ALTO SHAAM®
COMBITHERM®

ecosmart™

10•18ESi
ELECTRIC COMBINATION OVEN/STEAMER

Boiler-Free

- Flash-steam generation design makes conventional steam generator obsolete:
  — Eliminates steam generating boiler maintenance
  — Ends boiler heating element burn-out
  — Maintains steam levels without a water reservoir

- Cook by internal product temperature or time with temperature variable steam, convection heat, or a combination of both to roast, steam, bake, or oven-fry in a single piece of equipment.

- Provides increased food quality and expands menu options while increasing production efficiency and speed by as much as 70-percent compared to conventional cooking methods.

- EcoSmart™ technology reduces energy cost by using less electricity and water during both normal operation and the cleaning function.

- Gold-n-Brown™ feature provides the operator with the ability to add additional product color.

- AutoClean™ feature simplifies the cleaning process to a single oven function.

- Standard and Deluxe control offers 2-speed fan, a cool-down feature, additional moisture injection, Delta-T cooking, multiple language display, and other control features.

- Enhanced safety feature includes automatic steam venting before door is opened. (U.S. Pat. 7,282,674)

- Optional patented smoking technology (U.S. Pat. 7,157,668) gives operators the unique ability to smoke any product, hot or cold, and follow it with a non-smoked item without any residual smoke flavor.

MODEL 10•18ESi DELUXE
CAPACITY OF TWENTY (20) FULL-SIZE OR GN 1/1 PANS,
TEN (10) FULL-SIZE SHEET OR GN 2/1 PANS
SHOWN WITH OPTIONAL MOBILE STAND 5005736

SHORT FORM SPECIFICATIONS:

Provide Alto-Shaam Combitherm® Model 10•18ESi flash-steam combination oven/steamer designed with EcoSmart™ technology for reduced energy and water usage and include operational modes for steam, convection, and a combination of steam and convection heat. Standard features to include patented, automatic steam venting; Gold-n-Brown™ browning function; and a self-adjusting, flush-mounted rotary door handle with a steam venting safety stop. Control to include 2-speed fan and cool-down function. Oven cavity is to be constructed of 18 gauge stainless steel, include an attached spray hose with backflow preventer, and automatic cleaning function. The oven is to accommodate up to 10 full-size sheet pans or 20 full-size hotel pans, include a removable door gasket for easy replacement, and standard right-hand door hinging. The oven is to include the patented smoking function *(only if requested with order)*.

STANDARD CONTROL: To include removable quick-connect internal product temperature probe in the oven interior.
DELUXE CONTROL: To include removable quick-connect internal product temperature probe in the oven interior and programming capability with Rapid-Touch™ operational quick-keys.
S-CONTROL: To include removable quick-connect internal product temperature probe in the oven interior and smoking function as an option.
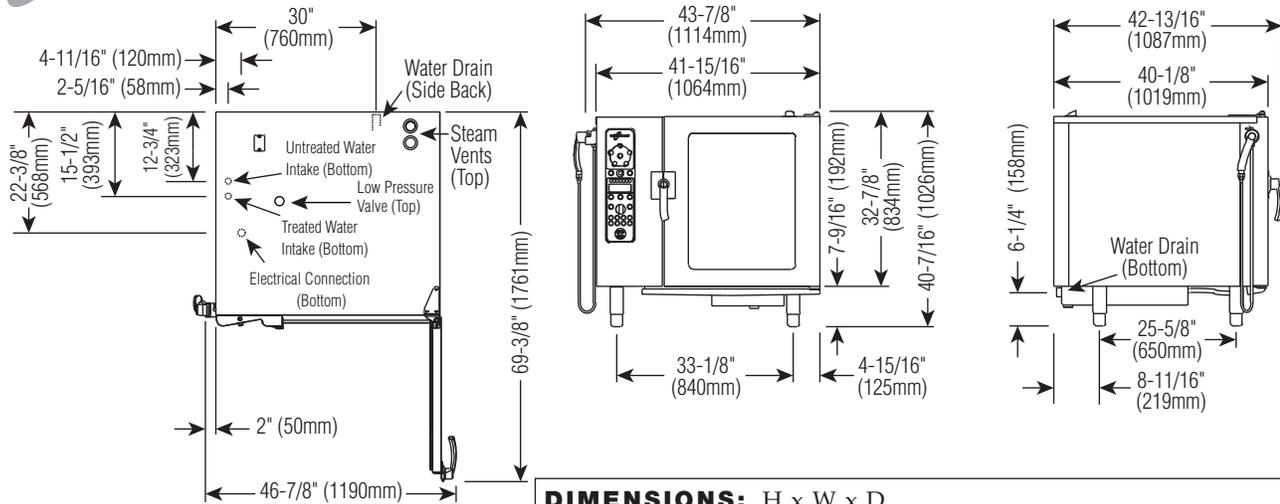
MODELS:

☐ **10•18ESi: STANDARD**

☐ **10•18ESi: DELUXE**

☐ **10•18ESi: S-CONTROL**

STANDARD FEATURES AND ACCESSORIES

- Five (5) stainless steel shelves
- Two (2) stainless steel side racks with
  Ten (10) non-tilt pan support rails
  21-1/16" (535mm) horizontal width between rails
  2-5/8" (65mm) vertical spacing between rails
- Four (4) adjustable legs
- One (1) hand-held shower with backflow preventer PATENT PENDING
- One (1) flush-mounted rotary door latch with steam venting position
- Single-point detachable temperature probe (OPTIONAL ON S-CONTROL MODELS)

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COOKING APPLIANCE 584m

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ANSI/NSF 4

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ALTO·SHAAM® ELECTRIC COMBINATION OVEN/STEAMER 10·18ESi

Left view labels:
30" (760mm)
4-11/16" (120mm)
2-5/16" (58mm)
22-3/8" (568mm)
15-1/2" (393mm)
12-3/4" (323mm)
Water Drain (Side Back)
Steam Vents (Top)
Untreated Water Intake (Bottom)
Low Pressure Valve (Top)
Treated Water Intake (Bottom)
Electrical Connection (Bottom)
69-3/8" (1761mm)
2" (50mm)
46-7/8" (1190mm)

Front view labels:
43-7/8" (1114mm)
41-15/16" (1064mm)
7-9/16" (192mm)
32-7/8" (834mm)
40-7/16" (1026mm)
33-1/8" (840mm)
4-15/16" (125mm)

Right view labels:
42-13/16" (1087mm)
40-1/8" (1019mm)
6-1/4" (158mm)
Water Drain (Bottom)
25-5/8" (650mm)
8-11/16" (219mm)

DIMENSIONS: H x W x D

EXTERIOR:
40-7/16" x 43-7/8" x 42-13/16" (1026mm x 1114mm x 1087mm)

EXTERIOR WITH RETRACTABLE DOOR:
40-7/16" x 47-7/8" x 42-13/16" (1026mm x 1216mm x 1087mm)

INTERIOR:
30-3/4" x 23-1/2" x 28-7/16" (781mm x 596mm x 722mm)

INSTALLATION REQUIREMENTS

Oven must be installed level.
Hood installation is required.
Water supply shut-off valve and back-flow preventer.

WATER REQUIREMENTS

TWO (2) COLD WATER INLETS - DRINKING QUALITY

ONE (1) TREATED WATER INLET:	3/4" NPT
ONE (1) UNTREATED WATER INLET:	3/4" NPT
LINE PRESSURE:	30 to 90 psi
	2.8 to 6.2 bar

WATER DRAIN: 1-1/2" FERNCO CONNECTION WITH AIR GAP

CLEARANCE REQUIREMENTS

LEFT: 6" (152mm) **PLUS SERVICE ACCESS: 18" (457mm)** RECOMMENDED 20" (508mm) FROM HEAT PRODUCING EQUIPMENT

RIGHT: 4" (102mm)   TOP: 20" (508mm) FOR AIR MOVEMENT

BACK: 4" (102mm)   BOTTOM: 5-1/8" (130mm) FOR LEGS

COUNTER-TOP INSTALLATIONS MUST MAINTAIN 4" (102mm) MINIMUM CLEARANCE FROM COUNTER SURFACE.

WATER QUALITY MINIMUM STANDARDS

USING A WATER SUPPLY NOT MEETING ALTO-SHAAM'S MINIMUM WATER QUALITY STANDARDS WILL VOID THIS WARRANTY. It is the responsibility of the purchaser to ensure that incoming water supply is compliant with the specifications listed through adequate treatment measures. Installation of the CombiGuard™ Water Filtration System is recommended, but this system may not address all water quality issues present.

