	0558001525

MultiMaster® 260 w/15 ft. GM-250 “NAS” torch	
208/230 vac, 1 phase 50/60 Hz Argon.....	0558001520
208/230 vac, 1 phase 50/60 Hz Co2	0558001524
230-575 vac, 1 phase 50/60 Hz Argon.....	0558001522
230-575 vac, 1 phase 50/60 Hz CO2	0558001526

MultiMaster® 260 w/12 ft. “NAS” torch and spool gun, Argon	
208/230 vac, 1 phase 50/60 Hz/MT-250SG	0558001767
208-575 vac, 1 phase 50/60 Hz/MT-250SG	0558001768

MultiMaster® 260 w/15 ft. “NAS” torch and spool gun, Argon	
208/230 vac, 1 phase 50/60 Hz/MT-250SG	0558001769
230-575 vac, 1 phase 50/60 Hz/MT-250SG	0558001770

MultiMaster® 260 w/12 ft. GM-250 “NAS” torch and spool gun, Argon	
208/230 vac, 1 phase 50/60 Hz/ST-23A	0558001771
230-575 vac, 1 phase 50/60 Hz/ST-23A	0558001772

MultiMaster® 260 w/15 ft. “NAS” torch and spool gun, Argon	
208/230 vac, 1 phase 50/60 Hz/ST-23A	0558001773
230-575 vac, 1 phase 50/60Hz/ST-23A	0558001774
.....continued next column	

MultiMaster® 260 cvcc Multi-Process Package

MultiMaster® 260 w/15ft. GunMaster-250 & 25ft. HW-17v2TL
 208/230 vac, 1 phase 50/60 Hz Argon..... 0558005606

- Comes complete with:
- | | |
|----------------------------------|----------------------------------|
| Gunmaster 250, NAS 15 ft. | (5) .035" & .045" Contact Tips |
| HW-17v-2TL Heliarc Torch, 25 ft. | Heliarc Torch Accessory Kit |
| Remote Control Panel | FC-5C Foot Control, 30 ft. |
| Work Cable Assembly, 15 ft. | Electrode Cable & Holder, 15 ft. |
| R-33-FM580 Flowmeter Regulator | .035" SpoolArc 87HP wire, 10lbs |
| MIG & TIG Welding Handbooks | |

Specifications

Rated DCCV or DCCC Output (10 min base)	
50% duty cycle (NEMA Class I).....	260 amps @ 27 vdc
Output Current Range	
Mig (GMAW)	35-300 amps
Tig (GTAW)	10-300 amps
Stick (SMAW).....	40-300 amps
Open Circuit Voltage	
Mig (MGAW)	70 vdc
Tig (TGAW)	20 vdc
Stick (SMAW).....	70 vdc
Primary Input Voltage & Current @ 260 amp rated load	
208/230 vac, 60 Hz, 1 ph.....	57/52 amps
Wire Feed Range.....	65-675 ipm (1.6 - 17.3 m/min)
Net Weight.....	250 lbs. (112.5 kg)
Shipping Weight.....	290 lbs. (130.5 kg)
W x L x H.....	25.3 in. (64 cm) x 39.5 in. (100 cm) x 33.5 in. (85 cm)

Instruction Manual **F-15-611**
 Sales Literature(03-01-09) **ARC-23085**



Remote Control Option
"Spool-on-Gun" Option



Pulse Module Option

Pulse Mig Welding of Carbon Steel, Stainless Steel and Aluminum



Optional Equipment

Pre/Post Flow/Spot/Burnback module	0558002889
Inductance Control Module	0558002888
Remote Control Module	0558002605
FC-5C Foot Control - 30 ft. (9.1 m) cable	*0558004234
TC-2B Thumb Control - 25 ft.	33839
Provides remote current control and connector (on/off) control and requires Remote Control Module	
.....	0558002605
Spool Gun Module	0558002606
MT-250SG Spool Gun	36779
Requires Spool Gun module	
.....	0558002606
ST-23A Spool Gun	19164
Requires Adapter 37301 and Spool Gun module... ..	
.....	0558002606
Pulse Module Option	0558002604
HW-17V-2TL (w/valve) Heliarc® Tig Torch 60 deg. 12.5 ft.	35857
HW-17V-2TL (w/valve) Heliarc® Tig Torch 60 deg. 25 ft.	35856
Tig weld without disconnecting the Mig torch.	
HW-17 Torch Accessory Kit	999126
Work Cable & Clamp (15 ft.)	35881
Electrode Holder Assembly - 175 amp (15 ft.)	0558001786
(Includes holder, cable and quick connector)	
Electrode Holder Assembly - 300 Amp (15 ft.)	21226
(Includes holder, cable and quick connector)	

EURO CC Retrofit Kit	0558001082
NAS to Euro Adapter	0558002622
Primary Extension Cord (25 ft.) 50 amp	37833
TIG Welding Handbook	781F29
MIG Welding Handbook	791F18
Gas Meter (measures gas flow at the gun)	19043

50 mm Connectors - quick-acting twist lock connectors for attaching output power cables or torches to power source:

Male for 1/0 to 4/0 cable	13792513
Female for 1/0 to 4/0 cable	13735631
Male for #2 AWG to 1/0 cable	13733936
Female for #2 AWG to 1/0 cable	13735632
Quick connector with 1/2 in. threaded stud	13735501
Tee connector - 1 male, 2 female	13792804

Tig/Stick Sets

Includes 15 ft. Electrode Holder, 12.5 ft. or 25 ft. HW-17V-2TL Torch, Torch Accessory Kit, Remote Control Module, TC-2B Thumb Control and TIG Handbook.

TIG/Stick Set 12.5 ft.	0558004449
TIG/Stick Set 25 ft.	0558004450

Wire Diameter	Desc.	Roll	Drive Qty	Outlet Guide NAS Models Only		Center Guide		Inlet Guide	
				Qty	Qty	Qty	Qty	Qty	Qty
.023 in. (0.8 mm)	V-Solid	21155	2	0558001499	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	V-Solid	21155	2	0558001499	1	0558001757	1	0558001758	1
.035 in. (0.8 mm)*	V-Solid	21156*	2	0558001498*	1	0558001757*	1	0558001758*	1
.045 in. (1.2 mm)*	V-Solid	21156*	2	0558001498*	1	0558001757*	1	0558001758*	1
.030 in. (0.8 mm)	K-Cored	21160	2	0558001499	1	0558001757	1	0558001758	1
.035 in. (0.9 mm)	K-Cored	21160	2	0558001498	1	0558001757	1	0558001758	1
.045 in. (1.2 mm)	K-Cored	21161	2	0558001498	1	0558001757	1	0558001758	1
.052 in. (1.4 mm)	K-Cored	21161	2	0558001497	1	0558001757	1	0558001758	1
1/16 in. (1.6 mm)	K-Cored	21161	2	0558001497	1	0558001757	1	0558001758	1
3/64 in. (1.2 mm)	U-Soft	21159	2	0558001904	1	0558001895	1	0558001758	1
1/16 in. (1.6 mm)	U-Soft	21159	2	0558001904	1	0558001895	1	0558001758	1

*As delivered



1Phase DC CVCC

MULTIMASTER® 300X OPTIMIZED FOR DUALSHIELDX SERIES

Industrial Ready-To-Weld Multi-Process Package MultiMaster® 300X



- Advanced SuperSwitch™ technology makes welding with DualShield X Series a breeze.
- DC welding output from 15 to 300 amps; rated 40% duty cycle
- Output pre-set control with two digital meters makes for quick set-up straight from the DualShield X Series quick set up card.
- 400 Amp 15ft. gun set up for DualShield X Series wires in .045" and .052" diameters.
- Heavy Duty Four Drive Roll stand with serrated DualShield X drive rolls for .045" and .052" dia.
- Convenient, large capacity built-in tool box
- Dual "Easy-On" cylinder tray
- Can be configured to run from Marathon paks
- Fan on demand



DC - CV & CVCC
Power Sources

Ordering Information

MultiMaster® 300X cvcc Packages

Each of the following packages are set ready to run .045" diameter DualShield X Series wire. Packages include power source with built-in four roll wire feeder with .045-.052-1/16" knurled feed rolls; factory installed undercarriage & cylinder rack; Gun Master 400 Amp Mig Torch; Contact Tips for .045", R-33-FM320 - CO2 regulator/flowmeter; 6' gas hose; Electrode holder and plug; 15' Work cable & clamp; 10' Primary input cable; Mig Welding Handbook; 33# spool of .045" DualShield 710X wire and 5# sample assortment of Stick Electrodes.

MultiMaster® 300X w/15 ft. GM-400 "NAS" torch

208/230 vac, 1 phase 50/50 Hz. 0558007778
230-575 vac, 1 phase 50/60 Hz. 0558007779

If TIG Set with Thumb Control Remote is desired for the above, add one of the TIG/Stick sets listed on the next page. If you wish to have TIG Set with Foot Control, order one of the below outfits.

MultiMaster® 300X cvcc Multi-Process Package

MultiMaster® 300X w/15ft. GunMaster-400 & 25ft. HW-17v2TL
208/230 vac, 1 phase 50/60 Hz 0558007780
230-575 vac, 1 phase 50/60 Hz 0558007781

Comes complete with items listed above plus:
HW-17v-2TL Heliarc Torch, 25 ft. Heliarc Torch Accessory Kit
Remote Control Panel FC-5C Foot Control, 30 ft.
Electrode Cable & Holder, 15 ft. TIG Welding Handbook
R33-FM 580 Flowmeter/Regulator

Specifications

Rated DCCV or DCCC Output (10 min base)
40% duty cycle (NEMA Class I) 300 amps @ 32 vdc
Output Current Range
Mig/Fluxcore (GMAW/FCAW) 35-300 amps
 Tig (GTAW) 10-300 amps
 Stick (SMAW)..... 40-300 amps
Open Circuit Voltage
Mig/Fluxcore (MGAW/FCAW) 70 vdc
 Tig (TGAW) 20 vdc
Stick (SMAW) 70 vdc
Primary Input Voltage & Current @ 300 amp rated load
 208/230 vac, 60 Hz, 1 ph..... 66/60 amps
Wire Feed Range 65-675 ipm (1.6 - 17.3 m/min)
Net Weight..... 250 lbs. (112.5 kg)
Shipping Weight..... 300 lbs. (xx.x kg)
W x L x H.....25.3 in. (64 cm) x 39.5 in. (100 cm) x 33.5 in. (85 cm)

Instruction Manual0558007770
Sales Literature(03-01-09) ARC-23231



MULTIMASTER® 300X OPTIMIZED FOR DUALSHIELDX SERIES



X SERIES

- ▶ Start at the 'sweet spot'
- ▶ Use straight progression
- ▶ Then show low end
- ▶ Work up to high end
- ▶ Can weave at higher settings

Visit www.dualshieldx.com for more information.

ESAB ESAB Welding & Cutting Products
1.800.ESAB.123

Dual Shield X

Dual Shield 700X (CO₂), 2F
1/16" @ 350 WFS, 25V
3/32" @ 208 WFS, 30V

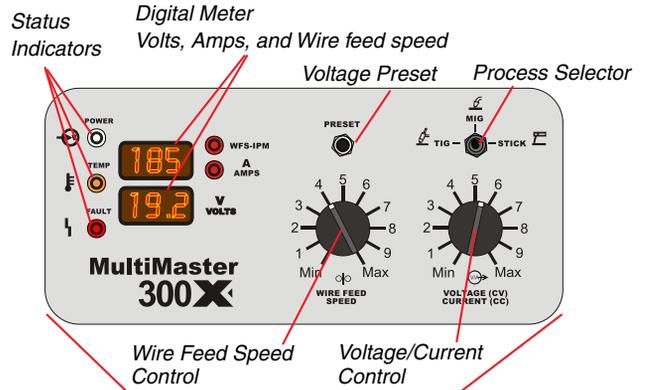
Dual Shield 710X (CO₂), 3F
.045" @ 304 WFS, 25V
.052" @ 214 WFS, 24V
1/16" @ 189 WFS, 24V

Dual Shield 710X (75/25), 3F
.045" @ 360 WFS, 24V
.052" @ 270 WFS, 23V
1/16" @ 180 WFS, 23V

Dual Shield II 711X (CO₂), 3F
.045" @ 343 WFS, 24V
.052" @ 283 WFS, 24V
1/16" @ 188 WFS, 24V

Dual Shield II 712X (75/25), 3F
.045" @ 337 WFS, 24V
.052" @ 245 WFS, 23V
1/16" @ 145 WFS, 24V

Above settings are the starting sweet spots.



DC - CV & CVCC
Power Sources

Optional Equipment

Pre/Post Flow/Spot/Reback module	0558002889
Inductance Control Module	0558002888
Remote Control Module	0558002605
FC-5C Foot Control - 30 ft. (9.1 m) cable	0558004234
Provides remote current control and connector (on/off) control and requires Remote Control Module	0558002605
TC-2B Thumb Control - 25 ft.	33839
Provides remote current control and connector (on/off) control and requires Remote Control Module	0558002605
Spool Gun Module	0558002606
MT-250SG Spool Gun	36779
Requires Spool Gun module	0558002606
ST-23A Spool Gun	19164
Requires Adapter 37301 and Spool Gun module...	0558002606
Pulse Module Option	0558002604
HW-17V-2TL (w/valve) Heliarc® Tig Torch 60 deg. 12.5 ft.	35857
HW-17V-2TL (w/valve) Heliarc® Tig Torch 60 deg. 25 ft.	35856
Tig weld without disconnecting the Mig torch.	
HW-17 Torch Accessory Kit	999126
Work Cable & Clamp (15 ft.)	35881
Electrode Holder Assembly - 175 amp (15 ft.)	0558001791
(Includes holder, cable and quick connector)	
Electrode Holder Assembly - 300 Amp (15 ft.)	21226
(Includes holder, cable and quick connector)	

EURO CC Retrofit Kit	0558001082
NAS to Euro Adapter	0558002622
Primary Extension Cord (25 ft.) 50 amp	37833
TIG Welding Handbook	781F29
MIG Welding Handbook	791F18
Gas Meter (measures gas flow at the gun)	19043
Marathon Pak Inlet Adapter (fits QCA 899F50)	0558002354

Refer to Marathon Pak brochures for Cap and Conduit selections

50 mm Connectors - quick-acting twist lock connectors for attaching output power cables or torches to power source:

Male for 1/0 to 4/0 cable	13792513
Female for 1/0 to 4/0 cable	13735631
Male for #2 AWG to 1/0 cable	13733936
Female for #2 AWG to 1/0 cable	13735632
Quick connector with 1/2 in. threaded stud	13735501
Tee connector - 1 male, 2 female	13792804

Tig/Stick Sets

Includes 15 ft. Electrode Holder, 12.5 ft. or 25 ft. HW-17V-2TL Torch, Torch Accessory Kit, Remote Control Module, TC-2B Thumb Control and TIG Handbook.

TIG/Stick Set 12.5 ft.	0558004449
TIG/Stick Set 25 ft.	0558004450

Wire Diameter	Desc.	Roll	Drive Qty	Outlet Guide NAS Models Only	Qty	Center Guide	Qty	Inlet Guide	Qty
.023 in. (0.8 mm)	V-Solid	21155	2	0558001499	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	V-Solid	21155	2	0558001499	1	0558001757	1	0558001758	1
.035 in. (0.8 mm)	V-Solid	21156	2	0558001498	1	0558001757	1	0558001758	1
.045 in. (1.2 mm)	V-Solid	21156	2	0558001498	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	K-Cored	21160	2	0558001499	1	0558001757	1	0558001758	1
.035 in. (0.9 mm)	K-Cored	21160	2	0558001498	1	0558001757	1	0558001758	1
.045 in. (1.2 mm)*	K-Cored	21161*	2	0558001498	1	0558001757*	1	0558001758*	1
.052 in. (1.4 mm)*	K-Cored	21161*	2	0558001497*	1	0558001757*	1	0558001758*	1
1/16 in. (1.6 mm)*	K-Cored	21161*	2	0558001497*	1	0558001757*	1	0558001758*	1

*As delivered

ESAB 353cv

- Three phase primary power for industrial DC Mig welding
- High/Low inductance taps for optimized short circuiting welding
- Lugged output studs for positive, low cost cable connection
- Simple front panel designs with sealed electronics compartment
- Compatible with 42 vac and 115 vac ESAB Wire Feeders (Mig 4HD, Mig-35, Digimig, DuraDrive)
- 115 vac outlet for water circulator or tools
- Three-year warranty
- Auto Fan™ Installed

Ordering Information

ESAB 353cv Power Source

353cv, 230(208)/460 vac, 3 ph, 60 Hz.....	37961
353cv, 230(208)/460/575 vac, 3 ph, 60 Hz	37962
353cv, 220/400 (380-415) vac, 3 ph, 50 Hz CE.....	37964

ESAB 353cv Migmaster Packages

The following package includes an ESAB DC power source, wire feeder, 8 ft. (2.4m) control cable, 8 ft. (2.4m) gas hose, .035/.045 in. (.9/1.2mm) feed roll, - 15 ft. (4.5m) GunMaster gas-cooled gun, 15ft. work cable with clamp, 15 ft. wire feeder weld cable and R-33-FM-580 regulator with adjustable flowmeter.

Migmaster 353cv, Mig 4HD, GM-250cc, 230/460/575 vac36445

Note: For other feeder packages see Ready-to-Weld feeder page

Options & Accessories

Power source to wire feeder control cables - see section Wire Feeder - Accessories - Control Cables

Esab Wire Feeder/Remote Control Kit 0558001436

(14 pin remote, 19 pin Esab feeder, and 115vac receptacles)

HC-3B Hand Control, 30 ft. (9.1m) cable 33838

(requires 0558001436)

TR-29 Truck Kit, includes wheels & 2-cylinder rack37924

Mini-Boom for Mig 4HD (requires Swivel Post) 34322

Swivel Post, use with Mig 4HD or DuraDrive feeders.....36172

Slope Resistor Kit (400A. Max.) 0558001456

Auto Fan™ Kit for old machines (352)36707

Work Cable with Clamp (15 ft.) 0558001440

Feeder Cable with Lug (15 ft.)0558001441

Miller Wire Feeder Adaptor Kit, 24Vac0558001415

Lincoln Wire Feeder Adaptor Kit0558001416



Shown with optional DuraDrive 4®-30 wire feeder, GM-250 Mig welding torch, TR-29 Truck kit, 15ft. work cable and welding wire

Specifications

Rated DCCV Output* @ 100% duty cycle (10 min base)	
50/60 Hz.....	350 amps @ 34 vdc
Rated DCCV Output* @ 60% duty cycle (10 min base)	
50/60 Hz.....	450 amps @ 34 vdc
Open Circuit Voltage, 50/60 Hz.....	13-45 vdc
Primary Input Voltage & Current @ 100% duty cycle load	
230(208)/460 vac, 60 Hz, 3 ph.....	50(55)/25 amps
230(208)/460/575 vac, 60 Hz, 3 ph.....	50/25/20 amps
220/400(380-415) vac, 50 Hz, 3 ph.....	52/29(31-28) amps
Power Factor @ rated load.....	83 %
Auxiliary Output Power (receptacle)....	115 vac, 50/60 Hz, 10 amps
Net Weight**, 60 Hz.....	331 lb. (150 kg)
Shipping Weight** (approximate), 60 Hz.....	341 lb. (155 kg)
W x L x H.....	18.75 in. (46 cm) x 32.5 in. (83 cm) x 25 in. (64 cm)

* For 208 vac, 60 Hz and 380 vac, 50 Hz service, derate output current rating 10%.

** For 50 Hz models, add 40 lb. (18 kg).

Instruction Manual	F-15-579
Sales Literature	(03-01-09) ARC-23084



DC - CV & CVCC
Power Sources



3 Phase DC CV

ESAB 353E cv "WEATHER GUARD" POWER SOURCE



ESAB "Weather Guard" DC Power Sources

- Designed for the harshest welding environments
- All stainless steel base, frame and fasteners
- Non-Corrosive, high impact strength, non-flammable, composite side panels and top
- All power components, connectors, terminals and support structures are covered with a durable, environmental safe, clear protective coating
- Protected from damage caused by water, salt spray, metal dusts, corrosive mists and many other airborne substances
- Completely enclosed and sealed electronic control circuitry
- Option kits available for Miller and Lincoln
- Same superior welding performance, features and equipment options as standard 353cv, 453cv and 653cvcc power sources

3 YEAR WARRANTY



Composite Plastic Panels

Ordering Information

ESAB 353E cv Power Sources

353E cv, 230(208)/460 vac, 60 Hz	37965
353E cv, 230(208)/460/575 vac, 60 Hz	37966

Options & Accessories

Power Source to wire feeder control cables - see section Wire Feeder - Accessories - Control Cables

ESAB Wire Feeder/Remote Control Kit 0558001429

(14 pin remote, 19 pin Esab feeder, and 115vac receptacles)

HC-3B Hand Control, 30 ft. (9.1m) cable 33838

(requires 0558001429)

TR-29 Truck Kit, includes wheels & 2-cylinder rack37924

Mini-Boom for Mig 4HD (requires Swivel Post) 34322

Swivel Post, use with Mig 4HD or DuraDrive feeders.....36172

Slope Resistor Kit (400A. Max.)..... 0558001456

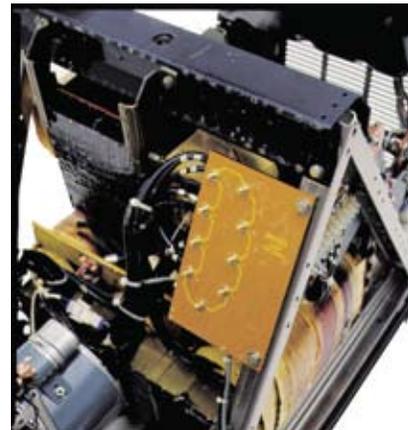
Work Cable with Clamp (15 ft.) 0558001440

Feeder Cable with Lug (15 ft.)0558001441

Miller S60 Series Wire Feeder Adaptor, 24Vac 0558001430

Lincoln Wire Feeder Adaptor 0558001431

Output Terminal Boot..... 0558006581



Coated Power Components & Panels



Lug Connector

Stainless Panel & Frame

DC - CV & CVCC Power Sources

ESAB 453cv

- Heavy Duty industrial DC Mig welding power source for Mig, Flux core and ACAG applications
- Lugged output studs for positive, low cost cable connection
- Simple front panel design with sealed electronics compartment
- Compatible with 42 vac and 115 vac ESAB wire feeders (Mig 4HD, Mig-35 and Digimig, DuraDrive)
- 115 vac outlet for water circulator or power tools
- Quality manufacturing system certified to ISO 9002
- Auto Fan™ Installed
- Optional Miller and Lincoln wire feeder attachment kits

Ordering Information

ESAB 453cv Power Sources

453cv, 230(208)/460 vac, 3 ph, 60 Hz	37969
453cv, 230(208)/460/575 vac, 3 ph, 60 Hz	37970
453cv, 220/400(380-415) vac, 3 ph, 50 Hz CE	37972

ESAB 453cv Migmaster Packages

The following package includes an ESAB DC power source, wire feeder, 8 ft. (2.4m) control cable, 8 ft. (2.4m) gas hose, .035/.045 in. (.9/1.2mm) feed roll, - 15 ft. (4.5m) GunMaster gas-cooled gun, 15ft. work cable with clamp, 15 ft. wire feeder weld cable and R-33-FM-580 regulator with adjustable flowmeter.

Migmaster 453cv, Mig 4HD, GM-400cc, 230/460 vac	36233
---	-------

Note: For other feeder packages see Ready-to-Weld feeder page

Options & Accessories

Power source to wire feeder control cables - see section Wire Feeders - Accessories - Control Cables	
Esab Wire Feeder/Remote Control Kit	0558001436
<i>(14 pin remote, 19 pin Esab feeder, and 115vac receptacles)</i>	
HC-3B Hand Control , 30 ft. (9.1m) cable.....	33838
<i>(requires 0558001436)</i>	
TR-29 Truck Kit , includes wheels & 2 cylinder rack.....	37924
Mini Boom (requires Swivel Post)	34322
Swivel Post , use with Mig 4HD or Mig 2E wire feeders	36172
Slope Resistor Kit (400A. Max.).....	0558001456
Auto Fan™ Kit for old machines (452).....	36707
Work Cable with Clamp (15 ft.).....	0558001440
Feeder Cable with Lug (15 ft.)	0558001441
Miller Wire Feeder Adaptor Kit, 24Vac	0558001415
Lincoln Wire Feeder Adaptor Kit	0558001416



Shown with optional DuraDrive 4-30 wire feeder, GM-250 Mig welding torch, TR-29 Truck kit, 15 ft. work cable and welding wire

Specifications

Rated DCCV Output* @ 100% duty cycle (10 min base)	
50/60 Hz.....	450 amps @ 38 vdc
Rated DCCV Output* @ 60% duty cycle (10 min base)	
50/60 Hz.....	550 amps @ 42 vdc
Open Circuit Voltage, 50/60 Hz.....	13 - 52 vdc
Primary Input Voltage & Current @ rated 100% duty cycle load	
230 (208)/460 vac, 60 Hz, 3 ph.....	74(81)/37 amps
230(208)/460/575 vac, 60 Hz, 3 ph.....	74/37/30 amps
220/400 (380-415) vac, 50 Hz, 3 ph.....	78/43(45-41) amps
Power Factor @ rated load	83%
Auxiliary Output Power (receptacle)....	115 vac, 50/60 Hz, 10 amps
Net Weight,** 60 Hz	355 lb. (161kg)
Shipping Weight** (approximate), 60 Hz.....	365 lb. (166kg)
W x L x H.....	18.75 in. (46 cm) x 32.5 in. (83 cm) x 25 in. (64 cm)

* For 208 vac, 60 Hz and 380 vac, 50 Hz service derate output current rating 10%.

** For 50 Hz models, add 40 lb. (18kg)

Instruction Manual	F-15-581
Sales Literature	(03-01-09) ARC-23082





3 Phase DC CV

ESAB 453E cv "WEATHER GUARD" POWER SOURCE

DC - CV & CVCC Power Sources

ESAB "Weather Guard" DC Power Sources

- Designed for the harshest welding environments
- All stainless steel base, frame and fasteners
- Non-Corrosive, high impact strength, non-flammable, composite side panels and top
- All power components, connectors, terminals and support structures are covered with a durable, environmental safe, clear protective coating
- Protected from damage caused by water, salt spray, metal dusts, corrosive mists and many other airborne substances
- Completely enclosed and sealed electronic control circuitry
- Option kits available for Miller and Lincoln
- Same superior welding performance, features and equipment options as standard 353cv, 453cv and 653cvcc power sources

3 YEAR WARRANTY



Composite Plastic Panels

Ordering Information

ESAB 453E cv Power Sources

453E cv, 230(208)/460 vac, 60 Hz	37973
453E cv, 230(208)/460/575 vac, 60 Hz	37974

Options & Accessories

Power source to wire feeder control cables - see section Wire Feeders - Accessories - Control Cables

ESAB Wire Feeder/Remote Adaptor 0558001429
(14 pin remote, 19 pin Esab feeder, and 115vac receptacles)

HC-3B Hand Control, 30 ft. (9.1m) cable 33838
(requires 0558001429)

TR-29 Truck Kit, includes wheels & 2 cylinder rack.....37924

Mini Boom for Mig 4HD (requires Swivel Post) 34322

Swivel Post, use with Mig 4HD or Mig 2E wire feeders36172

Slope Resistor Kit (400A. Max.)..... 0558001456

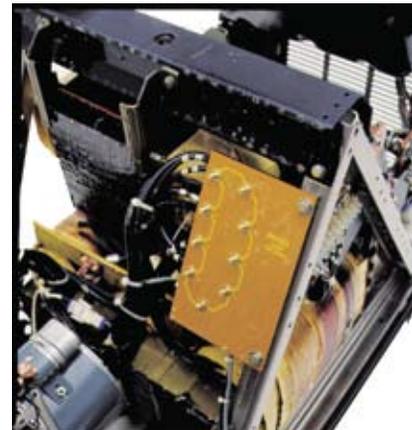
Work Cable with Clamp (15 ft.) 0558001440

Feeder Cable with Lug (15 ft.)0558001441

Miller S60 Series Wire Feeder Adaptor, 24Vac..... 0558001430

Lincoln Wire Feeder Adaptor 0558001431

Output Terminal Boot 0558006581



Coated Power Components & Panels



Lug Connector

Stainless Panel & Frame

MultiPower 460 Power Source

- Multi-process, three phase power source designed for heavy duty Industrial DC welding applications.
- Use for High Performance Mig, Pulse Mig, Flux Cored wire, Stick electrode welding, Tig and Air Carbon Arc Gouging
- SuperSwitch Technology design, provides superior inverter like performance in the welding arc while providing SCR like reliability.
- Variable inductance for fine tuning of the arc characteristics in short arc welding.
- Built-in arc force control for superior stick electrode performance.
- Digital preset of voltage/amperage on all process at the front panel.
- Sheet metal parts and hardware made of stainless steel. Top and side panel made of Kydex polymer for superior durability in harsh environments.
- Auto Fan™ feature standard in the unit for energy savings. Automatically turns the fan motor on and off when needed.
- Energy and power efficient, the best in its class with a 92% efficiency figure. Saves energy and reduces power costs. Uses up to 50% less current than conventional SCR machines. See chart.
- Convenient 115vac auxiliary power receptacle.
- Synergic / Non-Synergic Mig Pulse welding capability with the intelligence built into the power source (Standard on pulse unit, optional in the standard unit) Allows you to do Pulse Mig with almost any wire feeder.
- Compatible with DuraDrive 4-30 and DuraDrive 4-48 wire feeders
- Touch Tig™ Start capability

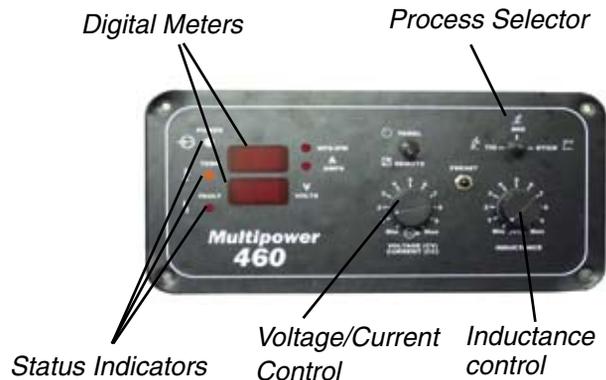
Ordering Information

MultiPower 460cvcc 230(208)/460/575vac	
50/60 Hz 3ph	0558002669
MultiPower 460Pulse 230(208)/460/575vac	
50/60 Hz 3ph	0558002877

See next page for options and accessories.



DC - CV & CVCC
Power Sources



Standard Control Panel

Specifications

Rated DC Output @ 100% Duty Cycle*	
50/60Hz, cv or cc	450 amps 38 vdc
Rated DC Output @ 60% Duty Cycle*	
50/60Hz, cv or cc	500 amps 39 vdc
Welding Range.....	10A/12V to 500A/40V
Open Circuit Voltage Max.	80vdc
Primary Input Voltage and Current @ 100% DutyCycle	
230(208)/460/575vac, 60Hz 3ph	66/33/26 amps
Power Factor at Rated Output	89%
Efficiency at Rated Output	92%
Auxiliary Output Power	115vac 50/60Hz, 10 amps
Physical Dimensions	
W x L x H... 18.8 in. (483mm) x 32.5 in. (819mm) x 25 in. (622mm)	
Net Weight.....	322 lbs. (146 Kg)
Shipping Weight.....	375 lbs. (170Kg)

* For 208 vac, 60 Hz service derate output current rating 10%.

Instruction Manual.....	F15-666
Pulse Version	F15-721
Sales Literature.....	(03-01-09) ARC-23117

Options & Accessories

Power source to wire feeder control cables - see section Wire Feeders - Accessories - Control Cables

Pulse Mig Upgrade Kit 0558002671 —

This kit adds pulse gas metal arc welding capability to the standard MultiPower 460cvcc power source. This pulse control can be used in the synergic and Non-synergic modes for maximum versatility and wire feeder selection. Material pulse selection includes: Carbon steel, Stainless steel, Aluminum and Metal cored wires.



Remote Hand Control, 30 ft. 0558002871 —

This pendant provides remote output control on all process and contactor control to make the output terminals "hot" from a remote location. Also provides process selection (Mig, Tig and Stick).



TR-29 Truck37924

This truck kit provides complete mobility of the power source. The kit consists of front casters, rear cylinder rack for two cylinders, gas cylinder bracket and chain, and pull handle.

Wire Feeder Swivel Mount Kit36172

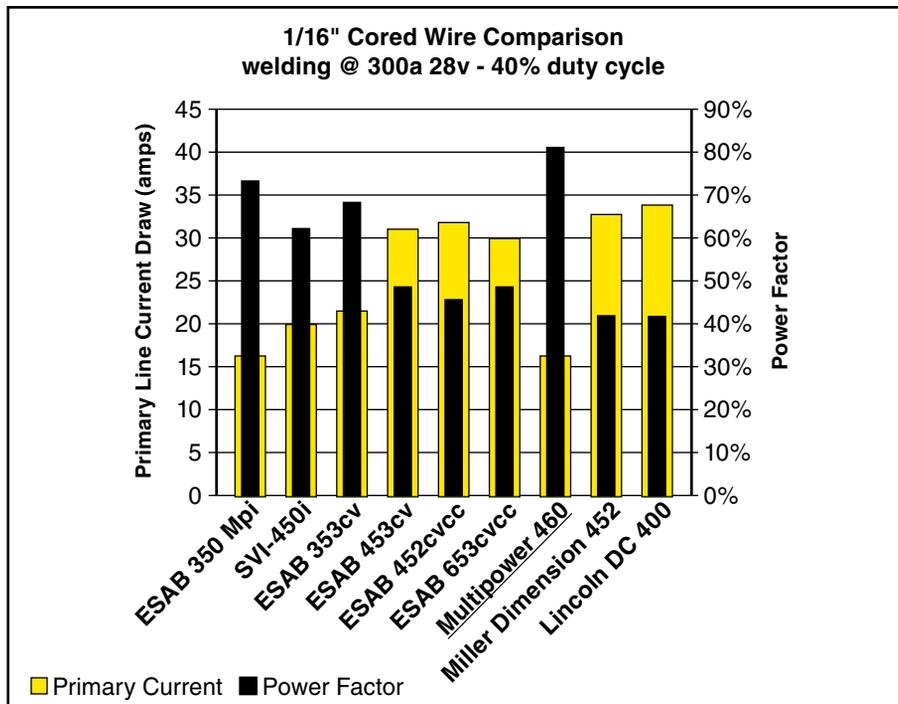
This kit allows the wire feeder to be placed on an insulated swivel post on top of the power source. The feeder can freely rotate, relieving potential wire feed problems.

ESAB 115vac Wire Feeder Accy Panel (SCO).....0588001197

Allows the use of an Esab 115vac wire feeder such as a Mig-35.
(19 pin Esab feeder and 115vac receptacles)

Output Terminal Boot 0558006581

DC - CV & CVCC
Power Sources



MultiPower 460 Better than the Competition



3 Phase DC CVCC

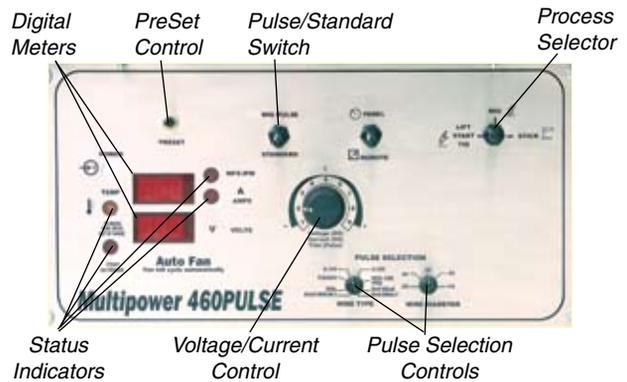
MULTIPOWER 460-SE POWER SOURCE

MultiPower 460-SE Power Source

- Multi-process, three phase power source designed for heavy duty Industrial DC welding applications.
- Use for High Performance Mig, Pulse Mig, Flux Cored wire, Stick electrode welding, Tig and Air Carbon Arc Gouging
- SuperSwitch Technology design, provides superior inverter like performance in the welding arc while providing SCR like reliability.
- Sheet metal parts and hardware made of stainless steel for superior durability in harsh environments.
- Non-Corrosive, high impact strength, non-flammable, composite side panels and top
- Built-in arc force control for superior stick electrode performance.
- Digital preset of voltage/amperage on all process at the front panel.
- Auto Fan feature standard in the unit for energy savings. Automatically turns the fan motor on and off when needed.
- Energy and power efficient, the best in its class with a 92% efficiency figure. Saves energy and reduces power costs. Uses up to 50% less current than conventional SCR machines. See chart.
- Synergic/Non-Synergic Mig Pulse welding capability with the intelligence built into the power source (Standard on pulse unit, optional in the standard unit) Allows you to do Pulse Mig with almost any wire feeder.
- Touch Tig™ Start capability
- Optional remote control and 115vac auxiliary power receptacle.



DC - CV & CVCC
Power Sources



Control Panel

Ordering Information

MultiPower 460cvcc, 230(208)/460vac
50/60 Hz 3ph0558004922

Options & Accessories

ESAB Feeder/Remote Control Kit (SS) 0558003410
(14 pin remote, 19 pin Esab feeder, and 115vac receptacles)

Power source to wire feeder control cables - see section Wire Feeders - Accessories - Control Cables

HC-3B Hand Control, 30 ft. (9.1m) cable 33838
(requires Kit 0558003410 above)

Work Cable with Clamp (15 ft.)..... 0558001440

Feeder Cable with Lug (15 ft.).....0558001441

Output Terminal Boot..... 0558006581

Specifications

Rated DC Output
 100% Duty Cycle*, cv or cc.....450 amps 38 vdc
 60% Duty Cycle*, cv or cc.....500 amps 39 vdc
 Welding Range..... 10A/12V to 500A/40V
 Open Circuit Voltage Max.....80vdc
 Primary Input Voltage and Current @ 100% DutyCycle
 230(208)/460, 60Hz 3ph 66/33 amps
 Power Factor at Rated Output 89%
 Efficiency at Rated Output..... 92%
 Optional Auxiliary Output Power.....115vac 50/60Hz, 10 amps
 Physical Dimensions
 W x L x H..... 19 in. (483mm) x 35 in. (819mm) x 29 in. (622mm)
 Net Weight.....322 lbs. (146 kg)
 Shipping Weight.....375 lbs. (170 kg)

* For 208 vac, 60 Hz and 380 vac, 50 Hz service derate output current rating 10%.

Instruction Manual.....0558004964
 Sales Literature.....(03-01-09) ARC-23206


**DC - CV & CVCC
Power Sources**

ESAB 653cvcc

- Multi-process, three phase power sources designed for heavy duty industrial DC welding applications
- Use for Mig, flux cored wire, submerged arc and stick electrode welding or air carbon arc gouging
- Compatible with 42v and AVS wire feeders: MobileFeed 200avs, MobileFeed 300avs, MobileMaster IV, 2E, 4HD, 4HD Dual and with 115v wire feeders/controls: Mig 35, Digimig, Digimig Dual, Digimatic II, UEC-8, DuraDrive 4-30 and DuraDrive 4-48
- 115 vac outlet for water circulator or tools
- Control electronics are protected from dirt and dust in an easy-access compartment
- Optional wire feed adaptor kits for Miller and Lincoln wire feeders

Ordering Information

ESAB Power Sources

653cvcc, 230(208)/460 vac, 3 ph, 60 Hz.....	37829
653cvcc, 230(208)/460/575 vac, 3 ph, 60 Hz	37830
653cvcc, 220/400 (380-415) vac, 3 ph, 50 Hz CE	37832

ESAB 653cvcc Migmaster Packages

The following package includes an ESAB DC power source, wire feeder, 8 ft. (2.4m) control cable, 8 ft. (2.4m) gas hose, .035/.045 in. (.9/1.2mm) feed roll, - 15 ft. (4.5m) GunMaster gas-cooled gun, 15ft. work cable with clamp, 15 ft. wire feeder weld cable and R-33-FM-580 regulator with adjustable flowmeter.

