COMBITHERM®

ecosmart™

10•18ES
COMBIOVEN™

MODEL 10•18ES 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

- 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.

- CombiClean™ feature uses scrubbing jets of water for fully automatic cleaning. Use either commercial-strength CombiClean Tablets or Combitherm Cleaning Liquid Spray.

- Standard and Deluxe control offers additional moisture injection, Delta-T cooking, multiple language display, and other features.

- Enhanced safety feature includes automatic steam venting immediately before cooking time expires. (U.S. Pat. 7,282,674)

SHORT FORM SPECIFICATIONS:

Provide Alto-Shaam Combitherm® counter-top Model 10•18ES electric CombiOven 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, cool-down function, and automatic decalcification. Oven 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, and standard right-hand door hinging.

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 as an option.

MODELS:

☐ **10•18ES: STANDARD**

☐ **10•18ES: DELUXE**

☐ **10•18ES: S-CONTROL**

c(UL)us
LISTED
COOKING APPLIANCE
584m

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ANSI/NSF 4

## 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) removable 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)

ALTO-SHAAM®

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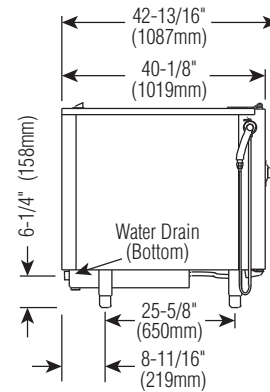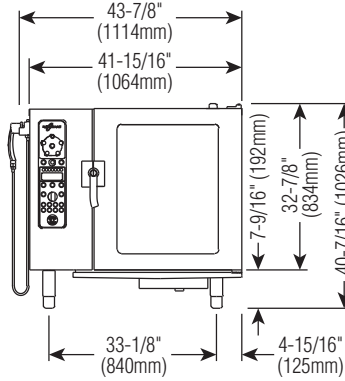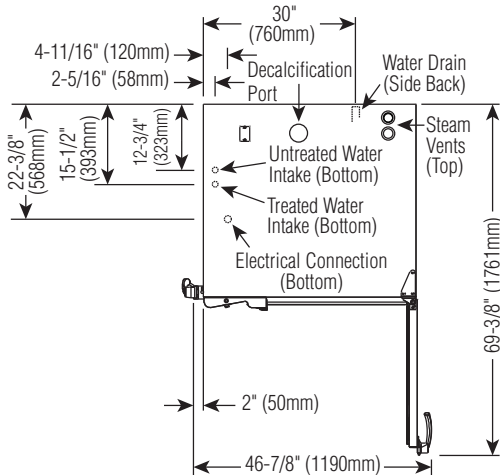
DIMENSIONS: H x W x D

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" CONNECTION WITH AIR GAP

* Can manifold off of one 3/4" line.

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 (DEDICATED CIRCUIT REQUIRED)

	VOLTAGE	PHASE	CYCLE/HZ	AWG	AMPS	kW
208-240	at 208	3	60	3 Wire plus ground	61.3/ph	22.0
	at 240			AWG 2	70.0/ph	29.2
380-415	at 380	3	50	4 Wire plus ground	33.5/ph	22.0
	at 415			AWG 6	40.7/ph	29.2
440-480	at 440	3*	60	3 Wire plus ground	36.0/ph	27.2
	at 480			AWG 6	43.5/ph	36.1

* ELECTRICAL SERVICE CHARGE APPLIES

WEIGHT

NET	514 lb	(233 kg)
SHIP	650 lb	(295 kg)

CRATE DIMENSIONS: (L X W X H)

53" x 45" x 49"

(1346 x 1143 x 1245mm)

CAPACITY

FULL-SIZE PANS:	20" x 12" x 2-1/2"	Twenty (20)
GN 1/1:	530 x 325 x 65mm	Twenty (20)
GN 2/1:	650 x 530 x 65mm	Ten (10)
FULL-SIZE SHEET PANS:*	18" x 26" x 1"	Ten (10)

