# COMBITHERM®

ecosmart™

# 6•10ESiN
## COMBIOVEN™

**Boiler-FREE**

- Flash-steam generation 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.

- 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)

- CombiSmoke™ is an optional feature — patented smoking technology (U.S. Pat. 7,157,668; EU Pat. 1659911) that gives operators the unique ability to smoke any product, hot or cold.

MODEL 6•10ESiN DELUXE
CAPACITY OF SIX (6) FULL-SIZE OR GN 1/1 PANS,
SIX (6) HALF-SIZE SHEET PANS

## SHORT FORM SPECIFICATIONS:

Provide Alto-Shaam Combitherm® counter-top Model 6•10ESiN flash-steam 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 and cool-down function. 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 6 half-size sheet pans or 6 full-size hotel pans, and standard right-hand door hinging. The oven is to include the patented CombiSmoke™ 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 as an option.

## MODELS:

☐ **6•10ESiN:** STANDARD

☐ **6•10ESiN:** DELUXE

☐ **6•10ESiN:** S-CONTROL

c(UL)us
LISTED
COOKING APPLIANCE
584m

(UL) EPH
ANSI/NSF 4

C E

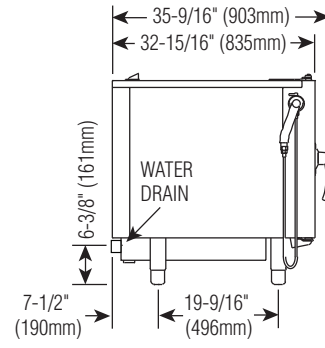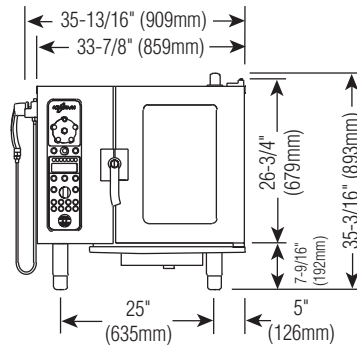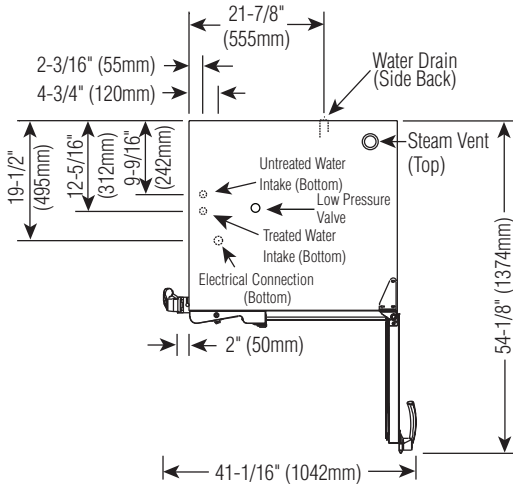## STANDARD FEATURES AND ACCESSORIES

- Three (3) stainless steel shelves

- Two (2) stainless steel side racks with
  Six (6) non-tilit pan support rails
  13" (330mm) 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®

PRINTED IN U.S.A.      DUE TO ONGOING PRODUCT IMPROVEMENT, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.      #426 - 01/10

## INSTALLATION REQUIREMENTS

Oven must be installed level.

Hood installation is required.

Water supply shut-off valve and back-flow preventer.