Migmaster 653cvcc, Mig 4HD, GM-400cc,	
230(208)/460/575 vac.....	36234

Note: For other feeder packages see Ready-to-Weld feeder page

Options & Accessories

Power source to wire feeder control cables - see section Wire Feeders - Accessories - Control Cables

ESAB Feeder/Remote Control Kit	0558001436
<i>(14 pin remote, 19 pin Esab feeder, and 115vac receptacles)</i>	
HC-3B Hand Control, 30 ft. (9.1m) cable	33838
<i>(requires 0558001436)</i>	
Mini Boom for Mig 4HD (requires Swivel Post)	34322
Swivel Post, use with Mig 4HD or Mig 2E wire feeders	36172
Auto Fan™ Kit	36707
TR-29 Truck Kit	37924
Miller Wire Feeder Adaptor Kit, 24Vac	0558001415
Lincoln Wire Feeder Adaptor Kit	0558001416
Work Cable with Clamp (15 ft.)	0558001440
Feeder Cable with Lug (15 ft.)	0558001441

Instruction Manual	F-15-572
Sales Literature	(03-01-09) ARC-23077



Shown with optional DuraDrive 4®-48 wire feeder, GM-400 Mig welding torch, TR-29 Truck kit, 15 ft. work cable and welding wire

Specifications

Rated DC Output* @ 100% duty cycle,	
50/60 Hz, cv or cc 653cvcc	650 amps @ 44 vdc
Rated DC Output* @ 60% duty cycle,	
50/60 Hz, cv or cc 653cvcc	750 amps @ 44 vdc
Open Circuit Voltage, 50/60 Hz 653cvcc ...	54 vdc (cv)/59 vdc (cc)
Primary Input Voltage & Current @ rated 100% duty cycle load	
653cvcc, 230(208)/460 vac, 60 Hz, 3 ph	108/54 amps
653cvcc, 230(208)/460/575 vac, 60 Hz, 3 ph	108/54/43
amps	653cvcc, 220/400 (380-415) vac, 50 Hz, 3 ph ..
.....	102/56 (59-54) amps
Power Factor @ rated load	83%
Auxiliary Output Power (receptacle).....	115 vac, 50/60 Hz, 10 amps
W x L x H.....	18.75 in. (46 cm) x 32.5 in. (83 cm) x 25 in. (64 cm)
Net Weight,** 60 Hz 653cvcc.....	493 lb. (224 kg)
Shipping Weight** (approximate), 60 Hz 653cvcc ...	503 lb. (229 kg)

* For 208 vac, 60 Hz and 380 vac, 50 Hz service, derate output current rating 10%.

** For 50 Hz models, add 40 lb. (18kg)

ESAB 653cvcc-SE

- Multi-process, three phase power sources designed for heavy duty industrial DC welding applications in the harshest environments
- Use for Mig, flux cored wire, submerged arc and stick electrode welding or air carbon arc gouging
- All stainless steel base, frame, front, rear and fasteners
- Non-Corrosive, high impact strength, non-flammable, composite side panels and top
- All power components, connectors, terminals and support structures are covered with a durable, environmental safe, clear protective coating
- Protected from damage caused by water, salt spray, metal dusts, corrosive mists and many other airborne substances
- Completely enclosed and sealed electronic control circuitry
- Option kits available for use with Miller or Lincoln wire feeders
- Compatible with 42 and 115 vac wire feeders with optional kit:
DuraDrive 4-30, DuraDrive 4-48
MobileFeed 200avs & 300avs, Mobilemaster IV
Mig 2E, 4HD, 4HD Dual
Mig 35, Digimig, Digimig Dual, Digimatic II
UEC-8 Control
- Optional 115 vac outlet for water circulator or tools



DC - CV & CVCC Power Sources

Specifications

Rated DC Output* @ 100% duty cycle	650 A @ 44 Vdc
Rated DC Output* @ 60% duty cycle	750 A @ 44 Vdc
Open Circuit Voltage	54 vdc (cv)/59 vdc (cc)
Primary Input Voltage & Current	
@ rated 100% duty cycle load	108/54 amps
Power Factor @ rated load	83%
Auxiliary 115vac Output (Optional Kit)	60 Hz, 10 amps
Dimensions WxLxH	19"(46cm) x 35"(83cm) x 29"(64cm)
Net Weight	493 lb. (224 kg)
Shipping Weight (approximate)	503 lb. (229 kg)
Enclosure Class	IP-23S

* For 208 vac, 60 Hz. derate output current rating 10%

Ordering Information

ESAB Power Sources

653cvcc SE, 230(208)/460 vac, 3 ph, 60 Hz..... 0558005377
 (Replaces 37835)

Options & Accessories

- Power source to wire feeder control cables** - see section Wire Feeders - Accessories - Control Cables
- Lift Support Kit** Consult ESAB Customer Service
- ESAB Feeder/Remote Control Kit** 0558001429
 (14 pin remote, 19 pin Esab feeder, and 115vac receptacles)
- HC-3B Hand Control**, 30 ft.(9.1 m) 33838
 (Requires Remote Control Kit 0558001429)
- Miller Wire Feeder Adaptor Kit, 24Vac** 0558001430
- Lincoln Wire Feeder Adaptor Kit** 0558001431
- Work Cable with Clamp** (15 ft.)..... 0558001440
- Output Terminal Boot**..... 0558006581

Instruction Manual0558005191
Sales Literature (03-01-09) **ARC-23205**



1 Phase 3 Phase DC CVCC

ESAB MTS-3500i MULTI-PROCESS POWER SOURCE



DC - CV & CVCC
Power Sources

ESAB MTS-3500i

- Multi-process, fourth generation inverter power source puts reliability and ease of use into a powerful, versatile package
- Microprocessor controlled - makes it easy to tune in an excellent welding condition
- Delivers the very best welding performance available
- Digital preset of voltage/amperage on all process at the front panel
- Supports a wide selection of ferrous and non-ferrous alloys in MIG mode utilizing fixed slope and inductance controls
- Starts and re-starts are easy in Stick mode and arc force is adjustable
- Touch Lift Tig™ Start capability
- Select primary voltage with a convenient switch on the back panel
- Operates on single-phase or three-phase power
- Auto Fan™ feature standard in the unit for energy savings. Automatically turns the fan motor on and off when needed.
- Three-year warranty



Ordering Information

Can be used as a direct replacement for the 350mpi

MTS-3500i Power Source

230 (208)/460 vac, 1-3 ph, 50/60 Hz	0558007140
575 vac, 3 ph, 60 Hz	0558007141
400/440 vac, 3 ph, 50/60 Hz CE	0558007142

Supplied with 8 ft. primary cable and two male Twist Lock Cable Connectors.
For Options and Accessories, see next page.

MTS-3500i Migmaster Packages

The following packages include an ESAB MTS-3500i 230/460 vac power source, wire feeder, control cable, gas hose, .035/.045 in. (0.9/1.2mm) feed rolls, GunMaster gas-cooled gun, 15ft. work cable with clamp, 15 ft. wire feeder weld cable and R-33 regulator with adjustable flowmeter unless otherwise noted.

Packages for Argon & Argon Mixed Shield Gases (R-33-FM-580)

MTS-3500i, Mig 4HD, GM-250cc-10ft.	0558008345
MTS-3500i, Mig 4HD, GM-400cc-15ft. (4.5m)	0558001472
MTS-3500i, Mig 4HD Dual, GM-400cc-15ft. (4.5m)	0558007805
(supplied with 2 each, Gunmaster 400, R-33FM580, and feeder weld cable)	
MTS-3500i, Mig 35, GM-400cc-15ft. (4.5m)	0558001473

Instruction Manual	0558008058
Sales Literature	(03-01-09) ARC-23239

MTS-3500i Migmaster Packages Continued . . .

Packages for CO₂ Shield Gas (R-33-FM-320)

MTS-3500i, Mig 4HD, GM-400cc.....	0558001474
MTS-3500i, Mig 35, GM-400cc.....	0558001475

Notes:

MIG-4HD kits have 8 ft. (2.4m) control cable & 9.5 ft. (3.7m) gas hose.
MIG-35 kits have 6 ft. (1.8m) control cable & 12.5 ft. (4.9m) gas hose.

MTS-3500i Migmaster DuraDrive Pulse Package

MTS-3500i, DuraDrive 4-30 Pulse, 60ft. control cable, . 0558005373
(gun, flowmeter-regulator, gas hose, feeder welding cable and work cable must be ordered separately)

Specifications

Rated DC Output @ 60% duty cycle (10 min base continuous fan)	
50 or 60 Hz, 3 ph Input, cv or cc.....	350 amps @ 32 vdc
50 or 60 Hz, 1 ph Input, cv or cc.....	225 amps @ 29 vdc
Rated DC Output @ 100% duty cycle (10 min base continuous fan)	
50 or 60 Hz, 3 ph Input, cv or cc.....	300 amps @ 29 vdc
50 or 60 Hz, 1 ph Input, cv or cc.....	200 amps @ 29 vdc
Open-Circuit Voltage (50 or 60 Hz)	72 vdc
Primary Input Voltage & Current @ rated 60% duty cycle load	
230(208-220)/460 vac,50/60 Hz, 3 ph.....	50/25 amps
230(208-220)/460 vac,50/60 Hz, 1 ph.....	50/38 amps
Net Weight.....	101 lb. (46 kg)
Shipping Weight.....	114 lb. (52 kg)
W x L x H.....	11.5 in. (29 cm) x 24.5 in. (62 cm) x 16.4 in. (42 cm)

Options & Accessories

HC-5 Hand Pendant Control - 30 ft. (9.1 m) cable. Provides remote control of Weld Process Selection (cv-Mig/cc-Tig/cc-Stick), Output Control (cc-amps/cv-volts), and Arc Control (arc force-Stick/Inductance-Mig)..... 34838

Ultra-Pulse 350 Mig Pulse Pendant Control - Easy-to-use synergic pulse Mig control. Simply select the desired wire type and diameter, set the wire feed speed and begin welding. Twenty preset combinations include steel, stainless steel, aluminum and silicon bronze. 36988
Note: MIG 4HD is required.

EAS-IV Electronic Tig Arc Starter and Plumbing Box - This high voltage arc starter is designed for DCSP (electrode negative) Tig applications where arc starting without the tungsten electrode touching the work is required. The EAS-IV is also effective at eliminating problems associated with RF generating arc starters or high frequency arc starters. The EAS-IV is rated 400 amps at 40% duty cycle and includes selection switch (Arc Start/Touch Tig), gas solenoid, gas preflow timer and gas postflow timer, direct Tig torch connections, water inlet/outlet fittings, quick connector output connections, 4 ft. welding power input cables with male quick connectors, 8 ft. control cable, carrying handle and remote control plug (14 pin). 34839
Note: Remote contactor control (such as TC-2B, HC-3B or FC-5B/C) is required.

Tig Torches - 2-piece cable and hose assembly with Twist Lock Cable Connector for direct connection to the power source.
 HW-17V-2-TL, 12.5 ft..... 35857
 HW-17V-2-TL, 25 ft..... 35856
 HW-26V-2-TL, 12.5 ft 35858

Tig Accessory Kit - for HW-17, 18 or 26.....999126

FC-5B EHD Foot Control - 30 ft. (9.1 m) cable *33841

FC-5C Foot Control - 30 ft. (9.1 m) cable*0558004234

TC-2B Torch Control - 25 ft. (7.5 m) cable*33839

TC-3A Torch Control - 30 ft. (9.1 m) cable, use with HW-9, 17, 20, 20A & 24..... *35783

TC-3A Torch Control - 30 ft. (9.1 m) cable, use with HW-18 & HW-26R..... *36680

***Note: FC-5 & TC-2 provide contactor and current control.**

TC-3 provides contactor control only.

Power Source to Feeder Cable, Lug w/ QC 15 ft. (4.5m)... 36254

Work Cable Assembly, Clamp w/ QD 15 ft. (4.5m)..... 36253

Stick Electrode Holder Assembly - 300A., 15 ft. (4.5m)21226

Inverter Cart (2 cylinder) for use with SVI 450i & 350 mpi31700

Twist Lock Cable Connectors & Adaptors

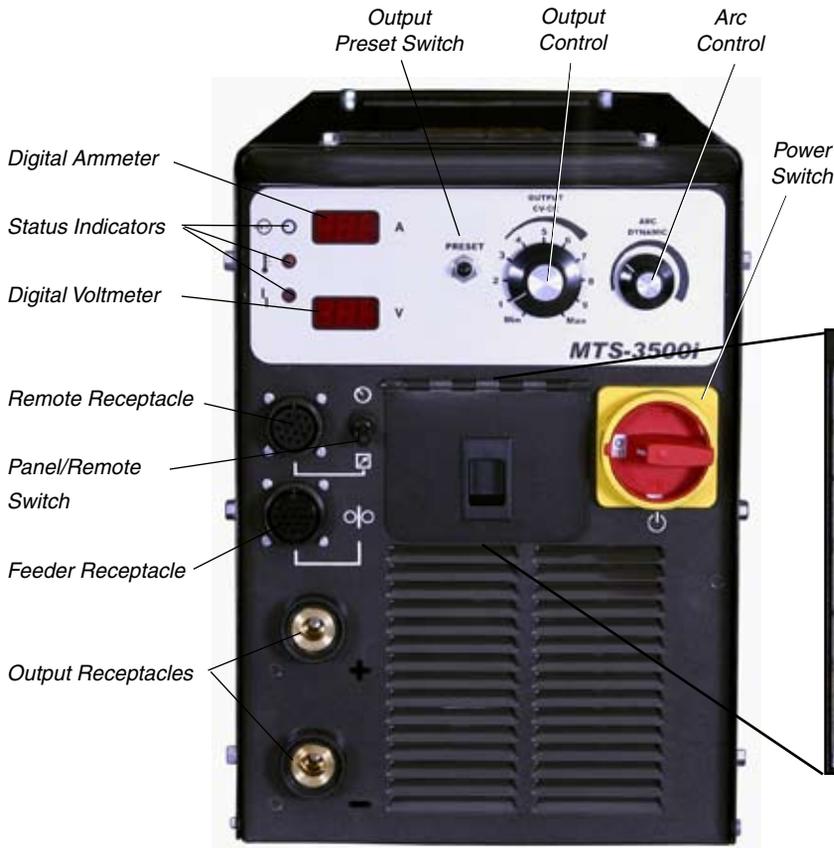
...see under General Accessories

Power Source to Wire Feeder Control Cables

...see under Wire Feeder - Accessories - Control Cables

DC - CV & CVCC
Power Sources

Control Panel and Connections



Super Easy to Use - Simple to Setup

Output and Arc control are right on the front panel for quick adjustment

Contactor, Process, and Mode switched are protected behind a latching cover




**DC - CV & CVCC
Power Sources**

SVI 450i cvcc

- Provides outstanding Mig performance with a wide variety of alloys
- Variable Inductance and Selectable Slope allow ultra fine tuning for superior arc characteristics, such as near spatterless short arc—even with CO₂ shielding gas
- Optional HC-4B provides adjustable Arc Force that controls arc penetration and wetting action during stick electrode welding or air carbon arc gouging
- Three-year warranty

Ordering Information

SVI 450i cvcc Power Source*
208/230/460 vac, 1 or 3 ph, 60 Hz 31950

Note: Each of the power sources above is supplied with an 8 ft. primary cable and two male Twist Lock Cable Connectors.
* Remote control (HC-3B, HC-4B, FC-5B or TC-2B) is required for "cc" operation.

Options & Accessories

Ultra-Pulse 450i Mig Pulse Pendant Control - This easy-to-use synergic pulse control automatically provides precise parameters for pulsed Mig welding. Select the desired wire type and diameter on the control dial, set the wire feed speed and then begin welding. As you change wire feed rate, the pulse parameters automatically adjust to maintain a high quality, spray-like pulsed arc. An arc trim dial is also provided to allow fine tuning of arc length. Eight preset combinations include steel, stainless steel, 4000 series aluminum and 5000 series aluminum with .035 in., .045 in., 3/64 in. or 1/16 in. diameters 34946
(Note: MIG 4HD is required. See 4HD page for additional details.)

Mig 4HD Ultra-Pulse Wire Feeder see 4HD Ultra Pulse page

HC-4B Hand Pendant Control - Provides remote output control of power source, process selection (cv or cc mode), special Stick mode (with Arc Force adjustment for optimum stick electrode welding) and contactor control. 33840

HC-3B Hand Control* - 30 ft. (9.1m) cable 33838

FC-5B EHD Foot Control* - 30 ft. (9.1m) cable 33841

TC-2B Torch Control* - 25 ft. (7.5m) cable 33839

***Note: Remote contactor control (such as TC-2B, HC-3B or FC-5B) is required for "cc" operations.**

Power Source to Feeder Cable, Lug w/ QC 15 ft. (4.5m)... 36254

Work Cable Assembly, Clamp w/ QD 15 ft. (4.5m) 36253

Stick Electrode Holder Assembly - 300A., 15 ft. (4.5m) 21226

Inverter Cart (2 cylinder) for use with SVI 450i & 350 mpi 31700

Twist Lock Cable Connectors & Adaptors
...see under General Accessories

Power source to wire feeder control cables
...see under Wire Feeders - Accessories - Control Cables

Instruction Manual **F-15-071**
Sales Literature (03-01-09) **ARC-23045**



Shown with optional Mig 35 wire feeder, welding torches and welding wire.

Specifications

Rated DC Output @ 60% duty cycle (10 min base continuous fan)
50 or 60 Hz, 3 ph Input, cv or cc 450 amps @ 38 vdc
50 or 60 Hz, 1 ph Input, cv or cc 275 amps @ 31 vdc
Rated DC Output @ 100% duty cycle (10 min base continuous fan)
50 or 60 Hz, 3 ph Input, cv or cc 350 amps @ 34 vdc
50 or 60 Hz, 1 ph Input, cv or cc 215 amps @ 28 vdc
Open Circuit Voltage (50/60 Hz) 72 vdc
Primary Input Voltage & Current @ rated 60% duty cycle load
230(208)/460 vac, 60 Hz, 3 ph 55/38 amps
230 (208) vac, 60 Hz, 1 ph 55 amps
220/380/415 vac, 50 Hz, 3 ph 61/42/39 amps
Auxiliary Output Power (receptacle) 115 vac, 50/60 Hz, 10 amps
Net Weight 155 lb. (70 kg)
Shipping Weight 165 lb. (75 kg)
W x L x H 15.25 in. (39 cm) x 23 in. (58 cm) x 15.5 in. (39 cm)



Industrial Rack Systems for Demanding Environments

- For use in large construction sites, shipyards, and rental fleets and job sites requiring mobility of welding power sources
- All stainless steel frame work construction
- Dual lift-eye for easy and safe hoisting
- Fork truck access for local mobility
- Electrical Fuse/breaker panel options
- Electrical disconnect supplied by customer or ordered optionally.
- Four Pak racks available for any A-Frame style power supply. 353cv, 453cv, 653cvcc, 653cvcc-SE, MultiPower 460, MultiPower 460-SE, LHF405 PipeMaster
- Six Pak racks are available for 350mpi, AristoMig 5000i (460V) and SVI-450i,
- Other options available: Consult the Special Customer Order Department



DC - CV & CVCC
Power Sources

Ordering Information

Power Source Rack Systems

Each of the following rack packages are assembled at the factory. Contact Special Customer Order department for options and accessories.

Standard Four Pak Racks with Power Sources

Four Pak Rack - LHF405 Pipemaster 230/460V 0588001294
 Four Pak Rack - 653cvcc Std. 230/460V 0588001248
 Four Pak Rack - 653cvcc-SE 230/460V 0588001292
 Four Pak Rack - 350mpi 230/460V 0588001632

Six Pak Rack with MTS-3500i Power Sources

Six pak Rack - MTS-3500i 230/460V0588001247

Other custom power source/rack systems available on request. Consult the Special Customer Order department.

Racks also available in painted mild steel (metallic black) or unpainted galvanized finishes.





READY-TO-WELD FEEDER PACKAGES

Order a package below and a power source listed for that package to make a custom welding system

Part No.	DuraDrive 4-30 Ready to Weld Packages - Ring Terminal Cables for ESAB MultiPower 460, ESAB 353cv, ESAB 453cv, ESAB 653cvcc			
0558003266	DuraDrive 4-30	GM-400 x12 ft.	R33 Package	
0558003267	DuraDrive 4-30	GM-400 x15 ft.	R33 Package	
Part No.	DuraDrive 4-30 Ready to Weld Packages - Twist Lock Cables for ESAB 350 MPI, MTS-3500i, ESAB SVI-450i			
0558003270	DuraDrive 4-30	GM-400 x12 ft.	R33 QC Package	
0558003271	DuraDrive 4-30	GM-400 x15 ft.	R33 QC Package	
<i>The DD4-30 Ready to Weld Packages listed above include wire feeder, 8 ft. control cable, 12.5 ft. gas hose, GM 400 torch .035-.045, work cable with clamp, welding power cable with ring terminal, R-33 regulator/flowmeter and .035-.045 drive roll. Other Driveroll Kit sizes must be ordered separate.</i>				
Part No.	DuraDrive 4-48 Ready to Weld Packages - Ring Terminal Cables for ESAB MultiPower 460, ESAB 353cv, ESAB 453cv, ESAB 653cvcc			
0558003268	DuraDrive 4-48	GM-400 x12 ft.	R33 Package	
0558003269	DuraDrive 4-48	GM-400 x15 ft.	R33 Package	
Part No.	DuraDrive 4-48 Ready to Weld Packages - Twist Lock Cables for ESAB 350 MPI, MTS-3500i, ESAB SVI-450i			
0558003272	DuraDrive 4-48	GM-400 x12 ft.	R33 QC Package	
0558003273	DuraDrive 4-48	GM-400 x15 ft.	R33 QC Package	
<i>The DD4-48 Ready to Weld Packages listed above include wire feeder, 8 ft. control cable, 12.5 ft. gas hose, GM 400 torch .052-1/16", work cable with clamp, welding power cable with ring terminal and R-33 regulator/flowmeter. Driveroll Kits must be ordered separate.</i>				
Part No.	Wire Feeder Ready-To-Weld Packages - Twist Lock Cables for ESAB 350 MPI, MTS-3500i, ESAB SVI-450i			
37112	Mig 4HD	GM250cc	R33FM580	ArgonMix 035-045 (0.9/1.2)
37113	Mig 4HD	GM400cc	R33FM580	ArgonMix 035-045 (0.9/1.2)
37114	Mig 4HD	GM400cc	R33FM580	ArgonMix 052-1/16 (1.4/1.6)
37115	Mig 35	GM400cc	R33FM580	ArgonMix 035-045 (0.9/1.2)
37116	Mig 35	GM400cc	R33FM580	ArgonMix 052-1/16 (1.4/1.6)
37118	Digimig	GM400cc	R33FM580	ArgonMix 035-045 (0.9/1.2)
37119	Digimig	GM400cc	R33FM580	ArgonMix 052-1/16 (1.4/1.6)
37121	Mig 4HD	GM250cc	R33FM320	CO ₂ 035-045 (0.9/1.2)
37122	Mig 4HD	GM400cc	R33FM320	CO ₂ 035-045 (0.9/1.2)
37123	Mig 4HD	GM400cc	R33FM320	CO ₂ 052-1/16 (1.4/1.6)
37124	Mig 35	GM400cc	R33FM320	CO ₂ 035-045 (0.9/1.2)
37125	Mig 35	GM400cc	R33FM320	CO ₂ 052-1/16 (1.4/1.6)
37126	Digimig	GM400cc	R33FM320	CO ₂ 035-045 (0.9/1.2)
37127	Digimig	GM400cc	R33FM320	CO ₂ 052-1/16 (1.4/1.6)
Part No.	Wire Feeder Ready-To-Weld Packages - Ring Terminal Cables for ESAB MultiPower 460, ESAB 353cv, ESAB 453cv, ESAB 653cvcc			
0558001477	Mig 4HD	GM250cc	R33FM580	ArgonMix 035-045 (0.9/1.2)
0558001478	Mig 4HD	GM400cc	R33FM580	ArgonMix 035-045 (0.9/1.2)
0558001479	Mig 4HD	GM400cc	R33FM580	ArgonMix 052-1/16 (1.4/1.6)
0558001480	Mig 35	GM400cc	R33FM580	ArgonMix 035-045 (0.9/1.2)
0558001481	Mig 35	GM400cc	R33FM580	ArgonMix 052-1/16 (1.4/1.6)
0558001482	Digimig	GM400cc	R33FM580	ArgonMix 035-045 (0.9/1.2)
0558001483	Digimig	GM400cc	R33FM580	ArgonMix 052-1/16 (1.4/1.6)
0558001485	Mig 4HD	GM250cc	R33FM320	CO ₂ 035-045 (0.9/1.2)
0558001486	Mig 4HD	GM400cc	R33FM320	CO ₂ 035-045 (0.9/1.2)
0558001487	Mig 4HD	GM400cc	R33FM320	CO ₂ 052-1/16 (1.4/1.6)
0558001488	Mig 35	GM400cc	R33FM320	CO ₂ 035-045 (0.9/1.2)
0558001489	Mig 35	GM400cc	R33FM320	CO ₂ 052-1/16 (1.4/1.6)
0558001490	Digimig	GM400cc	R33FM320	CO ₂ 035-045 (0.9/1.2)
0558001491	Digimig	GM400cc	R33FM320	CO ₂ 052-1/16 (1.4/1.6)
<i>The Wire Feeder Packages listed above include wire feeder, 6 ft. control cable, 8 to 12.5 ft. gas hose, feed roll(s), GM torch 15 ft., work cable with clamp, work cable with Ring terminal, cable adaptor, and R-33 regulator/flowmeter.</i>				

Wire Feeders

DuraDrive® 4- 30 Wire Feeder

- Heavy duty compact wire feed motor
- Modular panels for easy function and feature upgradability
- Two speed ranges - Ideal for hi-speed/small diameter applications; 50-700 or 350-999 ipm
- Quick release “No Tools” feed roll system
- Driven upper and lower feed rolls for positive feed force and maximum wire grip
- All control circuits incorporated on one solid-state printed circuit board, mounted for easy access and removal
- Slow run-in switch sets the wire feed speed to 1/2 the preset until the arc is struck for smoother arc starting
- Jog switch for wire inching without energizing the power source contactor
- Anti-stick wire burnback control for precise adjustment of amount of wire burnback after wire feed stops, to eliminate freezing of wire in weld pool
- Low voltage circuit (12V) for gun trigger switch, to assure operator safety
- NAS (Bayonet) gun adapter
- All cable and hose connections are quickly detachable
- .035-.045 in. driveroll included

Ordering Information

DuraDrive 4-30 Basic.....	0558001911
DuraDrive 4-30 Basic w/ 8' Control Cable.....	0558002769
DuraDrive 4-30 Basic w/Digital Display.....	0558002279
<i>Single Schedule with Digital Display. Field upgradable to Dual schedule with addition of kit 0558002278.</i>	
DuraDrive 4-30 Pulse.....	0558006555
<i>PulseMig, Dual Weld Schedule with Digital Display</i>	

DuraDrive 4-30 Basic, Ready-to-Weld Packages for Ring Terminal Cables

(use with ESAB 353, 453, 460, 653)

DuraDrive 4-30 Basic, GM-400 x12 ft. R33 Pkg	0558003266
DuraDrive 4-30 Basic, GM-400 x15 ft. R33 Pkg	0558003267

for Quick Connect Cables

(use with ESAB 350 mpi, SVI- 450)

DuraDrive 4-30 Basic, GM-400 x12 ft. R33 Pkg	0558003270
DuraDrive 4-30 Basic, GM-400 x15 ft. R33 Pkg	0558003271

Ready-to-Weld packages include: Wire Feeder, 8 ft. control cable, gas hose regulator/flowmeter, GunMaster 400 Torch Ready-to-Weld .035-.045, 15 ft. work cable and 15 ft. welding power cable.

Instruction Manual.....	F15-635
Sales Literature.....	(03-01-09) ARC-23114



Options & Accessories

Single Schedule/Digital Display Panel	0558002277
Dual Schedule Panel	0558001913
Dual Schedule/Digital Display Panel.....	0558001912
Dual Sched./Digital Display/Pulse Panel.....	0558002496
Pre-Postflow/Spot/Trigger Lock Kit.....	0558001914
Hanging Bail	0558003047
Handle Kit	0558002356
Counterbalance Mini-Boom.....	0458705881
Counterbalance Mini-Boom for 60lb. Coils	0458705882
Spool Cover.....	0558002357
Marathon Pack inlet guide.....	0558002354
Control Cable, 6ft.	30686
Control Cable, 8 ft.	0558002358
Control Cable, 30 ft.	30780
Control Cable, 60 ft.	30781
Water Kit.....	37801
ST16/21 Outlet Adaptor (use with 45V11).....	0588000995
NAS Tweco #4 to EURO Adaptor.....	0558002622

Gunmaster Trigger Leads

Trigger Lead, GunMaster 250	0558001815
Trigger Lead, GunMaster 400.....	2075216

Specifications

Input Power Required	42V, 50/60Hz 1ph
Wire Feed Range	
Low Range	50-700 in/min (1.2-18 m/min)
Hi Range	350-999 in/min (9-25 m/min)
Wire Sizes	
Hard (V-Groove) .....	.023 - 1/16 in. (.6-1.6 mm)
Cored (Knurled) .....	.035 - 5/64 in. (.9-2.0 mm)
Soft (U-Groove) .....	.035 - 1/16 in. (.9-1.6 mm)
Dimensions	
Length	21 in. (53 cm)
Width	9 in. (23 cm)
Height.....	9.25 in. (23 cm)
Weight	45 lbs. (20.5 kg)

Optional Panels

Single Schedule Panel w/ Digital Display 0558002277

The Digital Single Schedule panel has all the capability of the Basic panel with the addition of a digital display for Wire Feed Speed and output Voltage. This panel may be field upgraded to Dual Schedule by adding the Dual Schedule Upgrade Kit 0558002278.



Dual Schedule Panel Basic.....0558001913

The Basic Dual Schedule panel allows for the adjustment of two independent welding schedules (Wire Speed and VOLTS) for power sources with remote voltage capability. The operator can switch between either schedule while welding by simply double clicking the gun trigger in rapid fashion.



Dual Schedule Panel w/ Digital Display 0558001912

The Digital Dual Schedule panel has all the capability of the Basic Dual Schedule panel with the addition of a digital display for Wire Feed Speed and output Voltage. The operator can switch between either welding schedule while welding by simply double clicking the gun trigger in rapid fashion.



Dual Schedule Pulse Kit w/ Digital Display 0558002496

The Digital Dual Schedule Pulse panel adds Pulse Mig welding capability to the DuraDrive feeder line. Two welding schedules can be set on the panel in either the standard (CV) or Pulse-Mig process modes. This kit can be used with the ESAB 350 mpi, SVI-450i and MultiPower 460 (non-pulse version) power sources.



Pre-PostFlow/Spot/Trigger Lock Panel 0558001914

This easy-to-install kit permits the operator to set times for spot welding (0-10 secs.), gas preflow (0-5 secs.), and gas postflow (0-7.5 secs.). This panel also includes a trigger latch feature, which allows the welder to make long welds without having to "hold" the trigger.



Drive Roll Kits

Drive Roll Kit 1/16" Knurled V groove 0558005918

Drive Roll Kit 5/64-3/32" Knurled V groove..... 0558005919

Use for: Drive Roll Kits - DuraDrive 4-30

Wire Diameter	Type	Kit P/N	Drive Roll	Qty	Center Guide	Qty	Outlet Guide	Qty	Inlet Guide	Qty
.023 - .030 in. (0.6 - 0.8 mm)	V-Solid	0558003134	0459052001	4	0455072002	1	0458690880	1	0455049001	1
.035 - .045 in. (0.9 - 1.2 mm)*	V-Solid*	0558003135	0459052003*	4	0455072002*	1	0458690880*	1	0455049001*	1
.052 - 1/16 in. (1.4 - 1.6 mm)	V-Solid	0558003136	0459052013	4	0455072001	1	0458690881	1	0455049001	1
.035 - .045 in. (0.9 - 1.2 mm)	K-Cored	0558003137	0558002352	4	0455072002	1	0458690880	1	0455049001	1
.045 - .052 in. (1.2 - 1.4 mm)	K-Cored	0558003138	37319	4	0455072002	1	0458690881	1	0455049001	1
1/16 - 5/64 in. (1.6 - 2.0 mm)	K-Cored	0558003139	37320	4	0455072001	1	0458690882	1	0455049001	1
.035 - 3/64 in. (0.9 - 1.2 mm)	U-Soft	0558003140	36860	4	0456615001	1	0458690883	1	0455049001	1
3/64 - 1/16 in. (1.2 - 1.6 mm)	U-Soft	0558003141	36861	4	0456615001	1	0458690883	1	0455049001	1

*As delivered

Note: Kits include outlet/intermediate guides and 4 Feed Rolls.

DuraDrive® 4 - 48 Wire Feeder

- Modular panels for easy function and feature upgradability
- Heavy duty compact wire feed motor
- Two speed ranges - offers wider application range; 50-700 or 150-800 ipm
- Quick release “No Tools” feed roll system
- Driven upper and lower feed rolls for positive feed force and maximum wire grip
- All control circuits incorporated on one solid-state printed circuit board, mounted for easy access and removal
- Slow run-in switch sets the wire feed speed to 1/2 the preset until the arc is struck for smoother arc starting
- Jog switch for wire inching without energizing the power source contactor
- Anti-stick wire burnback control for precise adjustment of amount of wire burnback after wire feed stops, to eliminate freezing of wire in weld pool
- Low voltage circuit (12V) for gun trigger switch, to assure operator safety
- NAS (Bayonet) gun adaptor factory installed
- Heavy Duty 48 millimeter feed rolls, ideal for heavy wire applications

Ordering Information

DuraDrive 4-48 Basic.....	0558001910
DuraDrive 4-48 Basic w/6ft. Control Cable	*0558002770
DuraDrive 4-48 Basic Boom Mount Feeder	0558002497
DuraDrive 4-48 Basic w/Digital Display	0558002280
<i>Single Weld Schedule with Digital Display. Field upgradable to Dual Schedule with addition of kit 0558002278.</i>	
DuraDrive 4-48 Pulse	0558006556
<i>PulseMig, Dual Weld Schedule with Digital Display</i>	

DuraDrive 4-48 Basic, Ready-to-Weld Packages for Ring Terminal Cables

(use with ESAB 353, 453, 460, 653)

DuraDrive 4-48 Basic, GM-400 x 12 ft. R33 Pkg	0558003268
DuraDrive 4-48 Basic, GM-400 x 15 ft. R33 Pkg	0558003269

for Quick Connect Cables

(use with ESAB 350 mpi, SVI- 450)

DuraDrive 4-48 Basic, GM-400 x 12 ft. R33 Pkg	0558003272
DuraDrive 4-48 Basic, GM-400 x 15 ft. R33 Pkg	0558003273

Ready-to-Weld packages include: Wire Feeder, 8 ft. control cable, gas hose regulator/flowmeter, GunMaster 400 Torch Ready-to-Weld .052-1/16, 15 ft. work cable and 15 ft. welding power cable. Order drive roll kits from next page.

Instruction Manual.....	F15-636
Sales Literature	(03-01-09) ARC-23115



Options & Accessories

Single Schedule/Digital Display Panel	0558002277
Dual Schedule Panel	0558001913
Dual Schedule/Digital Display Panel.....	0558001912
Dual Sched./Digital Display/Pulse Panel.....	0558002496
Pre-Postflow/Spot/Trigger/Lock Kit	0558001914
Hanging Bail	0558003047
Handle Kit	0558002356
Outlet Adaptor Tweco #5	0558002212
Marathon Pack Inlet Guide	0558002519
Requires Quick Connect Adaptor.....	899F50
Counterbalance Mini-Boom.....	0458705881
Counterbalance Mini-Boom for 60lb. Coils	0458705882
Spool Cover.....	0558002357
Control Cable, 6ft.	30686
Control Cable, 8ft.	0558002358
Control Cable, 30ft.	30780
Control Cable, 60ft.	30781
ST16/21 Outlet Adaptor (use with 45V11).....	0588000995
Water Kit.....	37801
NAS Tweco #4 to Euro Adaptor.....	0558002622

Gunmaster Trigger Leads,

Trigger Lead, GunMaster 250	0558001815
Trigger Lead, GunMaster 400.....	2075216

Specifications

Input Power Required.....	42V, 50/60Hz 1ph
Wire Feed Range	
Low Range	50-700 in/min (1.2-18 m/min)
Hi Range	150-800 in/min (3.8-20.5 m/min)
Wire Sizes	
Hard (V-Groove) .....	.035 - 1/16 in.(.9-1.6 mm)
Tubular (Knurled) .....	.035 - 1/8 in.(.9-3.2 mm)
Soft (U-Groove) .....	.035 - 3/32 in.(.9-2.4 mm)
Dimensions	
Length	21 in.(53 cm)
Width	9 in.(23 cm)
Height.....	9.25 in.(23 cm)
Weight	53 lbs.(24 kg)

Optional Panels

Single Schedule Panel w/ Digital Display 0558002277 —
 The Digital Single Schedule panel has all the capability of the Basic panel with the addition of a digital display for Wire Feed Speed and output Voltage. This panel may be field upgraded to Dual Schedule by adding the Dual Schedule Upgrade Kit 0558002278.



Dual Schedule Panel Basic..... 0558001913 —
 The Basic Dual Schedule panel allows for the adjustment of two independent welding schedules (Wire Speed and VOLTS) for power sources with remote voltage capability. The operator can switch between either schedule while welding by simply double clicking the gun trigger in rapid fashion.



Dual Schedule Panel w/ Digital Display 0558001912 —
 The Digital Dual Schedule panel has all the capability of the Basic Dual Schedule panel with the addition of a digital display for Wire Feed Speed and output Voltage. The operator can switch between either welding schedule while welding by simply double clicking the gun trigger in rapid fashion.



Dual Schedule Pulse Kit w/ Digital Display 0558002496 —
 The Digital Dual Schedule Pulse panel adds Pulse Mig welding capability to the DuraDrive feeder line. Two welding schedules can be set on the panel in either the standard (CV) or Pulse-Mig process modes. This kit can be used with the ESAB 350 mpi, SVI-450i and MultiPower 460 (non-pulse version) power sources.



Pre-PostFlow/Spot/Trigger Lock Panel 0558001914 —
 This easy-to-install kit permits the operator to set times for spot welding (0-10 secs.), gas preflow (0-5 secs.), and gas postflow (0-7.5 secs.). This panel also includes a trigger latch feature, which allows the welder to make long welds without having to "hold" the trigger.