Contaminant	Inlet Water Requirements (untreated water)
Free Chlorine	Less than 0.1 ppm (mg/L)
Hardness	Less than 3 gpg (52 ppm)
Chloride	Less than 30 ppm (mg/L)
pH	7.0 to 8.5
Alkalinity	Less than 50 ppm (mg/L)
Silica	Less than 12 ppm (mg/L)
Total Dissolved Solids (tds)	Less than 60 ppm

ELECTRICAL

	VOLTAGE	PHASE	CYCLE/HZ	AWG	10·18ESi AMPS	kW	10·18ESi/sk AMPS	kW
208-240	at 208	3	50/60	3 Wire plus ground	61.1/ph	22.0	62.5/ph	22.5
	at 240			AWG 2	70.3/ph	29.2	71.5/ph	29.7
380-415	at 380	3	50/60	4 Wire plus ground	33.5/ph	22.0	34.2/ph	22.5
	at 415			AWG 8	40.7/ph	29.2	41.4/ph	29.7
440-480	at 440	3*	50/60	3 Wire plus ground	35.7/ph	27.2	36.4/ph	27.7
	at 480			AWG 8	43.5/ph	36.1	44.0/ph	36.6

* ELECTRICAL SERVICE CHARGE APPLIES

WEIGHT

NET	514 lb EST. (233 kg) EST.
SHIP	754 lb EST. (342 kg) EST.
CRATE	46" X 51" X 46" EST.
DIMENSIONS:	(1168 x 1295 x 1168mm)

CAPACITY

	10·18ESi	10·18ESi/sk
FULL-SIZE PANS: 20" x 12" x 2-1/2"	Twenty (20)	Eighteen (18)
GN 1/1: 530 x 325 x 65mm	Twenty (20)	Eighteen (18)
GN 2/1: 650 x 530 x 65mm	Ten (10)	Eight (8)
FULL-SIZE SHEET PANS:* 18" x 26" x 1" ON WIRE SHELVES ONLY	Ten (10)	Nine (9)

240 lb (109 kg) MAXIMUM

VOLUME MAXIMUM: 150 QUARTS (190 LITERS)

*ADDITIONAL WIRE SHELVES REQUIRED FOR MAXIMUM CAPACITY

Deluxe Control

(PICTURED)

The Combitherm deluxe control includes all the operational functions of the standard control and adds a programming function. Program memory can accept up to 250 procedures, each with up to 20 steps in any combination of cooking modes. The deluxe control also features a set of 8 Rapid-Touch™ keys to assign frequently used programs to cook at the touch of a single button.
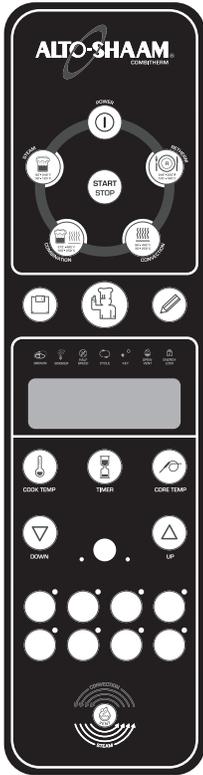
Standard Control

The Combitherm standard control includes all operational functions shown to steam, bake, and roast by time or internal product temperature. The control features the Gold-n-Brown™ automatic browning function, a Retherm Mode for plate regeneration, plus a wide variety of auxiliary functions and operational settings. This control is offered for operators that do not require programming capability.

S-Control

The Combitherm S-Control includes all basic combination oven operational modes with the use of rotary dials. The S-Control also features the Gold-n-Brown™ automatic browning function, an automatic cleaning setting, an oven cool-down function, and a half-speed fan position. S-Control models can also be furnished with a Smoker, which includes the Core Temperature option package.

Steam Mode
Automatic steaming at 212°F (100°C)
Quick steaming between 213°F and 248°F (101°C and 120°C)
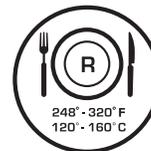Low temp steaming between 86°F and 211°F (30°C and 99°C)

Combination Mode
Steam and convection cooking with a temperature range of 212°F to 482°F (100°C to 250°C)
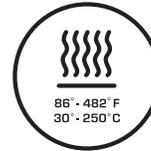
Convection Mode
Cooking without steam at a temperature range of 86°F to 482°F (30°C to 250°C)

Retherm Mode
Food or plated meal reheating with automatic steam injection at a temperature range of 248°F to 320°F (120°C to 160°C)

Core Temperature Mode
Cooking by sensing internal product temperature in any selected cooking mode

Gold-n-Brown™
An automatic browning function to be set or programmed as needed to add additional product color in the combination or convection mode of operation.