ON WIRE SHELVES ONLY

240 lb (109 kg) MAXIMUM

VOLUME MAXIMUM: 150 QUARTS (190 LITERS)

*ADDITIONAL WIRE SHELVES REQUIRED FOR MAXIMUM CAPACITY

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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.
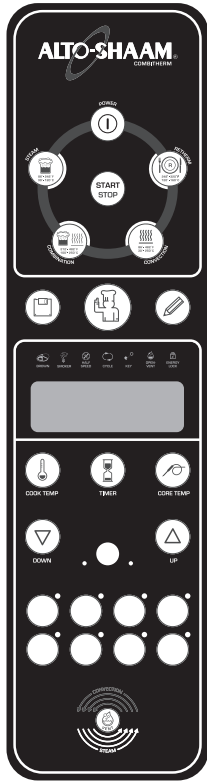
Standard Control

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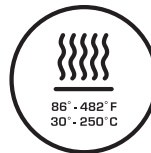
Steam Mode
Automatic steaming at 212°F (100°C)
Quick steaming between 213°F and 248°F (101°C and 120°C)
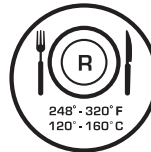Low temp steaming between 86°F and 211°F (30°C and 99°C)

86° - 248° F
30° - 120° C

Combination Mode
Steam and convection cooking with a temperature range of 212°F to 482°F (100°C to 250°C)

212° - 482° F
100° - 250° C

Convection Mode
Cooking without steam at a temperature range of 86°F to 482°F (30°C to 250°C)

86° - 482° F
30° - 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)
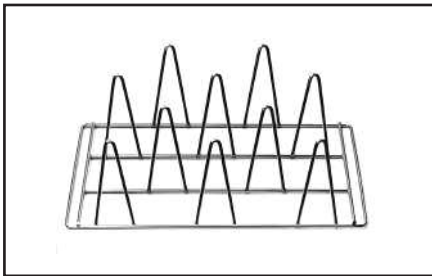
248° - 320° F
120° - 160° C

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.

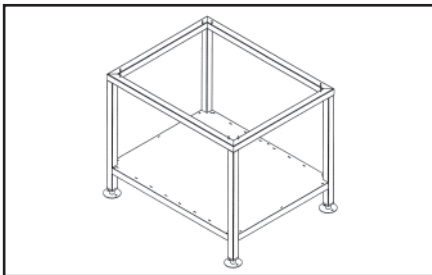Ten (10) Chicken Roasting Rack
SH-22634

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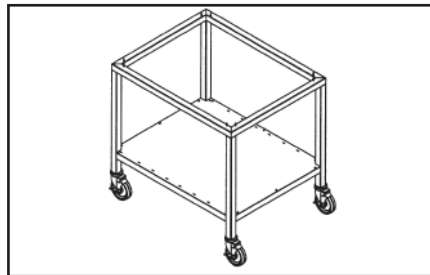(PAN NOT INCLUDED)   SH-23000
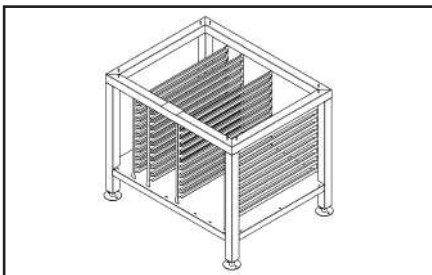