Table 1. Drive Roll & Guide Tube Selection

Use for: DuraDrive 4-48

Wire Diameter	Type	Kit P/N	Drive Roll	Qty	Center Guide	Qty	Outlet Guide	Qty	Inlet Guide	Qty
.035 in. (0.9 mm)	V-Solid	0558003125	0558002237	4	0558002223	1	0558002215	1	0558002347	1
.045 in. (1.2 mm)	V-Solid	0558003126	0558002238	4	0558002223	1	0558002215	1	0558002347	1
.052 in. (1.4 mm)	V-Solid	0558003126	0558002238	4	0558002223	1	0558002216	1	0558002347	1
1/16 in. (1.6 mm)	V-Solid	0558003128	0558002240	4	0558002224	1	0558002216	1	0558002347	1
.035 in. (0.9 mm)	K-Cored	0558003115	0558002227	4	0558002223	1	0558002215	1	0558002347	1
.045 in. (1.2 mm)	K-Cored	0558003116	0558002228	4	0558002223	1	0558002215	1	0558002347	1
.052 in. (1.4 mm)	K-Cored	0558003117	0558002229	4	0558002224	1	0558002216	1	0558002347	1
1/16 in. (1.6 mm)	K-Cored	0558003118	0558002230	4	0558002224	1	0558002216	1	0558002347	1
5/64 in. (2.0 mm)	K-Cored	0558003119	0558002231	4	0558002225	1	0558002217	1	0558002347	1
3/32 in. (2.4 mm)	K-Cored	0558003120	0558002232	4	0558002225	1	0558002217	1	0558002347	1
7/64 in. (2.8 mm)	K-Cored	0558003121	0558002233	4	0558002226	1	0558002217	1	0558002347	1
1/8 in. (3.2 mm)	K-Cored	0558003122	0558002234	4	0558002226	1	0558002218	1	0558002347	1
.035 in. (0.9 mm)	U-Soft	0558003130	0558002244	4	0558002307	1	0558002219	1	0558002347	1
3/64 in. (1.2 mm)	U-Soft	0558003131	0558002245	4	0558002308	1	0558002220	1	0558002347	1
1/16 in. (1.6 mm)	U-Soft	0558003132	0558002247	4	0558002308	1	0558002220	1	0558002347	1
3/32 in. (2.4 mm)	U-Soft	0558003133	0558002248	4	0558002310	1	0558002222	1	0558002347	1

Mig 4HD and Mig 4HD Dual

- These wire feeders come complete with internal gas solenoid, 8 ft. control cable, 9-1/2 ft. gas hose with fittings, .035/.045 in. drive rolls, and guide tube
- Compact, well balanced design suitable for stationary or portable applications. Mig 4HD weighs 29 lbs.
- Designed with safety in mind:
 - low voltage (42 vac) operation
 - low voltage (12 vac) torch switch
 - wire drive located behind hinged door
 - overload protection circuit
- Electronic Dynamic Braking for regulated stops
- Quality manufacturing system certified to ISO 9002
- Three-year warranty

Mig 4HD - P/N 34154

- Provides excellent Mig welding performance
- 4-roll drive is standard. Two .035/.045 in. dual groove drive rolls and two pressure rolls are included. Can also be used as a 2-roll drive feeder
- 50-750 ipm wire feed speed range standard
- Gas purge switch, cold wire inch switch (jog), and remote power source voltage control are standard
- Options available: Dual Schedule Kit, Spot/Burnback/Pre-Postflow/Trigger-lock Module, Digital Meter Module (with wire feed preset feature), Burnback

Mig 4HD Dual Wire Feeder - P/N 37544

- Dual schedule for each side is standard
- 4 wire feed speed potentiometers
- 4 voltage control potentiometers
- Right/Left side "Active" lights
- Push-Pull torch ready on left side



Mig 4HD
Shown with optional digital meter kit



Mig 4HD Dual
Shown with optional digital meter kit and water kits

Instruction Manuals

Mig 4HD	F-15-142
Mig 4HD Dual	F-15-483
Sales Literature	(03-01-09) ARC-23046



Option Modules & Kits

- Burnback Kit (Mig 4HD)**37526
- Spot/Burnback/Pre-Postflow/Trigger-Lock Modules** Easy-to-install kits permit the operator to set times for spot welding (0-5 sec), wire burnback (0-0.6 sec), gas preflow (0-5 sec), and gas postflow (0-7.5 sec). These modules also include trigger lock, which allows the welder to make long welds without continuously depressing the torch trigger.
- For Mig 4HD 34182
- For Mig 4HD Dual 37799
- Slow Run-In, Pre/Post Flow Kit (Mig 4 HD only)** 37837
- Digital Meter w/Preset Module** Easy-to-install kit provides a digital display of wire feed speed (set ipm or m/min) and voltage. This option also enables the welder to preset wire feed speed and power source voltage (OCV)34180
- Dual Schedule Kit w/Remote Receptacle (Mig 4HD only)** Easy-to-install kit includes controls for setting a second set of welding conditions (wire feed speed and voltage). The welder can select Schedule A or Schedule B on a switch (provided with kit) located on the front panel of wire feeder or select remotely using an optional Remote Pendant Control or use an optional torch-mounted Remote Schedule Selector Switch 34181
- Remote Pendant Control (Mig 4HD only)** - (Requires Dual Schedule Kit) Provides a third schedule with remote control of wire feed speed and power source voltage. Schedule selection (A, B or C) switch included, 25 ft. 34328
- Remote Schedule Selector Switch (Mig 4HD only)** (Requires Dual Schedule Kit) Torch-mounted, two position remote schedule selection switch (A or B), 25 ft. 34329
- Push-Pull Torch Control Kit (Mig 4HD only)** - Easy-to-install kit allows the use of Mig-41 or Mig-41A Push-Pull Torches. Use 2 pole plug on front of Mig 4HD 34327
- Dual Wire Feeder Adaptor** - Enables the use of two Mig 4HD's with one power source such as ESAB 353cv, 453cv, Multipower 460, 653cvcc, 350mpi or SVI 450i 000444

- Water Kits** - Convenient way of using water-cooled Torches. Kit consists of inlet/outlet fittings, mounting Hardware, quick action connectors for the torch and 8 ft. (2.4 m) water hoses with "B" size water fittings.
- For Mig 4HD only (MIG-41 Gun) 34325
- For Mig 4HD Dual only37801
- Fem. QC Water Hose for MIG-41, 1 ft. (0.3 m) 19089
- Power Source to Control Extension Cables**
(8 ft. control cable is standard)
- 30 ft. (9.1 m) extension cable 34378
- 60 ft. (18.3 m) extension cable 34377
- Drive Rolls & Guide Tubes** see chart below

Accessories

- All accessories listed below are used with Mig 4HD only.*
- Swivel Post** - Installs onto power sources such as ESAB 353cv, 453cv, Multipower 460 or 653cvcc and allows the wire feeder to swivel freely on post 36172
- Swivel Post w/Mounting Bracket** - Attaches to Inverter Cart (P/N 31700) or other flat mounting surface and allows the wire feeder to swivel freely on the post 34075
- Wire Reel Adaptor** - Use with 60 or 65 lb. (27 or 30 kg) coils ..34323
- Spool Spacer** - For adapting 10 in. (25.4 cm) spools 34330
- Spool Cover Kit** - Includes clear cover and mounting hardware (not for use with coils) 34326
- Wire Feeder Wheel Cart** - Cart makes it easy to roll wire feeder around the job site. Cart is 5-7/8 in. (15 cm) high and includes base, front swivel caster wheels, rear caster wheels and mounting hardware 34324
- Boom Hanging Bracket Kit** - includes hardware 34321
- Carrying Handle Kit** - includes hardware 34320
- Counterbalance Mini-Boom** - Reduces wire feeding problems caused by sharp bends in torch conduits or cables by keeping torch cables off the floor. Includes boom and mounting hardware. (Swivel Post - P/N 36172 is required) 34322

Specifications

Model	Wire Speed Range in.	Wire Dia. Range in.	Primary Voltage vac	Current amps	Net. Weight lbs.	Shipping Weight lbs.	Dimensions L x W x H in.
4HD	50-750	.023 - 5/64 in.	42 vac	8 amps	29	40	21 x 9 x 9.25
4HD Dual	50-750	.023 - 5/64 in.	42 vac	8 amps	58	67	22 x 14 x 14

Drive Rolls and Guide Tubes for: Mig 4HD

Wire Diameter	Type	Drive Roll	Qty.	Outlet Guide	Qty.	Center Guide	Qty.	Inlet Guide	Qty.
.023 in. (0.6mm)	V-Solid	21155	2	21163	1	34612	1	34615	1
.030 in. (0.8mm)	V-Solid	21155	2	21164	1	34612	1	34615	1
.035 in. (0.9mm)**	V-Solid**	21156**	2	21165**	1	34612**	1	34615**	1
.045 in. (1.2mm)**	V-Solid**	21156**	2	21165**	1	34612**	1	34615**	1
.052 in. (1.4mm)	V-Solid	21157	2	21166	1	34613	1	34616	1
1/16 in. (1.6mm)	V-Solid	21157	2	21166	1	34613	1	34616	1
.030 in. (0.8mm)	K-Cored	21160	2	21164	1	34612	1	34615	1
.035 in. (0.9mm)	K-Cored	21160	2	21165	1	34612	1	34615	1
.045 in. (1.2mm)	K-Cored	21161	2	21165	1	34612	1	34615	1
.052 in. (1.4mm)	K-Cored	21161	2	21166	1	34612	1	34615	1
1/16 in. (1.6mm)	K-Cored	21161	2	21166	1	34613	1	34616	1
5/64 in. (2.0mm)	K-Cored	21162	2	21166	1	34613	1	34616	1
.035 in. (0.9mm)	U-Soft	21158	2	21167*	1	34612	1	34615	1
3/64 in. (1.2mm)	U-Soft	21158	2	21168*	1	34612	1	34615	1
1/16 in. (1.6mm)	U-Soft	21159	2	Not Required	1	34613	1	34616	1

* Requires support tube 21169. ** As delivered.



MIG 4HD ULTRA PULSE WIRE FEEDER FOR USE WITH SVI 450i ONLY

Mig 4HD Ultra Pulse

- Designed for Pulsed Mig (PGMAW) welding as well as conventional Mig (GMAW) welding
- Synergic Pulsed Mig welding with wire type selection dial, wire feed speed control and arc length trim control
- Synergic Pulsed Mig pre-programmed for eight different combinations:
.035 & .045 (0.9-1.2mm) Steel & Stainless Steel
3/64 & 1/16 (1.2-1.6mm) 4000 & 5000 Aluminum
- Standard 4-roll drive for excellent wire feedability
- Standard digital meter with wire feed speed preset - meter displays voltage or wire feed speed
- Burnback (anti-stick) standard
- Use Mig 4HD Ultra Pulse wire feeders only with SVI 450i cvcc inverter power source - SVI 450i page for details
- Three-year warranty



Wire Feeders

Ordering Information

Mig 4HD UltraPulse Wire Feeder¹

4-roll drive, 42 vac, 50/60 Hz..... 36645
w/ 60 ft. 19 pin control cable, 60 ft. gas hose with fittings, .035/.045 in.
(0.9/1.2 mm) dual groove drive rolls and guide tube.

Mig 4HD UltraPulse Wire Feeder¹

4-roll drive, 42 vac, 50/60 Hz..... 000844
w/ 30 ft. 19 pin control cable, factory installed Spot/PrePost Flow/Trigger
Lock Module. .035/.045" dual groove drive rolls and guide tube.

Mig 4HD UltraPulse Wire Feeder¹

4-roll drive, 42 vac, 50/60 Hz..... 0588000959
w/ 19 pin receptacle (no control cable), Factory Installed Spot/PrePost
Flow/Trigger Lock Module, 3/64-1/16 U groove drive rolls.

¹SVI 450i power source is required. See ordering information below.

Accessories see under Wire Feeders - Accessories

SVI 450i cvcc Power Source*

208/230/460 vac, 1 or 3 ph, 60 Hz..... 31950

*Each of the power sources above is supplied with an 8 ft. primary cable and two male Twist Lock Cable Connectors.

*Remote control (HC-3B, HC-4B, FC-5B or TC-2B) is required for "cc" operation.

Specifications

Mig 4HD Ultra Pulse Wire Feeder

Wire Speed Range..... 50-750 ipm (1.3-19.0 m/min)
Wire Diameter Capacity..... .023 - 3/32 in. (0.6 mm-2.4 mm)
Primary Input Voltage & Current... .42 vac, 50/60 Hz, 1 ph, 8 amps
Net Weight..... 28 lb. (14 kg)
Shipping Weight..... 38 lb. (15 kg)
W x L x H..... 9 in. (23 cm) x 21 in. (53 cm) x 9.25 in. (23.5 cm)

SVI 450i cvcc Power Source

For details see SVI 450i cvcc page.

Drive Rolls and Guide Tubes for: Mig 4HD

Wire Diameter	Type	Drive Roll	Qty.	Outlet Guide	Qty.	Center Guide	Qty.	Inlet Guide	Qty.
.023 in. (0.6mm)	V-Solid	21155	2	21163	1	34612	1	34615	1
.030 in. (0.8mm)	V-Solid	21155	2	21164	1	34612	1	34615	1
.035 in. (0.9mm)**	V-Solid**	21156**	2	21165**	1	34612**	1	34615**	1
.045 in. (1.2mm)**	V-Solid**	21156**	2	21165**	1	34612**	1	34615**	1
.052 in. (1.4mm)	V-Solid	21157	2	21166	1	34613	1	34616	1
1/16 in. (1.6mm)	V-Solid	21157	2	21166	1	34613	1	34616	1
.030 in. (0.8mm)	K-Cored	21160	2	21164	1	34612	1	34615	1
.035 in. (0.9mm)	K-Cored	21160	2	21165	1	34612	1	34615	1
.045 in. (1.2mm)	K-Cored	21161	2	21165	1	34612	1	34615	1
.052 in. (1.4mm)	K-Cored	21161	2	21166	1	34612	1	34615	1
1/16 in. (1.6mm)	K-Cored	21161	2	21166	1	34613	1	34616	1
5/64 in. (2.0mm)	K-Cored	21162	2	21166	1	34613	1	34616	1
.035 in. (0.9mm)	U-Soft	21158	2	21167*	1	34612	1	34615	1
3/64 in. (1.2mm)	U-Soft	21158	2	21168*	1	34612	1	34615	1
1/16 in. (1.6mm)	U-Soft	21159	2	Not Required	1	34613	1	34616	1

* Requires support tube 21169. ** As delivered.

Instruction ManualF-15-348

Sales Literature(03-01-09) ARC-23047

Balanced Boom Assembly

- With a 12 or 15 ft. gun and the boom's 12 ft. reach, you can weld virtually anywhere within a 60 ft. diameter area.
- Fully balanced - for ease of movement both vertically and horizontally
- 350 degree motion on pedestal support
- Rugged construction - will sustain continuous use
- Boom adjusts from horizontal position upward 50 degrees and downward 6 degrees
- Boom Model gives operator access to change weld parameters at the end of the boom, not on the mast
- Mast has 6 ft. 10 in. clearance from floor to centerline of boom support pin

Ordering Information

Mig 4HD Balanced Boom Packages

A boom package requires the ordering of two part numbers:

- (1) MIG 4HD Boom Model Wire Feeder
- (2) Balanced Boom - based on length required

Wire Feeder

MIG 4HD Boom Model Wire Feeder0558003448

(Includes 2 in. Spindle Hub Assembly and 20 ft. control cable and gas hose)

Balanced Booms

Balanced Boom, 8 ft. 4HD0558003451

Balanced Boom, 10 ft. 4HD0558003452

Balanced Boom, 12 ft. 4HD0558003454

DuraDrive 4-48 and AristoDrive 4-48

Balanced Boom Packages

A boom package requires the ordering of these part numbers:

- (1) DuraDrive 4-48 Boom Model Wire Feeder
Feed head on boom end, control on boom mast.
- (2) Blanced Boom - based on length required
- (3) Control Box to Power Source Cable

Wire Feeder

DuraDrive 4-48 Boom Model Wire Feeder0558002497

Balanced Booms

Balanced Boom, 12 ft. DuraDrive 4-480558003442

Balanced Boom, 16 ft. DuraDrive 4-480558004011

Booms include wire conduit for mast mounted reels.

Control Box to Power Source Cable

DuraDrive 4-48 (Std. Control Cable)

Control Cable, 8 ft.0558002358

(For a full list of available cables see DuraDrive 4-48)

Custom Balanced Boom Packages

As many combinations are possible for a custom installation, please call ESAB Customer Service to design a custom Balanced Boom Package tailored to your needs.



Required

Power Source - ESAB 353cv, 453cv, 653cvcc, Multipower 460
350mpi or SVI 450i

Regulator/Flowmeter

R-33-FM-58021557

R-33-FM-32021558

GunMaster-250 or 400 See GunMaster page for selections

Note: Welding cable, water and gas hose are customer supplied items as required by specific installation.

Accessories

Pallet Base - Requires anchors or another method to secure base to floor 37776

Welding Cart with wheels - Completely portable with 653cvcc installed 37777

Spindle Hub Assembly - 2 in. diameter for standard 4 in. wide spools 948259

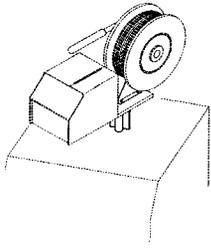
Single Reel Support - Mounts spindle hub assembly 37770

60 Lb. Coil Adapter - Fits over spindle hub assembly 34323

DuraDrive 4-48 Marathon Pac Adaptor 0558002519
Requires Quick Connect Adaptor 899F50

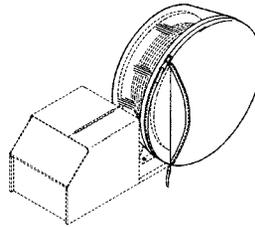
Sales Literature (03-01-09) **ARC-23213**

Accessories for Mig 4HD and DuraDrive



Swivel Post - Installs onto power sources such as ESAB 353cv, 453cv, or 653cvcc. The wire feeder swivels freely on the post36172

Swivel Post with Mounting Bracket - Bracket attaches to Inverter Cart (P/N 31700) or other flat mounting surfaces. Wire feeder swivels on the post ... 34075

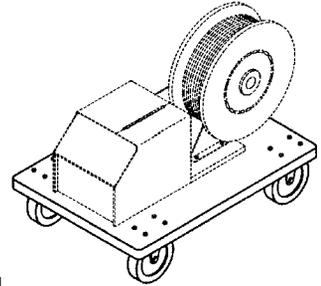


Spool Cover Kit - Includes clear cover and mounting hardware (not for use with coils) Mig 4HD.....34326
Spool Cover DuraDrive... 0558002357

Accessories for DuraDrive 4-30, 4-48

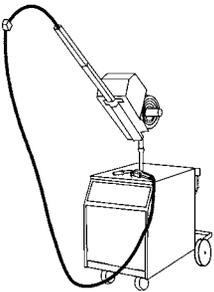
Dual Schedule Option.....	0558001913
Dual Sched./Digital Mtr Option.....	0558001912
Dual Sched./Dig. Mtr/Pulse Opt.....	0558002496
Pre/Postflow/Spot/Trig Lock Opt.....	0558001914
Control Cable, 8 ft.	0558002358
Control Cable, 30 ft.	30780
Control Cable, 60 ft.	30781
Marathon Pack Inlet Guide, 4-30 (Req's. 899F50).....	0558002354
Marathon Pack Inlet Guide, 4-48 (Req's. 899F50)	0558002519
Outlet Adaptor Tweco #5, 4-48.....	0558002212
Marathon Pack Inlet Guide, 4-48.....	0558002519
NAS (Tweco #4) to Euro Torch Adapter	0558002622

Wire Feeder Wheel Cart - Cart makes it easy to roll wire feeder around job site. Cart is 5-7/8 in. (15 cm) high and includes base, front swivel caster wheels, rear caster wheels and mounting hardware 34324



Water Kit - Convenient way of using water cooled torches. Kit consists of inlet/outlet fittings, mounting hardware, quick action connectors for the torch and 10 ft. (3 m) water hoses with "B" size water fittings, Mig 4HD..... 34325

Water Kit - DuraDrive.....37801
Coil Adaptor - standard - Use with 60 or 65 lb. (27 or 30 kg) coils ... 34323
Spool Spacer - For adapting 8 in. (20.3 cm) diameter spools.... 17511
Spool Spacer - For adapting 10 in. (25.4 cm) diameter spools .. 34330



Counterbalance Mini-Boom - Reduces wire feeding problems caused by sharp bends in torch conduits or cables by keeping torch cables off the floor. Includes boom and mounting hardware. (Swivel Post required)
Mini Boom for MIG 4HD 34322
Counterbalance Mini-Boom for DuraDrives 0458705881
Counterbalance Mini-Boom for 60lb. Coils on DuraDrive 0458705882
Swivel Post.....36172

R-33 Regulator / Flowmeter

Regulator with Lexan flow tube, 3000 psi cylinder gauge
R-33-FM-580* - Argon 10-50 cfh.....21557
R-33-FM-320* - CO2 10-65 cfh21558
***Refer to Gas-1000 catalog for details**

Hoses & Fittings

Gas Hose Assemblies

3 ft. (0.8 m).....	31504
6 ft. (3.8 m).....	31503
12-1/2 ft. (3.8 m).....	40V77
25 ft. (7.5 m).....	34V38
12-1/2 ft. (3.8 m) heavy duty (CO ₂).....	19416
25 ft. (7.5 m) heavy duty (CO ₂).....	19415

Gas Hose Coupler

Gas Hose Coupler11N17
Gas Hose Coupler, "Y"..... 950356

Water Hose Assemblies

3 ft. (0.8 m).....	20634
6 ft. (1.8 m).....	20633
12-1/2 ft. (3.8 m).....	40V76
25 ft. (7.5 m).....	406196

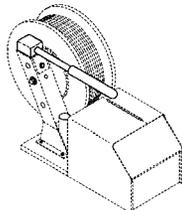
Water Hose Coupler

Water Hose Coupler11N18
Gas Spud (Surge Reducer) 19X76

Install Gas Spud between gas solenoid inlet and gas hose coming from flowmeter. Flowrate will be limited to approx. 35 to 45 cfh on a 50 psig regulator/flowmeter and 30-35 cfh on a 25 psig regulator/flowmeter.

Note: This Gas Spud cannot be used on wire feeders having a direct crimped or clamped hose connection to the solenoid. Only hose connections having a standard 5/8 in. 'B' hose nut fitting can be used.

Carrying Handle Kit - Includes handle with rubber grip and mounting hardware 34320
Handle Kit, DuraDrive.....0558002356



Boom Hanging Bracket Kit

Includes hanging bracket and mounting hardware, 4HD34321
Hanging Bail, DuraDrive 0558003047



MobileFeed 200Avs

- Arc voltage feeder for use with DC, CC or CV power supplies with straight (DC-) or reverse (DC+) polarity operation - no switches to set
- Ideal for harsh environments such as construction sites, pipe lines, shipyards, offshore, general fabrication, mobile welding rigs and more
- For use with 8" wire spools for enhanced portability, smaller size and reduced weight
- Enclosed, super impact-resistant case protects against dirt, metal grit, and moisture as well as extreme abuse, from grinding sparks, corrosive chemicals, knocks, bumps, drops and more
- 'CC' Euro torch connection for ultra fast setup - no external gas hose or trigger wire
- Heavy duty 4 roll feed unit with PWM drive provides powerful, dependable wire feeding with Automatic slow wire run-in and Electronic Dynamic Braking for overall improved operation
- Safety features include insulated case, secondary contactor, low voltage torch trigger circuit and overload protection



MobileFeed 200Avs

Wire Feeders

Ordering Information

Each MobileFeed wire feeder includes, gas solenoid and contactor, dual groove drive rolls.

MobileFeed 200Avs LC40 0558004709
Includes .045 - 1/16 in. (1.2 - 1.6mm) serrated groove drive rolls and guide tube.

MobileFeed 200Avs OKC CE 0558005796
Includes .035 - .045 in. (0.9 - 1.2mm) V groove drive rolls and guide tube.

Note: 0558004709 has LC40 type cable connector
0558005796 has OKC type cable connector

Accessories

Drive Rolls & Guide Tubessee Table on next page

50mm OKC Cable Connectors

OKC Female Cable Connector, 1/0-4/0 cable 13735631

OKC Male Cable Connector, 1/0-4/0 cable 13732513

LC40 Cable Connectors

LC40 Cable Connector Set (male & female), 1/0-3/081F25

LC40 Male Cable Connector, 1/0-3/081F26

LC40 Female Cable Connector, 1/0-3/0.....81F27

Gas Meter (measures gas flow at the gun)..... 19043

Specifications

MobileFeed 200Avs

Wire Speed Range*50 - 800 ipm (1.8 - 20.3 m/min)

** actual speed range will depend on the arc voltage*

Rating400 Amps @ 100% duty cycle

Wire Diameter Capacity023 - 5/64 in. (0.6 - 2.0 mm)

Wire Spool Capacity 8 in. x 15 lb.

Primary Input** (open circuit voltage or arc voltage)

Minimum 16.5 vdc

Maximum 100 vdc (113v peak)

**** not for use with AC power sources**

Physical Dimensions

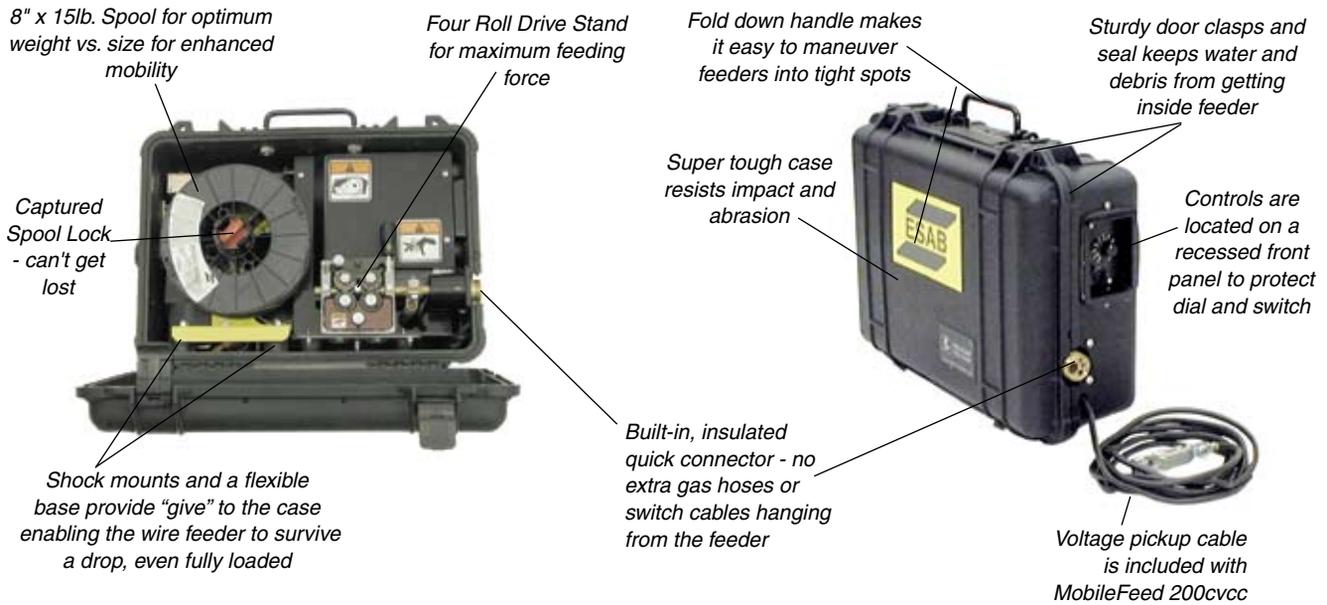
Weight 26 lbs (11.8 kg)

W" x H" x L" 6.75 (171mm) x 14.0 (356mm) x 18.50 (470mm)

MobileFeed 200Avs will fit through 14.25 in. (362 mm) dia. hole.

Instruction Manual0558004754

Sales Literature(03-01-09) **ARC-23207**



Wire Feeders

Drive Rolls and Guide Tubes for: MobileFeed 200avs

Wire Diameter	Desc.	Roll	Qty	Guide Tube EURO	Qty	Center Guide	Qty	Inlet Guide	Qty
.023 in. (0.6 mm)	V-Solid	21155	2	0558001077	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	V-Solid	21155	2	0558001077	1	0558001757	1	0558001758	1
.035 in. (0.9 mm) +	V-Solid	21156+	2	0558001078+	1	0558001757+	1	0558001758+	1
.045 in. (1.2 mm) +	V-Solid	21156+	2	0558001078+	1	0558001757+	1	0558001758+	1
.052 in. (1.4 mm)	V-Solid	21157	2	0558001079	1	0558001757	1	0558001758	1
.062 in. (1.6 mm)	V-Solid	21157	2	0558001079	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	K-Cored	21160	2	0558001077	1	0558001757	1	0558001758	1
.035 in. (0.9 mm)	K-Cored	21160	2	0558001078	1	0558001757	1	0558001758	1
.045 in. (1.2 mm) *	K-Cored	21161*	2	0558001079*	1	0558001757*	1	0558001758*	1
.052 in. (1.4 mm) *	K-Cored	21161*	2	0558001079*	1	0558001757*	1	0558001758*	1
1/16 in. (1.6 mm) *	K-Cored	21161*	2	0558001079*	1	0558001757*	1	0558001758*	1
5/64 in. (2.0 mm)	K-Cored	21162	2	0558001079	1	0558001757	1	0558001758	1
3/64 in. (1.2 mm)	U-Soft	21159	2	0558001898	1	0558001895	1	0558001758	1
1/16 in. (1.6 mm)	U-Soft	21159	2	0558001898	1	0558001895	1	0558001758	1

* As delivered on 0558004709

+ As delivered on 0558005796

Note: Two lower drive rolls are required for four roll drive systems.

Use flat, smooth pressure rolls (P/N 2361 2397) supplied with wire feeder.

MobileFeed 300AVS

- Arc voltage feeder for use with DC, CC or CV power supplies with straight (DC-) or reverse (DC+) polarity operation - no switches to set
- Ideal for harsh environments such as construction sites, pipe lines, shipyards, offshore, general fabrication, mobile welding rigs and more
- For use with 8" or 12" wire spools for enhanced portability, smaller size and reduced weight
- Enclosed, super impact-resistant case protects against dirt, metal grit, and moisture as well as extreme abuse, from grinding sparks, corrosive chemicals, knocks, bumps, drops and more
- 'CC' Euro torch connection for ultra fast setup - no external gas hose or trigger wire
- Heavy duty 4 roll feed unit with PWM drive provides powerful, dependable wire feeding with Automatic slow wire run-in and Electronic Dynamic Braking for overall improved operation
- Safety features include insulated case, secondary contactor, low voltage torch trigger circuit and overload protection
- Designed to meet the most rigid standards. **Meets IEC-974-1 specifications.**



MobileFeed 300AVS

Ordering Information

Each MobileFeed wire feeder includes gas solenoid, contactor, and dual groove feed rolls.

MobileFeed 300AVS LC40	0558005729
MobileFeed 300AVS LC40 Push/Pull	0558005745
Includes .045 - 1/16 in. (1.2 - 1.6mm) serrated groove drive rolls and guide tube.	
MobileFeed 300AVS OKC CE	0558005728
MobileFeed 300AVS OKC CE Push/Pull	0558005832
Includes .035 - .045 in. (0.9 - 1.2mm) V groove drive rolls and guide tube.	

Note: 0558005729 & 0558005745 use LC40 type cable connector
0558005728 & 0558005832 use OKC type cable connector

Accessories

Drive Rolls & Guide Tubes	see Table on next page
50mm OKC Cable Connectors	
OKC Female Cable Connector, 1/0-4/0 cable	13735631
OKC Male Cable Connector, 1/0-4/0 cable	13732513
LC40 Cable Connectors	
LC40 Cable Connector Set (male & female), 1/0-3/0	81F25
LC40 Male Cable Connector, 1/0-3/0	81F26
LC40 Female Cable Connector, 1/0-3/0	81F27
Spool Adaptor - Use for adapting to 8 in. (20.3 cm) diameter spools	17511
Spool Adaptor - Use for adapting to 10 in. (25.4 cm) diameter spools	34330
Gas Meter (measures gas flow at the gun)	19043

Specifications

MobileFeed 300AVS

Wire Speed Range*	50 - 800 ipm (1.8 - 20.3 m/min)
<i>* actual speed range will depend on the arc voltage</i>	
Rating	400 Amps @ 100% duty cycle
Wire Diameter Capacity .....	.023 - 5/64 in. (0.6 - 2.0 mm)
Wire Spool Capacity	12 in. x 44 lb.
Primary Input** (open circuit voltage or arc voltage) Minimum	16.5 vdc
Maximum	100 vdc (113v peak)
Note - not for use with AC power sources	

Physical Specifications

Weight	32 lbs (14.5 kg)
W" x H" x L" (mm)	8.6 (217) x 17.2 (437) x 20.7 (526)
MobileFeed 300AVS will fit through 18 in. (457 mm) dia. hole.	

Instruction Manual	0558005921
Sales Literature	(03-01-09) ARC-23208



Wire Feeders

Drive Rolls and Guide Tubes for: MobileFeed 300avs

Wire Diameter	Desc.	Roll	Qty	Guide Tube EURO	Qty	Center Guide	Qty	Inlet Guide	Qty
.023 in. (0.6 mm)	V-Solid	21155	2	0558001077	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	V-Solid	21155	2	0558001077	1	0558001757	1	0558001758	1
.035 in. (0.9 mm) +	V-Solid	21156+	2	0558001078+	1	0558001757+	1	0558001758+	1
.045 in. (1.2 mm) +	V-Solid	21156+	2	0558001078+	1	0558001757+	1	0558001758+	1
.052 in. (1.4 mm)	V-Solid	21157	2	0558001079	1	0558001757	1	0558001758	1
.062 in. (1.6 mm)	V-Solid	21157	2	0558001079	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	K-Cored	21160	2	0558001077	1	0558001757	1	0558001758	1
.035 in. (0.9 mm)	K-Cored	21160	2	0558001078	1	0558001757	1	0558001758	1
.045 in. (1.2 mm) *	K-Cored	21161*	2	0558001079*	1	0558001757*	1	0558001758*	1
.052 in. (1.4 mm) *	K-Cored	21161*	2	0558001079*	1	0558001757*	1	0558001758*	1
1/16 in. (1.6 mm) *	K-Cored	21161*	2	0558001079*	1	0558001757*	1	0558001758*	1
5/64 in. (2.0 mm)	K-Cored	21162	2	0558001079	1	0558001757	1	0558001758	1
3/64 in. (1.2 mm)	U-Soft	21159	2	0558001898	1	0558001895	1	0558001758	1
1/16 in. (1.6 mm)	U-Soft	21159	2	0558001898	1	0558001895	1	0558001758	1

* As delivered on 0558005729 and 0558005745

+ As delivered on 0558005728 and 0558005832

Note: Two lower drive rolls are required for four roll drive systems.

Use flat, smooth pressure roll(s) (P/N 2361 2397) supplied with wire feeder.

MobileMaster IVcvc

- Arc voltage feeder capable of use with CC or CV units Automatic, no switch required
- Available with “NAS” or “CC” torch connection
- 4 roll drive unit
- All units include secondary contactor
- Built for harsh environments such as construction sites, pipe lines, shipyards, offshore, general fabrication, mobile welding rigs and more
- Totally enclosed, impact-resistant case protects welding wire from dirt, metal grit, moisture and other contaminants - a unique “rain gutter” door design keeps water from dripping into the wire compartment
- Metal reinforced, flame retardant, molded composite plastic case will stand extreme abuse like hot slag, grinding sparks, corrosive chemicals, knocks, bumps, drops and more
- Operates with reverse polarity (wire DC +) or straight polarity (wire DC-)
- Permanent magnet drive motor with PWM drive, solid state control - provides powerful, dependable wire feeding and controlled wire acceleration for smooth arc starts and chatterfree operation
- Electronic Dynamic Braking
- Safety features include insulated case, low voltage torch trigger circuit and overload protection
- Designed to meet the most rigid standards. CSA certified for USA and Canadian requirements. Meets IEC-974-1 specifications.
- Three-year-warranty



MobileMaster IV

Ordering Information

Each MobileMaster wire feeder includes gas solenoid and .045-1/16 in. (1.2-1.6 mm) dual groove serrated feed rolls.

MobileMaster IV,CC	0558001333
MobileMaster IV, NAS	0558001334
MobileMaster IV, CC w/Meters	0558001802
MobileMaster IV, NAS w/Meters	0558001801

Specifications

MobileMaster IV

Wire Speed Range*	50 - 700 ipm (1.3 - 17.8 m/min)
* actual speed range will depend on the arc voltage	
Wire Diameter Capacity .....	.023 - 5/64 in. (0.8 - 2.0 mm)
Primary Input** (open circuit voltage or arc voltage)	
Minimum.....	16 vdc
Maximum.....	100 vdc (113v peak)
** not for use with AC power	
Weight	30 lbs (13 kg)
Euro Gun to Tweco Conn & 4	0558002622

Common to MobileMaster IV

Standard - 2-in (5.1 cm) ID spindle hub
8 in. O.D. (20.3 cm) spools - require adaptor P/N 17511
10 in. O.D. (25.4 cm) spools - require adaptor P/N 34330
12 in. O.D. (30.5 cm) spools - no adaptor required

Physical Dimensions

W x H x L 9.5 in. (24.1 cm) x 14.0 in. (35.6 cm) x 26.9 in. (68.3 cm)
MobileMaster feeders will fit through 16 in. (41 cm) diameter hole

Accessories

Options, Drive Rolls & Guide Tubessee next page

Instruction Manual	F15-610
Sales Literature	(03-01-09) ARC-23087

Optional control kits are available for the MobileMaster

Door latch, hinge and recessed fold-down top handle



Wire drive system uses dual groove feed rolls and gear-driven pressure roll for maximum feeding force

Shock mounts and a flexible base provide "give" to the case enabling the wire feeder to survive a drop, even fully loaded

Controls are located on a recessed front panel to protect dials and switches

"Rain Gutter" around door keeps water from getting inside feeder

Optional Digital Meter (see Accessories for details)

Built-in, insulated gun holder

Unique rear handle makes it easy to maneuver feeders into tight spots



Voltage pickup cable is included with MobileMaster IVcvcc

Built-in, insulated quick connector - no extra gas hoses or switch cables hanging from the feeder

Optional Accessories

Gas Flowmeter Kit - Includes an adjustable flowmeter with mounting hardware and protective guard that attaches to rear of MobileMaster feeders. Flow tube is calibrated in cubic feet per hour and liters per min.
For CO₂ shielding gas, order 37365
For Argon shielding gas mixtures, order 36658

Digital Meter Kit - This kit provides a digital display of voltage and wire feed speed (ipm or m/min)..... 23540446

Gas Pre/Postflow w/Burnback Kit - This kit provides adjustment for shielding gas preflow time (sec) and postflow time (sec). Adjustable burnback stops the wire feed before the arc is stopped and keeps the wire from sticking to the weld puddle..... 36661

Burnback Control Kit - Adjustable burnback stops the wire feed before the arc is stopped 36657

Contactors Replacement 13735590

Spool Adaptor - Use for adapting to 8 in. (20.3 cm) diameter spools..... 17511

Spool Adaptor - Use for adapting to 10 in. (25.4 cm) diameter spools..... 34330

Drive Rolls and Guide Tubes for: MobileMaster IV

Wire Diameter	Desc.	Roll	Qty	Guide Tube			Center		Inlet Guide	Qty
				NAS	EURO	Qty	Guide	Qty		
.023 in. (0.8 mm)	V-Solid	21155	2	0558001499	0558001077	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	V-Solid	21155	2	0558001499	0558001077	1	0558001757	1	0558001758	1
.035 in. (0.8 mm)	V-Solid	21156	2	0558001498	0558001078	1	0558001757	1	0558001758	1
.045 in. (1.2 mm)	V-Solid	21156	2	0558001498	0558001078	1	0558001757	1	0558001758	1
.052 in. (1.4 mm)	V-Solid	21157	2	0558001497	0558001079	1	0558001757	1	0558001758	1
.062 in. (1.6 mm)	V-Solid	21157	2	0558001497	0558001079	1	0558001757	1	0558001758	1
.030 in. (0.8 mm)	K-Cored	21160	2	0558001499	0558001077	1	0558001757	1	0558001758	1
.035 in. (0.9 mm)	K-Cored	21160	2	0558001498	0558001078	1	0558001757	1	0558001758	1
.045 in. (1.2 mm)*	K-Cored	21161*	2	0558001497*	0558001079*	1	0558001757*	1	0558001758*	1
.052 in. (1.4 mm)*	K-Cored	21161*	2	0558001497*	0558001079*	1	0558001757*	1	0558001758*	1
1/16 in. (1.6 mm)*	K-Cored	21161*	2	0558001497*	0558001079*	1	0558001757*	1	0558001758*	1
5/64 in. (2.0 mm)	K-Cored	21162	2	0558001497	0558001079	1	0558001757	1	0558001758	1
3/64 in. (1.2 mm)	U-Soft	21159	2	0558001904	0558001898	1	0558001895	1	0558001758	1
1/16 in. (1.6 mm)	U-Soft	21159	2	0558001904	0558001898	1	0558001895	1	0558001758	1

*As delivered



Optimum Welding Solutions

- *Reliable and smooth starts and ends supported by efficient Hot Start and crater fill functions*
- *Efficient Man Machine Communication by the user-friendly control panels MA6 or U8 Pendant*
- *Wide range of pre-programmed synergic lines.*
- *U8 Pendant provides the facility to define and store customized synergic lines for any material or gas combinations*
- *Memory for 10 (MA6) or 256 (U8 Pendant) welding parameters*
- *Dust filter to handle tough and dirty environment and avoid grinding-dust and metal particles inside the chassis*
- *Aristo SuperPulse™, the welding process with the ability to control the heat input (U8 Pendant only).*

Robust and powerful

Aristo Mig 5000i is ideal when it comes to efficient production or prefabrication of high alloyed materials with a very high demand on the welding performance.

The power sources are compact and sturdy pieces of equipment with a chassis made of extruded aluminum sections: Alutech™. This is a robust material that withstands rough treatment.

The power sources are based on inverter IGBT technology that provides reliable equipment with outstanding welding characteristics.

The communications and control CAN-bus system means less cables, which in turn increases operational reliability.

Flexibility

The power sources are optimized to operate together with the wire feeders Aristo Feed 3004 and Aristo Feed 4804. Connection cables up to 115 ft. (35m) provides a working radius of up to 115 ft. (35m) to suit all your individual welding needs.

Aristo Mig 5000i allows the choice of the following processes; MIG/MAG, pulse MIG, MMA and Carbon Arc Gouging. The choice of processes is related to the different control panels (see related AristoFeed 3004 and 4804 sales sheets).



The TrueArcVoltage System guarantees that you weld with the correct arc voltage independent of any voltage drop in the welding cables. This means that you will get the same arc voltage and weld result either you have a set-up with short connection cable and 10 ft. (3m) gun or a set-up with 115 ft. (35m) working radius.

Aristo U8 Pendant for advanced applications

U8 Pendant supports quick access to synergic settings. More than 100 pre-programmed synergic lines are available. Welding based on pre-programmed synergic data reduce the preparation before start to a minimum.

The memory provides additional functionality and the capacity to store up to 256 welding parameters which can be recalled when ever needed. A number of soft buttons with flexible functions provides direct access to Hot Start, crater fill, 2/4-stroke etc.



