

20•20ES SERIES COMBITHERM® COMBIOVEN



- EcoSmart design uses less electricity and water than competitive models. Reduced energy setting further minimizes electricity use.
- Exclusive Gold-n-Brown™ features gives the operator the ability to achieve the ideal cooking environment for the ideal finish.

- Expandable system to meet your specific requirements.
- Cook with the included product temperature probe (not included as standard on S-control models) or by time.
- Cooks with variable steam, convection heat, or a combination of both to roast, steam, bake, or oven-fry. Cooking speeds are increased by as much as 70% compared to conventional cooking methods.
- CombiClean® feature uses jets of water for fully automated cleaning. Use either commercial-strength CombiClean Tablets or Combitherm Cleaning Liquid Spray.
- **CombiTouch®**
 - Intuitive CombiTouch control is fully operable from the touch screen.
 - Store up to 250 recipes, each with up to 9 steps. CombiTouch comes standard with more than 100 preprogrammed recipes and photos.
 - Six precise and consistent Gold-n-Brown™ browning levels.
 - Multi-shelf Timers track cooking time of ten different food items in the same oven.
 - Advance reversing fan design provides excellent baking results and prevents excessive water and power consumption.

MODEL 20•20ES WITH COMBITOUCH CONTROL
ROLL-IN PAN CART INCLUDED
CAPACITY OF FORTY (40) FULL-SIZE OR GN 1/1 PANS,
TWENTY (20) FULL-SIZE SHEET OR GN 2/1 PANS



Provide Alto-Shaam Combitherm® floor-standing Model 20•20Es 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. Oven is to be constructed of 18 gauge stainless steel, include an attached spray hose with backflow preventer, cool-down function, automatic cleaning function, and four (4) adjustable legs. Each oven is to accommodate up to twenty (20) full-size sheet pans or forty (40) full-size hotel pans, include standard right-hand door hinging, and Roll-in pan cart with twenty (20) non-tilt support rails (21-1/8" (537mm) horizontal width between rails, and 2-5/8" (67mm) vertical spacing between rails), ten (10) stainless steel shelves, removable drip tray and cart handle.

- CombiTouch® Control:** includes six different browning levels; two-speed reversing fan with coordinated venting system, USB port for data access, quick-connect single-point internal product temperature probe in the oven interior.

- Deluxe Control:** includes a quick-connect single-point internal product temperature probe in the oven interior and programming capability with Rapid-Touch™ operational quick-keys.

- Standard Control:** includes a quick-connect single-point internal product temperature probe in the oven interior.

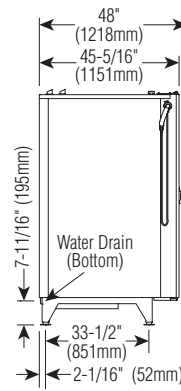
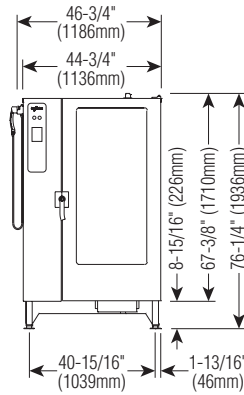
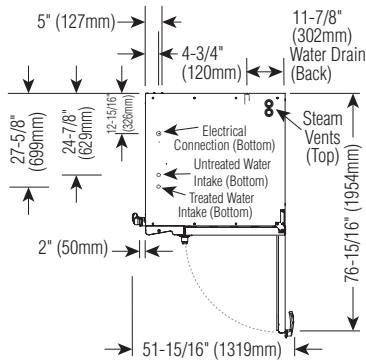
- S-Control:** with quick-connect single-point internal product temperature probe in the oven interior as an option.