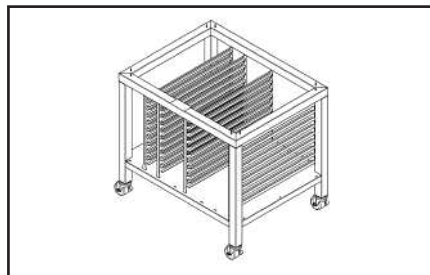Fry Basket BS-26730

Grilling Grate SH-26731

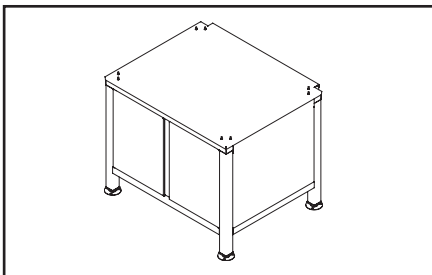Stationary Stand with Shelf
5005731

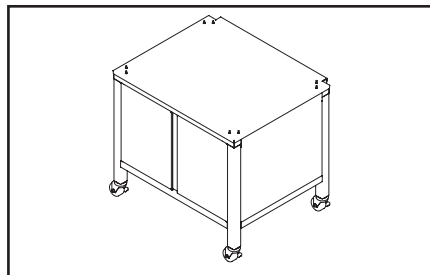Mobile Stand with Shelf
5005735

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

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FACTORY INSTALLED OPTIONS
(MAY REQUIRE ADDITIONAL LEAD TIME)

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

☐ **Left-Hand Door Swing**
INCREASES OVEN WIDTH BY 1" (25mm)

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** FOR CORRECTIONAL FACILITY USE
EXCLUDES TEMPERATURE PROBE
Additional Security Options
☐ ANTI ENTRAPMENT DEVICE [5011081]
☐ CONTROL PANEL SECURITY COVER [5011080]
☐ HASP DOOR LOCK (PADLOCKS NOT INCLUDED) [5011079]
☐ SEISMIC LEG PACKAGE (FOR BOLTING TO THE COUNTERTOP) [5011135]
☐ TAMPER-PROOF SCREW PACKAGE FOR OVEN [5011082]

☐ **Ventless Hood VHES-10** [5011181]
NOT AVAILABLE ON STACKED COMBINATIONS

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

☐ **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 COMPLIANT

☐ **Wireless HACCP Documentation with Kitchen Management**
NAFEM DATA PROTOCOL COMPLIANT
IEEE 802.11b STANDARDS

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
☐ **COMBITHERM CLEANING LIQUID** — SPECIALLY FORMULATED FOR COMBITHERM OVENS		
➥ TWELVE (12) CONTAINERS/CASE, 1 QUART (C. 1 LITER) EACH		CE-24750
☐ **COMBICLEAN™ TABLETS** — SPECIALLY FORMULATED FOR COMBITHERM OVENS		
➥ 90 PACKETS EACH CONTAINER - MUST BE ORDERED IN EVEN QUANTITIES OF TWO (2) OR MORE		CE-28892
☐ **FRY BASKET,** 12" x 20" (325mm x 530mm)		BS-26730
☐ **GRILLING GRATE,** 12" x 20" (325mm x 530mm)		SH-26731
☐ **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	29-7/16" x 35-7/16" x 28" (746mm x 900mm x 710mm)	5005731
☐ ➥ STATIONARY WITH PAN SLIDES & SHELF	29-7/16" x 35-7/16" x 28" (746mm x 900mm x 710mm)	5005732
☐ ➥ STATIONARY WITH SHELF & SKIRT	29-7/16" x 35-7/16" x 29-5/8" (746mm x 900mm x 751mm)	5005733
☐ ➥ STATIONARY WITH PAN SLIDES, SHELF, & SKIRT	29-7/16" x 35-7/16" x 29-5/8" (746mm x 900mm x 751mm)	5005734
☐ ➥ MOBILE WITH SHELF	32-1/16" x 35-7/16" x 28" (815mm x 900mm x 710mm)	5005735
☐ ➥ MOBILE WITH PAN SLIDES & SHELF	32-1/16" x 35-7/16" x 28" (815mm x 900mm x 710mm)	5005736
☐ ➥ MOBILE WITH SHELF & SKIRT	32-1/16" x 35-7/16" x 29-5/8" (815mm x 900mm x 751mm)	5005737
☐ ➥ MOBILE WITH PAN SLIDES, SHELF, & SKIRT	32-1/16" x 35-7/16" x 29-5/8" (815mm x 900mm x 751mm)	5005738
☐ ➥ STATIONARY	37-3/4" x 35-7/16" x 28" (957mm x 900mm x 710mm)	5006170