Specifications

Mains Voltage	3x460, 60
Setting range, MIG/MAG, A.....	16-500/8-60
Setting range, MMA, A.....	16-500
Permitted load	
at 60% duty cycle, A/V	500/39
at 100% duty cycle, A/V	400/34
Open circuit voltage, V.....	68-88
Energy save mode (400V), W.....	50
Input power, kW	23
Apparant power, kVA	28
Power factor at maximum current.....	0.85
Efficiency at maximum current, %	86
Control voltage, V, Hz	42, 50/60
Dimensions L x W x H..25 in. x 16 in. x 20 in. (625 x 394 x496mm)	
Dimensions L x W x H (multi-voltage unit)	
..... 25 in. x 16 in. x 31 in. (625 x 394x 776mm)	
Enclosure class.....	IP 23
Operating temperature, °C	-10 to +40
Insulation class (main trafo.).....	H
Weight	145.5lbs. (66kg)
Application class	S
Standards.....	IEC/EN 60974-1, EN 50199

Water cooling unit:

Cooling capacity, W, l/min	2500 at 40°C, .4 (1.5)
Coolant volume, l	1.4 (5.5)
Max flow, l/min	5 (2.0)
Max pressure, bar	50 (3.4)
Weight	44.1 lbs (20kg)

Multi Voltage unit:

Main voltage, V, Hz	3x208/230/400/460/475/575, 50/60
Weight	176.4 lbs. (80kg)
Dimension L x W x H... 25 in. x 16 in. x 11 in. (621 x 389 x 266mm)	

Ordering Information

Aristo Mig 5000i (3x460Vac 60Hz)	0459230884
<i>Delivery content: 16.4 ft. (5m) mains cable and termination resistor plug.</i>	

Options & Accessories

Multi Voltage unit, Wide body (3x208/230/400/460/475/575V, 50/60 Hz)	0459145880
---	------------

Remote Controls - CAN (order cable separately)

MTA1 CAN	0459491880
Multi-function remote control for the following panels: A2, A4, TA4, TA6, MA4, MA6, U6, U8	

Process	Knob 1 Function	Knob 2 Function
MMA:	Current Control	Arc Force
TIG:	Pulse Current	Background Current
MIG/MAG 1:	Wire Feed Speed	Voltage Control
MIG/MAG 2:	Wire Feed Speed	Voltage Trim +/-

M1 10 Program CAN	0459491882
Synergic MIG for MA6, U6, U8	

Process	Knob 1 Function	Switch 1 Function
MIG/MAG:	1-10 Memory Select	+/- Voltage Trim

Remote Control Cables - CAN

Length	CAN12 Pin	CAN 10 Pin
.25m	459554884	0459960883
5m	459554880	0459960880
10m	459554881	0459960881
15m	459554882	- NA -
25m	459554883	0459960882
5m HD	459554880	0459960880
10m HD	- NA -	0459960881
25m HD	- NA -	0459960882

Handle includes mounting screws for separate installation. (Complete set = 2)..... 0459307881

Trolley 1 (Standard)
 0458530880 |

Trolley 2 (Feeder with counter balance device)
 0458603880 |

Guide pin (If no trolley)
 0458731880 |

Quick connector kit for current, water and shielding gas supply for 2x AristoFeed
 0459546880 |

MMC kit for MMC panel mounted in the power source..... 0459579880

MMC - MA6..... 0458535886

Connection cables, air cooled torches

Air 5.6 ft. (1.7m).....	0456528880
Air 16.4 ft. (5.0m)	0456528890
Air 32.8 ft. (10.0m)	0456528881
Air 49.2 ft. (15.0m)	0456528882
Air 82.0 ft. (25.0m)	0456528883
Air 115 ft. (35.0m).....	0456528884

Connection cables, water cooled torches

Water 5.6 ft. (1.7m).....	0456528885
Water 16.4 ft. (5.0m)	0456528895
Water 32.8 ft. (10.0m)	0456528886
Water 49.2 ft. (15.0m)	0456528887
Water 82.0 ft. (25.0m)	0456528888
Water 115 ft. (35.0m)	0456528889

ESAT service kit..... 0458847880





Optimum Welding Solutions

- Multiprocess equipment; MIG/MAG, pulse MIG, MMA, TIG, Pulse TIG and Carbon Arc Gouging.
- Reliable and smooth starts and ends supported by efficient Hot Start and crater fill functions
- Efficient Man Machine Communication by the user-friendly control panel U6 or U8 Pendant
- Wide range of pre-programmed synergic lines. U8 Pendant provides the facility to define and store customized synergic lines for any material or gas combinations
- Memory for 10 (U6) or 256 (U8 Pendant) welding parameters
- TrueArcVoltage System, measures the correct arc voltage value independent of the length of the connection cable, return cable or welding gun.
- Dust filter to handle tough and dirty environment and avoid grinding-dust and metal particles inside the chassis
- Aristo SuperPulse™, the welding process with the ability to control the heat input (U8 Pendant).



Robust and powerful

Aristo Mig U4000i and Mig U5000i are ideal partners when it comes to efficient production or prefabrication of high alloyed materials with a very high demand on the welding performance.

The power sources are compact and sturdy pieces of equipment with a chassis made of extruded aluminum sections: Alutech™. This is a robust material that withstands rough treatment.

The power sources are based on inverter IGBT technology that provides reliable equipment with outstanding welding characteristics. The control and communication CAN-bus system means less cables, which in turn increases operational reliability.

Flexibility

The power sources are optimized to operate together with the wire feeders Aristo Feed 3004 and Feed 4804. Connection cables up to 115 ft. (35 m) provides a working radius of up to 115 ft. (35 m) to suit all your individual welding needs.

The TrueArcVoltage System guarantees that you weld with the correct arc voltage independent of any voltage drop in the welding cables. This means that you will get the same arc voltage and weld result whether you have a set-up with short connection cable and 3 m gun or a set-up with 35 meters working radius.

Aristo U8 Pendant for advanced applications

U8 Pendant supports a quick access to synergic setting. More than 100 pre-programmed synergic lines are available. Welding based on pre-programmed synergic data reduces the preparation before start to a minimum.

The memory provides additional functionalities. The capacity to store up to 256 welding parameters which can be recalled when ever needed. A number of soft buttons with flexible functions provides direct access to Hot Start,



Specifications

Mains Voltage, Vac, Hz	3 x 460, 60
Fuse slow, A	35
Setting range, MIG/MAG, A/V	16-500/8-60
Setting range, MMA DC, A	16-500
Setting range, TIG DC, A	4-500
Permitted load	
60% duty cycle, A/V	500/39
100% duty cycle, A/V	400/34
Open circuit voltage, V	68-88
Energy save mode, W	50
Input power, kW	23
Power factor at maximum current	0.85
Efficiency at maximum current, %	86
Control voltage, V, Hz	42, 50/60
Dimensions L x W x H... 25 in. x 16 in. x 20 in. (625 x 394 x 496mm)	
Dimensions L x W x H (with cooling unit)	25 in. x 16 in. x 31 in. (625 x 394 x 776mm)
Enclosure class	IP 23
Insulation class (main trafo.)	H
Operating temperature, °C	-10 till +40
Weight	152 lbs. (69kg)
Application class	S
Standards	IEC/EN 60974-1, EN 50199

Water cooling unit (water cooled version only):

Cooling capacity, W, Gal/Min (l/min)	2500w at 40 °C, .40 (1.5)
Coolant volume, Gal. (l)	1.4 (5.5)
Max flow:, Gal/Min (l/min)	.5 (2.0)
Max pressure, PSIG (bar)	50 (3.4)
Weight, lbs. (kg)	44 lbs. (20kg)

Multi Voltage unit:	Add on or separate
Main voltage, V, Hz	3x208/230/400/460/475/575, 50/60
Weight	176 lbs. (80kg)
Dimension L x W x H...	25 in. x 16 in. x 11 in. (621 x 389 x 266mm)

Ordering Information

Aristo Mig U5000i (3x460V 60Hz)	0459230885
Aristo Mig U5000iw (3x460V 60Hz)	0459230886
	(on request)

Delivery content: 16.4 ft. (5m) mains cable and termination resistor plug.

Accessories

Multi Voltage unit, Wide	
(3x208/230/400/460/475/575V, 50/60 Hz)	0459 145 880

Remote Controls - CAN (order cable separately)

MTA1 CAN	0459491880
Multi-function remote control for the following panels:	
A2, A4, TA4, TA6, MA4, MA6, U6, U8	

Process	Knob 1 Function	Knob 2 Function
MMA:	Current Control	Arc Force
TIG:	Pulse Current	Background Current
MIG/MAG 1:	Wire Feed Speed	Voltage Control
MIG/MAG 2:	Wire Feed Speed	Voltage Trim +/-

M1 10 Program CAN	0459491882
Synergic MIG for MA6, U6, U8	

Process	Knob 1 Function	Switch 1 Function
MIG/MAG:	1-10 Memory Select	+/- Voltage Trim

Remote Control Cables - CAN

Length	CAN12 Pin	CAN 10 Pin
.25m	459554884	0459960883
5m	459554880	0459960880
10m	459554881	0459960881
15m	459554882	- NA -
25m	459554883	0459960882
5m HD	459554880	0459960880
10m HD	- NA -	0459960881
25m HD	- NA -	0459960882

Handle includes mounting screws for separate installation. (Complete set = 2) 0459307881

Trolley 1 (Standard)	0458530880
Trolley 2 (Feeder with counter balance device)	0458603880
Guide pin (If no trolley)	0458731880
Feeder stand	0458522880
Return cable , 16.4 ft. (5m) 2/0 (70mm2)	0156743881
AristoSelector 400/500	On request

Water Flow guard 0467118001

ESAT service kit 0458847880

Connection cables, air cooled gun

Air 5.6 ft. (1.7 m)	0456528880
Air 16.4 ft. (5.0 m)	0456528890
Air 32.8 ft. (10.0 m)	0456528881
Air 49.2 ft. (15.0 m)	0456528882
Air 82.0 ft. (25.0 m)	0456528883
Air 115 ft. (35.0 m)	0456528884

Connection cables, water cooled gun

Water 5.6 ft. (1.7 m)	0456528885
Water 16.4 ft. (5.0 m)	0456528895
Water 32.8 ft. (10.0 m)	0456528886
Water 49.2 ft. (15.0 m)	0456528887
Water 82.0 ft. (25.0 m)	0456528888
Water 115 ft. (35.0 m)	0456528889



AristoPower 4600c Power Source

- Easy-to-use advanced technology
- Customizable MA-6 man/machine communications. Upgradable using ESAT software (ESAB Software Administration Tools).
- 107 preprogrammed synergic welding programs for standard & pulsed Mig and Stick welding
- 10 memory locations for user-defined welding parameter storage
- Digital preset of voltage, amperage or wire speed on process selection.
- Robust, reliable, energy saving 450 amp/100% Duty Cycle power source
- SuperSwitch™ Technology design, provides superior inverter like performance in the welding arc while providing SCR like reliability.
- Energy and power efficient, the best in its class with a 92% efficiency figure. Saves energy and reduces power costs. Uses up to 50% less current than conventional SCR machines.
- True Multi-process, three phase power source designed for heavy duty Industrial DC welding applications.
- Use for High Performance Mig, Pulse Mig, Flux Cored wire, Stick electrode welding, and Air Carbon Arc Gouging
- Variable inductance for fine tuning of the arc characteristics when short arc welding.
- Adjustable arc force and hot start control for superior stick electrode performance.
- Process Limits and Lock Out Features Standard
- Sheet metal parts and hardware made of stainless steel. Top and side panel made of Kydex polymer for superior durability in harsh environments.
- Auto Fan feature standard in the unit for energy savings. Automatically turns the fan motor on and off.
- Convenient 115vac auxiliary power receptacle.
- Compatible with AristoFeed 4-30 and AristoFeed 4-48 wire feeders.

Ordering Information

ESAB Power Source

AristoPower 4600c, 230(208), 460 vac, 3 ph, 60 Hz 0558002668



Shown with AristoDrive 4-30 wire feeder, GM-400 Mig welding torch, TR-29 truck kit, work cable, clamp and welding wire.

Specifications

Rated DC Output @ 100% Duty Cycle	
50/60Hz, cv or cc.....	450 amps 38 vdc
Rated DC Output @ 60% Duty Cycle	
50/60Hz, cv or cc.....	500 amps 39 vdc
Welding Range	10A/12V to 500A/40V
Open Circuit Voltage Max.....	80vdc
Primary Input Voltage and Current @ 100% DutyCycle	
230/460/575vac, 60Hz 3ph	66/33/26 amps
Power Factor at Rated Output.....	.89%
Efficiency at Rated Output.....	.92%
Auxiliary Output Power.....	115vac 50/60Hz, 10 amps

Physical Dimensions:

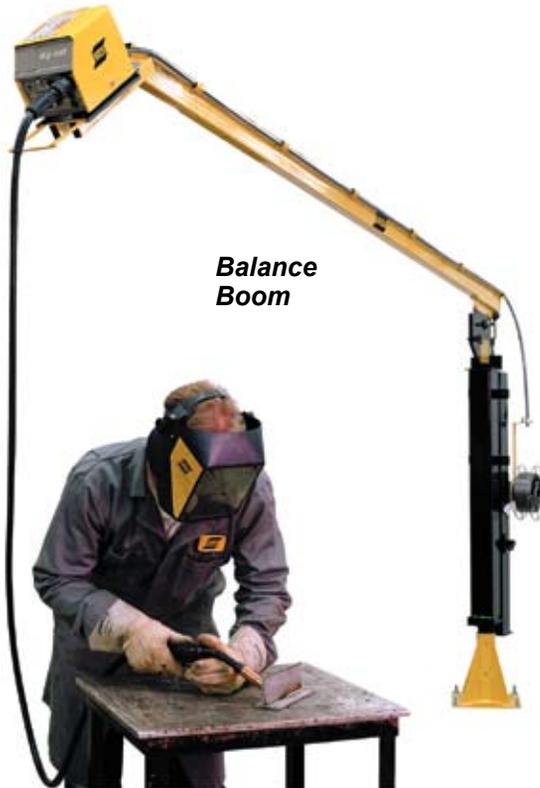
W x L x H	18.8 in. (483mm), 32.5 in. (819mm), 25 in. (622mm)
Net Weight.....	322 lbs.(146 Kg)
Shipping Weight	375 lbs. (170Kg)

Instruction Manual	0558003748
Sales Literature	(03-01-09) ARC-23131

Options & Accessories

AristoFeed

Lifting Eye	0458706880
Wheel Kit	34324
Swivel Post	36172
Counterbalance Mini-Boom for 60lb. coils	0458705882
Reel Assembly for 60lb. coils	34323
Spool Cover, steel	0459431880



Balance Boom



Mini Boom

Remote Synergic Control



MTA1 CAN



MI 10Prog CAN

Options & Accessories

AristoPower-4600i

TR-29 Truck37924
 This truck kit provides complete mobility of the power source. The kit consists of front casters, rear cylinder rack for two cylinders, gas cylinder bracket and chain, and pull handle.

Wire Feeder Swivel Mount Kit36172
 This kit allows the wire feeder to be placed on an insulated swivel post on top of the power source. The feeder can freely rotate, minimizing potential wire feed problems.

ESAT PC Software Package0458847880
 PC software for service, diagnostics, troubleshooting, and upgrading (PC is not included).

Aristo Remote Controls

MTA1 CAN0459491880
 CAN based multi function remote control for the control panels A2, A4, T4, T6, M2, MA4, MA6, U6 and AristoPendant U8.
 MMA: Knob 1: Current control / Knob 2: Arc force
 TIG: Knob 1: Pulse current / Knob 2: Background current
 MIG/MAG 1: Knob 1: Wire feed speed Knob 2: Voltage control
 MIG/MAG 2: Knob 1: Wire feed speed Knob 2: Voltage trim +/-

MI 10Prog CAN.....0459491882
 CAN based Synergic MIG for control panel MA6, U6 and AristoPendant U8
 MIG/MAG : Memory 1-10 and voltage trim +/-



Optimum Welding Solutions

- 2/4 stroke, simplifies handling of the welding gun.
- Slow run-in start, gas pre-flow and hot start provide a soft and more direct start with less spatter.
- Crater filling, adjustable burn-back time and post gas provides a smooth finish, extend the lifetime of the contact tip and guarantee no cracks at the end.
- Pre-programmed synergic lines, to ensure optimum settings with a wide choice of materials, wire dimensions and gas combinations.
- MA6 features Memory for 10 parameter sets.
- Quick connectors- shortest possible set-up times.
- TrueArcVoltage System, measures the correct arc voltage value independent of the length of the connection cable, return cable or welding gun.

Sturdy and reliable

Sturdy design with galvanized metal casing for use in tough environments. Electronically controlled feeding gives accurate and stable arc. The 4-wheel feeder mechanism with grooves in both feed roll and pressure roll gives stable feeding and low wear on the wire, all to avoid operational disturbances.

The feeders are equipped with Ø30 mm rolls for wires up to 1/16" (1.6 mm).

All adjustments are made on the man-machine communication panels (MMC) of the feeder, giving a good overview of the settings.

With safety in mind

Designed to meet the most rigid safety standard IEC 60974-5 with low voltage (42 V/AC) operations and overload protection circuit to eliminate breakdowns.

Versatility

Wide variety of welding combinations can be achieved with the MA6 man-machine communication panel.

The control panel is easy to operate with accurate settings that suits different needs and demands.

The Aristo Feed can be equipped with a counterbalance device, lifting eye or a wheel kit for increased mobility.

Easy service and maintenance

The feeder mechanism is easy to access and all wear parts can be exchanged without tools. One single pressure device makes it easy to adjust the appropriate feeding pressure.

All electronic components are protected in a separate compartment.



Panel (MMC) functions

Panel (MMC) functions	MA6
2/4 stroke	X
Crater filling	X
Adjustable burn-back time	X
Slow run-in start	X
Hot start	X
Gas pre/post flow	X
Digital V/A meters	X
Pre-programmed synergic lines	X
Memory 10 set	X
Pulse/synergic pulse	X

Ordering Information

Air Cooled Systems

Aristo Feed 3004, MA6 0458805886

Water Cooled Systems (Special Order only)

Aristo Feed 3004w, MA6 0458805896

Specifications

Power supply, Vac, Hz 42 Vac, 50/60 Hz.
 Wire spool capacity, lbs. (kg) 44 & 65** lbs., 18 (30**) kg
 Max. spool diameter in. (mm) 12" & 17" **, 300 (440**) mm
 Wire feed speed, IPM (m/min) 32 - 980 ipm (0.8 - 25.0) m/m
 Dimension (L x W x H) in. (mm) ...22"x11"x14" (560x265x350) mm
 Weight, Lbs. (kg) 35.3 lb. (16 kg)

Wire dimensions:

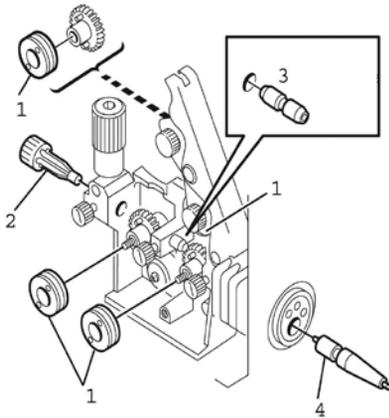
steel023" - 1/16" (0.6 - 1.6mm)
 stainless steel023" - 1/16" (0.6 - 1.6mm)
 aluminum040" - 1/16" (1.0 - 1.6mm)
 cored wire035" - 5/64" (0.9 - 2.0mm)

** With Optional Adaptor (see Options & Accessories)

Instruction Manual 0458716101
 Sales Literature (03-01-09) ARC-23144

Connection Cable Sets (required)

	Air cooled	Water cooled
5.5 ft. (1.7m)	0456528880	0456528885
16.4 ft. (5m)	0456528890	0456528895
32.8 ft. (10m)	0456528881	0456528886
49.2 ft. (15m)	0456528882	0456528887
82.0 ft. (25m)	0456528883	0456528888
115 ft. (35m)	0456528884	0456528889



Drive Roll and Feed System Wear Parts

Wire Diameter	Wire Type	1 Feed Roller (4 req'd.)	2 Inlet Nozzle	3 Intermediate Nozzle	4 Outlet Nozzle	Groove Type	1 Marking
.023 / .030	Fe, Ss, C	0459052001	0455049001	0455072002	0469837880	V	.023 S2 & .030 S2
.035-.040 / .045		0459052003	0455049001	0455072002	0469837880		.040 S2 & .045 S2
.052 / 1/16		0455052013	0455049001	0455072002	0469837880		.052 S2 & .062 S2
.035-.040 / .045	C	0558002352	0455049001	0455072002	0469837880	V-K	.039 R2 & .045 R2
.045 / .052		37319	0455049001	0455072002	0469837880		.045 R2 & .052 R2
1/16-5/64		37320	0455049001	0455072001	0469837880		1/16 R2 & 5/64 R2
.035-.040 / .045	Al	36860	0455049001	0456615001	0469837881	U	.039 A2 & .045 A2
.045 / 1/16		36861	0455049001	0456615001	0469837881		.045 A2 & 1/16 A2

C=Cored Wire K= Knurled Groove

Options & Accessories

Wheel kit	0458707880
Strain relief for welding gun	0457341881
Strain relief for connection cables	0459234880
Lifting eye	0458706880
MarathonPac™ Adapter	0558002354
MarathonPac Quick Connector	899F50
Adapter for 8", 10/12 lb. (5 kg) spool	0455410001
Counter balance device	0458705880
Spool cover	0458674880
Spool cover, steel	0459431880
Dual Feeder Stand and 2 cyl. rack (floor mtg.)	0458522880
Reel assembly for 60/65 lb. coils	34323 **
Adapter for reel assembly or 14" spool	0459233880
ESAT service kit	0458847880

**Must use optional adaptor

*** Only in combination with the Remote control adaptor

Additional Remote controls available on request.

Drive Roll Kits

Drive Roll Kit 1/16" Knurled V groove	0558005918
Drive Roll Kit 5/64-3/32" Knurled V groove	0558005919

Remote Controls - CAN (order cable separately)

MTA1 CAN 0459491880

Multi-function remote control for the following panels:

A2, A4, TA4, TA6, MA4, MA6, U6, U8

Process	Knob 1 Function	Knob 2 Function
MMA:	Current Control	Arc Force
TIG:	Pulse Current	Background Current
MIG/MAG 1:	Wire Feed Speed	Voltage Control
MIG/MAG 2:	Wire Feed Speed	Voltage Trim +/-

M1 10 Program CAN 0459491882

Synergic MIG for MA6, U6, U8

Process	Knob 1 Function	Switch 1 Function
MIG/MAG:	1-10 Memory Select	+/- Voltage Trim

Remote Control Cables - CAN

Length	CAN12 Pin	CAN 10 Pin
.25m	459554884	0459960883
5m	459554880	0459960880
10m	459554881	0459960881
15m	459554882	- NA -
25m	459554883	0459960882
5m HD	459554880	0459960880
10m HD	- NA -	0459960881
25m HD	- NA -	0459960882



Optimum Welding Solutions

- 2/4 stroke, simplifies handling of the welding gun.
- Slow run-in start, gas pre-flow and hot start provide a soft and more direct start with less spatter.
- Crater filling, adjustable burn-back time and post gas provides a smooth finish, extend the lifetime of the contact tip and guarantee no cracks at the end.
- Pre-programmed synergic lines, to ensure optimum settings with a wide choice of materials, wire dimensions and gas combinations.
- MA6 features Memory for 10 parameter sets.
- Quick connectors- shortest possible set-up times.
- TrueArcVoltage System, measures the correct arc voltage value independent of the length of the connection cable, return cable or welding gun.

Sturdy and reliable

Sturdy design with galvanized metal casing for use in tough environments. Electronically controlled feeding gives accurate and stable arc. The 4-wheel feeder mechanism with grooves in both feed roll and pressure roll gives stable feeding and low wear on the wire, all to avoid operational disturbances.

The feeders are equipped with Ø48 mm rolls for wires up to 3/32" (2.4 mm).

All adjustments are made on the man-machine communication panels (MMC) of the feeder, giving a good overview of the settings.

With safety in mind

Designed to meet the most rigid safety standard IEC 60974-5 with low voltage (42 V/AC) operations and overload protection circuit to eliminate breakdowns.

Versatility

Wide variety of welding combinations can be achieved with the MA6 man-machine communication panel.

The control panels are easy to operate with accurate settings that suits different needs and demands.

The AristoFeed can be equipped with a counterbalance device, lifting eye or a wheel kit for increased mobility.

Easy service and maintenance

The feeder mechanism is easy to access and all wear parts can be exchanged with a single Allen wrench. One single pressure device makes it easy to adjust the appropriate feeding pressure.

All electronic components are protected in a separate compartment.



MA6



Panel (MMC) functions

Panel (MMC) functions	MA6
2/4 stroke	X
Crater filling	X
Adjustable burn-back time	X
Slow run-in start	X
Hot start	X
Gas pre/post flow	X
Digital V/A meters	X
Pre-programmed synergic lines	X
Memory 10 set	X
Pulse/synergic pulse	X

Ordering Information

Air Cooled Systems

Aristo Feed 4804, MA6 0458805986

Water Cooled Systems (Special Order Only)

Aristo Feed 4804w, MA6..... 0458805996

Specifications

Power supply, Vac, Hz 42 Vac, 50/60 Hz.
 Wire spool capacity, Lbs (kg)..... 44 & 66**, (18 & 30** kg)
 Max. spool diameter, Inches (mm) 12" & 16" **, (300/440** mm)
 Wire feed speed, IPM (m/min)..... 32 - 980 ipm, (0.8 - 25 m/m)
 Dimension LxWxH, Inches (mm) ... 22"x11"x14" (560x265x350mm)
 Weight, lbs. (kg) 46.3 lbs. (21 kg)

Wire dimensions:

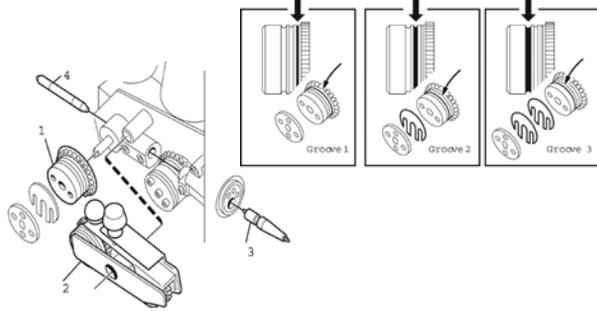
steel..... .023" - 3/32" (0.6 - 2.4mm)
 stainless steel023" - 3/32" (0.6 - 2.4mm)
 aluminium..... .035" - 3/32" (1.0 - 2.4mm)
 cored wire..... .030" - 3/32" (0.8 - 2.4mm)

** With Optional Adaptor (see Options & Accessories)

Instruction Manual 0458716101
 Sales Literature (03-01-09) ARC-23173

Connection Cable Sets (required)

	Air cooled	Water cooled
5.5 ft. (1.7m)	0456528880	0456528885
16.4 ft. (5m)	0456528890	0456528895
32.8 ft. (10m)	0456528881	0456528886
49.2 ft. (15m)	0456528882	0456528887
82.0 ft. (25m)	0456528883	0456528888
115 ft. (35m)	0456528884	0456528889



Options & Accessories

Wheel kit	0458707880
Strain relief for welding gun	0457341881
Strain relief for connection cables	0459234880
Lifting eye	0458706880
MarathonPac™ Adapter	0558002354
MarathonPac Quick Connector	899F50
Adapter for 8" 10/12 lb. (5 kg) spools	0455410001
Counter balance device	0458705880
Spool cover	0458674880
Spool cover, steel	0459431880
Dual Feeder Stand and 2 cyl. rack (floor mtg.)	0458522880
Reel assembly for 60/65 lb. Coils	34323**
Adapter for reel assembly or 14" spools	0459233880
ESAT service kit	0458847880

**Must use optional adaptor

Wear Parts

Wire Diameter	Wire Type	1 Feed Roll	2 Bogies	3 Outlet Nozzle	4 Intermediate Nozzle	5 Inlet Nozzle	Groove Type	Marking	Grooves			
									1	2	3	
.023-.045* HD	Fe, Ss, C	0366966880*	0366902880*	0469837880*	0156603001*	0156602001*	V	1*	.023-.030*	.035-.040*	.045*	
.030		0366966887	0366941883	0469837880	0156603001	0156602001		.030	.030	.030	.030	
.035		0366966888	0366941884	0469837880	0156603001	0156602001		.035	.035	.035	.035	
.045		0366966889	0366941885	0469837880	0156603001	0156602001		.045	.045	.045	.045	
.045 HD		0366966889	0366902894	0469837880	0156603001	0156602001		.045	.045	.045	.045	
.052-.062 HD		0366966881	0366902881	0469837880	0156603001	0156602001		2	.052-.062	.078	.093	
.052-.062		0366966890	0366941886	0469837880	0156603001	0156602001		1/16	.052-.062	.052-.062	.052-.062	
5/64 HD		0366966891	0366902888	0469837882	0156603002	0156602002		5/64	.078	.078	.078	
5/64-3/32 HD		0366966881	0366902881	0469837882	0156603002	0156602002		2	.052-.062	.078	.093	
3/32 HD		0366966892	0366902889	0469837882	0156603002	0156602002		3/32	.093	.093	-	
1/8 HD		0366966892	0366902889	0469837882	0156603002	0156602002		1/8	.125	-	-	
.045		0366966893	0366941887	0469837880	0332322001	0332318001		VK	.045	.045	.045	.045
.062		0366966894	0366941888	0469837880	0332322001	0332318001			.062	.062	.062	.062
5/64 HD		0366966895	0366902890	0469837882	0332322001	0332318001			5/64	.078	.078	.078
3/32 HD	0366966896	0366902891	0469837882	0332322002	0332318002	3/32	.093		.093	-		
1/8 HD	0366966897	0366902892	0469837882	0332322002	0332318002	1/8	.125		-	-		
.035/.040 HD	Al	0366966884	0366902885	0469837881	0156603001	0156602001	U	-	.035/.040	.035/.040	.035/.040	
3/64 HD		0366966885	0366902886	0469837881	0156603001	0156602001		U2	.045	.045	.045	
.040-1/16 HD		0366966899	0366902899	0469837881	0156603001	0156602001		U4	.040	.045	.062	
1/16 HD		0366966886	0366902887	0469837881	0156603001	0156602001		-	.062	.062	.062	

C=cored wire K=knurled groove *=Delivery Content

Remote Controls - CAN (order cable separately)

MTA1 CAN..... 0459491880

Multi-function remote control for the following panels:

A2, A4, TA4, TA6, MA4, MA6, U6, U8

Process	Knob 1 Function	Knob 2 Function
MMA:	Current Control	Arc Force
TIG:	Pulse Current	Background Current
MIG/MAG 1:	Wire Feed Speed	Voltage Control
MIG/MAG 2:	Wire Feed Speed	Voltage Trim +/-

M1 10 Program CAN..... 0459491882

Synergic MIG for MA6, U6, U8

Process	Knob 1 Function	Switch 1 Function
MIG/MAG:	1-10 Memory Select	+/- Voltage Trim

Remote Control Cables - CAN

Length	CAN12 Pin	CAN 10 Pin
.25m	459554884	0459960883
5m	459554880	0459960880
10m	459554881	0459960881
15m	459554882	- NA -
25m	459554883	0459960882
5m HD	459554880	0459960880
10m HD	- NA -	0459960881
25m HD	- NA -	0459960882

Optimum Welding Solutions

- 2/4 stroke, simplifies handling of the welding gun.
- Slow run-in start, gas pre-flow and hot start provide a soft and more direct start with less spatter.
- Crater filling, adjustable burn-back time and post gas provides a smooth finish, extend the lifetime of the contact tip and guarantee no cracks at the end.
- Pre-programmed synergic lines, to ensure optimum settings with a wide choice of materials, wire dimensions and gas combinations.
- U8 control gives ability to create synergic lines
- Memory for 10 (U6) or 256 (U8 Pendant) parameter set
- Quick connectors- shortest possible set-up times.
- TrueArcVoltage System, measures the correct arc voltage value independent of the length of the connection cable, return cable or welding gun.
- Aristo SuperPulse™, the welding process with the ability to control the heat input (U8 Pendant).

Sturdy and reliable

Sturdy design with galvanized metal casing for use in tough environments. Electronically controlled feeding gives accurate and stable arc. The 4-wheel feeder mechanism with grooves in both feed roll and pressure roll gives stable feeding and low wear on the wire, all to avoid operational disturbance. The feeders are equipped with Ø30 mm for wires up to 1/16" (1.6 mm).

With safety in mind

Designed to meet the most rigid safety standard IEC-60974-5 with low voltage (42 V/AC) operations and overload protection circuit to eliminate breakdowns.

Flexibility

Wide variety of combinations are available with the man-machine communication panels U6 and U8 Pendant. All adjustments are made on the control panels (MMC) of the feeder, giving a good overview of the settings. The MMC panel U6 and U8 Pendant are easy to operate with accurate settings that suits different needs and demands.

The AristoFeed can be equipped with a counterbalance device, lifting eye or a wheel kit for increased mobility.

Easy service and maintenance

The feeder mechanism is easy to access and all wear parts can be exchanged without tools. One single pressure device makes it easy to adjust the appropriate feeding pressure.



Shown with optional spool cover



U6



U8

Panel (MMC) Functions	U6	U8 Pendant
2/4 stroke	X	X
Hot start & Crater filling	X	X
Slow run-in start	X	X
Adjustable burn-back	X	X
Gas pre/post flow	X	X
Digital V/A meters	X	X
Pre-programmed synergic lines	X	X (>100)
Memory sets	10	256
Pulse/synergic pulse	X	X
Create synergic lines		X
Super Pulse Process Control		X

Ordering Information

Air Cooled Systems

Aristo Feed 3004, U6 0458805887
 Aristo Feed 3004, M0 (for use with U8)..... 0458805881

Water Cooled Systems (Special Order Only)

Aristo Feed 3004w, U6 0458805897
 Aristo Feed 3004w, M0 (for use with U8) 0458805891

Aristo U8 Pendant

U8 Pendant, complete incl. holder 0456290981
 Control cable extension 16.4 ft. (5 m) 0456280881
 Control cable extension 32.8 ft. (10 m)..... 0456280882

Specifications

Power supply, Vac, Hz 42 Vac, 50/60 Hz.
 Wire spool capacity, lbs.(kg)..... 44 & 65** lbs., 18 (30**) kg
 Max. spool diameter in.(mm)..... 12" & 17" **, 300 (440**) mm
 Wire feed speed, IPM (m/min)..... 32 - 980 ipm, (0.8 - 25.0) m/m
 Dimension (L x W x H)in.(mm)22" x11" x14"(560x265x350) mm
 Weight, Lbs. (kg).....35.3 lb. (16 kg)

Wire dimensions:

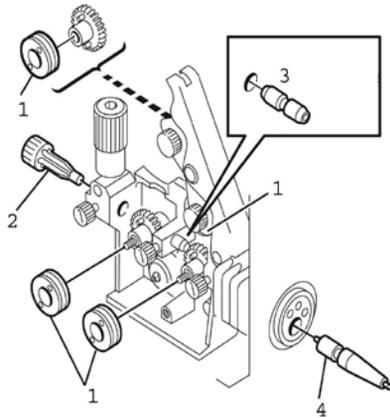
steel......023" - 1/16" (0.6 - 1.6mm)
 stainless steel023" - 1/16" (0.6 - 1.6mm)
 aluminum..... .040" - 1/16" (1.0 - 1.6mm)
 cored wire......035" - 5/64" (0.9 - 2.0mm)

** With Optional Adaptor (see Options & Accessories)

Instruction Manual 0458716101
 Sales Literature (03-01-09) ARC-23145

Connection Cable Sets (required)

	Air cooled	Water cooled
5.5 ft. (1.7m)	0456528880	0456528885
16.4 ft. (5m)	0456528890	0456528895
32.8 ft. (10m)	0456528881	0456528886
49.2 ft. (15m)	0456528882	0456528887
82.0 ft. (25m)	0456528883	0456528888
115 ft. (35m)	0456528884	0456528889



Options & Accessories

Wheel kit	0458707880
Strain relief for welding gun	0457341881
Strain relief for connection cables	0459234880
Lifting eye	0458706880
MarathonPac™ Adapter	0558002354
MarathonPac Quick Connector	899F50
Adapter for 8", 10/12 lb. (5 kg) spool	0455410001
Counter balance device	0458705880
Spool cover	0458674880
Spool cover, steel	0459431880
Dual Feeder Stand and 2 cyl. rack (floor mtg.)	0458522880
Reel assembly for 60/65 lb. coils	34323 **
Adapter for reel assembly or 14" spool	0459233880
ESAT service kit	0458847880

**Must use optional adaptor

*** Only in combination with the Remote control adaptor
Additional Remote controls available on request.

Drive Roll Kits

Drive Roll Kit 1/16" Knurled V groove	0558005918
Drive Roll Kit 5/64-3/32" Knurled V groove	0558005919

Drive Roll and Feed System Wear Parts

Wire Diameter	Wire Type	1 Feed Roller (4 req'd.)	2 Inlet Nozzle	3 Intermediate Nozzle	4 Outlet Nozzle	Groove Type	1 Marking
.023 / .030	Fe, Ss, C	0459052001	0455049001	0455072002	0469837880	V	.023 S2 & .030 S2
.035-.040 / .045		0459052003	0455049001	0455072002	0469837880		.040 S2 & .045 S2
.052 / 1/16		0455052013	0455049001	0455072002	0469837880		.052 S2 & .062 S2
.035-.040 / .045	C	0558002352	0455049001	0455072002	0469837880	V-K	.039 R2 & .045 R2
.045 / .052		37319	0455049001	0455072002	0469837880		.045 R2 & .052 R2
1/16-5/64		37320	0455049001	0455072001	0469837880		1/16 R2 & 5/64 R2
.035-.040 / .045	Al	36860	0455049001	0456615001	0469837881	U	.039 A2 & .045 A2
.045 / 1/16		36861	0455049001	0456615001	0469837881		.045 A2 & 1/16 A2

C=Cored Wire K= Knurled Groove

Remote Controls - CAN (order cable separately)

MTA1 CAN..... 0459491880

Multi-function remote control for the following panels:
A2, A4, TA4, TA6, MA4, MA6, U6, U8

Process	Knob 1 Function	Knob 2 Function
MMA:	Current Control	Arc Force
TIG:	Pulse Current	Background Current
MIG/MAG 1:	Wire Feed Speed	Voltage Control
MIG/MAG 2:	Wire Feed Speed	Voltage Trim +/-

M1 10 Program CAN..... 0459491882

Synergic MIG for MA6, U6, U8

Process	Knob 1 Function	Switch 1 Function
MIG/MAG:	1-10 Memory Select	+/- Voltage Trim

Remote Control Cables - CAN

Length	CAN12 Pin	CAN 10 Pin
.25m	459554884	0459960883
5m	459554880	0459960880
10m	459554881	0459960881
15m	459554882	- NA -
25m	459554883	0459960882
5m HD	459554880	0459960880
10m HD	- NA -	0459960881
25m HD	- NA -	0459960882

Optimum Welding Solutions

- 2/4 stroke, simplifies handling of the welding gun
- Slow run-in start, gas pre-flow and hot start provide a soft and more direct start with less spatter
- Crater filling, adjustable burn-back time and post gas provides a smooth finish, extend the lifetime of the contact tip and guarantee no cracks at the end
- Pre-programmed synergic lines, to ensure optimum settings with a wide choice of materials, wire dimensions and gas combinations
- Possibility to create synergic lines
- Memory for 10 (U6) or 256 (U8 Pendant) parameter set
- Quick connectors- shortest possible set-up times
- TrueArcVoltage System, measures the correct arc voltage value independent of the length of the connection cable, return cable or welding gun
- Aristo SuperPulse™, the welding process with the ability to control the heat input (U8 Pendant)

Sturdy and reliable

Sturdy design with galvanized metal casing for use in tough environments. Electronically controlled feeding gives accurate and stable arc. The 4-wheel feeder mechanism with grooves in both feed roll and pressure roll gives stable feeding and low wear on the wire, all to avoid operational disturbance. The feeders are equipped with Ø48 mm rolls for wires up to 3/32" (2.4mm).

With safety in mind

Designed to meet the most rigid safety standard IEC-60974-5 with low voltage (42 V/AC) operations and overload protection circuit to eliminate breakdowns.

Flexibility

Wide variety of combinations are available with the man-machine communication panels U6 and U8 Pendant. All adjustments are made on the control panels (MMC) of the feeder, giving a good overview of the settings. The MMC panel U6 and U8 Pendant are easy to operate with accurate settings that suits different needs and demands.

The AristoFeed can be equipped with a counterbalance device, lifting eye or a wheel kit for increased mobility.

Easy service and maintenance

The feeder mechanism is easy to access and all wear parts can be exchanged with a single Allen wrench. One single pressure device makes it easy to adjust the appropriate feeding pressure.