FACTORY INSTALLED

- Electrical Choices
 - Specify voltage:
 - 208-240 3ph
 - 380-415 3ph
 - 440-480 3ph
- Door Swing
 - Specify choice
 - Right-hand Door Hinging, standard
 - Recessed Door, optional increases oven width by 4" (102mm)
- Probe
 - Specify choice
 - Multi-point, hard-wired temperature probe [5005678] - not available on ovens with S-Control
 - Single-point, removable temperature probe - included on Touch, Deluxe and Standard controls
 - S-Control oven [5011570]
- Security Devices for correctional facility use.
 - Base package: excludes temperature probe
 - Specify additional choices
 - Anti Entrapment Device [5011081]
 - Control Panel Security Cover [5012224]
 - Hasp Door Lock (padlock not included) [5011079]
 - Tamper-Proof Screw Package for oven [5013925]
 - Seismic Feet Package [5015198]



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DIMENSIONS: H x W x D
EXTERIOR: 76-1/4" x 46-3/4" x 48" (1936mm x 1186mm x 1218mm)
EXTERIOR WITH RECESSED DOOR: 76-1/4" x 50-3/4" x 48" (1936mm x 1288mm x 1218mm)
INTERIOR: 60-1/4" x 26-1/4" x 32-11/16" (1530mm x 667mm x 830mm)

WATER REQUIREMENTS
TWO (2) COLD WATER INLETS - DRINKING QUALITY
ONE (1) TREATED WATER INLET: 3/4" NPT* * Can manifold off of one 3/4" line.
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 A 2" MINIMUM AIR GAP INSTALLED AS CLOSE TO THE OVEN AS POSSIBLE. MATERIALS MUST WITHSTAND TEMPERATURES UP TO 200°F (93°C).
CLEARANCE REQUIREMENTS
LEFT 6" (152mm) RECOMMENDED SERVICE ACCESS: 18" (457mm) 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
TOP 20" (508mm) FOR AIR MOVEMENT
BOTTOM 5-1/8" (130mm) FOR LEGS
*6" (152mm) from grease producing equipment

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.																
<table border="1"> <thead> <tr> <th>Contaminant</th> <th>Inlet Water Requirements (untreated water)</th> </tr> </thead> <tbody> <tr> <td>Free Chlorine</td> <td>Less than 0.1 ppm (mg/L)</td> </tr> <tr> <td>Hardness</td> <td>Less than 3 gpg (52 ppm)</td> </tr> <tr> <td>Chloride</td> <td>Less than 30 ppm (mg/L)</td> </tr> <tr> <td>pH</td> <td>7.0 to 8.5</td> </tr> <tr> <td>Alkalinity</td> <td>Less than 50 ppm (mg/L)</td> </tr> <tr> <td>Silica</td> <td>Less than 12 ppm (mg/L)</td> </tr> <tr> <td>Total Dissolved Solids (tds)</td> <td>Less than 60 ppm</td> </tr> </tbody> </table>	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
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INSTALLATION REQUIREMENTS
<ul style="list-style-type: none"> Oven must be installed level. Water supply shut-off valve and back-flow preventer when required by local code. Hood installation is required.

ELECTRICAL (DEDICATED CIRCUIT REQUIRED)							
MODEL	VOLTAGE	PH	HZ	AMPS	kW	AWG	CORD & PLUG
20•20ES Touch	208 – 240	3	60	151.2 - 173.9/ph	55.3 - 73.2	AWG 4/0	no cord or plug
	380 – 415	3	50/60	83.0 - 101.0/ph	55.3 - 73.2	AWG 2	no cord or plug
	440 – 480	3*	60	71.5 - 87.0/ph	55.3 - 73.2	AWG 2	no cord or plug
20•20ES	208 – 240	3	60	151.2 - 173.9/ph	54.4 - 72.2	AWG 4/0	no cord or plug
	380 – 415	3	50/60	83.0 - 101.0/ph	55.4 - 72.2	AWG 2	no cord or plug
	440 – 480	3*	60	71.5 - 87.0/ph	54.4 - 72.2	AWG 2	no cord or plug

