

## CLASSIC CONVECTION STEAMERS 15 PSI BOILER BASE STYLE

Project \_\_\_\_\_  
Item \_\_\_\_\_  
Quantity \_\_\_\_\_  
FCSI Section \_\_\_\_\_  
Approval \_\_\_\_\_  
Date \_\_\_\_\_

### **Cleveland Classic Series** CONVECTION STEAMERS

TWO COMPARTMENT, PRESSURELESS  
ELECTRIC STEAM GENERATOR  
24, 36 OR 48 KW, 24" WIDE CABINET BASE DESIGN

**MODELS:**  24-CEM-24  24-CEM-48  
 24-CEM-36

#### **Cleveland Standard Features**

- Cooking Capacity for up to six 12" x 20" x 2½" deep Cafeteria Pans.
- Pressureless cooking with forced convection steam, permitting doors to be opened while cooking continues.
- Solid State Controls operate water level and safety functions.
- Each compartment is equipped with a 60 minute mechanical timer, separate bypass switch for constant steaming and a cold water condenser for superior cooking results.
- **Instant Steam Standby Mode:** Holds generator at steaming temperature. Allows unit to start cooking instantly.
- **Durable 14 Gauge Stainless Steel Construction:** For Compartment Door and Steam Cooking Cavity.
- **Separate Main Power Switch for "On/Off"**
- **Exclusive Steam Cooking Distribution System:** The exclusive Convection Jets produce a high velocity convection steam without fans. Coved Corner design in cooking compartment distributes heat evenly and is easy to keep clean. Creased top & bottom enhance drainage. Cold Water Condenser for each compartment maintains a dry steam. Fully insulated cooking compartment for thermal efficiency. Removable Stainless Steel Slide Racks for easy cleaning.
- **Exclusive "Cool to the Touch" Compartment Door Design:** Free floating inner door with reversible door gasket provides an air tight seal. Stainless Steel Slam/Latch Door Latch mechanism provides greater reliability.
- **Left Hand Door Hinging:** Compartment Doors hinged left, controls on the right.
- Modular Cabinet Base with Hinged Door.
- **Electric Steam Generator:** Automatic Water Fill on start up.
- **Automatic Generator Drain at shutdown:** Contains a "Water Jet" Spray Rinse Cleaning Cycle to keep drain clear.
- **Automatic Water Level Control System** with Low Water Power Cut-off Circuit.
- Steam generator equipped with High Limit Pressure Safety Switch, 15 psi Safety Valve, and Steam Generator Pressure Gauge.
- Secondary Low Water Cut-Off, factory installed (CALE)  
(Required for AZ. AR. CA. CO. CT. DE. FL. GA. HI. IL. IA. KS. MD. MA. MI. MN. MT. NE. NV. NM. NC. OK. OR. PR. RI. TN. UT. VA. WA. WV., Buffalo, NY, Wash. DC)
- **NSF Certified 6" Stainless Steel Legs** with adjustable flanged feet for a one inch level adjustment.
- Standard voltage 208 or 240 volts, 60 Hz, 3 phase.
- All Controls are serviceable from the front.



#### **Short Form Specifications**

Shall be Two Compartments, CLEVELAND Convection Steamer, Model 24-CEM-\_\_\_\_, Electric Steam Generator, \_\_\_\_KW, \_\_\_\_ volts, \_\_\_\_ phase, 3 wire. Solid State Controls operate timing, water level and safety functions. Electric Steam Generator with Automatic Water Fill on start-up and Automatic Blowdown with additional Manual Drain Valve. For each cooking compartment: 60 minute Mechanical Timer, Manual Operation Mode and Cold Water Condenser. Type 304 Stainless Steel cooking compartment.

#### **Options & Accessories**

- Right Hand Door Hinging, Controls on the Left (DHR)
- Electronic Timer with Compensating Load Feature (ETC)
- ON/OFF Steam Switch only for compartment controls (MC)
- Cafeteria pans in depths of 1", 2½", 4" and 6"
- Voltages other than standard
- Power Take Off Kit (EPTO), Kettle Interconnecting Kit (IMK)
- Correctional Packages
- Stainless Steel Base Frame (FSS)
- Compartment Door Steam Shut Off Switch (SCS)
- Boiler Descaling Pump Kit (107142)
- Water Filters

Each compartment has capacity for:

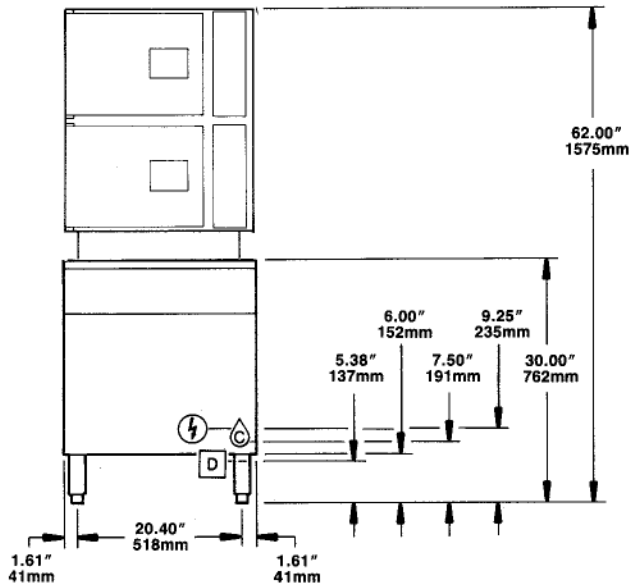
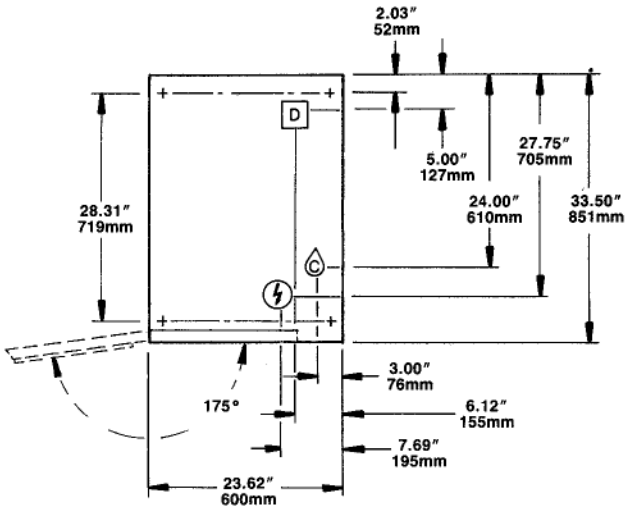
- Three, 12" x 20" x 2½" or six, 12" x 20" x 1" deep Cafeteria Pans.

### WATER QUALITY REQUIREMENT

The recommended minimum water quality standards whether untreated or pre-treated, based upon 10 hours of use per day, and a Daily Blowdown, are as follows:

TOTAL DISSOLVED SOLIDS	less than 60 parts per million
TOTAL ALKALINITY	less than 20 parts per million
SILICA	less than 13 parts per million
pH FACTOR	greater than 7.5
CHLORINE	less than 30 parts per million

Consult a local water treatment specialist for an on site water analysis for recommendations concerning steam generator feed water treatment (if required), in order to remove or reduce harmful concentrations of minerals. The use of highly mineralized water will mean that more frequent servicing of the steam generator will be necessary. The fact that a water supply is potable is not proof that it will be suitable for the generator.



**NOTE:** When ordering optional reverse door openings: Control Panel, door openings and cooking compartments are opposite that shown.

### ELECTRIC ⚡

KW	Volts	Watts	Ph	Amps	Wire	KW	Volts	Watts	Ph	Amps	Wire	
24	208	21,500	1	103.4	2	36	208	32,200	3	89.5	3	
	220	24,000	1	109.1	2		220	36,000	3	94.6	3	
	240	24,000	1	100.0	2		240	36,000	3	86.7	3	
	440	20,200	1	45.9	2		440	30,200	3	39.7	3	
	480	24,000	1	50.0	2		480	36,000	3	43.4	3	
	208	21,500	3	59.7	3		600	36,000	3	34.7	3	
	220	24,000	3	63.1	3		360	32,200	3	51.7	4	
	240	24,000	3	57.8	3		380	36,000	3	54.8	4	
	440	20,200	3	26.5	3		415	36,000	3	50.1	4	
	480	24,000	3	28.9	3		48	208	42,900	3	119.2	3
	600	24,000	3	23.1	3			220	48,000	3	126.1	3
	360	21,500	3	34.5	4			240	48,000	3	115.6	3
	380	24,000	3	36.5	4			440	40,300	3	52.9	3
	415	24,000	3	33.4	4			480	48,000	3	57.8	3
								600	48,000	3	46.2	3
								360	42,900	3	68.9	4
								380	48,000	3	73.0	4
								415	48,000	3	66.9	4

WATER Ⓒ	DRAINAGE Ⓓ	CLEARANCE
1/4" NPT Cold Water Inlet 35 psi minimum 60 psi maximum	<b>The Floor Drain must be located outside the confines of the equipment base.</b>  1 1/2" I.P.S. common drain. Do not connect other units to this drain. Do not use PVC pipe for drain.	Right - 3", Left - 3", Rear - 3" (12" on control side if adjoining wall or equipment is over 30" high for service access) <b>Contact factory for variances to clearances.</b>

**NOTES:**

Cleveland Range reserves right of design improvement or modification, as warranted. Many regional, state and local codes exist and it is the responsibility of the owner and installer to comply with the codes. Cleveland Range equipment is built to comply with applicable standards for manufacturers. Included among those approval agencies are ASME/N. Bd, UL, NSF and CSA.