Shown with optional spool cover



Panel (MMC) Functions	U6	U8 Pendant
2/4 stroke	X	X
Hot start & Crater filling	X	X
Slow run-in start	X	X
Adjustable burn-back	X	X
Gas pre/post flow	X	X
Digital V/A meters	X	X
Pre-programmed synergic lines	X	X (>100)
Memory sets	10	256
Pulse/synergic pulse	X	X
Create synergic lines		X
Super Pulse Process Control		X

Specifications

Power supply, Vac, Hz	42 Vac, 50/60 Hz.
Wire spool capacity, lbs. (kg)	44 & 66** (18 & 30** kg)
Max. spool diameter, in. (mm)	12" & 16*** (300/440** mm)
Wire feed speed, IPM (m/min)	32 - 980 ipm (0.8 - 25 m/m)
Dimension LxWxH, in. (mm)	22" x11" x14", (560x265x350)
Weight, lbs. (kg)	46.3 lbs. (21 kg)

Wire dimensions:

steel	.023" - 3/32", (0.6 - 2.4mm)
stainless steel	.023" - 3/32", (0.6 - 2.4mm)
aluminum	.035" - 3/32", (1.0 - 2.4mm)
cored wire	.030" - 3/32", (0.8 - 2.4mm)

** With Optional Adaptor (see Options & Accessories)

Ordering Information

Air Cooled Systems

Aristo Feed 4804, U6	0458805987
Aristo Feed 4804, M0 (for use with U8)	0458805981

Water Cooled Systems (Special Order Only)

Aristo Feed 4804w, U6	0458805997
Aristo Feed 4804w, M0 (for use with U8)	0458805991

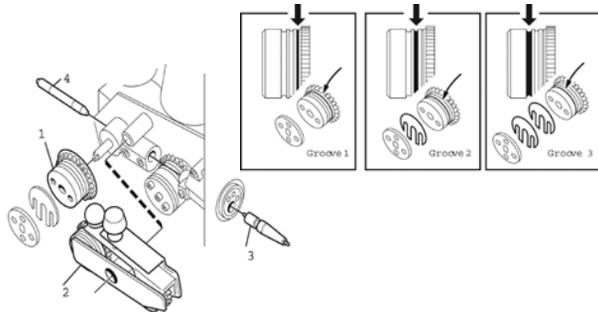
Aristo U8 Pendant

U8 Pendant, complete incl. holder	0456290981
Control cable extension 16.4 ft. (5 m)	0456280881
Control cable extension 32.8 ft. (10 m)	0456280882

Instruction Manual	0458716101
Sales Literature	(03-01-09) ARC-23174

Connection Cable Sets (required)

	Air cooled	Water cooled
5.5 ft. (1.7m)	0456528880	0456528885
16.4 ft. (5m)	0456528890	0456528895
32.8 ft. (10m)	0456528881	0456528886
49.2 ft. (15m)	0456528882	0456528887
82.0 ft. (25m)	0456528883	0456528888
115 ft. (35m)	0456528884	0456528889



Options & Accessories

Wheel kit	0458707880
Strain relief for welding gun	0457341881
Strain relief for connection cables	0459234880
Lifting eye	0458706880
MarathonPac™ Adapter	0558002354
MarathonPac Quick Connector	899F50
Adapter for 8" 10/12 lb. (5 kg) spools	0455410001
Counter balance device	0458705880
Spool cover	0458674880
Spool cover, steel	0459431880
Dual Feeder Stand and 2 cyl. rack (floor mtg.)	0458522880
Reel assembly for 60/65 lb. Coils	34323**
Adapter for reel assembly or 14" spools	0459233880
ESAT service kit	0458847880

**Must use optional adaptor

Wear Parts

Wire Diameter	Wire Type	Groove					Groove Type	Marking	Grooves		
		1 Feed Roll	2 Bogies	3 Outlet Nozzle	4 Intermediate Nozzle	5 Inlet Nozzle			1	2	3
.023-.045* HD	Fe, Ss, C	0366966880*	0366902880*	0469837880*	0156603001*	0156602001*	V	1*	.023-.030*	.035-.040*	.045*
.030		0366966887	0366941883	0469837880	0156603001	0156602001		.030	.030	.030	.030
.035		0366966888	0366941884	0469837880	0156603001	0156602001		.035	.035	.035	.035
.045		0366966889	0366941885	0469837880	0156603001	0156602001		.045	.045	.045	.045
.045 HD		0366966889	0366902894	0469837880	0156603001	0156602001		.045	.045	.045	.045
.052-.062 HD		0366966881	0366902881	0469837880	0156603001	0156602001		2	.052-.062	.078	.093
.052-.062		0366966890	0366941886	0469837880	0156603001	0156602001		1/16	.052-.062	.052-.062	.052-.062
5/64 HD		0366966891	0366902888	0469837882	0156603002	0156602002		5/64	.078	.078	.078
5/64-3/32 HD		0366966881	0366902881	0469837882	0156603002	0156602002		2	.052-.062	.078	.093
3/32 HD		0366966892	0366902889	0469837882	0156603002	0156602002		3/32	.093	.093	-
1/8 HD	0366966892	0366902889	0469837882	0156603002	0156602002	1/8	.125	-	-		
.045	C	0366966893	0366941887	0469837880	0332322001	0332318001	VK	.045	.045	.045	.045
.062		0366966894	0366941888	0469837880	0332322001	0332318001		.062	.062	.062	.062
5/64 HD		0366966895	0366902890	0469837882	0332322001	0332318001		5/64	.078	.078	.078
3/32 HD		0366966896	0366902891	0469837882	0332322002	0332318002		3/32	.093	.093	-
1/8 HD		0366966897	0366902892	0469837882	0332322002	0332318002		1/8	.125	-	-
.035/.040 HD	Al	0366966884	0366902885	0469837881	0156603001	0156602001	U	-	.035/.040	.035/.040	.035/.040
3/64 HD		0366966885	0366902886	0469837881	0156603001	0156602001		U2	.045	.045	.045
.040-1/16 HD		0366966899	0366902899	0469837881	0156603001	0156602001		U4	.040	.045	.062
1/16 HD		0366966886	0366902887	0469837881	0156603001	0156602001		-	.062	.062	.062

C=cored wire K=knurled groove *=Delivery Content

Remote Controls - CAN (order cable separately)

MTA1 CAN..... 0459491880
 Multi-function remote control for the following panels:
 A2, A4, TA4, TA6, MA4, MA6, U6, U8

Process	Knob 1 Function	Knob 2 Function
MMA:	Current Control	Arc Force
TIG:	Pulse Current	Background Current
MIG/MAG 1:	Wire Feed Speed	Voltage Control
MIG/MAG 2:	Wire Feed Speed	Voltage Trim +/-

M1 10 Program CAN..... 0459491882
 Synergic MIG for MA6, U6, U8

Process	Knob 1 Function	Switch 1 Function
MIG/MAG:	1-10 Memory Select	+/- Voltage Trim

Remote Control Cables - CAN

Length	CAN12 Pin	CAN 10 Pin
.25m	459554884	0459960883
5m	459554880	0459960880
10m	459554881	0459960881
15m	459554882	- NA -
25m	459554883	0459960882
5m HD	459554880	0459960880
10m HD	- NA -	0459960881
25m HD	- NA -	0459960882

Aristo SuperPulse™ - The only welding process if control of heat input is essential

- *Makes positional welding easier*
- *Allows welding with low heat input*
- *Provides uniform penetration*
- *Allows operator more control over welding speed*
- *TIG-looking weld appearance with MIG*
- *Very adaptable to all kind of mechanization, for example, Railtrac and Miggytrac*
- *Extends working range with larger wire size*
- *Less sensitive to joint gap variations*
- *Less sensitive to unequal heat transfer*

If your application demands efficient root runs or positional welding on thin, or thick aluminum or stainless materials, then SuperPulse™ will provide the optimum solution. With productivity as the objective, today's TIG process is tomorrow's Aristo SuperPulse™.

The prime advantage of the pulse/pulse process is the ability to control the heat input. Pulse/pulse is a well established process and has mainly been focused on aluminum welding.

Now SuperPulse™ is a further development of the pulse/pulse concept with the following additional combinations:

Pulse/short arc—Replace the TIG process by welding the root pass with the pulse/short-arc process. This process enables full control of the heat input for any thin sheet welding.

Spray arc/pulse—A very efficient process in positional welding of thicker materials. Aluminum can be welded straight upwards without the usual torch manipulation.
(Less tiring for the operator)

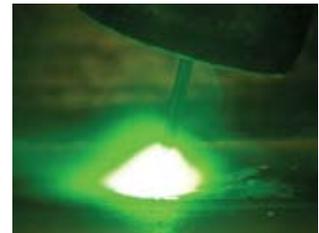
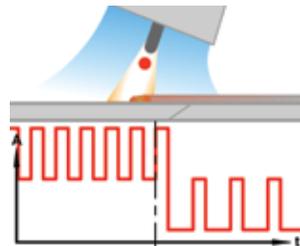
MIG brazing of very thin sheets is another application where we recommend Aristo SuperPulse™.

New welding processes will always require expert advice and training. To find out more about the process or applications surrounding Aristo SuperPulse™ please contact your local ESAB sales office for further information.

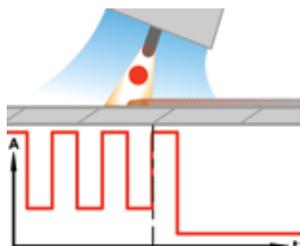
ESAB has welding process centers located in Hanover (US), Florence (US), Gothenburg (SE), Solingen (DE), Utrecht (NL), Waltham Cross (GB), Milan (IT) and Vamberk (CZ). All are prepared to undertake application trials for you, or offer a complete application/training package.

A complete package consists of:

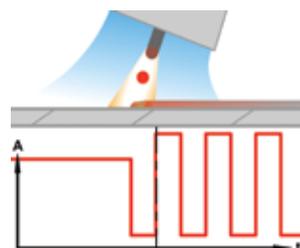
- Aristo Mig power source
- U8 operator pendant
- Aristo Feed 3004 M0 wire feeder
- MIG welding torch



pulse / pulse



pulse / short arc



spray / pulse

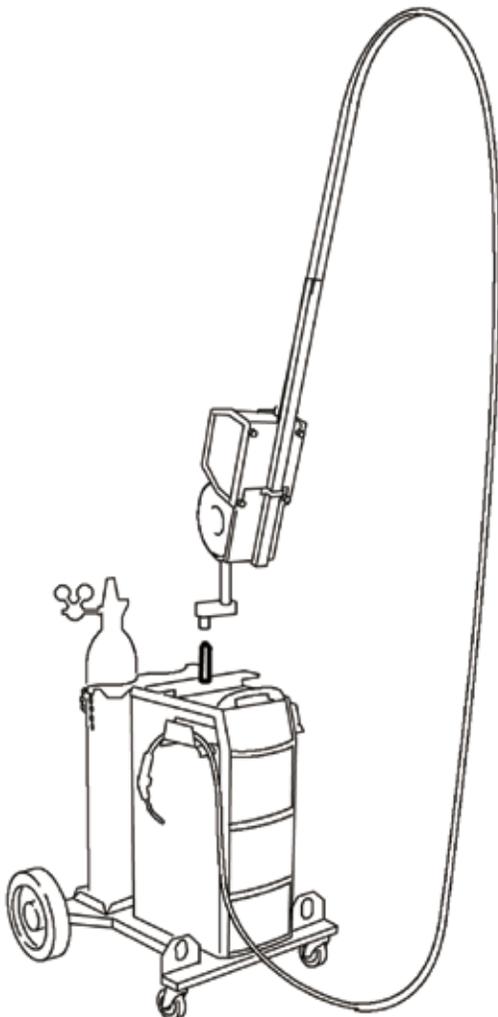


Counterbalance Mini-Booms

- up to 25 ft. working radius—effective area of over 1900 sq. ft.
- 350 degree working envelope
- Mounts easily to power source, inverter cart or stationary pedestal
- Lowest cost boom on the market
- Adjustable boom length
- Adjustable counter-balance spring

Ordering Information

Mini-Boom - (Mig 4HD)	34322
Swivel Post - Req'd for 353/453/460/653 power sources ...	36172
Inverter Cart - Fits SVI 450i and 350 mpi.....	31700
Swivel Post with bracket - (Required with 31700 cart).....	34075
Mini-Boom AristoFeed Models - up to 12" spools	0458705880
Mini-Boom AristoFeed and DuraDrive Models - up to 66 lb. coils	0458705882
Aristo Swivel Post - (Req'd with no cart).....	0458731880
Aristo Trolley Cart - used when 0458 705 880 or 0458 705 882 Mini-Boom is desired.....	0458603880



AristoMig power source, AristoMig wire feeder, 25ft. MIG torch, 0458 750 880 Mini-Boom and 0458 603 880 Trolley Cart with 2 gas cylinder capacity shown.

Designed to provide the utmost in convenience and versatility

- Ergonomic handles reduce fatigue for operator comfort and ease of use
- Optimum cooling of the torches, extended life time of the swan necks and the wear parts
- Proven Euro style central connection for quick easy installation or removal
- Spring loaded contact pins in the central connector for positive trigger connection
- Torches available in 10 ft. (3m) and 13 ft. (4m) lengths
- Gas nozzles in 3 different versions, standard, straight and conical provide maximum flexibility and an optimum lifetime
- Molded cable strain reliefs for improved cable life

Specifications

MXL 200

CO ₂	Amps/DutyCycle	200A / 35%
Ar/CO ₂	Amps/DutyCycle	170A / 35%
Wire	Inches (mm).....	.023-.040 (0.6-1.0)

MXL 270

CO ₂	Amps/DutyCycle	270A / 35%
Ar/CO ₂	Amps/DutyCycle	260A / 35%
Wire	Inches (mm).....	.030-.045 (0.6-1.2)

MXL 340

CO ₂	Amps/DutyCycle	340A / 35%
Ar/CO ₂	Amps/DutyCycle	320A / 35%
Wire	Inches (mm).....	.030-.045 (0.6-1.2)

Ordering Information

MXL 200

10 ft. (3.0 m).....	0700200002
13 ft. (4.0 m).....	0700200003

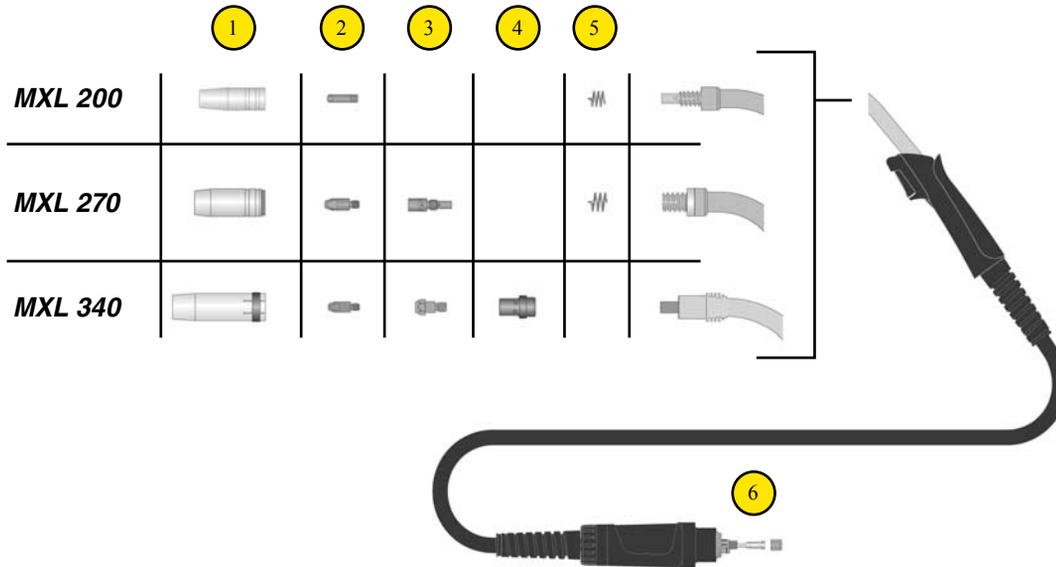
MXL 270

10 ft. (3.0 m).....	0700200004
13 ft. (4.0 m).....	0700200005

MXL 340

10 ft. (3.0 m).....	0700200006
13 ft. (4.0 m).....	0700200007





Consumables and Wear Parts

	MXL200		MXL270	MXL340
1. Gas nozzle standard	7/16"	(12 mm)	0700200054	
Gas nozzle standard	9/16"	(15 mm)		0700200055
Gas nozzle standard	5/8"	(16 mm)		0700200056
Gas nozzle straight	5/8"	(16 mm)	0700200057	
Gas nozzle straight	11/16"	(18 mm)		0700200058
Gas nozzle straight	3/4"	(19 mm)		0700200059
Gas nozzle conical	3/8"	(9.5 mm)	0700200060	
Gas nozzle conical	7/16"	(12 mm)		0700200061
Gas nozzle conical	7/16"	(12 mm)		0700200062
2. Contact tip	.023"	(0.6mm)	0700200063	
Contact tip	.030"	(0.8mm)	0700200064	
Contact tip	.035"	(0.9mm)	0700200065	
Contact tip	.040"	(1.0mm)	0700200066	
Contact tip	.030"	(0.8mm)		0700200068
Contact tip	.035"	(0.9mm)		0700200069
Contact tip	.040"	(1.0mm)		0700200070
Contact tip	.045"	(1.2mm)		0700200071
3. Tip adaptor	Std.		0700200072	
Tip adaptor	Std.			0700200073
Tip adaptor	Short			0700200074
Tip adaptor	use w/Teflon liners			0700200075
4. Gas diffuser				0700 200 080
5. Nozzle spring			0700200078	
Nozzle spring				0700200079
6. Steel liner .023"-.030" (0.6-0.8) 13 ft (4.0m)			0700200086	0700200086
Steel liner .035"-.045" (0.9-1.2) 13 ft (4.0m)			0700200088	0700200088
Teflon liner .023"-.030" (0.6-0.8) 13 ft (4.0m)			0700200090	0700200090
Teflon liner .035"-.045" (0.9-1.2) 13 ft (4.0m)			0700200092	0700200092

* Use tip adaptor 0700200067 when using teflon liners

Note: Bold = Standard Deliveries

Gun Master 250, 400

- “Slide-on” standard and heavy duty copper wall nozzles deliver performance and dependability
- Lightweight handle is impact resistant for long life
- Cable resists cuts, spatter, oil and abrasion

Ordering Information

Complete Assemblies (NAS Style)

Gun Master 250 NAS 10 ft. x .023	0558001630
Gun Master 250 NAS 10 ft. x .035-.045.....	0558001631
Gun Master 250 NAS 12 ft. x .035-.045.....	0558001635
Gun Master 250 NAS 15 ft. x .035-.045.....	0558001639
Gun Master 400 NAS 10 ft. x .035-.045	0558001653
Gun Master 400 NAS 10 ft. x .052-1/16.....	0558001654
Gun Master 400 NAS 12 ft. x .035-.045	0558001656
Gun Master 400 NAS 12 ft. x .052-1/16.....	0558001657
Gun Master 400 NAS 15 ft. x .035-.045	0558001659
Gun Master 400 NAS 15 ft. x .052-1/16.....	0558001660

Complete Assemblies (CC Style)

Gun Master 250cc 10 ft. x .023.....	0558001643
Gun Master 250cc 10 ft. x .035-.045	0558001644
Gun Master 250cc 12 ft. x .035-.045.....	0558001645
Gun Master 250cc 15 ft. x .035-.045	0558001649
Gun Master 400cc 10 ft. x .035-.045.....	0558001665
Gun Master 400cc 12 ft. x .035-.045.....	0558001667
Gun Master 400cc 15 ft. x .035-.045.....	0558001669
Gun Master 400cc 15 ft. x .052-1/16.....	0558001670

Basic (NAS Style)

Gun Master 400 NAS 25 ft. Basic.....	0558001664
--------------------------------------	------------

Basic (CC Style)

Gun Master 400cc 25 ft. Basic	0558001674
-------------------------------------	------------

Options

ESAB Power Pin for MIG 35	0558002313
Lincoln Power Pin	0558001862
45 Degree 250Amp Gooseneck	0558001616
(for Gun Master 250)	
Gas Meter (measures gas flow at the gun)	19043

Specifications

Gun Amperage Ratings

Gun Master	100% Duty Cycle		60% Duty Cycle	
	CO ₂	MIXED	CO ₂	MIXED
250 AMP	250	180	300	250
400 AMP	400	275	525	400

Note: Ratings are based on tests that comply with NEMA ARC Welding Section Standard 11-6-1975 for Duty Cycle. “The time period of one complete cycle shall be 10 minutes” (60% = 6 minutes). National Electrical Manufacturers Association, 2101 L Street N.W., Washington, D.C., 20037.



Consumables & Accessories

Liner Selection

Steel & Flux Core

.023 x 10,12,15 ft. Liner	0558001675
.030 x 10,12,15 ft. Liner	37031
.035/.045 x 10,12,15 ft. Liner.....	37032
.052-1/16 x 10,12,15 ft. Liner	37033
5/64 x 10,12,15 ft. Liner.....	0558001676
3/32 x 10,12,15 ft. Liner.....	37034
7/64-1/8 x 10,12,15 ft. Liner.....	952948
.035 - .045 x 25 ft. Liner.....	0558002137
.052 - 1/16 x 25 ft. Liner	0558002138
5/64 x 25 ft. Liner.....	0558002139
3/32 x 25 ft. Liner.....	0558002140

Aluminum

.035-3/64 x 15 ft. Poly Liner	*37039
3/64-1/16 x 15 ft. Poly Liner	*37040

*Requires Liner Sleeve P/N 0558003050 when H.D. parts used.

Note: All 15 ft. Liners can be trimmed to fit 10 ft. or 12 ft.

Trigger Leads, ESAB Style

Trigger Lead 6 in., Gun Master 250	0558001815
Trigger Lead 24 in., Gun Master 250	0558002583
Trigger Lead, Gun Master 400.....	2075216

Control Plugs (Options)

Lincoln (LN 7, 8, 9, NAZ).....	0558001864
--------------------------------	------------

Instruction Manual Gun Master 250	F-15-612
Instruction Manual Gun Master 400	F-15-613
Sales Literature.....	(03-01-09) ARC-23095



GUN MASTER 250 & 400

Liners for Gun Master 250/400

Wire Type and Size	Liner
Hard Wires	
.030 in. (0.8mm)	37031
.035 in. - .045 in. (0.9mm - 1.2mm)	37032
.045 in. - 1/16 in. (1.2 - 1.6mm)	37033
5/64 in. - 3/32 in. (2 - 2.4mm)	37034
Soft Wires	
.035 in. (0.9mm)	37039
3/64 in. - 1/16 in. (1.2 - 1.6mm)	37040

Contact Tips

Standard Duty Tips		Heavy Duty Tips	
Wire Size	Part No.	Wire Size	Part No.
.023	20543	.030	0558002367
.030	20544	.035	0558002368
.035	996995	.040	0558002369
.045	37290	.045	37286
.045 - 3/64	996999	3/64 (Aluminum)	17765
.052	2075349	.052	17778
1/16	996997	1/16 (Hard or Cored Wire)	37291
5/64	2075230	1/16 (Aluminum)	948835
		5/64	948832
		3/32	948833

Nozzles

Standard Duty		Tip Relationship Using All Sizes Standard and Heavy Duty Tips 5/64 in. & 3/32 in.		Tip Relationship Using All Sizes Heavy Duty Tips Except 5/64 in. & 3/32 in.	
Inside Diameter	Part No.				
3/8 in.	0558001609	Flush	Copper	1/8 in. Recess	
1/2 in.	0558001612	1/8 in. Recess	Copper	Flush	
1/2 in.	0558001611	Flush	Copper	1/8 in. Stick Out	
1/2 in.	0558001613	1/8 in. Stick Out	Copper	1/4 in. Stick Out	
5/8 in.	0558001614	Flush	Copper	1/8 in. Stick Out	
5/8 in.	0558001615	1/8 in. Stick Out	Copper	1/4 in. Stick Out	
Std. Duty Tip/Noz. Adaptor					
Tip/Adaptor	0558001608				
Heavy Duty					
Inside Diameter	Part No.				
5/8 in.	0558001599	1/8 in. Recess	Copper	Flush	
5/8 in.	0558001600	1/4 in. Recess	Copper	1/8 in. Recess	
5/8 in.	0558001598	Flush	Copper	1/8 in. Stick Out	
5/8 in.	0558001601	1/8 in. Stick Out	Copper	1/4 in. Stick Out	
Spot					
Spot Nozzle	0558001602	1/4 in.	Brass	1/4 in.	
Heavy Duty Tip/Noz. Adaptor					
Tip/Adaptor	0558001888				

All tips are the medium length to give these relationships.



“COOL GRIP” - MT-300GL, 400GL AND 500GL GASLESS FLUX CORED GUNS

“Cool Grip” Gasless Flux Cored Guns

- Aluminum insulated and re-positionable 45, 60 and 80 degree gooseneck
- Can be easily converted to a gas shielded gun
- Replaceable liner extends to back of contact tip
- Spring Strain reliefs improve cable life
- Choice of torch connectors:
 - Central Connector (Euro Style)
 - NAS (Tweco® #4 Compatible)
- Unique ergonomic small diameter molded handle for unmatched operator safety, comfort and unlimited durability

Specifications

60% Duty Cycle*	Model	100% Duty Cycle*
MT-300GL	250 amps	300 amps
MT-400GL	400 amps	450 amps
MT-500GL	500 amps	550 amps

*Duty Cycle = 10 min. base

Ordering Information

Gun Assemblies

Each of the following guns has a shock washer, tip adaptor, nozzle insulator and heat shield. Liners and contact tips must be ordered separately.

CC Models	45 Deg.	60 Deg.
MT-300GL, 12 ft. (3.6 m)	37714*	
MT-300GL, 15 ft. (4.5 m)	37715	
MT-400GL, 12 ft. (3.6 m)	37717*	
MT-400GL, 15 ft. (4.5 m)	37718	37727
MT-500GL, 15 ft. (4.5 m)	37721	37730
NAS Models	45 Deg.	60 Deg.
MT-400GL 12 ft.	0558002162	0558002163
MT-400GL 15 ft.	0558002164	0558002165

*Made to order

Liners for MT-300GL, 400GL & 500GL (10, 12 & 15 ft.)

Hard & Cored Wires	
.030 in. (0.8 mm)	37031
.035 in. (0.9 mm)	37032
.045-1/16 in. (1.2-1.6 mm)	37033
5/64-3/32 in. (2-2.4 mm)	37034
7/64-1/8 in. (2.8-3.2 mm)	952948
Gas Meter (measures gas flow at the gun)	19043



Contact Tips

Wire Type & Size	Contact Tip	
	Long Part No.	Inside Diameter in. (mm)
Hard, Cored & Soft Wires		
.030 in. (0.8 mm)	Q403-1-30	.039 (.9)
.035 in. (0.9 mm)	Q403-1-35	.044 (1)
.045 in. (1.2 mm)	17765	.062 (1.6)
.052 in. (1.4 mm)	17778	.062 (1.6)
1/16 in. (1.6 mm)	948835	.072 (1.8)
5/64 in. (2.0 mm)	948832	.094 (2.4)
3/32 in. (2.4 mm)	948833	.123 (3.1)

Tip Insulators and Front End Parts



Note: To convert for gas shielding use tip adaptors and nozzles as used on Gun Master 250s and 400s.

Instruction ManualF-15-497
 Sales Literature (03-01-09) ARC 23074

ST-16/ST-21/ST-21M

- Rated at 600 amps with any shielding gas
- Handles flux cored wires to 7/64 in.
- ST-21M has an in-line body style designed for mechanized applications



ST-21



ST-16

ST-21M

Specifications

	ST-16	ST-21	ST-21M
Gun Capacity	600 amps, 100% duty cycle	600 amps, 100% duty cycle	600 amps, 100% duty cycle
Dimensions			
Length	13-3/4 in. (350 mm)	12-1/2 in. (315 mm)	10-1/4 in. (260 mm)
Height	4-1/4 in. (110 mm)	7-1/16 in. (180 mm)	
Handle Diameter	1-3/8 in. (35 mm)	1-3/8 in. (35 mm)	1-3/8 in. (35 mm)
Gun Angle	55 deg.	180 deg.	180 deg.
Weight			
(less service lines)	28 oz. (794 g)	38 oz. (1077 g)	28 oz. (794 g)
Cooling Req. (min.)	1.6 qt./min. (1.5 l/min.)	1.6 qt./min. (1.5 l/min.)	1.6 qt./min. (1.5 l/min.)
Wires Accommodated			
Hard	.030-3/32 in. (0.8-2.4 mm)	.030-3/32 in. (0.8-2.4 mm)	.030-3/32 in. (0.8-2.4 mm)
Soft	.035-3/32 in. (0.9-2.4 mm)	.035-3/32 in. (0.9-2.4 mm)	.035-3/32 in. (0.9-2.4 mm)
Cored	.030-7/64 in. (0.8-2.8 mm)	.030-7/64 in. (0.8-2.8 mm)	.030-7/64 in. (0.8-2.8 mm)

Ordering Information

These guns do not include liner/conduits, contact tips/tubes or nozzles. Select the accessories listed in Tables under Mig Gun Accessories to customize a gun that is just right for your job.

ST-16, 10 ft. (3.0 m)	997498
ST-21, 12 ft. (3.6 m)	995950
ST-21M, 2 ft. (0.6 m)	690509

Options & Accessories

Spatter Liner	633603
Centering Bushing	17782
EH-10A Mech. Gun Mounting Bracket (ST-21M)	633885
EH-10A Connection Block Assy (ST-21M)	58V74
ST-16/21 Outlet Adapter for DuraDrives	0588000995
Power Cable Adaptor	45V11
Gas Meter (measures gas flow at the gun)	19043

Instruction Manuals

ST-16	F-11-744
ST-21	F-12-218
ST-21M	F-11-964
Sales Literature	(03-01-09) ARC-23218



MIG Gun Consumables and Wear Parts ST-16/21/21M

Table 1. Contact Tips and Tubes for Water-Cooled Mig Guns

Wire Size	Inside Diameter	Contact Tips		Contact Tubes
		Short	Long	
.030 in. (0.8 mm)	0.037	632791	20123	–
.035 in. (0.9 mm)	0.043	632793	632794	996104
.040 in. (1.0 mm)	0.048	37275	37276	37277
.045 in. (1.2 mm)	0.054	37278	37279	37280
3/64 in. (1.2 mm)	0.058	–	–	996105
3/64 in. (1.2 mm)	0.061	632795	632796	49N16
.052 in. (1.4 mm)	0.062	–	–	996816
1/16 in. (1.6 mm)	0.073	37281	37282	37283
1/16 in. (1.6 mm)	0.078	632797	632798	996106
5/64 in. (2.0 mm)	0.090	37284	–	–
5/64 in. (2.0 mm)	0.094	632799	–	996107
3/32 in. (2.4 mm)	0.107	632800	–	996108
7/64 in. (2.8 mm)	0.123	633611	–	–

Table 2. Gas Nozzles for Water-Cooled Mig Guns

Nozzle Size	Inside Diameter	ST-16 / 21/21M
No. 8	1/2 in.	598739*
No. 10	5/8 in.	598721*
No. 10 Long	5/8 in.	598891*
No. 12	3/4 in.	633985
No. 12 Medium	3/4 in.	997310
No. 12 Long	3/4 in.	639756
No. 12 Spot	3/4 in.	993757

*Requires Spatter Liner 633603

Table 3. Conduits and Liners for ST-16/21 Water-Cooled Mig Guns

Conduit Wire Size	Hard and Flux-Cored Wire			Aluminum		
	10ft. Conduit	ST-16 Jumper Liner	ST-21 Jumper Liner	10 ft. Conduit	ST-16 Jumper Liner	ST-21 Jumper Liner
.030 in. (0.8 mm)	633455	993822	–	–	–	–
.035 in. (0.9 mm)	633455	993822	–	633578	636877*	–
.045 in. (1.2 mm)	633456	993823	995951	–	–	–
3/64 in. (1.2 mm)	–	–	–	633578	636877*	995953
.052 in. (1.4 mm)	633456	993823	995951	–	–	–
1/16 in. (1.6 mm)	633456	993823	995951	634777	636879	995953
5/64 in. (2.0 mm)	598806	993823	995952	–	–	–
3/32 in. (2.4 mm)	598922	598927	995952	46V68	994552	995954

*Requires Support Liner 598927

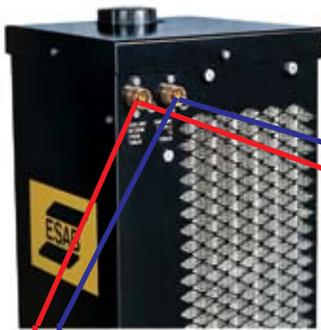
Table 4. Conduits and Liners for ST-21M Water-Cooled Mig Guns*

Wire Size	Hard and Flux-Cored Wire Conduits			Aluminum Wire Conduits			Conduit Liner
	4 ft.	6 ft.	10 ft.	4 ft.	6 ft.	10 ft.	
.045 in. (1.2 mm)	38V86	39V99	40V18	–	–	–	–
3/64 in. (1.2 mm)	–	–	–	38V89	40V01	–	42V74
.052 in. (1.4 mm)	38V86	39V99	40V18	–	–	–	–
1/16 in. (1.6 mm)	38V86	39V99	40V18	39V80	39V83	40V20	42V75
5/64 in. (2.0 mm)	38V89	40V01	–	–	–	–	–
3/32 in. (2.4 mm)	38V80	39V83	40V20	39V80	39V83	40V20	42V73
7/64 in. (2.8 mm)	38V80	39V83	40V20	–	–	–	–

* ST-21M requires bracket (P/N 633885) and adaptor (P/N 61N59) for use with the above conduits when mounting away from feeder. Refer to torch manuals for specific accessories required to install on wire feeder (available online at www.esabna.com)



WATER-COOLED MIG GUN INSTALLATION AND ACCESSORIES



WC-8C Water Circulator
P/N 33739

Mig 4HD Water Kit Connection

Mig 41 Kit - Allows direct connection of torch with Q.C. male fittings (10 ft. supply and return hoses included) 34325



Gun Water Connection

ST-16/21 Water-Cooled Mig Gun Feeder Mount Water Connection

Mig-35, Digimig and Digipulse

Water Kit Assembly for Mig-35, Digimig & Digipulse 994466



Adaptor	Coupling	Adaptor
11N16	1/4" NPT	58V75
	68121075	

To
ST-16/21



**Mig-35
Digimig
Digipulse**



Supply Water Hose Connection

Water Hose Assemblies	
3 ft. (0.8 m)	20634
6 ft. (1.8 m)	20633
12-1/2 ft. (3.8 m)	40V76
25 ft. (7.5 m)	406196



Return Water Hose Connection
See above selection.



Adaptor
45V11



From
ST-16/21



Adaptor
45V11
connects to
power stud

Adaptor
58V75
connects
to Baffle Plate

Mig Guns

Euro-Connector Direct Gun to Cooler Connection

2 Assemblies Required (one supply & one return)



Gun Q.C. Water Male Fitting



Quick-Disconnect Fitting Female
23610853



Water Coupler
11N18



Water Hose
See above selection.

Water Hose Fittings and Accessories

(for 1/4" I.D. Hose)



Nipple 1/4" Hose
35N22



Nut 5/8"-18 L.H.
10N40



Hose Clamp
950731



Q.C. 1/4" Hose Fitting Male
23611143

Euro-Adaptors

20572*	19260*
Mig41A	Mig-41
GM-250cc	
GM-400cc	



* Mig 35, Digimig or Digipulse

ST-23A

- Designed for use with Migmaster 250, MultiMaster 260, also for 353cv, 350mpi, SVI-450i, 453cv Multipower 460, 653cvcc with MIG-28A control package.
- Weighs less than 3 lbs.
- Uses durable contact tips and nozzles
- Powerful gear motor in handle pulls welding wire from 4 in. diameter spool in the molded gun case
- Partial depression of the torch trigger controls gas pre- and post-flow operations - full depression provides wire feeding as well as gas flow
- Wire feed control mounted on gun provides precise adjustment of wire feed rate at torch

ST-23A Spool Gun

- Rugged 250 amp, 100% duty cycle performance
- Service lines enter the rear of gun instead of handle for improved balance and accessibility
- Inching pushbutton mounted on bottom of handle
- 30 ft. service lines

Mig-28A Packages

- Super convenient - includes Mig-28A control and spool-on-gun type torch
- Use for short arc or spray arc welding with CV power source or for spray arc welding with CC power source
- Select type of welding power by simply flipping the selector switch

Ordering Information

Mig-28A, ST-23A Package - Includes Mig-28-A control, spool gun, three 3/64 in. contact tips, drive roll, liner, control cable, gas hose and #10 nozzle and 30 ft. service lines	19163
Mig-28A Control	2075159
ST-23A Spool Gun - Includes one 3/64 in. contact tip, drive roll, liner, control cable, gas hose and #10 nozzle and 30 ft. service lines	19164
Control Cable - 6 ft. for ESAB CV Power Sources.....	36618
Control Cable - 6 ft. for non-ESAB Power Sources	996736
Secondary Contactor Kit - 300 Amp.	677333
Secondary Contactor Control Cable - 1.5 ft.....	677389
Anti-Stick (Burnback) Kit	2075076



Options & Accessories

Zippered Hose Sheath - 25 ft. for gun service line protection.....	35454
ST-23A Control Cable Extension - Extends the spool gun control cable by 30 ft. (9.1 m)	636968
ST-23A Power Cable & Gas Hose Extension - Includes coupling 11N19 for extending 30 ft. (9.1 m)	15626
ST-23A to MultiMaster 260 Adaptor - This would also fit MigMaster 203 and 253's	37301
ST-23 Feed Roll - .030-.035 in. (.8-.9 mm).....	636343
Torch Liner - .030-.035 in. (.8-.9 mm)	19166
ST-23 Feed Roll - .045-.062 in. (1.2-1.6 mm)	*996112
Torch Liner - .045-.062 in. (1.2-1.6 mm)	*19167
Contact Tips -	see Table 1, Accessories page
Nozzles -	see Table 2, Accessories page
* - As delivered.	