*ELECTRICAL SERVICE CHARGE APPLIES

WEIGHT	CAPACITY												
OVEN NET 720 lb est (327 kg)	<table border="1"> <tr> <td>FULL-SIZE PANS:</td> <td>20" x 12" x 2-1/2"</td> <td>Forty (40)</td> </tr> <tr> <td>GN 1/1:</td> <td>530 x 325 x 65mm</td> <td>Forty (40)</td> </tr> <tr> <td>GN 2/1:</td> <td>650 x 530 x 65mm</td> <td>Twenty (20)</td> </tr> <tr> <td>FULL-SIZE SHEET PANS:* ON WIRE SHELVES ONLY</td> <td>18" x 26" x 1"</td> <td>Twenty (20)</td> </tr> </table>	FULL-SIZE PANS:	20" x 12" x 2-1/2"	Forty (40)	GN 1/1:	530 x 325 x 65mm	Forty (40)	GN 2/1:	650 x 530 x 65mm	Twenty (20)	FULL-SIZE SHEET PANS:* ON WIRE SHELVES ONLY	18" x 26" x 1"	Twenty (20)
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FULL-SIZE SHEET PANS:* ON WIRE SHELVES ONLY	18" x 26" x 1"	Twenty (20)											
OVEN SHIP 1047 lb (475 kg)													
TROLLEY NET 180 lb (82 kg)													
TROLLEY SHIP 245 lb (111 kg)													
CRATE DIMENSIONS: (L x W x H)	480 lb (218 kg) MAXIMUM												
OVEN: 54" x 49" x 85" (1374 x 1245 x 2159mm)	VOLUME MAXIMUM: 300 quarts (380 liters)												
TROLLEY: 35" x 35" x 82" (889 x 889 x 2083mm)													

*ADDITIONAL WIRE SHELVES REQUIRED FOR MAXIMUM CAPACITY



CombiTouch

Deluxe

Standard

S-Control

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Steam Mode

- Automatic steaming at 212°F (100°C).
- Quick steaming.
 - Touch — 213°F to 250°F (101°C to 121°C).
 - Deluxe, Standard, S-Control — 213°F to 248°F (101°C to 120°C).
- Low temperature steaming for poaching or proofing.
 - Touch — 85°F and 211°F (29°C and 99°C).
 - Deluxe, Standard, S-Control — 86°F and 211°F (30°C and 99°C).



Combination Mode

- Combines steam and convection modes for faster production and better moisture retention.
- Improves yield, quality and shelf life.
- Automatic humidity control.
 - Touch — 212°F to 485°F (100°C to 252°C).
 - Deluxe, Standard, S-Control — 212°F to 482°F (100°C to 250°C).



Convection Mode

- Cooking, roasting, baking and finishing applications.
 - Touch — 85°F to 485°F (29°C to 252°C).
 - Deluxe, Standard, S-Control — 86°F to 482°F (30°C to 250°C).



Retherm Mode

- Bulk food or plated meal reheating with automatic steam injection.
 - Touch — 245°F to 320°F (118°C to 160°C).
 - Deluxe, Standard, S-Control — 248°F to 320°F (120°C to 160°C).
- Automatic humidity control.



Gold-n-Brown™

- Gold-n-Brown vents just the right amount of humidity in the oven cavity for perfect browning.
 - Touch — Six levels of Gold-n-Brown are featured.



Moisture Injection

- A quick burst of moisture can be added with a touch of a button at any time when cooking in the convection mode.



HACCP Data Access (CombiTouch only)

- Records cooking mode, time and temperature completed within a two week time period. The information is captured in a text format and can be downloaded to a USB device.