Smoking Function (option)
Patented Alto-Shaam technology (U.S. Pat. 7,157,668) provides the ability to smoke any product, hot or cold, utilizing real wood chips. The oven also provides full mode function without smoke or residual smoke flavor. The smoking feature functions in both combination and convection mode and can be programmed into deluxe model operating procedure.

FACTORY INSTALLED OPTIONS

(MAY REQUIRE ADDITIONAL LEAD TIME)

☐ **Smoking Function** (U.S. PAT. 7,157,668)
NO CHARGE WHEN REQUESTED AT TIME OF ORDER.
SAMPLE BAG OF WOOD CHIPS INCLUDED.

☐ **Recessed Door** [5005761]
INCREASES OVEN WIDTH BY 4" (102mm)

☐ **Left-Hand Door Swing** [5005762]

Single-point removable temperature probe (PATENT PENDING)
INCLUDED ON STANDARD AND DELUXE OVENS
☐ OPTIONAL ON S-CONTROL OVENS [5005679]

☐ **Multi-point, hard-wired internal product temperature probe** [5005678]
NOT AVAILABLE ON OVENS WITH S-CONTROL

☐ **Security Devices** [5005680]
FOR CORRECTIONAL FACILITY USE
INCLUDES CONTROL SECURITY PANEL, DOOR LOCK, TAMPER-PROOF SCREW PACKAGE,
FLANGED LEGS FOR FLOOR OR COUNTER BOLTING (PADLOCKS NOT INCLUDED)

☐ **Ventless Hood VHES-10** [5005690]
NOT AVAILABLE ON SMOKER MODELS OR STACKED COMBINATIONS

☐ **Stacking Combinations**
MUST BE SPECIFIED AT TIME OF ORDER
SEE INDIVIDUAL STACKING COMBINATION SPECIFICATIONS SHEETS
  ☐ 6•10ESi OVER 10•18ESi, STATIONARY
  ☐ 6•10ESiN OVER 10•18ESi, STATIONARY
  ☐ ADDITIONAL MOBILE STACKING STAND [5006473]

☐ **Computer Software Options** [5005676]
Not available on S-Control Models.
REFER TO HACCP SPECIFICATION SHEET #9015
FOR APPLICABLE PART NUMBERS
  ☐ **HACCP Documentation**

  ☐ **HACCP Documentation with Kitchen Management**
  NAFEM DATA PROTOCOL
  C O M P L I A N T

  ☐ **Wireless HACCP Documentation with Kitchen Management**
  NAFEM DATA PROTOCOL
  C O M P L I A N T
  IEEE 802.11b STANDARDS
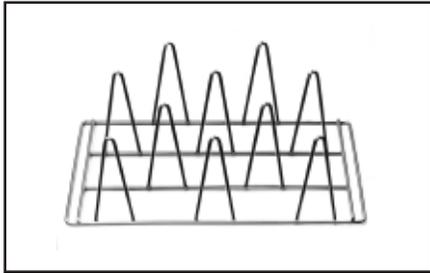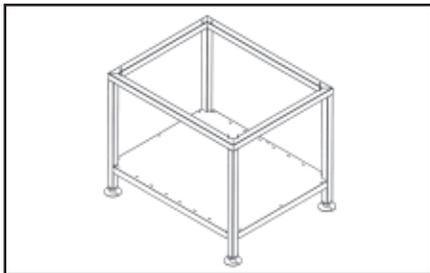
Ten (10) Chicken Roasting Rack
SH-22634

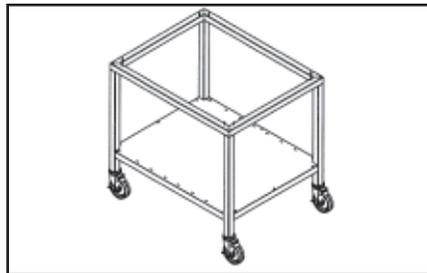Six (6) Chicken Roasting Rack
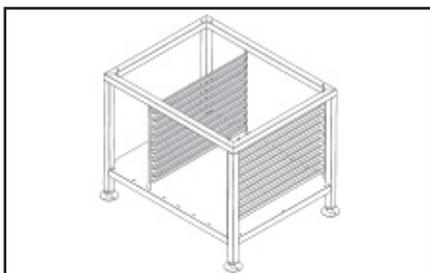(PAN NOT INCLUDED) SH-23000

