

X-Tractor 3A, 5A & 8A

Welding Fume Extractor

Lincoln's self contained X-Tractor units are specifically designed for the removal and filtration of welding fume. They feature a high vacuum, low volume system with an automatic self-cleaning filter system. They are suitable for heavy duty welding applications and continuous use, powered by three phase AC motors.

These units are designed to supply suction for up to 8 fume guns or 5 suction heads. Air enters the system through a connection on the rear side of the machine. It then passes through the filter and the fume particles are captured in the filter media. The air then passes through the blower and exits through an internal silencer. A timer signals a pulse of compressed air that loosens the particulate from the outside surface of the filter so that it falls to the bottom of the particulate bin canister.



Processes

Stick, TIG, MIG, Flux-Cored

Advantage Lincoln

- Integrated automatic filter cleaning
- Automatic operation capability using wire feeder trigger signal
- For 1 to 8 operators simultaneously
- Used as a stationary or mobile installation
- Rugged design for industrial use and impact resistance
- Large range of accessories available
- Compact design for easy installation in narrow spaces

Welding Fume Extractor	Suction Nozzle Capacity	Fume Gun Capacity
X-Tractor 3A	1	3
X-Tractor 5A	3	5
X-Tractor 8A	5	8

Note: Number of extraction nozzles/fume guns that can be connected to each system is directly related to the overall lengths of duct and flex hose used for connection.

Base Unit Includes

- Extraction Unit
- Filter Cartridge
- Automatic Filter Cleaning System
- Internal Compressed Air Regulator
- Automatic Operation Connection
- Starter/Overload Switch

TECHNICAL SPECIFICATIONS

Product Name	Product Number	Input Power	CFM	Dimensions H x W x D mm (in.)	Net Weight kg (lbs.)
X-Tractor 3A	L12810-1	230/3/60	165	1118 x 711 x 762 (44 x 28 x 30)	75
	L12810-2	460/3/60			(165)
X-Tractor 5A	L12810-3	230/3/60	285	1397 x 711 x 838 (55 x 28 x 33)	129
	L12810-4	460/3/60			(285)
X-Tractor 8A	L12810-5	230/3/60	475	1397 x 711 x 1118 (55 x 28 x 44)	215
	L12810-6	460/3/60			(475)

Automatic Filter Cleaning

The cleaning timer system is factory preset, but can be adjusted based on the welding application and usage amounts.

The system consists of a holding tank with compressed air, a solenoid valve and a timer mounted directly on the solenoid valve. The tank is filled with compressed air, the solenoid valve opens at intervals set by the timer, and compressed air is blown into the filter from the clean side. Particulate stuck on the outside of the filter, drops off and into a dustbin. The tank is then again filled with compressed air, awaiting the next cycle. This cycle can be turned off by placing the filter cleaning switch on the front panel in the OFF position.

Automatic Operation

The extraction unit can be operated in an automatic mode, where the extraction system will operate based on the welding machine status. Using an electromechanical relay circuit (provided by the customer) the welding machine trigger voltage can be used to operate a relay circuit which would be connected to the automatic operation circuit of the extraction system. This provides extraction demand only when welding is taking place.

Off-Line Filter Cleaning

In addition to the automatic cleaning function, there is also a built in off-line cleaning function that operates the cleaning system when the machine is shut down. When the unit is shut off, the signal to the cleaning system solenoid is delayed by an additional timer placed inside the cabinet. The timer extends the cleaning signal in order to operate more cleaning cycles after the extraction is shut down. Inside the filter container there is a backflow damper that closes the inlet in order to avoid particulate re-entrance in the duct/hose system.

Easy-Duct System

The Easy-Duct system is specially designed for a leak-proof, simple installation for up to 8 connection points. The duct system is designed specifically to the layout of the welding facility. The engineering behind the design takes into account welding facility layout, the number of welding stations, welding processes, physical obstacles and overall duct lengths to maintain specific airflow characteristics and provide an efficient and effective solution. A requirement is a facility layout that will show workplace locations, obstacles and extraction equipment location. The duct system consists of a metal duct and related accessories to build an extraction system for all types of welding environments.