Instruction Manuals

ST-23A	F-14-353
Mig-28A	F-12-728
Mig-28A Secondary Contactor Kit	F-12-825
Sales Literature	(03-01-09) ARC-23066

MT-250 SG Spool Gun

- Designed for use with the Migmaster 250, Migmaster 203, Migmaster 253, MultiMaster 260, and also for 353cv, 350mpi, SVI-450i, 453cv Multi-power 460, 653cvcc with MIG-28A control package.
- Weighs less than 3 lbs.
- Uses durable MT contact tips and nozzles
- Powerful gear motor in handle pulls welding wire from 4 in. diameter spool in the molded gun case
- Partial depression of the torch trigger controls gas pre- and post-flow operations - full depression provides wire feeding as well as gas flow
- Wire feed control mounted on gun provides precise adjustment of wire feed rate at torch



MT-250 SG

- Medium-duty 200 amp, 100% duty performance
- Spool holder adjusts to balance in the operator's hand
- 25 ft. service lines

Ordering Information

- Mig-28A, MT-250SG Package** - Includes Mig-28A control, spool gun, three 3/64 in. contact tips, drive roll, liner, control cable, gas hose and #10 nozzle and 25 ft. service lines. 37707
- MT-250 SG Spool Gun** - Includes three 3/64 in. contact tips, drive roll, liner, control cable, gas hose and #10 nozzle and 25 ft. service lines 36779
- Control Cable** - 6 ft. for ESAB CV Power Sources..... 36618

- Control Cable** - 6 ft. for non-ESAB Power Sources 996736
- Secondary Contactor Kit** - 300 Amp. 677333
- Secondary Contactor Control Cable** - 1.5 ft. 677389
- Anti-Stick (Burnback) Kit**..... 2075076

Options & Accessories

- MT-250 SG**
- Zippered Hose Sheath** -
25 ft. for gun service line protection..... 35454
- Gun Extension Lines**
- Gas Hose Assembly, 25 ft. 34V38
- Coupling, Gas Hose (5/8 in. - 18 in.) 11N17
- Quick Connector, Male #2 - 1/0 13733936
- Quick Connector, Female #2 - 1/0 13735632
- Gas Meter (measures gas flow at the gun) 19043
- Feed Roll** - .030-3/64 in. Soft wire (.8-1.2 mm) *36866
- Feed Roll Knurled** - .030-.045 in. Hard wire (.8-1.2 mm) 36867
- Inlet Guide Liner** - .030-3/64 in. (.8-1.2 mm) Gray 36869
- Barrel Liner** - .030-3/64 in. (.8-1.2 mm) White 36871
- Contact Tips** - see Table 1, Accessories page
- Nozzles** - see Table 2, Accessories page

- Instruction Manuals**
- MT-250SG F-15-380
- Mig 28A F-12-728
- Sales Literature** (03-01-09) ARC-23211



MIG Spool Gun Accessories

ST-23A, MT-250SG Spool Guns

Table 1. Contact Tips

Wire Size	Inside Diameter	Contact Tips			
		Short	*Standard Duty	Long	**Heavy Duty Medium
.023 in. (0.6mm)	0.031	–	20543	999742	–
.030 in. (0.8mm)	0.037	–	20544	996994	0558002367
.030 in. (Notched)	0.043	–	36884	–	–
.035 in. (0.9mm)	0.043	–	996995	996996	0558002368
.035 in. (Notched)	0.048	–	36885	–	–
.040 in. (1.0mm)	0.048	–	37287	37288	0558002369
.045 in. (1.2mm)	0.054	999578	37290	996998	37286
3/64 in. (Notched)	0.060	–	36886 ^(b)	–	–
3/64 in. (1.2mm)	0.058	–	996999 ^(a)	–	17765

*Requires Tip Adapter 17983 **Requires Tip Adapter 17984

(a) Included with ST-23A

(b) Included with MT-250SG

Table 2. Nozzles

Size	Inside Diameter	Standard Duty	Heavy Duty	Super Duty
No. 6	3/8 in. (10mm)	998895	–	–
No. 8	1/2 in. (13mm)	998893	–	–
No. 8 HD	1/2 in. (13mm)	–	999471	–
No. 10	5/8 in. (16mm)	998894	–	–
No. 10 HD	5/8 in. (16mm)	–	999472**	–
No. 12 HD	3/4 in. (20mm)	–	999473	17350
No. 12 Spot	3/4 in. (20mm)	17316*	999625	–

* Requires 17293 Tip Adapter and 17321 Adapter

** Included with ST-23A and MT-250SG

Mig-41/41A

- Couples with most ESAB wire feeders to create a high performance push-pull system
- All-electric drive automatically synchronizes with wire feeder
- Ideal for feeding aluminum or other small diameter wires long distances
- Quick disconnect convenience

Ordering Information

Mig-41A Gas-Cooled Guns

Gun assembly includes drive roll, liner, contact tip, #10 nozzle.
 Mig-41A, .030 in. (0.8 mm) soft wires, 15 ft. (4.5 m) 604620
 Mig-41A, .035 in. (0.9 mm) soft wires, 15 ft. (4.5 m) 604417
 Mig-41A, 3/64 in. (1.2 mm) soft wires, 25 ft. (7.6 m).... 0558005744
 Mig-41A, .035 in. (0.9 mm) hard wires, 25 ft. (7.6 m) 604420

Basic Guns do not include drive roll, liner, contact tip or nozzle.
 Mig-41A, 15 ft. (4.5 m)..... 20506
 Mig-41A, 25 ft. (7.6 m)..... 20536

Mig-41 Water-Cooled Guns

Gun assembly includes drive roll, liner, contact tip, #10 nozzle.
 Mig-41, 3/64 in. (1.2 mm) soft wires, 25 ft. (7.6 m) 600980
 Mig-41, 1/16 in. (1.6 mm) soft wires, 25 ft. (7.6 m)..... 604290

Basic Gun does not include drive roll, liner, contact tip or nozzle.
 Mig-41, 25 ft. (7.6 m) 19257

Options & Accessories

- Push-Pull Gun Control Kit** - For Mig 4HD wire feeder only....34327
- Power Control Assembly** - Required for Mig 35, Digimig, Digimig Dual or Digipulse wire feeders..... 19310
- Water Kit** - For Mig 4HD wire feeder. Kit consists of inlet/outlet fittings, mounting hardware, 8 ft. (2.4 m) water hoses with "B" size water fittings 34325
- Hose Assembly** -12 in. coolant in, attaches to gun coolant hose. Typically used with Mig 35, Digimig or Digipulse wire feeders. Includes quick action connectors for torch and brass "B" size female water fitting 19089
- Hose Assembly** - 12 in. coolant out, attaches to gun coolant hose. Includes quick disconnect fitting and brass "C" size female water fitting 19090
- Mig-41 Gun Adaptor** - Enables connection of Mig-41 push-pull gun to Mig 35, Digimig, Digimig Dual or Digipulse wire feeders.....19260
- Mig-41A Gun Adaptor** - Enables connection of Mig-41A push-pull gun to Mig 35, Digimig, Digimig Dual or Digipulse wire feeders. 20572
- Mig-41 Curved Front Body** - 45 deg. replaces straight front body. Requires Wire Guide P/N 19758..... 19757
- Gas Meter** (measures gas flow at the gun)..... 19043
- Liners & Drive Rolls** see Table 1 next column
- Contact Tips & Nozzles**see Tables 2 thru 5, next page



Mig-41A
Gas-Cooled Gun

Euro

Table 1. Liners & Drive Rolls
Push-Pull Guns - Mig-41 or Mig-41A

Wire Size	Liner		Drive Roll Part No.
	17 ft. (5.1 m) Part No.	28 ft. (8.4 m) Part No.	
Soft Wires - Aluminum			
.030 in. (0.8 mm)	20522	19304	19268
.035 in. (0.9 mm)	20522	19304	19269
3/64 in. (1.2 mm)	20522	19304	19270
1/16 in. (1.6 mm)	20523	19305	19736
Hard Wires			
.023 in. (0.6 mm)	20524	19868	20519
.030 in. (0.8 mm)	20524	19868	19268
.035 in. (0.9 mm)	20524	19868	19269
.045 in. (1.2 mm)	20525	19869	19270
1/16 in. (1.6 mm)	—	19870	19736

Specifications

Gun Capacity
 Mig-41 450 amps, 60% duty cycle
 Mig-41A 250 amps, 60% duty cycle

Dimensions (less service line)
 Length 15 in. (381 mm)
 Height..... 7 - 3/8 in. (187 mm)
 Handle Diameter 1 - 5/8 in. (41 mm)
 Weight (less service lines) 2.2 lbs. (1 kg)
 Water Cooling Requirements4 gal./min (1.5 L/min.)

Wire Accommodated	Mig-41	Mig-41A
Hard	.023-1/16 in.	.023-.045 in.
Soft	.030-1/16 in.	.030-3/64 in.

Instruction Manual, MIG-41A.....F-14-497
 Instruction Manual, MIG-41F-14-363
 Sales Literature(03-01-09) ARC-23209



MIG-41A Gun Accessories

Table 2. Contact Tips MIG-41A

Wire Size	Inside Diameter	Contact Tips				
		Standard Duty			Heavy Duty	
		Short	Medium	Long	Short	Medium
.023 in. (0.6mm)	0.031	–	20543	999742	–	–
.030 in. (0.8mm)	0.037	–	20544	996994	–	0558002367
.030 in. (Notched)	0.043	–	36884	–	–	–
.035 in. (0.9mm)	0.043	–	996995	996996	–	0558002368
.035 in. (Notched)	0.048	–	36885	–	–	–
.040 in. (1.0mm)	0.048	–	37287	37288	–	0558002369
.045 in. (1.2mm)	0.054	999578	37290	996998	–	37286
3/64 in. (Notched)	0.060	–	36886	–	–	–
3/64 in. (1.2mm)	0.058	–	996999	–	–	17765
.052 in. (1.4mm)	0.062	948340	2075349	–	–	17778
1/16 in. (1.6mm)	0.073	948341	37289	–	–	37291
1/16 in. (1.6mm)	0.078	–	996997	–	–	948835
5/64 in. (2.0mm)	0.090	–	2075230	–	948832	–
3/32 in. (2.4mm)	0.107	–	–	–	948833	–

Table 3. Nozzles MIG-41A

Size	Inside Diameter	Standard Duty	Heavy Duty	Super Duty
No. 6	3/8 in. (10mm)	998895	–	–
No. 8	1/2 in. (13mm)	998893	–	–
No. 8 HD	1/2 in. (13mm)	–	999471	–
No. 10	5/8 in. (16mm)	998894	–	–
No. 10 HD	5/8 in. (16mm)	–	999472	–
No. 12 HD	3/4 in. (20mm)	–	999473	17350
No. 12 Spot	3/4 in. (20mm)	17316	999625	–
No. 16 Spot	1 in. (25mm)	–	–	–

Table 4. Contact Tips MIG-41

Wire Size	Inside Diameter	Contact Tips	
		Short	Long
.030 in. (0.8 mm)	0.037	632791	20123
.035 in. (0.9 mm)	0.043	632793	632794
.040 in. (1.0 mm)	0.048	37275	37276
.045 in. (1.2 mm)	0.054	37278	37279
3/64 in. (1.2 mm)	0.058	–	–
3/64 in. (1.2 mm)	0.061	632795	632796
.052 in. (1.4 mm)	0.062	–	–
1/16 in. (1.6 mm)	0.073	37281	37282
1/16 in. (1.6 mm)	0.078	632797	632798
5/64 in. (2.0 mm)	0.090	37284	–
5/64 in. (2.0 mm)	0.094	632799	–
3/32 in. (2.4 mm)	0.107	632800	–
7/64 in. (2.8 mm)	0.123	633611	–

Table 5. Gas Nozzles for MIG-41

Nozzle Size	Inside Diameter	Mig-41
No. 8	1/2 in.	18958
No. 10	5/8 in.	18959
No. 10 Long	5/8 in.	–
No. 12	3/4 in.	18960
No. 12 Medium	3/4 in.	–
No. 12 Long	3/4 in.	–
No. 12 Spot	3/4 in.	18996

LHF 405 Pipemaster™

- Outstanding welding characteristics - high efficiency and high quality welding.
- Wide current and voltage range - multiple purpose applications.
- Best for cellulose electrodes
- Mains voltage compensation - stable welding controls
- Stepless current control - exact settings and remote control options
- Hot start, arc force, anti-stick and over-current protection
- Optional large wheel and handle kit
- Extra protection for harsh environments
- Can be stacked for compact installations

Rugged and Powerful

The LHF 405 Pipemaster is a sturdy and robust SCR-controlled unit intended for manual heavy duty MMA welding with coated electrodes, TIG welding and arc-air gouging. Well-proven technology provides high reliability and outstanding welding performance.

The LHF 405 Pipemaster is made with a strong galvanized metal housing. Optional large wheels make it easy to move. This range of machine is recommended especially for the highest requirements and toughest areas of applications.

Easy to Use

The wide current range makes it easy to optimize settings for a wide variety of filler materials.

It is possible to adjust parameters during welding process. The LHF 405 Pipemaster is equipped with such functions as hot start, arc force and automatic anti-stick.

Flexibility

The LHF 405 Pipemaster has steep volt/ampere characteristics which means that regardless of cable length and arc voltage, the current is constant.

The dynamic characteristics of the LHF 405 ensures stable, spatter free arc and ideal control of the molten weld pool. Due to high power factor, energy consumption is low as well as installation costs.



Welding properties of these units are configured to fulfill the requirements of welding with E-6010 cellulosic electrodes. The arc is very stable, even starting from the lowest currents. When the arc is shortened, arc force makes weld penetration easier, especially when the electrode is pressed against the welded material.

As an option the LHF 405 can be equipped with remote control units. The LHF 405 is switched off automatically in case of overheating.

Conformance to EN 60974-1.

Applications

- Pipelines
- Shipbuilding and offshore
- Process industry
- Power generation
- Civil construction
- General fabrication
- Repair and maintenance





LHF 405 PIPEMASTER HEAVY DUTY RECTIFIER POWER SOURCE

Specifications

Input voltage 230/460vac, 3 ph., 60 Hz
 Input current at rated load 400A, 230/460vac.....71A/36A
 Permitted load:
 35% duty cycle..... 400 A
 60% duty cycle..... 310 A
 100% duty cycle..... 240 A
 Setting range (DC Stick).....25A/20V - 400 A/36V
 Open circuit voltage 75 vdc
 Power factor at maximum current..... 0.80
 Efficiency at maximum current 70%
 Dimensions L x W x H..35 in. x 20.25 in. x 27 in. (89 x 52 x 69 cm)
 Weight 474 lbs. (215 Kg)
 Operating temperature..... -10°C to +40°C
 Enclosure class..... IP 23
 Application classification S



Ordering Information

LHF 405 Pipemaster, 230/460 vac, 3ph, 60Hz..... 0349 305 754

Options & Accessories

Wheel Kit (includes handles) 0349 309 224
 MMA 1 Remote control, 32 ft. (10m) 0349 501 024
 AT1 Coarse Remote control 0459 491 896
 AT1 Coarse/Fine Remote control 0459 491 897
 12 Pole Analog Connection Cables
 Connection cable 16 ft. (5m) 0459 552 880
 Connection cable 32 ft. (10m)..... 0459 552 881
 Connection cable 50 ft. (15m) (on request)..... 0459 552 882
 Connection cable 82 ft. (25m) (on request) 0459 552 883
 Work Cable Assembly, 15ft. 0558 001 440
 Electrode Cable Assembly, 15ft. 0558 001 441
 Output Terminal Boot 0558006581



Quality accessories for the quality welder

ESAB offers a wide range of accessories. The complete range, along with product information, is available at our web-site. Look at www.esabna.com or contact your local ESAB dealer.



Tig / Stick
Power Sources



1Phase DC CC

MINIARC® 150APS POWER SOURCE

MiniArc® 150APS

- The MiniArc 150 Automatic Primary Select operates on either 110 or 230 vac and will automatically configure to the primary input supplied
- Designed to provide outstanding welding performance for Touch Tig™ and Stick welding
- 18 Pound weight - Makes this unit portable and easy to carry directly to the job.
- Convenient sturdy plastic case accommodates the MiniArc, welding cables, Tig torch and other accessories
- Direct connections for Tig torch and electrode holder for maximum convenience and easy polarity change
- Standard 14 Pin receptacle for remote current control
- Tig welding with touch-start ignition selectable from the front panel
- Protected against overheating and overcurrent
- Small and portable, inverter based
- 5 to 150 Amps current range for DC Welding
- Continuous current control for easy fine tuning
- Low current draw

Ordering Information

MiniArc 150APS

MiniArc 150APS, Stick Package 0558003314
MiniArc 150APS stick package includes power source, 10 ft. work cable w/clamp, 10 ft. welding cable w/electrode holder and 1# 6013LV electrodes and plastic carrying suitcase.

MiniArc 150APS, Tig Package 0558003316
MiniArc 150APS Tig package includes power source, HW-17V 20ft., HW-17 Accessory Kit, R33-FM580 Reg/Flowmeter, 10 ft. work cable w/clamp, 10 ft. welding cable w/electrode holder and 1# 6013LV electrodes and plastic carrying suitcase.

Options & Accessories

HW-17 Accessory Kit 999126
R-33 FM 580 Reg/Flowmeter 21557
Power Extension Cord, 25 ft. (230V- 50 amp) 37833
HW-17V 20 ft. w/25mm QC 0558002690
MMA welding and return cable kit (25mm)
 ("crocodile" type holder) x 10ft. 0349501078
Replacement AF-1 Electrode holder only 882F25
Work cable (25mm) x 10 ft. w/clamp 0369857881
Replacement EG-300 Work Clamp only 82F31
TC-2B Torch Control - 25 ft. cable with 14 pin plug 33839
 Attach to torch handle. Provides remote current control only.
FC-5C Foot Control - 30 ft. (9.1 m) 0558004234

Instruction Manual F15-725
Sales Literature (03-01-09) ARC-23118



Specifications

MiniArc 150APS

Primary Input Voltage/Phase.....115/208/230 vac, 1 ph., 50/60 Hz.
 Voltage Tolerance +/- 10%

115V Operating Data:

Output Range (Stick) 5A/20V to 85A/23.5V
 Stick Duty Cycle & Rated Output 100% - 85 amps @ 23.4 V
 Output Range (Tig) 5A/20V to 100A/14V
 TIG Duty Cycle & Rated Output 100% - 100 amps @ 14.0 V
 TIG Duty Cycle & Rated Output 60% - 130 amps @ 15.0 V
 Primary Input Current @ 100% Duty Cycle..... 19 Amps
 Primary Input Current @ 60% Duty Cycle..... 26 Amps
 Open Circuit Voltage (max) 83V

230V Operating Data:

Output Range 5A/20V to 150A/26V
 Stick Duty Cycle 110 amps/24.5 V @ 100%
 Stick Duty Cycle 140 amps/25.6 V @ 60%
 TIG Duty Cycle 110 amps/14.5 V @ 100%
 TIG Duty Cycle 150 amps/16 V @ 60%
 Primary Input Current @ 100% Duty Cycle..... 17 Amps
 Primary Input Current @ 60% Duty Cycle..... 23 Amps
 Open Circuit Voltage (max) 83V
 Efficiency 83%
 Power Factor81
 Net Weight..... 18 lbs. (9 kg)
 W x L x H 5.75 in. (146mm) x 15 in. (381mm) x 11in. (279mm)

Tig / Stick
Power Sources

Portable Solutions for Professional MMA & TIG Welding

- Fifth generation Caddy™ machines feature advanced inverter technology built in – deliver unparalleled performance in a rugged, portable package
- Adjustable hot start (A33) makes it easy to strike the electrode – avoids starting problems
- Adjustable arc force (A33) sets the intensity of the arc – improves weld quality
- ArcPlus™ II (A33) improves welding characteristics and simplifies work – produces better weld quality with less clean up
- Equipped with large OKC 50 cable connectors – for greater durability
- Features compact design with impact resistant polymer and aluminum casing – makes the unit lightweight and easy to carry
- Small size does not compromise vital cooling of internal components
- Large heat sinks and innovative design make these Caddy™ machines run cooler – promotes longer machine life even when used in harsh environments
- Designed to keep sensitive interior parts clean and dust free
- Built in accordance with IP23 for outdoor use, even in wet-weather conditions – makes this machine ideal for on-site work
- Equipped with a PFC (Power Factor Correction) circuit – allows the machine to perform a full range of functions on a 16 A fuse, protects against fluctuating mains voltage, and makes it safer to use with a generator
- Operates with extra long mains cables – expands working radius

**3
YEAR
WARRANTY**



Control Panels

The advanced Caddy™ A33 features a digital display panel with hot-start and arc force control for fine tuning, MMA or TIG selection, LiveTig™ start, two memory settings and remote control. The Caddy™ A31 features a basic control panel with a single current setting knob, which makes it extremely easy to set.

MMA and ArcPlus™ II

Caddy™ Arc supplies direct current and allows you to weld most metals including alloy and non alloy steel, stainless steel and cast iron. With the Caddy™ Arc 151i, you can weld most 1/16" – 1/8" dia. electrodes and some 5/32" dia. electrodes. The Caddy™ Arc 201i welds electrodes up to 5/32" dia.

TIG Welding

To TIG weld with the Caddy™ Arc, all you need is a TIG torch with a gas valve, gas regulator and cylinder of gas. Use scratch-start with the Caddy™ A31 control panel. The Caddy™ A33 control panel provides Live Tig™ start for electronic control of the start current. You can weld mild steel or stainless steel with or without filler material.

Instruction Manual0460 446 001 GB
Sales Literature.....(03-01-09) ARC-23251

Specifications

	Caddy™ Arc 151i	Caddy™ Arc 201i
Mains voltage V/ph Hz	230/1ph 50/60 Hz	230/1ph 50/60 Hz
Fuse (slow), A	16	16
Recommended generator size, kVA	10	12
Permitted load at 104°F (40°C), MMA		
25% duty cycle, A/V	150/26	170/26.8
60% duty cycle, A/V	100/24	130/25.2
100% duty cycle A/V	90/23.6	110/24.4
Permitted load at 104°F (40°C), TIG		
25% duty cycle, A/V	150/16	220/18.8
60% duty cycle, A/V	120/14.8	150/16.0
100% duty cycle A/V	110/14.4	110/14.4
Setting range MMA (A31), A	8-150	--
Setting range MMA (A33), A	4-150	4-170
Setting range TIG (A33), A	3-150	3-220
Open circuit voltage (A31), V	58-72	--
Open circuit voltage (A33), V	72	72
Power factor at max. current	0.99	0.99
Efficiency at max. current	80	81
Dimensions LxWxH	16.46"x7.40"x8.19" (418x188x208mm)	16.46"x7.40"x8.19" (418x188x208mm)
Weight	17.42 lbs (7.9 kg)	18.30 lbs (8.3 kg)
Enclosure class	IP 23	IP 23
Application classification	S	S
Standards	IEC/EN 60974-1	IEC/EN 60974-10

Ordering Information

Caddy™ Arc 151i, A 31 package	0460445881
Caddy™ Arc 151i, A 33 package	0460445883
Caddy™ Arc 201i, A 33 package	0460445884

Packages include 10 ft. (3m) MMA welding and return cable kit with "screw" type electrode holder



Options

Shoulder Strap	0460265003
2-wheel Trolley, small gas bottle	0459366885
2-wheel Trolley, gas bottle in front	0459366886
2-wheel Trolley, gas bottle on side	0460330880
Remote Control MMA 1, 33 ft. (10m) cable	0349501024
Remote Control AT 1	0459491896
Remote Control AT1 CoarseFine	0459491897
Connection cables for AT1 and AT1 CoarseFine:	
16.5 ft. (5m) cable	0459552880
33 ft. (10m) cable	0459552881
49 ft. (15m) cable	0459552882
82 ft. (25m) cable	0459552883
Remote Foot Control FS 002	
with 16.5 ft. (5m) cable	0349090886
TIG torch TXH™ 150V OKC50, 13 ft. (4m)	0460011843
TIG torch TXH™ 150V OKC50, 26 ft. (8m)	0460011883
TIG torch TXH™ 200V OKC50, 13 ft. (4m)	0460012841
TIG torch TXH™ 200V OKC50, 26 ft. (8m)	0460012881

Accessories

Helmet Eye-Tech 5-13	0700000890
Helmet Eye-Tech Mono 10/11	15F22
Welding Gloves Heavy Duty Economy Large	747F40
Welding Gloves Heavy Duty Deluxe Large	747F02
Welding Gloves TIG Large	747F33
Welding Gloves TIG Medium	747F32
TIG-PEN for 0.040"-1/8" Rod	0700009026

Portable Solutions for Professional TIG Welding

- Fifth generation Caddy™ machines feature advanced inverter technology built in – deliver unparalleled performance in a rugged, portable package
- Designed for quality TIG welding with a variety of metals
- Extremely easy to use – all welding parameters displayed in an easy-to-understand format
- ESAB 2-Program function (with TA34) – allows pre-programming and program changes during welding
- Pulsed TIG feature (with TA34) – for greater control of heat input and weld pool
- Micro Pulse (with TA34) – minimizes area affected by heat, particularly when working with thin metals
- ArcPlus™ II (with TA34) improves welding characteristics and simplifies work – produces better weld quality with less clean up
- Hot start and Arc force settings (with TA34) – create true MMA welding characteristics
- Equipped with large OKC 50 cable connectors – for greater durability
- Features compact design with impact resistant polymer and aluminum casing – makes the unit lightweight and easy to carry
- Small size does not compromise vital cooling of internal components
- Large heat sinks and innovative design make these Caddy™ machines run cooler – promotes longer machine life even when used in harsh environments
- Designed to keep sensitive interior parts clean and dust free
- Built in accordance with IP23 for outdoor use, even in wet-weather conditions – makes this machine ideal for on-site work
- Equipped with a PFC (Power Factor Correction) circuit – allows the machine to perform a full range of functions on a 16 A fuse, protects against fluctuating mains voltage, and makes it safer to use with a generator

Control Panels

Two control panel options are available – both with all functions required for TIG (DC), with HF-start or LiftArc™, and MMA welding. The Caddy™ TIG TA34 features an advanced control panel with Pulsed TIG, which provides better control of the heat input, and Micro Pulse, which allows pulse time settings down to 0.001 seconds. The TA34 panel also includes dual memory settings, switchable from the panel or torch trigger, and the capacity to set slope up/down and post-gas.



The control panel of the Caddy™ TIG TA34 simplifies TIG welding. All you do is set the plate thickness, and the machine does the rest, making it easy to produce quality TIG welds. Welding current, slope down and post-gas can be manually controlled.

MMA with ArcPlus™ II

Caddy™ TIG supplies direct current and allows you to weld most metals including alloy and non alloy steel, stainless steel and cast iron. With the Caddy™ TIG 1500i, you can weld most 1/16" – 1/8" dia. electrodes and some 5/32" dia. electrodes. The Caddy™ TIG 2200i welds electrodes up to 5/32" dia.

Instruction Manual.....0460 443 101 GB
Sales Literature.....(03-01-09) ARC-23252



1Phase DC CC

CADDY™ TIG 1500i/2200i POWER SOURCE

Specifications

	Caddy™ TIG 1500i	Caddy™ TIG 2200i
Mains voltage V/ph Hz	230/1 ph. 50/60Hz	230/1 ph. 50/60Hz
Fuse (slow), A	16	16
Recommended generator size, kVA	10	12
Permitted load at 40°C (104°F), TIG		
25% duty cycle, A/V	150/16	220/18.8
60% duty cycle, A/V	120/14.8	150/16
100% duty cycle A/V	110/14.4	110/14.4
Permitted load at 40°C (104°F), MMA		
25% duty cycle, A/V	150/26	170/26.8
60% duty cycle, A/V	100/24	130/25.2
100% duty cycle A/V	90/23.6	110/24.4
Setting range TIG (DC), A	3-150	3-220
Setting range MMA (DC), A	4-150	4-170
Open circuit voltage, V	72 V	72 V
Power factor at		
max. current (TIG)	0.98	0.99
Power factor at		
max. current (MMA)	0.99	0.99
Efficiency at		
max. current (TIG)	77%	75%
Efficiency at		
max. current (MMA)	80%	81%
Dimensions LxWxH	16.46"x7.40"x8.19" (418x188x208mm)	16.46"x7.40"x8.19" (418x188x208mm)
Weight	20.28 lbs (9.2kg)	20.72 lbs (9.4kg)
Enclosure class	IP 23	IP23
Application classification	S	S
Standards	IEC/EN 60974-1	IEC/EN 60974-3 IEC/EN 60974-10

CoolMini water cooling unit:

Cooling capacity, W	700W/0.264 g.p.m. at 104°F (700W/1 l.p.m. at 40°C)
Coolant volume	0.581 gal. (2.2 l)
Maximum flow	0.528 g.p.m. (2.0 l.p.m.)
Maximum pressure, 50/60 Hz	33.4 p.s.i. (2.3 bar)
Weight	9.92/14.77 lbs. (4.5/6.7 kg)
Dimensions LxWxH	16.46"x7.40"x5.39" (418x188x137mm)

Control Panels

	TA34	TA33
Slope up, sec	0-10	0-9.9*
Slope down, sec	0-10	0-10
Gas pre-flow*, sec	0-5	0-5
Gas post-flow, sec	0-25	0-25
Pulse, background time, sec	0.01-2.5	--
MicroPulse* time, sec	0.001-0.250	--
Frequency AC, Hz	10-152	65
AC balance, %	50-98	70
Plate thickness setting	--	(0.1 – 7.3mm) (0.004-0.287in.)

*Hidden functions

Ordering Information

Caddy™ TIG 1500i, TA33 package with TXH™ 150 13 ft. (4m) TIG torch.....	0460450880
Caddy™ TIG 2200i, TA33 package with TXH™ 200 13 ft. (4m) TIG torch.....	0460450881
Caddy™ TIG 1500i, TA34 package with TXH™ 150 13 ft. (4m) TIG torch.....	0460450882
Caddy™ TIG 2200i, TA34 package with TXH™ 200 13 ft. (4m) TIG torch.....	0460450883
Caddy™ TIG 2200iw, TA33 package with TXH™ 250w 13 ft. (4m) TIG torch and CoolMini water cooler	0460450884
Caddy™ TIG 2200iw, TA34 package with TXH™ 250w 13 ft. (4m) TIG torch and CoolMini water cooler	0460450885

All packages include 10 ft. (3m) of mains cable, no plug, 5 ft. (1.5m) of gas hose with 2 hose clamps, 10 ft. (3m) return cable with work clamp.

To complete a ready-to-weld package, order from the following:

R33-FM-580-HB	0558005172
Choose one accessory kit to match the TXH torch.	
Accessory Kit TXH150	999126
Accessory Kit TXH200	999126
Accessory Kit TXH250	999127

Options

CoolMini cooling unit	0460144880
Shoulder Strap	0460265003
2-wheel Trolley, small gas bottle	0459366885
2-wheel Trolley, gas bottle in front	0459366886
2-wheel Trolley, gas bottle on side	0460330880
Remote control AT 1 CAN	0459491883
Remote control AT1 CoarseFine CAN	0459491884
Remote control MTA1 CAN	0459491880
Foot Pedal T1 CAN, with 16.5 ft. (5m) cable	0460315880
Connection cables for remote controls:	
16.5 ft. (5m) CAN	0459554880
33 ft. (10m) CAN	0459554881
49 ft. (15m) CAN	0459554882
82 ft. (25m) CAN	0459554883

TIG Torches

TXH™ 150 OKC50, 13 ft. (4m)	0460011842
TXH™ 150 OKC50, 26 ft. (8m)	0460011882
TXH™ 200 OKC50, 13 ft. (4m)	0460012840
TXH™ 200 OKC50, 26 ft. (8m)	0460012880
TXH™ 250w OKC50, 13 ft. (4m)	0460013840
TXH™ 250w OKC50, 26 ft. (8m)	0460013880

Accessories

Helmet Eye-Tech 5-13	0700000890
Helmet Eye-Tech Mono 10/11	15F22
Welding Gloves Heavy Duty Economy Large	747F40
Welding Gloves Heavy Duty Deluxe Large	747F02
Welding Gloves TIG Large	747F33
Welding Gloves TIG Medium	747F32
TIG-PEN for 0.040"-1/8" Rod	0700009026

Torch Coolant 156F05



Tig / Stick
Power Sources

Portable Solutions for Professional TIG & Stick Welding

- Unparalleled performance in a mobile machine for a wide range of TIG and Stick welding applications
- Designed for quality TIG welding with all types of metals
- Extremely easy to use – all welding parameters displayed in an easy-to-understand format
- Innovative QWave™ feature – enables AC welding with exceptional arc stability and low noise
- AC frequency and balance control (available with TA34 AC/DC) – optimizes weld pool
- Electrode preheating (available with TA34 AC/DC) – facilitates excellent starts and extends electrode life
- ESAB 2-Program function – allows pre-programming and program changes during welding
- DC Pulsed TIG welding (available with TA34 AC/DC) – for easy control of heat input and weld pool
- DC Micro Pulse (available with TA34 AC/DC) – minimizes area affected by heat, particularly when working with thin metals
- Hot start, Arc force and polarity switch (DC) – create true MMA (Stick) characteristics in AC and DC mode
- Equipped with large OKC 50 cable connectors – for greater durability
- Features compact design with impact resistant polymer and aluminum casing – makes the unit lightweight and easy to carry
- Small size does not compromise vital cooling of internal components
- Large heat sinks and innovative design make these Caddy™ machines run cooler – promotes longer machine life even when used in harsh environments
- Designed to keep sensitive interior parts clean and dust free
- Built in accordance with IP23 for outdoor use, even in wet-weather conditions – makes this machine ideal for on-site work
- Equipped with a PFC (Power Factor Correction) circuit – allows the machine to perform a full range of functions on a 16 A fuse, protects against fluctuating mains voltage, and makes it safer to use with a generator

**3
YEAR
WARRANTY**



Control Panels

Two control panel options are available – both with all functions required for TIG DC, AC/DC and MMA welding. The Caddy™ TIG TA34 AC/DC features an advanced control panel with Pulse TIG, AC Balance to control arc cleaning and penetration, AC Frequency to control arc width, and a special setting to control electrode preheating for better starts with a variety of electrodes. The control panel of the Caddy™ TIG TA33 simplifies AC and DC TIG welding. All you do is set the plate thickness, and the machine does the rest, making it easy to produce quality TIG welds.

Instruction Manual..... 0460 225 101 GB
Sales Literature (03-01-09) ARC-23253



Specifications

Table with 2 columns: Specification and Caddy™ Tig 2200i AC/DC. Rows include Mains voltage, Fuse, Maximum Output, Setting range, Open circuit voltage, Power factor, Efficiency, Enclosure class, Dimensions, and Weight.

CoolMini water cooling unit:

Table with 2 columns: Specification and value. Rows include Cooling capacity, Coolant volume, Maximum flow, Maximum pressure, Weight, and Dimensions.

MMC Panels

Table with 3 columns: Specification, TA34 AC/DC, and TA33 AC/DC. Rows include Slope up/down, Gas pre/post-flow, Pulse, Plate thickness, and Frequency.

*Hidden functions

Ordering Information

- Caddy™ TIG 2200i AC/DC, TA33 AC/DC
Caddy™ TIG 2200i AC/DC, TA34 AC/DC
Caddy™ TIG 2200i AC/DC, TA34 AC/DC
Caddy™ TIG 2200i AC/DC, TA34 AC/DC only
Caddy™ TIG 2200i AC/DC, TA33 AC/DC only

All packages include 10 ft. (3m) of mains cable, no plug, 5 ft. (1.5m) of gas hose with 2 hose clamps, 10 ft. (3m) return cable with work clamp.

- To complete a ready-to-weld package, order from the following:
R33-FM-580-HB
Accessory Kit TXH200
Accessory Kit TXH250

Options

- CoolMini cooling unit
2-wheel Trolley, small gas bottle
2-wheel Trolley, gas bottle in front
2-wheel Trolley, gas bottle on side
Remote control AT 1 CAN
Remote control AT1 CoarseFine CAN
Remote control MTA1 CAN
Remote control T1 Foot CAN
Remote interconnection cables:
TIG Torches
Accy Kit for TXH 200
Remote Adapter Kit

Accessories

- Helmet Eye-Tech 5-13
Helmet Eye-Tech Mono 10/11
Welding Gloves Heavy Duty Economy Large
Welding Gloves Heavy Duty Deluxe Large
Welding Gloves TIG Large
Welding Gloves TIG Medium
TIG-PEN for 0.040"-1/8" Rod

Torch Coolant 156F05



Tig / Stick Power Sources



Selection Guide

Item No.	Description 1	3 m Welding cable w/screw type holder	3 m Return cable w/clamp	3 m Mains cable no plug	Tig torch	1.5 m gas hose and 2 hose clamps	CoolMini	Trolley	Delivery
0460150880	Caddy Tig 2200i AC/DC, TA34 AC/DC		•	•		•			One box
0460150881	Caddy Tig 2200i AC/DC, TA33 AC/DC		•	•		•			One box
0460150882	Caddy Tig 2200i AC/DC, TA33 AC/DC w/cables and torch	•	•	•	TXH 200, 4m	•			One box
0460150883	Caddy Tig 2200i AC/DC, TA34 AC/DC w/cables and torch	•	•	•	TXH 200, 4m	•			One box
0460150884	Caddy Tig 2200i AC/DC, TA34 AC/DC w/cables, torch, cooler and trolley	•	•	•	TXH 250w, 4m	•	•	•	Kit contains: 0460150880 0460013840 0700006900 0460144880 0460330880
0460445881	Caddy Arc 151i, A31 w/cables	•	•	•					One box
0460445883	Caddy Arc 151i, A33 w/cables	•	•	•					One box
0460445884	Caddy Arc 201i, A33 w/cables	•	•	•					One box
0460450880	Caddy Tig 1500i, TA33 w/cables and torch	•	•	•	TXH 150, 4m	•			One box
0460450881	Caddy Tig 2200i, TA33 w/cables and torch	•	•	•	TXH 200, 4m	•			One box
0460450882	Caddy Tig 1500i, TA34 w/cables and torch	•	•	•	TXH 150, 4m	•			One box
0460450883	Caddy Tig 2200i, TA34 w/cables and torch	•	•	•	TXH 200, 4m	•			One box
0460450884	Caddy Tig 2200iw, TA33 w/cables and torch	•	•	•	TXH 250w, 4m	•	•		One box
0460450885	Caddy Tig 2200iw, TA34 w/cables and torch	•	•	•	TXH 250w, 4m	•	•		One box

TIG torches

For Caddy and Aristo family machines

- Ergonomic design, user friendly controls at fingertip
- Rugged construction - trouble-free operation with low maintenance
- Flexible heads offer unlimited versatility for hard to reach applications (TXH 120F, 150F, 200F and 250F only)
- Effective cooling system
- For use with Caddy Tig and Caddy Arc machines with OKC connectors
- Remote control models available



Ordering Information

Air Cooled Torches - 25mm OKC Connector

Use with HW-9 Consumables

TXH™ 120V, 13 ft.....	0460 010 841
TXH™ 120V, 26 ft.....	0460 010 881
TXH™ 120, 13 ft.....	0460 010 940
TXH™ 120, 26 ft.....	0460 010 980
TXH™ 120, 13 ft.....	0460 010 840
TXH™ 120, 26 ft.....	0460 010 880
TXH™ 120F, 13 ft.....	0460 010 843
TXH™ 120F, 26 ft.....	0460 010 883

Use with HW-17 Consumables

TXH™ 150, 13 ft.....	0460 011 940
TXH™ 150, 26 ft.....	0460 011 980
TXH™ 150, 13 ft.....	0460 011 840
TXH™ 150, 26 ft.....	0460 011 880
TXH™ 150V, 13 ft.....	0460 011 841
TXH™ 150V, 26 ft.....	0460 011 881
TXH™ 150F, 13 ft.....	0460 011 844
TXH™ 150F, 26 ft.....	0460 011 884

Use with HW-26 Consumables

TXH™ 200F, 26 ft.....	0460 012 882
TXH™ 200, 13 ft.....	0460 012 940
TXH™ 200, 26 ft.....	0460 012 980
TXH™ 200F, 13 ft.....	0460 012 941
TXH™ 200F, 26 ft.....	0460 012 981

Air Cooled Torches - 50mm OKC Connector

Use with HW-9 Consumables

TXH™ 120, 13 ft.....	0460 010 842
TXH™ 120, 26 ft.....	0460 010 882
TXH™ 120F, 13 ft.....	0460 010 844
TXH™ 120F, 26 ft.....	0460 010 884

Use with HW-17 Consumables

TXH™ 150, 13 ft.....	0460 011 842
TXH™ 150, 26 ft.....	0460 011 882
TXH™ 150V, 13 ft.....	0460 011 843
TXH™ 150V, 26 ft.....	0460 011 883
TXH™ 150F, 13 ft.....	0460 011 845
TXH™ 150F, 26 ft.....	0460 011 885

Use with HW-26 Consumables

TXH™ 200, 13 ft.....	0460 012 840
TXH™ 200, 26 ft.....	0460 012 880
TXH™ 200V, 13 ft.....	0460 012 841
TXH™ 200V, 26 ft.....	0460 012 881
TXH™ 200F, 13 ft.....	0460 012 842
TXH™ 200F, 26 ft.....	0460 012 882

Air Cooled Torches with Remote Function - 50mm OKC Connector

Use with HW-9 Consumables

TXH™ 120r, 13 ft.....	0462 010 842
TXH™ 120r, 26 ft.....	0462 010 882
TXH™ 120Fr, 13 ft.....	0462 010 844
TXH™ 120Fr, 26 ft.....	0462 010 884

Use with HW-17 Consumables

TXH™ 150r, 13 ft.....	0462 011 842
TXH™ 150r, 26 ft.....	0462 011 882
TXH™ 150Fr, 13 ft.....	0462 011 845
TXH™ 150Fr, 26 ft.....	0462 011 885

Use with HW-26 Consumables

TXH™ 200r, 13 ft.....	0462 012 840
TXH™ 200r, 26 ft.....	0462 012 880
TXH™ 200Fr, 13 ft.....	0462 012 842
TXH™ 200Fr, 26 ft.....	0462 012 882

Water Cooled Torches - 50mm OKC Connector

Use with HW-20 Consumables

TXH™ 250w, 13 ft.....	0460 013 840
TXH™ 250w, 26 ft.....	0460 013 880
TXH™ 250wF, 13 ft.....	0460 013 841
TXH™ 250wF, 26 ft.....	0460 013 881

Use with HW-18 Consumables

TXH™ 400w, 13 ft.....	0460 014 840
TXH™ 400w, 26 ft.....	0460 014 880
TXH™ 400w HD, 13 ft.....	0460 014 841
TXH™ 400w HD, 26 ft.....	0460 014 881

Water Cooled Torches with Remote Function - 50mm OKC Connector

Use with HW-20 Consumables

TXH™ 250wr, 13 ft.....	0462 013 840
TXH™ 250wr, 26 ft.....	0462 013 880
TXH™ 250wFr, 13 ft.....	0462 013 841
TXH™ 250wFr, 26 ft.....	0462 013 881

Use with HW-18 Consumables

TXH™ 400wr, 13 ft.....	0462 014 840
TXH™ 400wr, 26 ft.....	0462 014 880
TXH™ 400wr HD, 13 ft.....	0462 014 841
TXH™ 400wr HD, 13 ft.....	0462 014 881

F = Flexible head V = Gas valve r = Remote

NOTE: See Genuine Heliarc Accessories pages for cups, collets, collet bodies

Accessories

Remote Adaptor Kit RA T1, for Remote Function torches only

Includes holder and 0,25 m cable

12-pole0459 491 912

Accessory Kits

TXH-150, 200, 400999126

TXH-120, 250999127

Sales Literature (03-01-09) ARC-23254



1Phase ACDC CC

HELIARC® 161 AC/DC POWER SOURCE



Heliarc® 161 AC/DC

- Square wave AC output gives superior welding with improved cleaning and lack of rectification
- AC wave balance control - allows adjustment from maximum cleaning to maximum penetration
- Arc force control - fine tunes arc for stick welding from soft to a high penetration, digging arc
- Two Stroke or Four Stroke with Trigger Lock
- HF starting (AC or DC) and Non-HF Starting (DC)
- Direct connections for Tig torch and electrode holder for maximum convenience
- Adjustable preflow and postflow gas control -protects weld area and extends tungsten life
- Protected against overheating and overcurrent
- Small and portable, inverter based
- 10 to 160A AC & DC TIG Welding
- Adjustable downslope control
- Presetable start current
- Low current draw
- 6 Ready-to-Weld Packages, add shield gas and power to weld

Ordering Information

Heliarc® 161 AC/DC Package Basics

Heliarc® 161 packages listed below include power source, Heliarc® HW-17V TIG torch, TIG accessory kit, Remote Control, R-33-FM-580 Reg/Flowmeter, 12.5 ft. gas hose, 15 ft. Work Cable & 1# Electrodes.