## DIMENSIONS: H x W x D

**EXTERIOR**:
35-3/16" x 35-13/16" x 35-9/16"  (893mm x 909mm x 903mm)

**EXTERIOR WITH RETRACTABLE DOOR**:
35-3/16" x 39-13/16" x 35-9/16"  (893mm x 1011mm x 903mm)

**INTERIOR**:
17-3/4" x 13-1/4" x 26-1/4"  (450mm x 387mm x 665mm)

## 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 | 6•10ESiN AMPS | 6•10ESiN kW | 6•10ESiN/sk AMPS | 6•10ESiN/sk kW |
|---|---|---|---|---|---|---|---|---|
| 208-240 | at 208 | 1* | 60 | 2 Wire plus ground | 41.0 | 8.5 | 43.3 | 9.0 |
| 208-240 | at 240 | | | AWG 6 | 47.0 | 11.2 | 48.7 | 11.7 |
| 208-240 | at 208 | 3 | 60 | 3 Wire plus ground | 23.3/ph | 8.5 | 25.0/ph | 9.0 |
| 208-240 | at 240 | | | AWG 8 | 27.0/ph | 11.2 | 28.2/ph | 11.7 |
| 380-415 | at 380 | 3 | 50 | 4 Wire plus ground | 13.0/ph | 8.5 | 14.0/ph | 9.0 |
| 380-415 | at 415 | | | AWG 12 | 15.6/ph | 11.2 | 16.3/ph | 11.7 |
| 440-480 | at 440 | 3* | 60 | 3 Wire plus ground | 11.0/ph | 8.5 | 12.0/ph | 9.0 |
| 440-480 | at 480 | | | AWG 8 | 13.0/ph | 11.2 | 14.0/ph | 11.7 |

**\* ELECTRICAL SERVICE CHARGE APPLIES**

## WEIGHT

| | | |
|---|---|---|
| **NET** | 285 lb | (129 kg) |
| **SHIP** | 415 lb | (188 kg) |

**CRATE DIMENSIONS**: (L X W X H)

53" x 45" x 49"

(1346 x 1143 x 1245mm)

## CAPACITY

| | | | 6•10ESiN | 6•10ESiN/sk |
|---|---|---|---|---|
| FULL-SIZE PANS: | 20" x 12" x 2-1/2" | | Six (6) | Four (4) |
| GN 1/1: | 530 x 325 x 65mm | | Six (6) | Four (4) |
| HALF-SIZE PANS: | 10" x 12" x 2-1/2" | | Twelve (12) | Eleven (11) |
| GN 1/2: | 265 x 325 x 65mm | | Twelve (12) | Eleven (11) |
| HALF-SIZE SHEET PANS:* | 18" x 13" x 1" | | Six (6) | Five (5) |
| ON WIRE SHELVES ONLY | | | | |

72 lb (33 kg) MAXIMUM

VOLUME MAXIMUM:  45 QUARTS (57 LITERS)

*ADDITIONAL WIRE SHELVES REQUIRED FOR MAXIMUM CAPACITY

# COMBITHERM®

**ecosmart™**
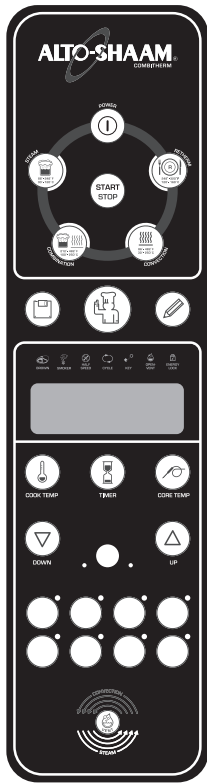
## Deluxe Control

**(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.

**ALTO-SHAAM®**

## 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 CombiSmoke or Core Temperature option package.
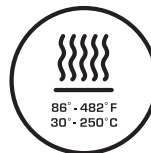
**ALTO-SHAAM®**

### Steam Mode
86°-248°F
30°-120°C

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
212°-482°F
100°-250°C

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

### Convection Mode
86°-482°F
30°-250°C

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

### Retherm Mode
248°-320°F
120°-160°C

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.

### CombiSmoke™ (option)

Patented Alto-Shaam technology (U.S. Pat. 7,157,668; EU Pat. 1659911) provides the ability to smoke any product, hot or cold, utilizing real wood chips. The smoking feature functions in both combination and convection mode and can be programmed into deluxe model operating procedure.