High Vacuum/Low Volume System

High vacuum welding fume extraction systems utilize higher pressure of 70-90" WG and low volume of 50-100 CFM with an air speed of 4000-5000 ft/min. The air handling configuration of high vacuum equipment allows the use of small diameter rigid duct and small diameter flexhose to easily reach extraction points. It is perfect for applications such as short welds when using fume suction nozzles or larger fixture welding using integrated fume extraction guns. This process is designed for close proximity source extraction from 2-4" to the welding source.

Since the hoses and suction nozzles are smaller than those of low vacuum systems, it is much easier to carry the fume gun, extraction nozzle and/or flex hose into confined spaces depending on the type of welding, base material, consumable used, and length of time. The mobility of the suction devices allows the main filter unit to be kept at a central location. Due to the low air volume (CFM) extracted, make-up air and negative room air pressures are kept to a minimum when exhausting outside the facility.



Shown: Front view



Shown: Back view



Shown: Distribution & Shutoff Valves



Shown: Easy-Duct System

GENERAL OPTIONS



Aluminum Suction Nozzles with Magnetic Mounting
Includes S20591-7 adapter for 1-3/4" (45 mm) hose. Best capture distance: ~1-1/2" (38 mm).
Order K639-1 for SHM-300 Nozzle - 300 mm (12")
Order K639-2 for SHM-400 Nozzle - 400 mm (16")
Order K639-3 for SHM-500 Nozzle - 500 mm (20")



SHMS-400 Low Noise Nozzle
400 mm (16") aluminum suction nozzle with magnetic mounting. Includes S20591-7 adapter for 1-3/4" (45 mm) hose. Best capture distance: ~1-1/2" (38 mm).
Order K639-4



SHFA Flat Suction Nozzle
150 mm (6") Aluminum suction nozzle with 20" (500 mm) flexible steel hose and magnetic mounting. Includes adapter for 1-3/4" (45 mm) hose. Best capture distance: < 4" (100 mm).
Order K639-5



UNM Suction Nozzle for Heavy Smoke
200 mm (8") Aluminum suction nozzle with magnetic mounting. Includes S20591-7 adapter for 1-3/4" (45 mm) hose. Best capture distance: < 4" (100 mm).
Order K639-6



SHMT Round Suction Nozzle
90 mm (3.6") Suction nozzle with 13" (330 mm) flexible steel hose and magnetic mounting. Includes S20591-8 adapter for 1-3/4" (45 mm) hose. Best capture distance: < 4" (125 mm).
Order K639-14



EN 20 Extraction Nozzle
The EN 20 nozzle is designed for a wide array of welding applications. With its funnel extraction opening and magnetic mounting stand, it gives the welder a greater amount of versatility.
Order K2389-5



EN 40 Extraction Nozzle
The EN 40 nozzle is designed for stick electrode applications. With its L-shaped tube and an elongated slotted opening, the EN 40 nozzle is designed to coincide with the time it takes the welder to use one stick electrode. This design alleviates the welder from having to continuously reposition the nozzle. Magnetic mounting stand included.
Order K2389-6



Gun Mounted Nozzle Kit
Nickel plated brass nozzle slips over the gun's gas nozzle and secures with screw. Includes a total of 16 ft. (5 m) of hose and all necessary adapters including SS-3245 for connection to 1-3/4" (45 mm) hose.
Order K639-20



Nozzle Kits
The NKT and NKC nozzle kits provide extraction capacity to standard welding torches. The NKT kit is for mounting the extraction hose on top of gun. The NKC kit is for circular extraction. Note: guns not included.
Order K2389-3 for NKT
Order K2389-4 for NKC



Hoses
Flexible hoses in PVC with internal steel spiral spring. Fits directly on adapters and available in different lengths.
Contact Lincoln Electric Sales Office



Adapters
Connects easily and prevent leakages in extraction system and damaged hoses.
Contact Lincoln Electric Sales Office



Fume Guns
To extract welding fumes, Lincoln Electric's X-Tractor 250FG, 340FG, and 500FG fume guns, can be connected to the X-Tractor 1GC and its extraction hose.
For X-Tractor 250FG, 340FG, 500FG
Contact Lincoln Electric Sales Office