Fry Basket BS-26730

Grilling Grate SH-26731
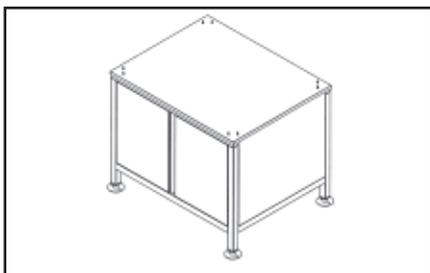
Stationary Stand with Shelf
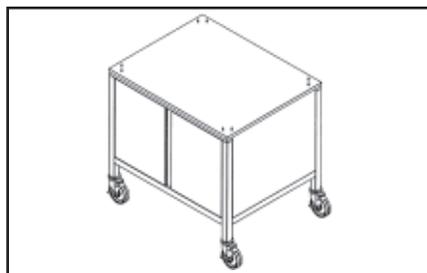5005731

Mobile Stand with Shelf
5005735

Stationary Stand with Pan Slides & Shelf
5005732

Mobile Stand with Pan Slides & Shelf
5005736

Stationary Stand with Shelf & Skirt
5005733

Mobile Stand with Shelf & Skirt
5005737

OPTIONS & ACCESSORIES	
☐ **CHICKEN GREASE TRAY** WITH DRAIN: 1-1/2" (38mm) DEEP	4758
☐ **CHICKEN GREASE TRAY** WITH DRAIN: 2-3/4" (70mm) DEEP	14475
CHICKEN ROASTING RACKS:	
☐ 6 CHICKEN CAPACITY — FITS FULL-SIZE PAN: 6 RACKS PER OVEN	SH-23000
☐ 8 CHICKEN CAPACITY — FITS FULL-SIZE PAN: 6 RACKS PER OVEN	SH-23619
☐ 10 CHICKEN CAPACITY — FITS IN SIDE RACKS: 6 RACKS PER OVEN	SH-22634
☐ **COMBIGUARD™ TRIPLE-GUARD WATER FILTRATION SYSTEM** (INCLUDES 1 CARTRIDGE)	FI-23014
☐ **COMBIGUARD™ REPLACEMENT FILTER**	FI-26356
☐ **FRY BASKET,** 12" X 20" (325mm x 530mm)	BS-26730
☐ **GRILLING GRATE,** 12" X 20" (325mm x 530mm)	SH-26731
☐ **OVEN CLEANER** — SPECIALLY FORMULATED FOR COMBITHERM OVENS	
➥ TWELVE (12) CONTAINERS/CASE, 1 QUART (C. 1 LITER) EACH	CE-24750
☐ **SCALE FREE™** (CITRUS BASED, NON-CORROSIVE DELIMING PRODUCT)	CE-27889
☐ **SERVICE START-UP CHECK** AVAILABLE THROUGH AN ALTO-SHAAM FASTEAM CENTER	SPECIFY AS REQUIRED
☐ **SHELF, STAINLESS STEEL WIRE**	SH-22584
STAND, STAINLESS STEEL (H X W X D):	
☐ ➥ STATIONARY WITH SHELF 28-15/16" x 35-7/16" x 28" (735mm x 900mm x 710mm)	5005731
☐ ➥ STATIONARY WITH PAN SLIDES & SHELF 28-15/16" x 35-7/16" x 28" (735mm x 900mm x 710mm)	5005732
☐ ➥ STATIONARY WITH SHELF & SKIRT 28-15/16" x 35-7/16" x 28" (735mm x 900mm x 710mm)	5005733
☐ ➥ STATIONARY WITH PAN SLIDES, SHELF, & SKIRT 28-15/16" x 35-7/16" x 28" (735mm x 900mm x 710mm)	5005734
☐ ➥ MOBILE WITH SHELF 33-7/8" x 35-7/16" x 28" (859mm x 900mm x 710mm)	5005735
☐ ➥ MOBILE WITH PAN SLIDES & SHELF 33-7/8" x 35-7/16" x 28" (859mm x 900mm x 710mm)	5005736
☐ ➥ MOBILE WITH SHELF & SKIRT 33-7/8" x 35-7/16" x 28" (859mm x 900mm x 710mm)	5005737
☐ ➥ MOBILE WITH PAN SLIDES, SHELF, & SKIRT 33-7/8" x 35-7/16" x 28" (859mm x 900mm x 710mm)	5005738
☐ ➥ STATIONARY 37" x 35-7/16" x 28" (940mm x 900mm x 710mm)	5006170
WOOD CHIPS — BULK PACK 20 lb (9 kg)	
☐ ➥ Apple . . .WC-22543 ☐ ➥ Cherry . . .WC-22541 ☐ ➥ Hickory . . .WC-2829 ☐ ➥ Maple . . .WC-22545	