Heliarc® 161 AC/DC Packages

Heliarc® 161 AC/DC w/HW-17 12.5 ft./TC-3A	0558002775
Heliarc® 161 AC/DC w/HW-17 25 ft./TC-3A	0558002777
Heliarc® 161 AC/DC w/HW-17 12.5 ft. & 15 ft. Electrode Holder/FC-5B	0558002776
Heliarc® 161 AC/DC w/HW-17 25 ft. & 15 ft. Electrode Holder/FC-5B	0558002778
Heliarc® 161 AC/DC w/HW-17 12.5 ft. & 15 ft. Electrode Holder/TC-2B	0558004452
Heliarc® 161 AC/DC w/HW-17 25 ft. & 15 ft. Electrode Holder/TC-2B	0558004453

Options & Accessories

HW-17 Accessory Kit	999126
R-33 FM 580 Reg/Flowmeter	21557
Primary Extension Cord (25 ft.) 50 amp	37833
FC-5C Foot Control	0558004234
Work Cable 15 ft. TL	35881
Gas Hose 6 ft.	31503
Gas Hose 12-1/2 ft.	40V77
Gas Hose 25 ft.	34V38
HW-17 12-1/2 ft.	35857
HW-17 25 ft.	35856
Electrode Holder 15 ft. 175 amp	0558001791



Tee Connector (1 Male/2 Female)	13792804
Torch Adaptor HW-17 Std. to Twist Lock	0558002692
(This adaptor allows a standard one piece HW-17 to a 50 mm Twist Lock.)	
TC-3A Remote Torch Switch - 30 ft. cable with 14 pin plug	35783
Provides on/off contactor control.	
(Note: Does not provide current control.)	
TC-2B Torch Control - 25 ft. cable with 14 pin plug	33839
Attach to torch handle. Provides remote current and contactor control.	
50 mm Connectors - quick-acting twist lock connectors for attaching output power cables or torches to power source:	
Male for 1/0 to 4/0 cable	13792513
Female for 1/0 to 4/0 cable	13735631
Male for #2 AWG to 1/0 cable	13733936
Female for #2 AWG to 1/0 cable	13735632
Quick connector with 1/2 in. threaded stud	13735501
Tee connector- 1 male, 2 female	13792804

Specifications

Heliarc® 161 AC/DC

Primary Input Voltage/Phase	208/230 vac, 1 ph., 50/60 Hz.
Primary Input Current @ Rated Load	30/27 Amps
Efficiency	83%
Power Factor .....	.81
TIG Duty Cycle & Rated Output	40% - 160 amps @ 16.4 V
STICK Duty Cycle & Rated Output	35% - 160 amps @ 26.0 V
Open Circuit Voltage (max)	50V
Net Weight	28.7 lbs. (13 kg)
W x L x H	8.0 in. (20 cm) x 14.4 in. (37 cm) x 16.4 in. (42 cm)

Instruction Manual	F-15-655
Sales Literature	
Heliarc 161	(03-01-09) ARC-23101

Tig / Stick Power Sources



1Phase ACDC CC

HELIARC® 252 & 352 AC/DC POWER SOURCES

Heliarc® 252/352 AC/DC

- Square wave AC output gives superior welding with improved cleaning and lack of rectification
- AC wave balance control - allows adjustment from maximum cleaning to maximum penetration
- Arc force control - fine tunes arc for stick welding from soft to a high penetration, digging arc
- 100% solid state design with no mechanical contactor - eliminates output drift, lowers maintenance and promotes long life
- Direct connections for Tig torch and quick lock output cable - for maximum convenience
- Adjustable preflow and postflow gas control - protects weld area and extends tungsten life
- 6 ft. (1.8 m) gas hose and water inlet and outlet fittings are factory installed
- Protected against overheating and overcurrent
- 12 Ready-to-Weld Packages, add shield gas and power to weld



Ordering Information

Heliarc® 252 AC/DC Power Source

230/460/575 vac, 1 ph, 60 Hz	36201
252 AC/DC CE, 220/400v 1ph 50 Hz	36205

Heliarc® 352 AC/DC Power Source

230/460/575 vac, 1 ph, 60 Hz	36211
352 AC/DC CE, 220/400v 1ph 50 Hz	36207

Each power source listed above is supplied with 2 male Twist Lock Cable Connectors and a 6 ft. (1.8 m) gas hose.

See other Heliarc® Outfits and Torches on following pages

Tigmaster AC/DC Packages

Tigmaster packages listed below include power source, Heliarc torch-25ft., starter hoses, work cable with clamp, R-33-FM-580 Regulator/flowmeter, Sample 5lb. Value Pack of Stick Electrodes & Heliarc welding handbook

Tigmaster H252 w/HW-17 Torch Outfit, 230/460/575v	36229
Tigmaster H252 w/HW-26 Torch Outfit, 230/460/575v	36674
Tigmaster H252 w/HW-20 Torch Outfit, 230/460/575v	36230
Tigmaster H252 w/HW-18 Torch Outfit, 230/460/575v	36675
Tigmaster H252 w/HW-26 Torch Deluxe Outfit, 230/460/575v (Incls.H252, HW-26 Outfit, TR-23 Truck, and TC-2B control).....	37659
Tigmaster H252 w/HW-20 Torch Deluxe Outfit, 230/460/575v (Incls.H252, HW-20 Outfit, TR-23 Truck,WC-8C Circulator and FC-5C control).....	0558004766
Tigmaster H252 w/HW-18 Torch Deluxe Outfit, 230/460/575v (Incls.H252, HW-18 Outfit, TR-23 Truck, WC-8C Circulator and FC-5C control).....	0558004794
Tigmaster H352 w/HW-17 Torch Outfit, 230/460/575v	36231
Tigmaster H352 w/HW-26 Torch Outfit, 230/460/575v	36676
Tigmaster H352 w/HW-20 Torch Outfit, 230/460/575v	36232
Tigmaster H352 w/HW-18 Torch Outfit, 230/460/575v	36677
Tigmaster H352 w/HW-18 Torch Deluxe Outfit, 230/460/575v (Incls.H352, HW-18 Outfit, TR-23 Truck, and TC-2B control).....	37660

Options & Accessories

Power Factor Correction Kit	36220
(see Specifications for performance comparison)	
Digital Amp/Volt Meter Kit with Current Preset.....	36226
(standard on 352; optional for 252)	
Pulse Control Kit	36227
Current Upslope/Downslope Control - with Trigger Lock	36228
TR-23A Truck Kit - includes wheels & 2-cylinder rack	36224
FC-5B EHD Foot Control - 30 ft. (9.1 m)	33841
FC-5C Foot Control - 30 ft. (9.1 m).....	0558004234
HC-3B Hand Control - 30 ft. (9.1 m)	33838
TC-2B Torch Control - 25 ft. (7.6 m)	33839
TC-3A Remote Torch Switch - 30 ft. (9.1 m):	
for HW-9, 17, 20, 20A & 24	35783
for HW-18 & 26R.....	36680
Electrode Holder, 300A., 15 ft.	21226
WC-8C Water Cooler	33739
Eye-Tech 5-13 Welding Helmet.....	0700000890
Economy Arc Welding Gloves Large	747F40
Heliarc Gloves Large.....	747F33
Heliarc Gloves Medium.....	747F32
TIG-PEN (for .040-1/8" Filler rod).....	0700009026

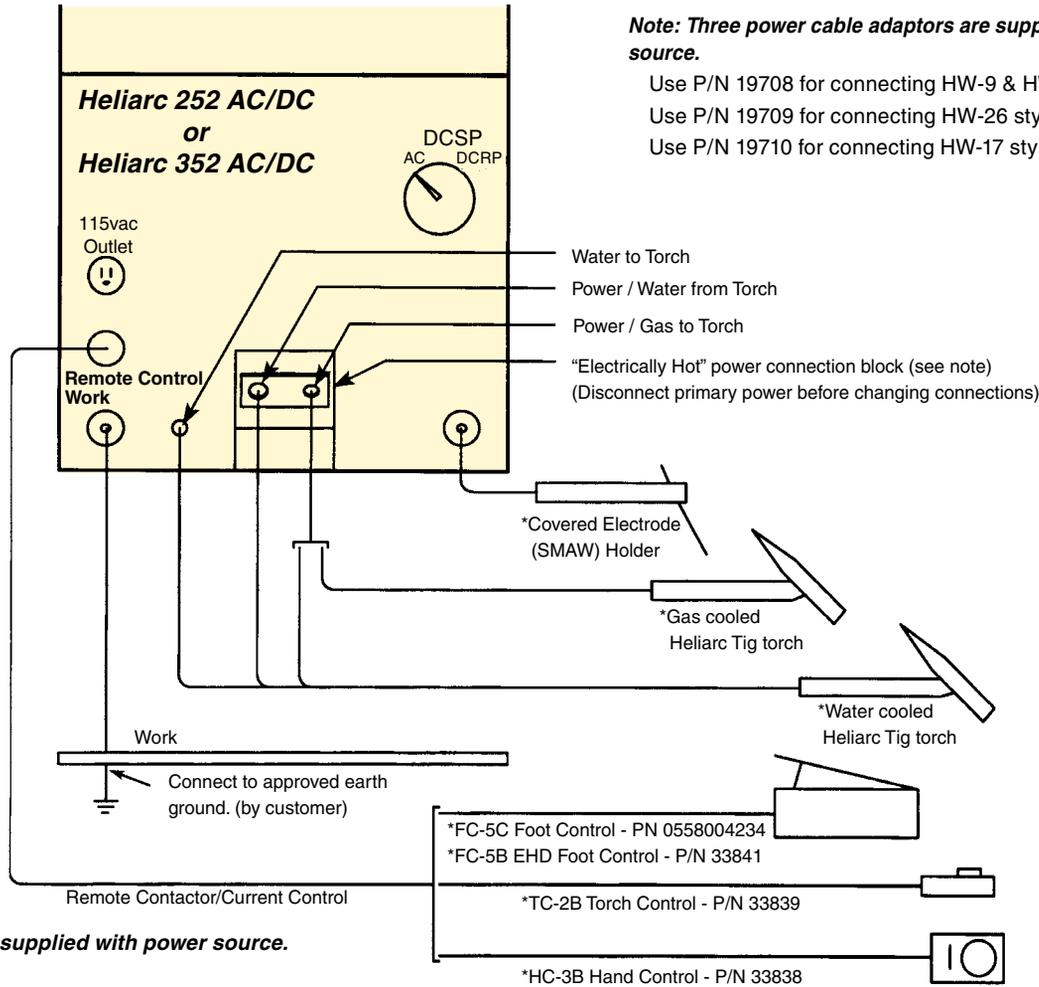
50 mm Connectors - quick-acting twist lock connectors for attaching output power cables or torches to power source:

Male for 1/0 to 4/0 cable	13792513
Female for 1/0 to 4/0 cable.....	13735631
Male for #2 AWG to 1/0 cable.....	13733936
Female for #2 AWG to 1/0 cable	13735632
Quick connector with 1/2 in. threaded stud	13735501
Tee connector - 1 male, 2 female	13792804

Instruction Manual	F-15-254
Sales Literature, Heliarc 252/352.....	(03-01-09) ARC-23013



Tig / Stick Power Sources



Specifications

	Heliarc 252	Heliarc 352
Rated output @ 40% Duty Cycle, 10 minute base, AC or DC	280 amps @ 30 volts	350 amps @ 34 volts
For 208 vac, 60 Hz or 380 vdc 50 Hz, derate output by 10%		
Output Current Range, AC or DC	5 - 320 amps	3 - 380 amps
Open Circuit Voltage (maximum)	79 vac; 72 vdc	79 vac; 72 vdc
Net Weight, 60 Hz models	375 lbs.	432 lbs.
Net Weight, 50 Hz models	415 lbs.	472 lbs.
Approximate Shipping Weight, 60 Hz models	385 lbs.	442 lbs.
Approximate Shipping Weight, 50 Hz models	425 lbs.	482 lbs.
Width x Length x Height (both models)	18.75 in (46cm) x 32.5 in (83 cm) x 25 in (64 cm)	
Primary input voltage & current at rated load of standard model (without power factor correction kit)		
230(208)/460 vac 1 ph, 60 Hz	112(118)/56 amps	152(168)/76 amps
230/460/575 vac 1 ph, 60 Hz	112/56/45 amps	152/76/61 amps
220/400 (380-415) vac 1 ph, 50 Hz	104/57(60-55) amps	153/84(88-81) amps
Primary input voltage & current at rated load of standard model with power factor correction kit		
230/460/575 vac 1 ph, 60 Hz	77/38/31 amps	110/55/43 amps
220/400 (380-415) vac 1 ph, 50 Hz	78/40(42-38) amps	112/58(61-56) amps
Power Factor @ rated load:		
Without power factor correction kit	52%	55%
With power factor correction kit	76%	76%



Tig Torch Outfits

When it comes to exceptional quality, value, and the convenience of one-part-number ordering, nobody delivers like GENUINE HELIARC®. These Tig Torch Outfits contain everything you need in one easy-to-use package.



Tig Torch Outfits Designed for H-252 & H-352

COMPONENTS	PART NO.	AIR-COOLED OUTFITS		WATER-COOLED OUTFITS	
		HW-17 604622	HW-26 36678	HW-18 36679	HW-20 604623
HW-17, 60 DEG. 25 ft.	16X50	●			
HW-26, 75 DEG. 25 ft.	46V29		●		
HW-18, 65 DEG. 25 ft.	948362			●	
HW-20, 75 DEG. 25 ft.	948085				●
TORCH ACCESSORY KIT, HW-17,18, 26	999126	●	●	●	
TORCH ACCESSORY KIT, HW-20	999127				●
R-33-FM-580 REGULATOR/FLOWMETER	21557	●	●	●	●
WATER HOSE, 6 ft.	20633			●	●
WORK CABLE & CLAMP w/OKC, 15 ft.	35881	●	●	●	●
GENUINE HELIARC® TIG WELDING HANDBOOK	781F29	●	●	●	●

Tig Torch Outfit Selections for all Other Power Supplies

COMPONENTS	PART NO.	AIR-COOLED OUTFITS								WATER-COOLED OUTFITS	
		HW-17 600991	HW-17V 600992	HW-17RV 36857	HW-17RV-2 600998	HW-17FV 600997	HW-26 600993	HW-26V 600994	HW-26RV-2 600999	HW-18 600996	HW-20 600995
HW-17, 60 DEG. 25 ft.	16X50	●									
HW-17V, 60 DEG. 25 ft.	634706		●								
HW-17RV, 60 DEG. 25 ft.	634706R			●							
HW-17RV-2, 60 DEG. 25 ft.	33814R				●						
HW-17FV, FLEX, 25 ft.	19884					●					
HW-26, 75 DEG. 25 ft.	46V29						●				
HW-26V, 75 DEG. 25 ft.	46V27							●			
HW-26RV-2, 75 DEG. 25 ft.	948128R								●		
HW-18, 65 DEG. 25 ft.	948362								●		
HW-20, 70 DEG. 25 ft.	948085									●	
TORCH ACCESSORY KIT, HW-17,18, 26	999126	●	●	●	●	●	●	●	●	●	
TORCH ACCESSORY KIT, HW-20	999127										●
R-33-FM-580 REGULATOR/FLOWMETER	21557	●	●	●	●	●	●	●	●	●	●
GAS HOSE, 25 ft.	34V38			●	●			●			
GAS HOSE, 12-1/2 ft.	40V77	●	●			●	●	●	●	●	●
GAS HOSE, 3 ft.	31504	●	●			●	●	●			
WATER HOSE, 6 ft. (2)	20633								●	●	
POWER CBL. ADPTR., HW-17	105Z57	●	●	●		●					
POWER CBL. ADPTR., HW-26	45V62						●	●			
POWER CBL. ADPTR., HW-18, 20	45V11								●	●	
WORK CBL., 15 ft. w/CLAMP & LUG	34886	●	●	●	●	●	●	●	●	●	●
TIG WELDING HANDBOOK	781F29	●	●	●	●	●	●	●	●	●	●

Gas-Cooled Torches

	RATING@ 50% DUTY CYCLE	HARD BODY¹ W/HFC™	SILICON RUBBER²	60 DEG. HEAD ANGLE	70/75 DEG. HEAD ANGLE	90 DEG. HEAD ANGLE	180 DEG. HEAD ANGLE	FLEX HEAD	WITH VALVE	WITHOUT VALVE	COMMENTS
HW-24	80 amp	●		●		●				●	MINIATURE, ULTRA LIGHT TORCH
HW-90	120 amp	●			●		●			●	SMALL, LIGHTWEIGHT TORCH
HW-9	140 amp	●			●					●	COMPACT, AIR-COOLED VERSION OF HW-20
HW-9RV-2	140 amp		●		●				●		SEPARATE POWER CABLE & GAS HOSE
HW-9RV	140 amp		●		●				●		ROTARY VALVE
HW-9F	140 amp		●					●		●	FLEXIBLE HEAD VERSION OF HW-20A
HW-17	150 amp	●		●		●			●	●	ROTARY VALVE & SLIDING VALVE AVAIL.
HW-17-2	150 amp	●		●					●	●	SEPARATE POWER CABLE & GAS HOSE
HW-17R	150 amp		●	●		●			●	●	ROTARY VALVE AVAILABLE
HW-17R-2	150 amp		●	●					●	●	SEPARATE POWER CABLE & GAS HOSE
HW-17F	150 amp		●					●	●	●	FLEXIBLE HEAD VERSION
HW-17F-2	150 amp		●					●	●	●	SEPARATE POWER CABLE & GAS HOSE
HW-26	220 amp	●			●				●	●	POPULAR HEAVY DUTY AIR-COOLED TORCH
HW-26-2	220 amp	●			●				●	●	SEPARATE POWER CABLE & GAS HOSE
HW-26R	220 amp		●		●				●	●	CONCENTRIC POWER CABLE
HW-26R-2	220 amp		●		●				●	●	SEPARATE POWER CABLE & GAS HOSE
HW-26F	220 amp		●					●	●	●	FLEXIBLE HEAD VERSION
HW-26F-2	220 amp		●					●	●		SEPARATE POWER CABLE & GAS HOSE

Water-Cooled Torches

	RATING@ 50% DUTY CYCLE	HARD BODY¹ W/HFC™	SILICON RUBBER²	60 DEG. HEAD ANGLE	70/75 DEG. HEAD ANGLE	90 DEG. HEAD ANGLE	180 DEG. HEAD ANGLE	FLEX HEAD	WITH VALVE	WITHOUT VALVE	COMMENTS
HW-20	300 amp	●			●					●	COMPACT, HIGH CURRENT TORCH
HW-20R	300 amp		●		●					●	COMPACT, HIGH CURRENT TORCH
HW-18	425 amp	●		●		●				●	GENERAL PURPOSE
HW-18R	425 amp		●	●						●	GENERAL PURPOSE
HW-25F	200 amp		●				●	●		●	FLEXIBLE HEAD, WATER TORCH
HW-27	400 amp	●					●			●	REAR LOADING MACHINE TORCH

¹ *Hard Body Torches with HFC™ (High temperature Fiber reinforced Composite material) provide the best performance, heat resistance, abrasion resistance, and high frequency resistance.*

² *Rubber bodies provide improved resistance to breakage in rough duty.*

Notes:

- ESAB has made a model change on the HW-9 series torches. The new designation for that series of torches is HW-90.
- ESAB has made a model change on the HW-20A series torches. The new designation for that series of torches is HW-9.

OLD DESIGNATION	NEW DESIGNATION
HW-9	HW-90
HW-20A	HW-9
HW-20AR	HW-9R
HW-20AF	HW-9F
HW-20ARV	HW-9RV
HW-20ARV2	HW-9RV2

HW-24 Torch Family - 80 amp



- Designed to reach into tight places
- Ideal for confined, cramped areas
- High flexibility one-piece cable
- Miniature head provides maximum accessibility to corners and tight joints
- Excellent visibility
- Gas lens available for improved shielding

Specifications

Capacity

75 Amps, 100% duty cycle, ac or dc with standard accessories
 100 Amps, 100% duty cycle, ac or dc with gas lens accessories
 80 Amps, 50% duty cycle, ac or dc with standard accessories

Size

OVERALL LENGTH 7-3/4 in. (197 mm)
 HANDLE DIAMETER 3/4 in. (19 mm)
 LENGTH OF HEAD 1-1/16 in. (27 mm)
 DIAMETER OF HEAD 5/8 in. (16 mm)
 WEIGHT (less cable) 2.5 oz. (71 gm)
 HEAD ANGLE: HW-24 60 or 90 degree

Torch Assemblies

DESCRIPTION	HW-24 HARD BODY
HW-24	
60 deg. head w/concentric cable, 12-1/2 ft.	45V17
90 deg. head w/concentric cable, 12-1/2 ft.	527712

Gas Cups, Collets, & Collet Bodies

ELECTRODE SIZE, in.	.020	.040	1/16	—	
STANDARD COLLET	53N15	53N16	53N14	—	
STANDARD COLLET BODY	53N17	53N18	53N19	—	
GAS LENS COLLET	53N62	53N63	53N64	—	
GAS LENS COLLET BODY	45V41	45V42	45V43	—	
CUP NUMBER	.165-in. I.D.	4 = 1/4	5 = 5/16	6 = 3/8	7 = 7/16
CERAMIC CUP	53N23	53N24	53N25	53N27	—
CERAMIC CUP, LONG	—	53N28	—	53N26	—
GAS LENS HIGH-IMPACT CUP	—	53N58	53N59	53N60	53N61

For selection of special ceramic cups, see Accessories following Torches.

Torch Parts and Accessories

ITEM	PART NO.	DESCRIPTION	HW-24 TORCH
1	45V16	BODY, HW-24 (60 DEG.)	
	527713	BODY, HW-24 (90 DEG.)	
2	105Z55	HANDLE, HW-24	
3	—	COLLET (see table above)	
4	—	COLLET BODY (see table above)*	
5	—	GAS CUPS (see table above)	
6	53N66	INSULATOR, GAS LENS (Required for gas lens)	
7	53N22	INSULATOR GASKET - std	
8	—	GAS LENS COLLET (see table above)	
9	—	GAS LENS COLLET BODY (see table above)	
10	—	GAS LENS CUP (see table above)	
11	53N43	POWER CABLE ADAPTOR	
12	56Y38	POWER CABLE, 12-1/2 ft.	

*Note: Order wrench (53N20) for HW-24 collet body.



HW-90 Torch Family - 120 amp

■ HW-90 is designed for small, confined areas where accessibility is the primary concern



- High flexibility one-piece cable
- Available in 60/120 deg. heads by exchanging cap and cup. Also available in Pencil style (180 deg.).
- Excellent visibility
- Gas lens available for improved shielding

Specifications

Capacity

110 Amps, 100% duty cycle, ac or dc with standard accessories
 110 Amps, 100% duty cycle, ac or dc with gas lens accessories
 120 Amps, 50% duty cycle, ac or dc

Size	60 deg.	Pencil
OVERALL LENGTH	6-3/4 in. (171 mm)	7-1/8 in. (181 mm)
HANDLE DIAMETER	3/4 in. (19 mm)	3/4 in. (19 mm)
LENGTH OF HEAD	(short cap) 3-1/8 in. (79 mm)	1-1/16 in. (27 mm) (long cap) 7-1/8 in. (181 mm)
DIAMETER OF HEAD	19/32 in. (15 mm)	5/8 in. (16 mm)
WEIGHT (less cable)	3 oz. (84 gm)	5 oz. (140 gm)
HEAD ANGLE	60/120 degree	180 degree

Torch Assemblies

DESCRIPTION	HW-90 HARD BODY
HW-90 concentric cable, 12-1/2 ft.	16X28
concentric cable, 25 ft.	16X44
HW-90 PENCIL concentric cable, 12-1/2 ft.	16X47

Cups, Collets, & Collet Bodies

ELECTRODE SIZE, in.	.020	.040	1/16	—
STANDARD COLLET	84Z34	84Z35	84Z33	—
STANDARD COLLET BODY (All sizes)	—	105Z27	—	—
GAS LENS COLLET BODY (Also order adaptor 45V52 & insulator 53N85)45V41	45V41	45V42	45V43	—
CUP NUMBER	4 = 1/4	5 = 5/16	6 = 3/8	7 = 7/16
CERAMIC CUP	84Z36	84Z37	84Z86	—
HIGH-IMPACT CUP	14N65	14N66	14N67	—
GAS LENS HIGH-IMPACT CUP	53N58	53N59	53N60	53N61

For selection of special ceramic or sleeved cups, see Accessories following Torches.

Torch Parts & Accessories

ITEM	PART NO.	DESCRIPTION	HW-90 TORCH
1	56Y35	BODY, HW-90 (60/120 DEG.)	
	86Z24	BODY, HW-90P (180 DEG.)	
2	105Z55	HANDLE, HW-90 & HW-90P	
3	56Y40	LONG TORCH CAP w/o O-RING (85W49)	
4	84Z31	SHORT TORCH CAP w/o O-RING (85W49)	
5	—	COLLET (see table above)	
6	85W49	O-RING	
7	105Z27	COLLET BODY (see table above)	
8	105Z26	INSULATOR SLEEVE	
9	—	HIGH-IMPACT CUP (see table above)	
10	—	CERAMIC CUP (see table above)	
11	—	GAS LENS CUP (see table above)	
12	—	GAS LENS COLLET BODY (see table above)	
13	53N85	GAS LENS INSULATOR	
14	45V52	GAS LENS ADAPTOR	
15	53N43	POWER CABLE ADAPTOR	
16	56Y38	POWER CABLE, 12-1/2 ft.	
	56Y97	POWER CABLE, 25 ft.	



GENUINE HELIARC® GAS-COOLED TORCHES

HW-17 Torch Family - 150 amp

- Quick release of electrodes
- Hard body provides superior heat and abrasion resistance for longest life
- Silicon rubber body provides improved resistance to breakage in rough duty
- Flexible head models provide added versatility for reaching hard-to-get-at applications



Specifications

Capacity

130 Amps, 100% duty cycle, ac or dc
150 Amps, 50% duty cycle, ac or dc with std. accessories

Size

OVERALL LENGTH	8-1/8 in. (206 mm)
HANDLE DIAMETER	3/4 in. (19 mm)
LENGTH OF HEAD	(short cap) 3-13/16 in. (97 mm)
	(medium cap) 5-1/4 in. (133 mm)
	(long cap) 7-7/16 in. (189 mm)
DIAMETER OF HEAD	51/64 in. (20 mm)
WEIGHT (less cable)	4.8 oz. (137 gm)
HEAD ANGLE: HW-17, HW-17R	60 or 90 degree
HW-17F	variable

Torch Assemblies

DESCRIPTION	HW-17 HARD BODY	HW-17R SILICON RUBBER	HW-17F FLEX HEAD
60 DEG. HEAD, 12-1/2 ft.			
1-pc. cable & hose ay.	16X48	16X48R	19881
2-pc. cable & hose ay.	33855	—	—
2-pc. cable & hose ay. twist lock	35782	—	—
60 DEG. HEAD, 25 ft.			
1-pc. cable & hose ay.	16X50	16X50R	19883
2-pc. cable & hose ay.	33856	—	—
60 DEG. HEAD w/SLIDE VALVE			
12-1/2 ft., 1-pc. cable & hose ay.	634705	—	—
25 ft., 1-pc. cable & hose ay.	634706	—	—
60 DEG. HEAD w/ROTARY VALVE, 12-1/2 ft.			
1-pc. cable & hose ay.	16X48LV	634705R	19882
2-pc. cable & hose ay.	33813	33813R	33815
2-pc. cable & hose ay. twist lock	35857	—	—
60 DEG. HEAD w/ROTARY VALVE, 25 ft.			
1-pc. cable & hose ay.	16X50LV	634706R	19884
2-pc. cable & hose ay.	33814	33814R	33816
2-pc. cable & hose ay. twist lock	35856	—	—
90 DEG. HEAD, 25 ft.			
1-pc. cable & hose ay.	634720	—	—
90 DEG. HEAD w/SLIDE VALVE, 25 ft.	601152	—	—
90 DEG. HEAD w/ROTARY VALVE, 25 ft.	—	601152R	—

Cups, Collets, & Collet Bodies

ELECTRODE SIZE, in.	.020	.040	1/16	3/32	1/8	—	—	—
STANDARD COLLET	10N21	10N22	10N23	10N24	10N25	—	—	—
STANDARD COLLET BODY	10N29	10N30	10N31	10N32	10N28	—	—	—
GAS LENS COLLET BODY	45V29	45V24	45V25	45V26	45V27	—	—	—
LG. DIA. GAS LENS COLLET BODY	—	—	—	45V64	995795	—	—	—
CUP NUMBER	4=1/4	5=5/16	6=3/8	7=7/16	8=1/2	10=5/8	12=3/4	SHORT
HIGH-IMPACT CUP	10N50	10N49	10N48	10N47	10N46	10N45	10N44	—
CERAMIC CUP	105Z43	105Z42	105Z44	105Z45	08N78	08N79	08N80	—
GAS LENS HIGH-IMPACT CUP	54N18	54N17	54N16	54N15	54N14	—	—	54N19
LG. DIA. GAS LENS, HIGH-IMPACT CUP	—	—	—	—	—	53N88	53N87	53N89
GAS LENS CERAMIC CUP	54N35	54N34	54N33	54N32	54N31	—	—	—

For selection of special ceramic or sleeved cups, see Accessories following Torches.

Torch Parts & Accessories

ITEM	PART NO.	DESCRIPTION	HW-17 TORCH
1	57Y06	BODY, HW-17	
	57Y06LV	BODY, HW-17V w/valve 19621	
	57Y06R	BODY, HW-17R	
	19576R	BODY, HW-17RV w/valve 19621	
	19885	BODY, HW-17F	
	19886	BODY, HW-17FV w/valve 19621	
	601477	BODY, HW-17N (90 DEG.)	
2	105Z55	HANDLE, HW-17, HW-17V, HW-17R, HW-17F	
	105Z55R	HANDLE, RIBBED (optional)	
3	57Y02	LONG TORCH CAP w/O-RING (98W18)	
4	34015	MEDIUM TORCH CAP w/O-RING (98W18)	
5	57Y04	SHORT TORCH CAP w/O-RING (98W18)	
6	17732	ARGON SHUT OFF SLIDE VALVE AY.	
7	—	COLLET (see table above)	
8	—	COLLET BODY (see table above)	
9	—	GAS CUP (see table above)	
10	54N01	INSULATOR, Req'd for GAS LENS	
	54N63	INSULATOR, Req'd for GAS LENS, LG. DIA.	
11	—	GAS LENS COLLET BODY (see table above)	
12	—	GAS LENS CUP (see table above)	
13	105Z57	POWER CABLE ADAPTOR	
14	997022*	1-pc. POWER CABLE, 12½ ft.	
	997023*	1-pc. POWER CABLE, 25 ft.	
15	33946	2-pc. POWER CABLE & HOSE AY., 12½ ft.	
	33947	2-pc. POWER CABLE & HOSE AY., 25½ ft.	
16	35873	2-pc. POWER CABLE & HOSE AY., T.L. 12½ ft.	
	0558002476	2-pc. POWER CABLE & HOSE AY., T.L. 25 ft.	
	34651	2-pc. POWER CABLE REPAIR KIT (not shown)	

*Optional PVC Power Cable 57Y01 (12-1/2 ft.); 57Y03 (25 ft.)



GENUINE HELIARC® WATER-COOLED TORCHES

HW-25 Torch Family - 200 amp



- Small, Lightweight
- Flexible head to access difficult joints

Specifications

Capacity

200 Amps, 100% duty cycle, ac or dc with standard accessories
210 Amps, 50% duty cycle, ac or dc with standard or gas lens accessories

Size

OVERALL LENGTH	10-1/2 in. (267mm)
HANDLE DIAMETER	3/4 in. (19 mm)
LENGTH OF HEAD	4-7/8 in. (124 mm)
DIAMETER OF HEAD	3/4 in. (19 mm)
WEIGHT (less cable)	14 oz. (400 gm)
HEAD ANGLE: HW-25	FLEXIBLE
COOLING REQUIREMENTS	1 qt. min. (0.94 l/min)

Torch Assemblies

DESCRIPTION	HW-25 SILICON RUBBER
FLEXIBLE HEAD	
HW-25 – 12 w/12 ft. cable	45V36
HW-25 – 25 w/25 ft. cable	45V37

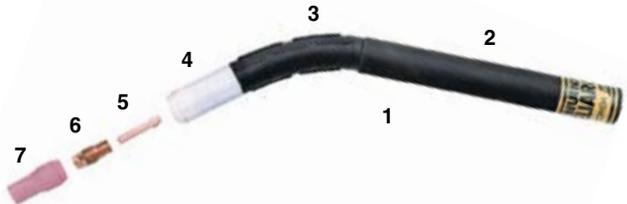
Cups, Collets, & Collet Bodies

ELECTRODE SIZE, in.	.020	.040	1/16	3/32	1/8	—
STANDARD COLLET	13N20	13N21	13N22	13N23	13N24	—
STANDARD COLLET BODY	13N25	13N26	13N27	13N28	13N29	—
GAS LENS COLLET BODY	45V41	45V42	45V43	45V44	45V45	—
CUP NUMBER	4 = 1/4	5 = 5/16	6 = 3/8	7 = 7/16	8 = 1/2	10 = 5/8
HIGH-IMPACT CUP	13N08	13N09	13N10	13N11	13N12	13N13
CERAMIC CUP	13N14	13N15	13N16	13N17	13N18	13N19
GAS LENS HIGH-IMPACT CUP	53N58	53N59	53N60	53N61	—	—

For selection of special ceramic or sleeved cups, see Accessories following Torches.

Torch Parts & Accessories

ITEM	PART NO.	DESCRIPTION	HW-25 TORCH
1	45V38	BODY, HW-25	
2	53N55	HANDLE, HW-25	
3	53N45	FLEX SLEEVE INSULATOR	
4	53N47	INSULATOR	
5	—	COLLET (see table above)	
6	—	COLLET BODY (see table above)	
7	—	CERAMIC CUP (see table above)	
	45V03	POWER CABLE, 12-1/2 ft.	
	45V04	POWER CABLE, 25 ft.	
	45V07	WATER HOSE, 12-1/2 ft.	
	45V08	WATER HOSE, 25 ft.	
	45V09	GAS HOSE, 12-1/2 ft.	
	45V10	GAS HOSE, 25 ft.	
	11N16	WATER ADAPTOR (5/8-18 LH TO 1/4 NPT) (not shown)	





GENUINE HELIARC® WATER-COOLED TORCHES

HW-27 Torch Family - 400 amp



- Front or back loaded
- Internal tungsten adjustment
- Model A with 9" length is designed for clamp-type fixture
- Model B with 20" length is designed for pinion-type fixture

Specifications

Capacity

400 Amps, 100% duty cycle, ac or dc with high impact cups
 500 Amps, 100% duty cycle, ac or dc with metal nozzles
 400 Amps, 50% duty cycle, ac or dc

Size

	27A	27B
OVERALL LENGTH.....	9 in. (230 mm)	20 in. (500 mm)
DIAMETER OF TORCH	1-3/8 in. (34 mm)	1-3/8 in. (34 mm)
WEIGHT (less cable)	24 oz. (96 gm)	36 oz. (144 gm)
COOLING REQUIREMENTS.....	2 qt. min. (1.91 l/min)	2 qt. min. (1.91 l/min)
MAXIMUM PRESSURE	50 psi	50 psi
ELECTRODE CAPACITY .....	.040-1/4" dia.	.040-1/4" dia.

Torch Assemblies

DESCRIPTION	HW-27 SILICON RUBBER
HW-27A – 9"	
HW-27A – 4 w/4 ft. cable	20955
HW-27A – 12 w/12 ft. cable	20954
HW-27B – 20"	
HW-27BL – 4 w/4 ft. cable	20017
HW-27B – 12 w/12 ft. cable	20018

Cups, Collets, & Collet Bodies

ELECTRODE SIZE, in.	.040	1/16	3/32	1/8	5/32	3/16	1/4
STANDARD COLLET	57N45	57N46	57N47	57N48	57N49	57N50	57N51
STANDARD COLLET BODY (includes gasket - 57N56)	49V22	49V23	49V24	49V25	49V26	49V27	49V28
CUP NUMBER	6=3/8	8=1/2	10=5/8	12=3/4	15=15/16	SHORT	—
HIGH-IMPACT CUP	—	57N75	57N74	53N88	53N87	53N89	—
METAL NOZZLE*	—	—	57N78	57N77	—	—	—

*Adaptor 57N76 required

Short nozzle not recommended for high frequency current

For selection of special ceramic or sleeved cups, see Accessories following Torches.

Torch Parts & Accessories

ITEM	PART NO.	DESCRIPTION	HW-27 TORCH
1	20019	BODY, HW-27	
2	20957	SHAFT & KNOB ASSY. (A-model)	
	20021	SHAFT & KNOB ASSY. (B-model)	
3	20956	BARREL (A-model)	
	20020	BARREL (B-model)	
4	20957	SHAFT ASSY. (A-model)	
	20021	SHAFT ASSY. (B-model)	
5	85W44	O-RING	
6	—	COLLET (see table above)	
7	—	COLLET BODY (see table above)	
8	57N56	GASKET	
9	—	GAS CUP (see table above)	
10	20024	POWER CABLE, 12-1/2 ft.	
	20023	POWER CABLE, 4-1/2 ft.	
	20025	WATER CABLE, 4-1/2 ft.	
	20026	WATER CABLE, 12-1/2 ft..	
	20027	GAS HOSE, 4-1/2 ft.	
	20028	GAS HOSE, 12-1/2 ft.	
11	20022	BOOT	
12	20032	OPTIONS (HW-27B only) – HW-27B BACK (32 pitch), rack length 11-11/16 in.	



Collets

Torch	Part No.	Size in. mm	
HW-20, HW-9, HW-25 	13N20	.020 0.5	
	13N21	.040 1.0	
	13N22	1/16 1.6	
	13N23	3/32 2.4	
	13N24	1/8 3.2	
HW-17, HW-18, HW-26 	10N21	.020 0.5	
	10N22	.040 1.0	
	10N23	1/16 1.6	
	10N24	3/32 2.4	
	10N25	1/8 3.2	
	54N20	5/32 4.0	
HW-24 	Standard	53N15	.020 0.5
		53N16	.040 1.0
		53N14	1/16 1.6
Gas Lens 	Gas Lens	53N62	.020 0.5
		53N63	.040 1.0
		53N64	1/16 1.6
HW-90 	84Z34	.020 0.5	
	84Z35	.040 1.0	
	84Z33	1/16 1.6	
HW-27 	57N45	.040 1.0	
	57N46	1/16 1.6	
	57N47	3/32 2.4	
	57N48	1/8 3.2	
	57N49	5/32 4.0	
	57N50	3/16 4.8	
	57N51	1/4 6.4	

Collet Bodies

Torch	Part No.	Size in. mm
HW-20, HW-9, HW-25 	13N25	.020 0.5
	13N26	.040 1.0
	13N27	1/16 1.6
	13N28	3/32 2.4
	13N29	1/8 3.2
HW-17, HW-18, HW-26 	10N29	.020 0.5
	10N30	.040 1.0
	10N31	1/16 1.6
	10N32	3/32 2.4
	10N28	1/8 3.2
	406488	5/32 4.0
HW-24*	Standard	53N17 .020 0.5 53N18 .040 1.0 53N19 1/16 1.6
HW-90 	105Z27	All Sizes
HW-27 	49V22	.040 1.0
	49V23	1/16 1.6
	49V24	3/32 2.4
	49V25	1/8 3.2
	49V26	5/32 4.0
	49V27	3/16 4.8
	49V28	1/4 6.4

*NOTE: Order Wrench (53N20) for HW-24 Collet Body.

Gas Lens Collet Bodies

Torch	PART No.	Size in. mm
HW-20, HW-9, HW-25 	45V41	.020 0.5
	45V42	.040 1.0
	45V43	1/16 1.6
	45V44	3/32 2.4
	45V45	1/8 3.2
HW-17, HW-18, HW-26 	45V29	.020 0.5
	45V24	.040 1.0
	45V25	1/16 1.6
	45V26	3/32 2.4
	45V27	1/8 3.2
Also order insulator 54N01	45V28	5/32 4.0
HW-90*, HW-24** 	45V41	.020 0.5
	45V42	.040 1.0
	45V43	1/16 1.6

*Also order adaptor 45V52 & insulator 53N85.