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ecosmart™

# 6•10ESiN
## COMBIoven™
### Boiler-FREE

## FACTORY INSTALLED OPTIONS

(MAY REQUIRE ADDITIONAL LEAD TIME)

☐ **CombiSmoke™** (U.S. Pat. 7,157,668; EU Pat. 1659911)
NO CHARGE WHEN REQUESTED AT TIME OF ORDER.
SAMPLE BAG OF WOOD CHIPS INCLUDED.

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

☐ **Left-Hand Door Swing**
INCREASES OVEN WIDTH BY 1" (26mm)

**Single-point removable temperature probe**
INCLUDED ON STANDARD AND DELUXE OVENS

☐ OPTIONAL ON S-CONTROL OVENS WITHOUT COMBISMOKE OPTION [5005679]

☐ OPTIONAL ON S-CONTROL OVENS WITH COMBISMOKE OPTION [5011457]

☐ **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**
   ☐ 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-5** [5010692]
NOT AVAILABLE ON SMOKER MODELS OR STACKED COMBINATIONS

☐ **Stacking Combinations**
MUST BE SPECIFIED AT TIME OF ORDER
SEE INDIVIDUAL STACKING COMBINATION SPECIFICATIONS SHEETS
   ☐ 6•10ESiN OVER 6•10ESiN, STATIONARY
   ☐ 6•10ESiN OVER 10•10ESiN, STATIONARY
   ☐ 6•10ESiN OVER 7•14ESi, STATIONARY
   ☐ 6•10ESiN OVER 7•14ES, STATIONARY
   ☐ 6•10ESiN OVER 10•18ESi, 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
   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**
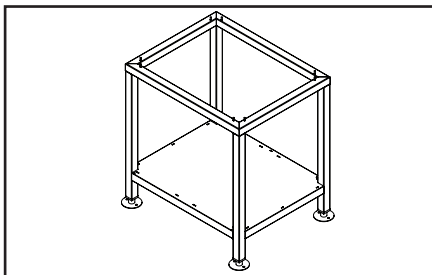
**COMBITHERM®**

Six (6) Chicken Roasting Rack
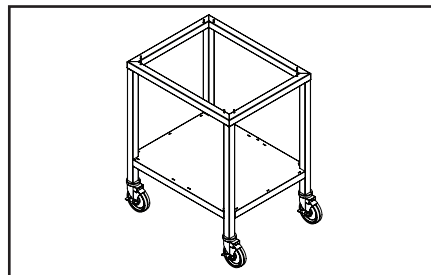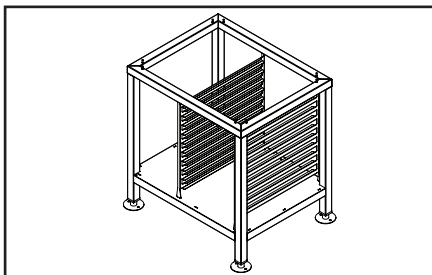(ᴘᴀɴ ɴᴏᴛ ɪɴᴄʟᴜᴅᴇᴅ)    SH-23000



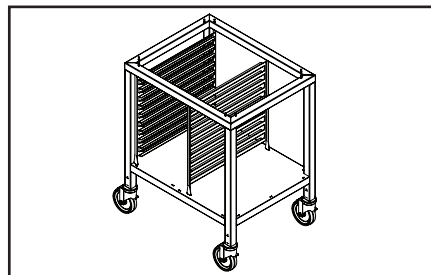Fry Basket  BS-26730
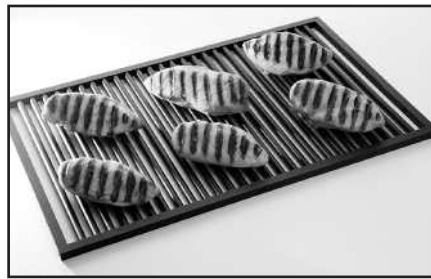