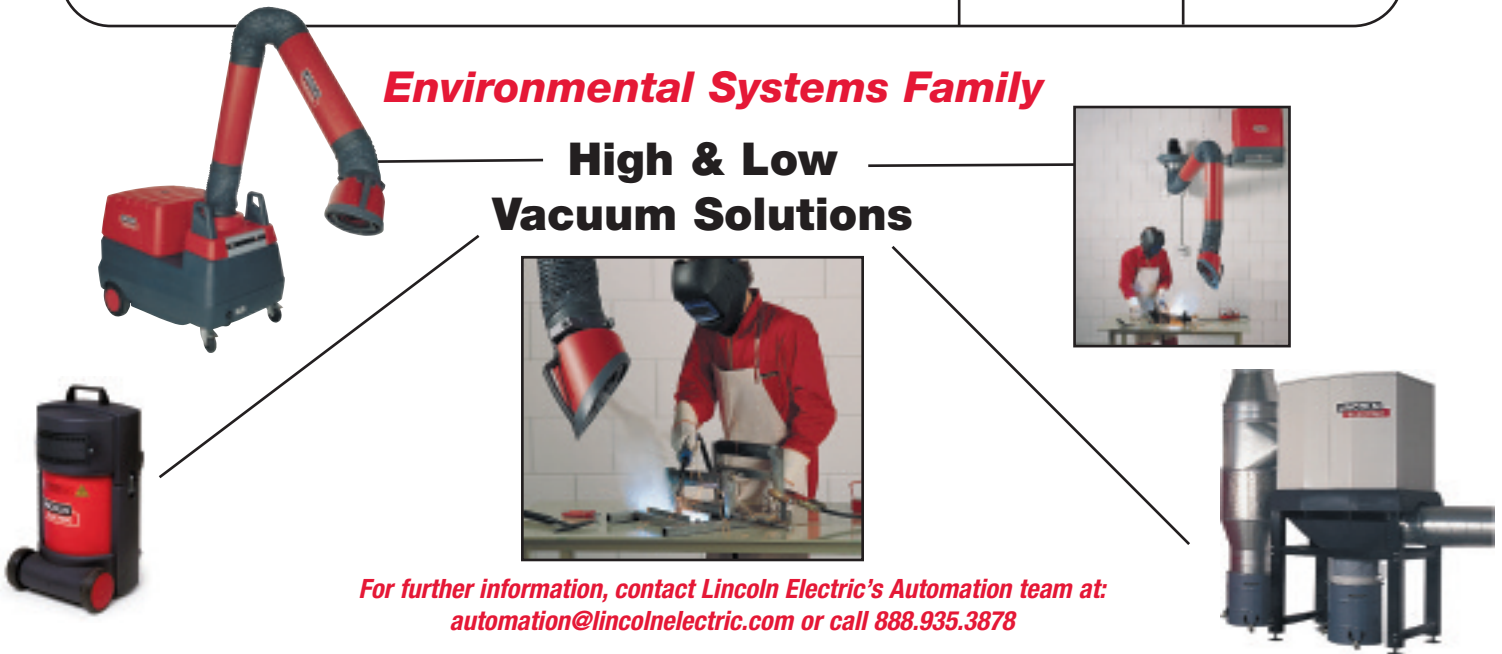
The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits.

X-TRACTOR 3A, 5A & 8A ORDER FORM

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
Xtractor 3A:	L12810-1: 230/3/60		
	L12810-2: 460/3/60		
Xtractor 5A:	L12810-3: 230/3/60		
	L12810-4: 460/3/60		
Xtractor 8A:	L12810-5: 230/3/60		
	L12810-6: 460/3/60		
GENERAL OPTIONS			
SHM-300 Nozzle	K639-1		
SHM-400 Nozzle	K639-2		
SHM-500 Nozzle	K639-3		
SHMS-400 Low Noise Nozzle	K639-4		
SHFA Flat Suction Nozzle	K639-5		
UNM Suction Nozzle for Heavy Smoke	K639-6		
SHMT Round Suction Nozzle	K639-14		
EN 20 Extraction Nozzle	K2389-5		
EN 40 Extraction Nozzle	K2389-6		
Gun Mounted Nozzle Kit	K639-20		
NKT Nozzle Kits	K2389-3		
NKC Nozzle Kit	K2389-4		
Hoses	Contact Lincoln Electric Sales Office		
Hose Adaptors	Contact Lincoln Electric Sales Office		
Fume Guns	Contact Lincoln Electric Sales Office		
TOTAL:			

Environmental Systems Family

High & Low Vacuum Solutions



For further information, contact Lincoln Electric's Automation team at: automation@lincolnelectric.com or call 888.935.3878

CUSTOMER ASSISTANCE POLICY

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