OPTIONS & ACCESSORIES	
<input type="checkbox"/> COMBIGUARD™ BWS BLENDED WATER SYSTEM (INCLUDES 50 GALLON TANK, 1 MEMBRANE & 3 FILTERS)	FI-28727
<input type="checkbox"/> COMBIGUARD™ BWS REPLACEMENT FILTER CARTRIDGE AMS-QT	FI-29316
<input type="checkbox"/> COMBIGUARD™ BWS REPLACEMENT FILTER CARTRIDGE SCLX2-Q	FI-29317
<input type="checkbox"/> COMBIGUARD™ BWS REPLACEMENT PREFILTER FILTER CARTRIDGE CTO-Q	FI-29318
<input type="checkbox"/> COMBIGUARD™ 20 TRIPLE-GUARD WATER FILTRATION SYSTEM (INCLUDES 1 CARTRIDGE)	FI-28728
<input type="checkbox"/> COMBIGUARD™ 20 TRIPLE-GUARD REPLACEMENT FILTER	FI-28744
<input type="checkbox"/> COMBITHERM CLEANING LIQUID — SPECIALLY FORMULATED FOR COMBITHERM OVENS ➔ TWELVE (12) CONTAINERS/CASE, 1 QUART (C. 1 LITER) EACH [SPECIAL HANDLING REQUIRED]	CE-24750
<input type="checkbox"/> COMBICLEAN® TABLETS — SPECIALLY FORMULATED FOR COMBITHERM OVENS ➔ 90 PACKETS EACH CONTAINER	CE-28892
<input type="checkbox"/> EXTENDED ONE-YEAR WARRANTY	CONTACT FACTORY
<input type="checkbox"/> FRY BASKET, 12" x 20" (325mm x 530mm)	BS-26730
<input type="checkbox"/> GRILLING GRATE, 12" x 20" (325mm x 530mm)	SH-26731
<input type="checkbox"/> POULTRY GREASE TRAY WITH DRAIN: 1-1/2" (38mm) DEEP	4758
<input type="checkbox"/> POULTRY GREASE TRAY WITH DRAIN: 2-3/4" (70mm) DEEP	14475
POULTRY ROASTING RACKS:	
<input type="checkbox"/> 6 CHICKEN CAPACITY, SELF-TRUSSING — FITS IN SIDE RACKS: 12 RACKS PER OVEN	5014438
<input type="checkbox"/> 6 CHICKEN CAPACITY — FITS FULL-SIZE PAN: 10 RACKS PER OVEN	SH-23000
<input type="checkbox"/> 8 CHICKEN CAPACITY — FITS FULL-SIZE PAN: 12 RACKS PER OVEN	SH-23619
<input type="checkbox"/> 10 CHICKEN CAPACITY — FITS IN SIDE RACKS: 12 RACKS PER OVEN	SH-22634
<input type="checkbox"/> PREHEAT SEALING STRIP (TO PREHEAT RIGHT HAND UNITS WITHOUT ROLL-IN TROLLEY)	1010739
<input type="checkbox"/> PREHEAT SEALING STRIP (TO PREHEAT RECESSED DOOR UNITS WITHOUT ROLL-IN TROLLEY)	1010657
<input type="checkbox"/> PROBE, SOUS VIDE	PR-34747
<input type="checkbox"/> ROLL-IN PAN CART (H x W x D): 66-1/16" x 28-15/16" x 35-3/16" (1678mm x 734mm x 892mm) INTERCHANGEABLE WITH 20•20 COMBIMATE HOLDING CABINET AND QC2-100 QUICKCHILLER	UN-27970
<input type="checkbox"/> ROLL-IN PAN CART — CORRECTIONAL INSTITUTION (H x W x D): 66-1/16" x 28-15/16" x 35-3/16" (1678mm x 734mm x 892mm) INCLUDES TAMPER-PROOF SCREWS AND WELDED HANDLE INTERCHANGEABLE WITH 20•20 COMBIMATE HOLDING CABINET AND QC2-100 QUICKCHILLER	5010642
ROLL-IN PLATE CART (H x W x D) INTERCHANGEABLE WITH 20•20 COMBIMATE HOLDING CABINET:	
<input type="checkbox"/> 108 PLATE CAPACITY – 65-7/8" x 28-15/16" x 39-7/8" (1674mm x 734mm x 1012mm) 2-11/16" (69mm) SPACING	UN-27971
<input type="checkbox"/> 108 PLATE CAPACITY – 65-7/8" x 28-15/16" x 39-7/8" (1674mm x 734mm x 1012mm) 2-11/16" (69mm) SPACING – CORRECTIONAL INSTITUTION	5009899
<input type="checkbox"/> 78 PLATE CAPACITY – 65-7/8" x 28-15/16" x 39-7/8" (1674mm x 734mm x 1012mm) 3-1/2" (89mm) SPACING	UN-28311
<input type="checkbox"/> SCALE FREE™ (CITRUS BASED, NON-CORROSIVE DELIMING PRODUCT)	CE-27889
<input type="checkbox"/> SERVICE START-UP CHECK AVAILABLE THROUGH AN ALTO-SHAAM FASTEAM CENTER	SPECIFY AS REQUIRED
<input type="checkbox"/> SHELF, STAINLESS STEEL WIRE	SH-22473
<input type="checkbox"/> THERMOBAG (COVER FOR ROLL-IN TROLLEY)	BL-29128