Grilling Grate  SH-26731



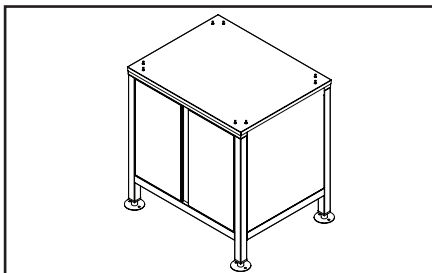Stationary Stand with Shelf
5005713



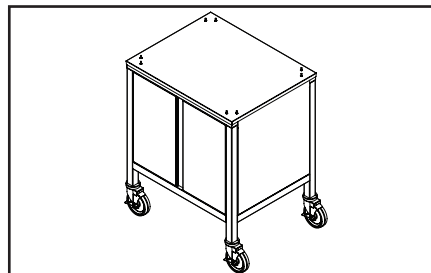Mobile Stand with Shelf
5005717



Stationary Stand with Pan Slides & Shelf
5005714



Mobile Stand with Pan Slides & Shelf
5005718



Stationary Stand with Shelf & Skirt
5005715



Mobile Stand with Shelf & Skirt
5005719

# COMBITHERM®    ecosmart™    6•10ESiN COMBIOVEN™ Boiler-FREE

| OPTIONS & ACCESSORIES | | |
|---|---|---|
| ☐ **CHICKEN GREASE TRAY** WITH DRAIN: 1-1/2" (38mm) DEEP | | 5003463 |
| **CHICKEN ROASTING RACKS**: | | |
| ☐ 6 CHICKEN CAPACITY — FITS FULL-SIZE PAN: 2 RACKS PER OVEN | | SH-23000 |
| ☐ 8 CHICKEN CAPACITY — FITS FULL-SIZE PAN: 2 RACKS PER OVEN | | SH-23619 |
| ☐ **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-2903 |
| **STAND, STAINLESS STEEL (H X W X D):** | | |
| ☐ ➥ STATIONARY WITH SHELF | 29-1/2" x 27-3/8" x 24" (749mm x 695mm x 610mm) | 5005713 |
| ☐ ➥ STATIONARY WITH PAN SLIDES & SHELF | 29-1/2" x 27-3/8" x 24" (749mm x 695mm x 610mm) | 5005714 |
| ☐ ➥ STATIONARY WITH SHELF & SKIRT | 29-1/2" x 27-3/8" x 24" (749mm x 695mm x 610mm) | 5005715 |
| ☐ ➥ STATIONARY WITH PAN SLIDES, SHELF, & SKIRT | 29-1/2" x 27-3/8" x 24" (749mm x 695mm x 610mm) | 5005716 |
| ☐ ➥ MOBILE WITH SHELF | 32-1/8" x 27-15/16" x 24-9/16" (815mm x 709mm x 624mm) | 5005717 |
| ☐ ➥ MOBILE WITH PAN SLIDES & SHELF | 32-1/8" x 27-15/16" x 24-9/16" (815mm x 709mm x 624mm) | 5006189 |
| ☐ ➥ MOBILE WITH SHELF & SKIRT | 32-1/8" x 27-15/16" x 24-9/16" (815mm x 709mm x 624mm) | 5006190 |
| ☐ ➥ MOBILE WITH PAN SLIDES, SHELF, & SKIRT | 32-1/8" x 27-15/16" x 24-9/16" (815mm x 709mm x 624mm) | 5006191 |
| ☐ ➥ STATIONARY | 38-13/16" x 33-15/16" x 37-1/2" (986mm x 861mm x 952mm) | 5007698 |
| **WOOD CHIPS** — BULK PACK 20 lb (9 kg) | | |
| ☐ ➥ Apple . . .WC-22543    ☐ ➥ Cherry . . .WC-22541    ☐ ➥ Hickory . . .WC-2829    ☐ ➥ Maple . . .WC-22545 | | |