**Also order insulator 53N66.

Large Diameter Gas Lens Collet Bodies

Torch	Part No.	Size in. mm
HW-17, HW-18, HW-26 	45V64	3/32 2.4
	995795	1/8 3.2
	45V63	5/32 4.0

Gas Lens

To meet increasingly stringent weld quality standards, we developed the patented GENUINE HELIARC® GAS LENS. This stack of concentric, fine-mesh stainless steel screens produces an exceptionally stable stream of shielding gas (see Figure 1). By forcing the gas into a coherent stream, an effective shielding pattern can be projected greater distances (see Figure 2). Welding is possible at nozzle distances up to one inch from the plate surface, allowing greater welder visibility and access to tight joints.

Extending the electrode from the gas cup also increases the current capacity of some torch models. For example, a gas lens increases the 100 percent duty rating of our popular Heliarc HW-18 torch from 300 to 375 amps.

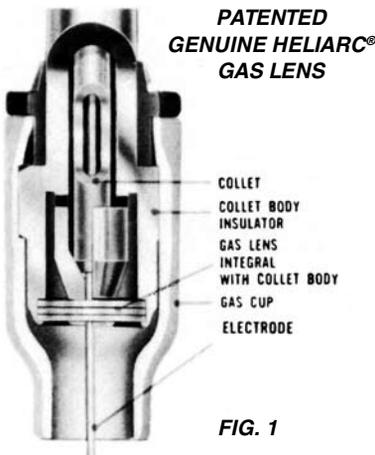


FIG. 1

CONVENTIONAL TORCH



TORCH WITH GAS LENS



FIG. 2

High-Impact Cups

Made from high strength alumina, have very good electrical insulating properties and exceptionally high impact resistance, heat resistance, thermal conductivity and spatter build-up resistance. They are recommended for most welding operations except for use in confined areas.

Standard High-Impact Cups

Torch	Length in.	Part No.	Size	Orifice in. mm	
	1-5/16	14N65	4	1/4	6.4
		14N66	5	5/16	8
		14N67	6	3/8	10
	1-7/8	14N73	4L	1/4	6.4
		14N74	5L	5/16	8
		14N75	6L	3/8	10
	1-27/32	10N50	4	1/4	6.4
		10N49	5	5/16	8
		10N48	6	3/8	10
		10N47	7	7/16	11
		10N46	8	1/2	12.5
		10N45	10	5/8	16
		10N44	12	3/4	19
	1-5/32	13N08	4	1/4	6.4
		13N09	5	5/16	8
		13N10	6	3/8	10
		13N11	7	7/16	11
		13N12	8	1/2	12.5
		13N13	10	5/8	16
	1-27/32	57N75	6	3/8	10
		57N74	8	1/2	12.5
		53N88	10	5/8	16
		53N87	12	3/4	19
		53N89	15	15/16	24

Gas Lens High-Impact Cups

Torch	Length in.	Part No.	Size	Orifice in. mm	
	1-5/8	54N18	4	1/4	6.4
		54N17	5	5/16	8
		54N16	6	3/8	10
		54N15	7	7/16	11
		54N14	8	1/2	12.5
		54N19	Short	11/16	17
	1	53N58	4	1/4	6.4
		53N59	5	5/16	8
		53N60	6	3/8	10
		53N61	7	7/16	11

Large Diameter Gas Lens High-Impact Cups

Torch	Length In.	Part No.	Size	Orifice in. mm	
	1-7/8	57N75	6	3/8	10
		57N74	8	1/2	12.5
		53N88	10	5/8	16
		53N87	12	3/4	19
	1-5/16	53N89	Short	15/16	24

Ceramic Cups

Made from Grade "A" lava materials are less impact and heat resistant than the high-impact cups, but can be expected to give very good service and long life. They perform very well in confined areas where excessive heat is reflected back into the nozzle. These cups can be used at currents up to 250 amp dcsp or ac, depending on arc time and cup size.

Ceramic Cups

Torch	Length in.	Part No.	Size	Orifice in. mm	
	1-5/16	84Z36	4	1/4	6.4
		84Z37	5	5/16	8
		84Z86	6	3/8	10
	1-27/32	105Z43	4	1/4	6.4
		105Z42	5	5/16	8
		105Z44	6	3/8	10
		105Z45	7	7/16	11
		08N78	8	1/2	12.5
		08N79	10	5/8	16
		08N80	12	3/4	19
<i>(With Gas Lens)</i>					
	1-5/32	13N14	4	1/4	6.4
		13N15	5	5/16	8
		13N16	6	3/8	10
		13N17	7	7/16	11
		13N18	8	1/2	12.5
		13N19	10	5/8	16
	5/8	53N23	.165	.165	4
		53N24	4	1/4	6.4
		53N25	5	5/16	8
		53N27	6	3/8	10
			1-1/8	53N28	4L	1/4	6.4
53N26	6L			3/8	10

Special Ceramic Long Cups

Torch	Length in.	Part No.	Size	Orifice in. mm	
	3-7/32	12N03	4L	1/4	6.4
		105Z60	5L	5/16	8
		12N02	6L	3/8	10
		105Z61	7L	7/16	11
	1-7/8	796F70	3L	3/16	4.8
		796F71	4L	1/4	6.4
		796F72	5L	5/16	8
		796F73	6L	3/8	10
	2-1/2	796F74	3XL	3/16	4.8
		796F75	4XL	1/4	6.4
		796F76	5XL	5/16	8
		796F77	6XL	3/8	10



Each package contains those accessory items most requested by our customers for use on our most popular Tig Torches, in easy-to-order kit form, packaged in durable plastic boxes.

HW-90 – P/N 999124

INCLUDES:

- (1) 56Y40 Long Torch Cap
- (1) 84Z35 .040 in. Collet
- (1) 84Z33 1/16 in. Collet
- (1) 105Z27 Collet Body
- (1) 14N65 No. 4 High-Impact Cup
- (1) 14N66 No. 5 High-Impact Cup
- (1) 14N67 No. 6 High-Impact Cup
- (1) 796F55 .040 in. dia. x 7 in. long, Ground Finish
Lanthana Electrode
- (1) 796F58 1/16 in. dia. x 7 in. long, Ground Finish
Lanthana Electrode

HW-17, 18, 26 – P/N 999126

INCLUDES:

- (1) 57Y04 Short Torch Cap
- (1) 10N23 1/16 in. Collet
- (1) 10N24 3/32 in. Collet
- (1) 10N25 1/8 in. Collet
- (1) 10N31 1/16 in. Collet Body
- (1) 10N32 3/32 in. Collet Body
- (1) 10N28 1/8 in. Collet Body
- (1) 10N49 No. 5 High-Impact Cup
- (1) 10N48 No. 6 High-Impact Cup
- (1) 10N46 No. 8 High-Impact Cup
- (1) 796F58 1/16 in. dia. x 7 in. long, Ground Finish
Lanthana Electrode
- (1) 796F63 3/32 in. dia. x 7 in. long, Ground Finish
Lanthana Electrode
- (1) 796F68 1/8 in. dia. x 7 in. long, Ground Finish
Lanthana Electrode

HW-20 – P/N 999127

INCLUDES:

- (1) 41V24 Long Torch Cap
- (1) 13N22 1/16 in. Collet
- (1) 13N23 3/32 in. Collet
- (1) 13N24 1/8 in. Collet
- (1) 13N27 1/16 in. Collet Body
- (1) 13N28 3/32 in. Collet Body
- (1) 13N29 1/8 in. Collet Body
- (1) 13N09 No. 5 High-Impact Cup
- (1) 13N10 No. 6 High-Impact Cup
- (1) 13N11 No. 7 High-Impact Cup
- (1) 796F58 1/16 in. dia. x 7 in. long, Ground Finish
Lanthana Electrode
- (1) 796F63 3/32 in. dia. x 7 in. long, Ground Finish
Lanthana Electrode
- (1) 796F68 1/8 in. dia. x 7 in. long, Ground Finish
Lanthana Electrode

Adaptors / Accessories



Back Caps



Power Cable Adaptors



PART NO.	DESCRIPTION	USED ON	PART NO.	DESCRIPTION	USED ON	PART NO.	DESCRIPTION	USED ON
54N63	Insulator	HW-17,18, 26	41V33	Short Cap	HW-20, 9	53N43	Adaptor	HW-90, 24
54N01	Insulator	HW-17, 18, 26	41V35	Med. Cap	HW-20, 9	105Z57	Adaptor	HW-17, 9
53N85	Insulator	HW-90	41V24	Long Cap	HW-20, 9	45V11	Adaptor	HW-18, 20
45V52	Adaptor	HW-90	57Y02	Long Cap	HW-17, 18, 26	45V62	Adaptor	HW-26
53N66	Collet Body Insul.	HW-24	34015	Med. Cap	HW-17, 18, 26	45V34	Fuse Assembly	HW-18, 20
598882	Cup Gasket	HW-20, 9	57Y04	Short Cap	HW-17, 18, 26	54N26	Replacement	HW-18, 20
			84Z31	Short Cap	HW-90	54N30	Fuses	
			56Y40	Long Cap	HW-90			

Hose/Cable Sheaths

Description	Used On	Part No.
-------------	---------	----------

(Covers) Zippered Nylon

12-1/2 ft. x 3" wide	all	35453
25 ft. x 3" wide	all	35454

(Covers) Non-Zippered

9 ft. x 7/8" I.D.	HW-20	2075198
20 ft. x 7/8" I.D.		2075200
9 ft. x 1-1/4" I.D.	HW-18	2075199
10 ft. Leather w/ Snaps 6" wide		20812

* Widths are as flat



Electrodes - Ground Finish Provides Maximum Smoothness

Diameter in.	Length in.	Pure (EWP) Green Coded	1% Thoriated (EWTh-1) Yellow Coded	2% Thoriated (EWTh-2) Red Coded	Zirconiated (EWZr-1) Brown Coded	2% Ceriated (EWCe-2) Orange Coded	1-1/2% Lanthana (EWG) Gray Coded
.020	7	—	—	—	—	—	796F53
.040	7	79Z15	—	84Z18	—	—	796F55
1/16	3	—	—	—	—	—	—
	6	—	—	—	—	—	—
	7	76Z51	84Z23	84Z19	790F47	798F92	796F58
3/32	3	—	—	798F08	—	799F36	—
	6	—	—	798F09	—	—	—
	7	76Z57	84Z24	84Z20	790F48	798F93	796F63
1/8	3	—	—	798F12	—	—	796F66
	6	—	—	—	—	—	—
	7	76Z52	84Z25	81Z79	790F49	798F94	796F68
5/32	6	—	—	798F17	—	—	—
	7	81Z43	—	81Z80	790F50	798F95	796F84
3/16	7	—	—	86Z05	790F51	799F86	796F89
	12	—	—	798F22	—	—	—
1/4	7	76Z54	—	84Z21	—	—	—

Note: Only the more popular tungsten electrodes are listed. We carry a wide variety of electrodes. For ordering information consult your ESAB Genuine Heliarc® supplier. Each package contains ten electrodes. For additional accessories, consult the Genuine Heliarc® Torch Guide - ARC-23110

Ordering Information

Brackets, Slides and Hardware

Mounting Bracket, EH-10A / EH-11

Right angle bracket used to mount wire feed motor to slides, carriages or other fixtures..... 996497

Mounting Bracket, Cross Slide

Right angle bracket used to mount Cross Slide Assembly to slides, carriages or other fixtures 996499

Cross Slide Assembly - Heavy duty slide provides 2 in. (50 mm) of vertical or horizontal adjustment.25V39

Rotary Adjustment Assembly

Mounts between wire feeder mounting bracket and cross slide mounting bracket or other fixture. Provides motor rotation around a horizontal axis..... 599202

Coil Adaptor - standard Use with 60 or 65 lb. (27 or 30 kg) coils..... 34323

Wire Straightener, EH-10A 34V74

HD Wire Straightener, EH-11.....28V55

Spindle Assembly - Attach to Wire Reel Support Arm or other fixture. Supports spool or coil of welding wire..... 948259

Wire Reel Support Arm - Use with Spindle Assembly above 634288

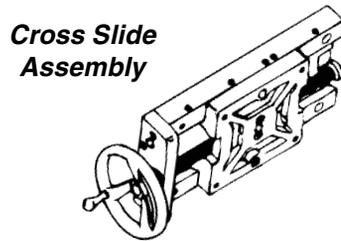
Support Arm Adaptor - Adapt Wire Reel Support Arm to side beam carriages 996498

Water Circulators

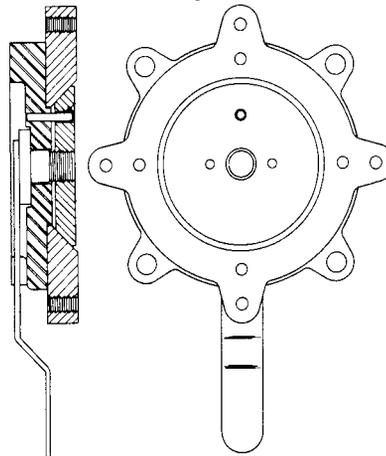
WC-8C - Vertical water circulator designed for Mig torches up to 600 amps and Tig torches up to 500 amps. Fits in cylinder rack of most power source trucks. High efficiency, fan cooled radiator dissipates 6480 BTU/hour. Rust proof 1.5 gal (5.7 L) reservoir. Water level window. Circulates 1 gal/min (3.8 L/min) @ 50 psi (345 kPa). 9.75 in. (25 cm) width x 9.75 in. (25 cm) depth x 36 in. (91 cm) height. 115/230 vac, 50/60 HZ, 1 phase..... **33739**

WC-9 - Extra heavy duty water circulator designed for Mig torches, Tig torches and plasma cutting torches. High efficiency, fan-cooled radiator dissipates 8000 BTU/hour. Rustproof 4 gal. (15 L) reservoir. Water level window. Circulates 1 gal/min (3.8 L/min) @ 50 psi (345 kPa). 18.5 in. (47 cm) width x 24.25 in. (62 cm) depth x 17.5 in. (44 cm) height. 115/230 vac, 50/60 HZ, 1 phase **33540**

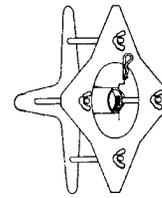
Water Circulator Coolant, 1 gal. . **156F05**



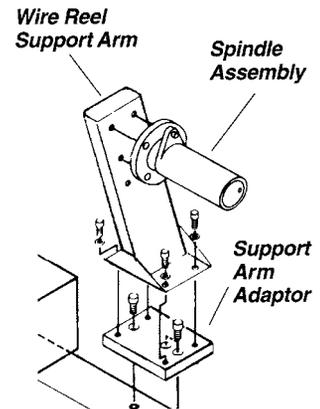
Rotary Adjustment Assembly



Coil Adaptor



Reel Support



Plumbing Box, Hoses & Fittings

PB-3 Plumbing Box - Includes water inlet, water outlet, gas inlet, gas outlet, gas solenoid and water flow switch and amphenol plug for connection to Digimatic II, Digipulse Automatic or select Robot Interfaces34749

PB-3 Plumbing Box Cable

4.5 ft. (1.4 m) cable34199
25 ft. (7.5 m) cable 34845

Gas/Water Solenoid Valve - For on/off control of shielding gases or water, 115 vac coil, 1/4 NPT threads..... 636386

Gas Hose Assemblies

3 ft. (0.8 m)..... 31504
6 ft. (1.8 m)..... 31503
12-1/2 ft. (3.8 m).....40V77
25 ft. (7.5 m)34V38
12-1/2 ft. (3.8 m) heavy duty (CO₂)..19416
5/8" - 18 RH nut 136Z08
1/4" - Hose Nipple 35N22
25 ft. (7.5 m) heavy duty (CO₂) 19415

Gas Hose Coupler - Use for gas hose assemblies11N17

Gas Hose Coupler, "Y" 950356

Water Hose Assemblies

3 ft. (0.9 m).....20634
6 ft. (1.8 m)20633
12-1/2 ft. (3.8 m).....40V76
25 ft. (7.5 m) 406196

Water Hose Coupler - Use for water hose assemblies 11N18

WC-8C Vertical Water Circulator



WC-9 Heavy-duty Water Circulator



Sales Literature(03-01-09) **ARC-23224**

Remote controls for:
350mpi, SVI 450i, 353cv*,
453cv*, 453cc*, 553cc*, MP 460,
653cvcc*, Heliarc 252, Heliarc
352

** Requires remote control kit (P/N 0558001436)*

HC-3B Hand Pendant Control - 30 ft. (9.1m) cable. Provides remote control of process switch (cv/cc), contactor switch (on/off) and output control (cc-amps/cv-volts)..... 33838

TC-2B Torch Control - 25 ft. (7.5 m) cable. Attach to torch handle. Provides remote current control and contactor (on/off) control 33839

TC-3A Remote Torch Switch - 30 ft. (9.1 m) cable. Provides on/off contactor control. Includes push button switch and rubber boot to secure switch to torch handle.
 For HW-9, 17, 20, 20A & 24..... 35783
 For HW-18 & 26R 36680



FC-5C Foot Control - 30 ft. (9.1 m) cable. Provides remote current control and contactor (on/off) control0558004234



FC-5B EHD Foot Control - 30 ft. (9.1 m). Extra Heavy Duty foot control provides remote current control and contactor (on/off) control 33841

R-33 Regulator / Flowmeter

Regulator with Lexan flow tube, 3000 psi cylinder gauge
R-33-FM-580* - Argon and Argon mixes, 10-50 cfh flow..... 21557
R-33-FM-320* - CO₂, 10-65 cfh flow...21558
**Refer to Gas section for details*



Truck Kits and Carts

TR-29 (2 cylinder) for ESAB 353cv, 453cv, MP 460, 453cc, 553cc and 653cvcc, Heliarc 252, Heliarc 352..... 37924

TR-23A (2 cylinder) for Heliarc 252 and Heliarc 352 36224



Inverter Cart, (two cylinder) for use with 350mpi & SVI 450i..... 31700

Hoses & Fittings

Gas Hose Assemblies
 3 ft. (0.9 m) 31504
 6 ft. (1.8 m)..... 31503
 12-1/2 ft. (3.8 m).....40V77
 25 ft. (7.5 m)34V38
 12-1/2 ft. (3.8 m) heavy duty (CO₂)..19416
 25 ft. (7.5 m) heavy duty (CO₂) 19415
 Gas Hose Coupler11N17
 Gas Hose Coupler, "Y"..... 950356

Water Hose Assemblies
 3 ft. (0.8 m).....20634
 6 ft. (1.8 m)20633
 12-1/2 ft. (3.8 m).....40V76
 25 ft. (7.5 m) 406196
 Water Hose Coupler 11N18



Twist Lock Connectors for:
350mpi, MTS-3500i, SVI 450i,
ESAB 452cv, 352cc, 452cc,
452cvcc, 652cvcc, Heliarc 252,
Heliarc 352, Heliarc 161 AC/DC,
Migmaster 275, CaddyArc 151i,
CaddyArc 201i, CaddyTig 1500i,
CaddyTig 2200i, CaddyTig 2200i
AC/DC, MultiMaster 160 & 260,
MultiMaster 300X

50 mm Connectors - quick-acting twist lock connectors for attaching output power cables or torches to power source:
 Male for 1/0 to 4/0 cable 13792513
 Female for 1/0 to 4/0 cable..... 13735631
 Male for #2 AWG to 1/0 cable.... 13733936
 Female for #2 AWG to 1/0 cable ... 13735632
 Quick connector with 1/2 in. threaded stud 13735501
 Tee connector- 1 male, 2 female 13792804

Accessories

Work & Electrode Holder Cable Assemblies

w/ Twist Lock 25mm QC plug
 10 ft. Cable Kit, electrode & work cable assemblies, 150A 0349501078
 10 ft. Electrode holder cable assembly, 150A 0349501079

w/ Twist Lock 50mm QC plug
 10 ft. Work cable*, #3AWG 32995
 15 ft. Work cable*, 2/0AWG 36253
 15 ft. Work cable*, 2/0AWG 35881
 15 ft. Electrode holder 2/0AWG..... 21226

w/ 1/2" Ring lug
 15 ft. Work cable*, 2/0AWG 0558001440
 * work cables include work clamp

Feeder Cable Assemblies

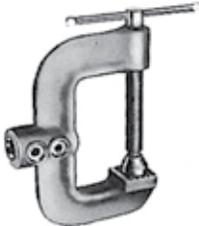
1/2" Ring lug to 1/2" Ring lug
 15 ft. Feeder cable, 2/0AWG ... 0558001441

1/2" Ring lug to 50mm QC
 15 ft. feeder cable, 2/0AWG..... 36254

ESAB Ground Clamps provide the largest workpiece-contact area of any clamp on the market. They assure positive connections and slide easily under steel plate. Three models described here help eliminate arc blow, make it easy to change ground location, and assure proper voltage for maximum weld results with all rods.

Specifications - Ground Clamps

Model	Part No.	Amp Capacity	Type Cable Connection	Weight
"200"	81F11	200	Mechanical Oval-Point Screw	13 oz.
"300"	81F12	300	Mechanical Oval-Point Screw	26 oz.
"500"	81F13	500	Mechanical Oval-Point Screw	35 oz.
MIG-600	82F19	600	Two Oval-Point Screws	56 oz.
"G"	82F17	600	Two Oval-Point Screws	52 oz.
EG-500	82F32	500	Bolt and Nut with Support	22 oz.
EG-300	82F31	300	Bolt and Nut with Support	11 oz.



MODEL "G"



MODEL 500



MODEL EG-500



MODEL MIG-600

The advanced design of ESAB Cable Connectors offers many advantages over older styles. Metal parts are precision machined from heavy, specially shaped brass extrusion. Cam action design of male half connector pulls the two halves tightly together. Connector covers are molded from a special heat and cold resistant material. Covers have no metal liner to rust or corrode. Easily installed with a 1/4 in. Allen wrench.

Specifications - Cable Connectors

Model No.	Part No.	Cable Connection	Cable Capacity	Weight Each	Std. Pack
LC-40	81F25	Oval-Point Screw Mech.	1/0 thru 3/0	17 oz.	1
Same connector style as above - only one half of the set					
LC-40	81F26	Male half only	1/0 thru 3/0		
LC-40	81F27	Female half only	1/0 thru 3/0		



Curved upper lever with low angle design for better hold. Newly designed jaw pattern for firm electrode grip. Fully insulated, high strength spring for excellent gripping power. High leverage tong designed for easy opening. Heavy-duty shockproof handle.

Specifications - Electrode Holder

Part No.	Amp Capacity	Electrode Capacity	Cable Capacity	Length	Weight
81F02	300	Up to 7/32 in.	2/0	10 in.	20 oz.
0558008634	500	Up to 3/8 in.	4/0	11 in.	26 oz.



MTA1 CAN

CAN based multi function remote control for the control panels A2, A4, T4, T6, M2, MA4, MA6, U6 and AristoPendant U8.

MMA: Knob 1: Current control Knob 2: Arc force
TIG: Knob 1: Pulse current Knob 2: Background current
MIG/MAG 1: Knob 1: Wire feed speed Knob 2: Voltage control
MIG/MAG 2: Knob 1: Wire feed speed Knob 2: Voltage trim +/-

MTA1 CAN 0459491880



M1 10Prog CAN

CAN based Synergic MIG for control panel MA6, U6 and AristoPendant U8
MIG/MAG : Memory 1-10 and voltage trim +/-

M1 10Prog CAN 0459491882



AT1 CAN

CAN based standard MMA and TIG for control panel A2, A4, T4 and T6.
MMA/TIG: Current control

AT1 CAN 0459491883



AT1 Coarse/Fine CAN

CAN based standard MMA and TIG for control panel A2, A4, T4 and T6.
MMA/TIG: Current control, coarse/fine

AT1 Coarse/Fine CAN 0459491884



M1

Analogue standard MIG for control panel M10, M12, M13, M13i and M14
MIG/MAG: Wire feed and voltage control

M1 0459491895



AT1 Coarse

Analogue standard MMA and TIG for power sources with remote outlet
MMA/TIG: Current control

AT1 Coarse 0459491896



AT1 Coarse/Fine

Analogue standard MMA and TIG for power sources with remote outlet
MMA/TIG: Current control, coarse/fine

AT1 Coarse/Fine 0459491897



Remote Adapters for CAN based systems

For analogue MMA and TIG remote controls.

For analogue MIG/MAG remote controls and 3-step program switch RS3.

RA 12 for MMA and TIG	0459491910
RA 23 for MIG/MAG and RS3	0459491911



Foot control FS002 - TIG

Complete with 5 m rubber cable and equipped with 12-pole Burndy

FS002 analogue	0349090886
T1 CAN for CaddyTig	0460315880
FS002 CAN - for control panel T4, T6, U6 and AristoPendant U8	0349090890



Interconnection cables:

0.25 m CAN	0459554884	5 m analogue 23 p	0459553880
5 m CAN	0459554880	5 m analogue 12 p	0459552880
10 m CAN	0459554881	10 m analogue 12 p	0459552881
15 m CAN	0459554882	15 m analogue 12 p	0459552882
25 m CAN	0459554883	25 m analogue 12 p	0459552883

Remote-control MIG 2

MIG 2 is equipped with 2 potentiometers for setting of the wire feed speed and voltage control. Delivery: 5 m rubber cable equipped with a 23-pole Burndy and a metal hook.

Remote-control MIG 2 complete incl 5 m cable	0349501028
---	------------



Remote-control MMA1

MMA 1 is equipped with 1 potentiometers for current setting.

Delivery: 10 m rubber cable equipped with a 12-pole Burndy and a metal hook

Remote-control MMA1 complete incl 10 m cable	0349501024
---	------------



Remote-control MMA2

MMA 2 is equipped with 2 potentiometers for course/fine current setting.

Delivery: 10 m rubber cable equipped with a 12-pole Burndy and a metal hook

Remote-control MMA2 complete incl 10 m cable	0349501025
---	------------



	MTA1 CAN	M1 10Prog CAN	AT1 CAN	AT1 CourseFine CAN	FS002 CAN	M1	AT1	AT1 CourseFine	FS002	MIG 1	MMA 1	MMA 2
DTF							x	x	x		x	x
DTE/DTG							x	x	x		x	x
LHF							x	x			x	x
LHN							x	x			x	x
LTN/LTR							x	x	x		x	x
CaddyArc							x	x			x	x
CaddyTig							x	x	x		x	x
ESABFeed						x				x		
MEK						x				x		
AristoFeed	x	x										
AristoArc	x		x	x								
AristoTig	x		x	x	x							
AristoMig U	x	x	x	x	x							

Helmets

No batteries to replace. Eye-Tech works on solar cells. No on/off switches - always on. ANSI Z87.1 approved. Maximum comfort headband. Push lock ratchet knob with five (5) different adjustment levels for the welder's personal requirement. Eyes are always protected against ultraviolet and infrared radiation regardless of the shade level.

Eye-Tech 5-13 P/N 0700000890

Offers unlimited personal settings. The latest LCD-technology enables you to adjust from shade 5 to 13. The "grinding mode" (shade 4) can easily be activated from the outside. The Eye-Tech 5-13 can be used in all welding applications including oxy-gas welding. Viewing area - 3.86 in. x 1.57 in. (98 mm x 39 mm)

- Infinitely variable in welding mode from shade 5 to 13. Grinding mode is shade 4
- Detection sensitivity can be adjusted
- Switching time from light to dark: 0.5ms at 131°F; 0.8ms at 72°F; 3ms at 23°F
- Dark to light delay can be adjusted from fast (0.1 - .35 sec.) to slow (0.3 - 0.6 sec.)
- Fully UV and IR protected up to shade 15
- Constructed of lightweight Zytel® (DuPont) non-flammable material. Weighs only 17 oz. (482g)

Eye-Tech 11 Mono P/N 15F22

- Shade 11 DIN
- Full UV and IR protection
- Switching time from light to dark: 0.1ms at 131°F; 0.4ms at 72°F
- Weighs only 16.6 oz. (470g)
- Application ranges: Electrode welding - MIG/MAG; Restricted for laser welding and oxy-fuel welding
- Viewing area - 3.86 in. x 1.57 in. (98 mm x 39 mm)

Accessories for Eye-Tech

Helmet Only (for Eye-Tech 5-13).....	0700000034
Helmet Only (for Eye-Tech 11)	15F01
Cartridge Shade (for Eye-Tech 5-13).....	0700000035
Cartridge Shade (for Eye-Tech 11).....	15F23
Headband.....	15F03
Sweatband.....	15F04
Front Frame.....	15F05
Potentiometer Knob (for Eye-Tech 5-13).....	0700000037
Sensitivity Knob (for Eye-Tech 5-13).....	0700000038
Cover Plate Satellite (for Eye-Tech 5-13).....	0700000039
Eccentric Ratchet Knob (Replacement for helmet tilt)	15F08
Front Cover Lens (10)	15F09
Inside Cover Lens (5).....	15F10
Magnifier Diopter 1.0 (req's. 15F18).....	15F11
Magnifier Diopter 1.5 (req's. 15F18)	15F12
Magnifier Diopter 2.0 (req's. 15F18)	15F13
Magnifier Diopter 2.5 (req's. 15F18)	15F14
Magnifier Diopter Holder.....	15F18
Hard Hat Adaptor	15F15
Neck Protector	15F19



Eye-Tech 5-13



Eye-Tech 11 Mono



Scanorama

Scanorama P/N 14F00

- Fitted with a shade 5 large absorbing filter screen 6" x 7" (150 x 175mm)
- Filter screen provides large "window" which allows free sight around the filter plates and protects against light and heat rays
- Weight - 14 oz. (396g)
- Ideally suited for Mig and Tig applications, up to 250 amps, using Argon shielding
- Helmet comes with large filter screen of shade 5 and filter plate each of shade 5. This gives a combined shade of 10. Order filter plates to get other shades
- Full UV and IR protection

Accessories for Scanorama

Filter Plate Shade 9.....	14F04
Filter Plate Shade 10.....	14F05
Filter Plate Shade 11.....	14F06
Filter Plate Shade 12.....	14F07
Clear Front Plate	14F09
Plugs (4).....	14F11
Large Filter Plate Screen 5.....	14F08
Headband.....	14F12
Sweatband	14F43
Neck Protector	14F37

This lightweight helmet gives you protection with any welding method. All helmets are ANSI Z87.1 approved.

Sales Literature..... (03-01-09) **ARC-23217**

Deluxe Arc Welding Glove (blue)

- Super-soft OXTANNED leather
 - Gunn cut
 - Wing thumb
 - Fully welted
 - Fourteen inch length
 - Full Estron® lining
 - Rolled cuff
- P/N 747F02 (Large)



Deerskin Arc Welding Glove

- Welted primary seams
 - Thumb/palm reinforcing strap
 - Fully lined
 - Stays soft and flexible
- P/N 747F53 (Large)



Red-Ox Arc Welding Glove (rust)

- Select side leather
 - One-piece back
 - Gunn cut
 - Wing thumb
 - Vulnerable seams welted
 - Rolled cuff
- P/N 747F38 (Medium)



Gas Welding And Cutting Glove

- Fire retardant cotton fabric
 - Suitable for applications not involving arc radiation
 - An OXWELD® classic for many years
- P/N 741F00 (Large)



Economy Arc Welding Glove

- Fully welted seams
 - Thumb/palm reinforcing strap
 - Fully lined
 - Select cowhide
 - Rolled cuff
- P/N 747F40 (Large)



Heliarc® Welding Glove

- Top grain cowhide
 - Gunn cut
 - Leather cuff
 - Sensitive to feel of filler rod
- P/N 747F33 (Large)
P/N 747F32 (Medium)



Welding Rod Carrier

Heavy-duty split cowhide - with double ply bottom and nickel-plated hardware
P/N 747F89



Shop Coat

P/N 781F62 (Small)
P/N 781F58 (Medium)
P/N 781F59 (Large)
P/N 781F60 (X Large)
P/N 781F61 (XX Large)



Helmet Pad

"Shearling" sheepskin - with rust-resistant hardware
P/N 747F91



Leather Shoe Spats

Double laminate flares, heavy-duty hardware and steel-stitched at vulnerable seams
P/N 747F90



Deluxe Helmet Pad

Top grain cowhide - with foam cushion and rust-resistant hardware
P/N 747F92



Tig Pen™

- Controls the tip of the filler wire with great accuracy, even at a long distance from the weld seam.
- Helps welder obtain higher welding quality
- Eliminates waste of filler wire
- Easy to use and lightweight, fingertip control
- Use any wire diameter from .040-1/8" (1.0 to 3.2 mm)



P/N 0700009026

Welder's Cap

Welder's caps can be imprinted with Distributor's name. Call your customer service representative.

781F96 (Small)
781F97 (Medium)
781F98 (Large)



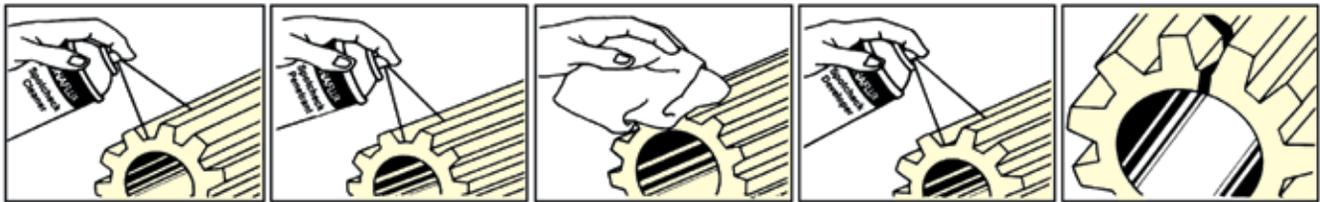
Magnaflux® Material

Three different types of MAGNAFLUX® material for non-destructive testing are available through ESAB. They are MAGNAFLUX®/MAGNAGLO®, SPOTCHECK®, and ZYGLO®. CERTS and MSDS for the material are available upon request.

Spotcheck®

SPOTCHECK® red dye Liquid Penetrant materials are ideal for weld inspection and, as the name implies, for “spot checking” to locate surface flaws. Where portability is required, SPOTCHECK® is ideal. It is available in aerosol and liquid form. The vivid red color permits daylight inspection. Military specification compliance assures acceptance of your results. A complete line of cleaners, removers and developers, as well as Water Wash or Post Emulsifiable penetrants, is available.

PENETRANT	Aerosol	4-1 gallon	5 gallon
SKL-SP1	16F00	16F01	16F78
SKL-WP	16F02	16F03	16F44
CLEANER			
SKC-S	16F06	16F07	16F61
SKC-HF	16F76		
DEVELOPER			
SKD-S2	16F10	16F11	16F62
SPOTCHECK KIT			
SK-816	16F14		

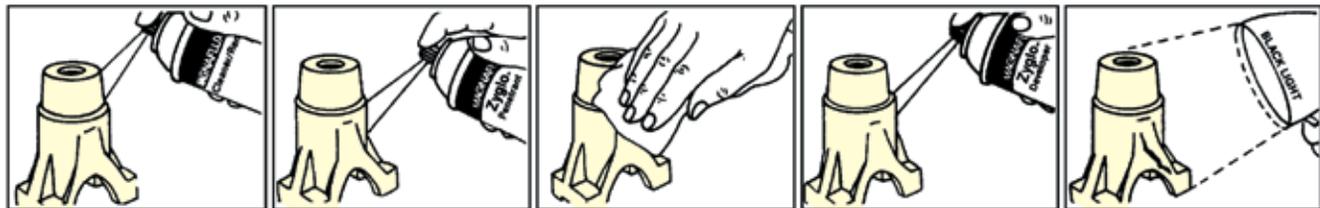


1. Preclean inspection area. Spray on Cleaner/Remover. Wipe off with cloth.
2. Apply Penetrant. Allow short penetration period.
3. Spray Cleaner/Remover on wiping towel and wipe surface clean.
4. Spray on a thin, uniform film of Developer.
5. Inspect. Defects will show as bright red lines in white developer background.

Zyglo®

ZYGLO® fluorescent materials are used with the Liquid Penetrant inspection method to locate surface flaws in non-porous parts. More sensitive than red dye penetrant, it is the most widely used method for locating fine discontinuities.

PENETRANT	Aerosol	4-1 gallon	5 gallon	20 gallon
ZL-27A	16F12			
ZL-60D	16F63	16F73	16F84	
ZL-67		16F64	16F65	
DEVELOPER				
ZP-9F	16F66			
ZYGLO KITS				
ZA-70	16F17			

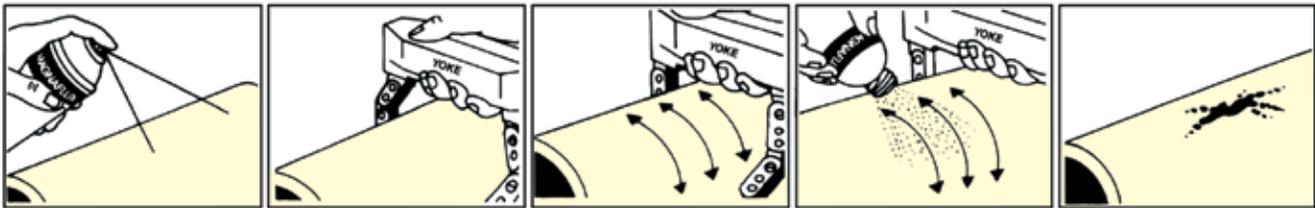


1. Preclean inspection area. Spray on Cleaner/Remover. Wipe off with cloth.
2. Apply Penetrant. Allow short penetration period.
3. Spray Cleaner/Remover on wiping towel and wipe surface clean.
4. Apply a thin film of Developer. Allow short developing period. For rough surfaces, daub on Dry Developer.
5. Inspect under Black Light. Cracks and lack of bond will show as glowing lines. Porosity will show as spots.

Magnaflux® / Magnaglo®

MAGNAFLUX and MAGNAGLO are used with Magnetic Particle Inspection Systems to locate surface and subsurface flaws in ferrous parts. Dry and wet particles are available to suit your needs. Choose from fluorescent or non-fluorescent for UV or daylight inspection. Particle size is controlled to insure maximum sensitivity. Fluorescent particles are encapsulated to minimize separation of fluorescents from particles. This system reveals discontinuities in any material which can be magnetized.

WET METHOD	Aerosol	1 lb.	6-1 lb.	5 gallon
14A	—	16F32	—	—
14AM	16F30	—	—	16F31
7HF Black	16F28	—	—	—
9CM Red	16F29	—	—	—
MX/MG Carrier II	—	—	—	—
20B 11B	—	16F67	—	—
DRY METHOD	12-1 lb.	7 lb.	25 lb.	45 lb.
#1 Gray	16F19	—	16F21	—
#8A Red	16F25	—	16F27	—
#3A Black	—	—	—	—
MAGNETIC PARTICLE KITS		P/N		
Y-7 AC/DC Yoke		16F35		
Y-6 AC Yoke		16F68		
L-10 AC Coil		—		
Magnaflux Kit		—		
Magnaglo Kit		16F38		



1. Preclean inspection area
Spray on Cleaner. Wipe off with cloth.
2. Place yoke on test piece
perpendicular to direction of suspected cracks.
3. Energize Yoke. Magnetic field will form in test piece.
4. Apply magnetic powder or prepared bath while Yoke is energized.
5. Indications will form immediately.

Accessories

Description	Part No.
507320 100 watt Bulb for Light made after 1982	16F48
519227 Filter Glass	16F49
1848 Contact Pad	16F51
2480 Field Indicator	16F53
600000 Black Light	16F60
501232 Powder Spray Bulb	16F69

If you do not see the material you need, consult your ESAB supplier. CERTS and MSDS are available upon request.

Training/Educational Materials

Whether you prefer CD Rom, printed handbooks or video cassettes, ESAB has the solution to all your training and educational needs. Please check with your ESAB Sales Representative for additional training and educational materials that may be available.

Ordering Information

Tig Handbook

(Available on CD Rom or in print)

Order No. 782F17 (CD Rom)

Order No. 781F29 (printed version)

Mig Handbook

(Available on CD Rom or in print)

Order No. 782F18 (CD Rom)

Order No. 791F18 (printed version)

Filler Metal Technology Course

(Available on CD Rom only)

Order No. 782F20

Filler Metal Data Handbook

(Available on CD Rom or print)

Order No. 782F22 (CD Rom)

Order No. EWC-DB4 (printed version)

Filler Metal Data Handbook

(Available on CD Rom only)

Order No. 782F22

Allstate Data Handbook

(Available on CD Rom only)

Order No. 782F25

Precautions & Safe Practices for Arc Welding, Cutting & Gouging

(Available in print only)

Order No. F52529

Precautions & Safe Practices for Gas Welding, Cutting & Heating

(Available in print only)

Order No. 17982

Oxy-Acetylene Handbook

(Available on CD Rom or print)

Order No. 782F23 (CD Rom)

Order No. 781F00 (printed version)



ESAB will provide one copy of each at no charge.



NOTES