

# **CREST HOSPITAL HAL CONSOLE SERIES**

Wash (W) • Wash-Rinse (WR) • Wash-Rinse-Dry (WRD)

# Application

Crest HAL Series Ultrasonic Cleaning Systems are designed to thoroughly wash instruments prior to final disinfection and sterilization, to ensure the total removal of tissue, blood and other contaminants. Thoroughly cleaning instruments between uses helps to keep them functioning properly, eliminates cross contamination and assures surgeon efficiency. HAL Series cleaners may be used in high volume areas like the O.R. or in Central Supply.

### **Features**

Optimum Ultrasonic Cleaning Power is assured by constant power output generators operating at 40 kHz. Vibra-bar transducer modules are bonded to the wash tank and provide maximum transmission of energy to clean the instruments.

Automatic Lid and Tray Elevator improves safety and increases the ease of loading instruments.

**E-Z Load Tray Elevator** is positioned at a convenient working height and oriented laterally to ease the loading of heavy trays of instruments.

Illuminated Main Controls include power On/Off, automatic fill, drain alert with cycle counter, adjustable wash cycle timer, drain actuator, lid actuator and emergency stop.

Large Capacity Process Tanks (11, 15 or 20 gallon) will accept a large variety of instrument trays. One instrument tray is included with each unit.

Large Load Capacity optimizes throughput with 22 pounds of instruments in 11 or 15 gallon models and 35 pounds in the 20 gallon model.

Automatic Push Button Ultrasonic Drain with drain indicator light and built-in counter to provide tracking for number of wash cycles, alerts operator when ultrasonic tank should be drained.

**Toe Touch Control** lowers the instruments into the cleaning solution, closes the lid and starts processing. When processed the lid is automatically raised along with the instruments to the unload position.

Safety Interlocks and Controls are provided to assure complete operator safety.

Special Features • wash-rinse & wash-rinse-dry

Rinse Process Tank utilizes the same automatic control system to assure properly cleaned instruments every time. The WRD system includes a similar Dry Process Tank.

Timed Distilled Water and Instrument Milk Lubricating Spray provides proper lubrication of instruments thereby assuring proper function and extending instrument life (specify-DM).

# **Options**

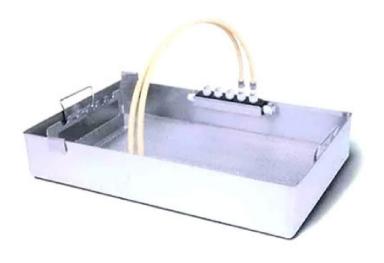
Electrical Voltage supplied for 240 volt operation rather than 208 volt standard voltage (specify voltage required).

Endoscopic instrument flushing system processes up to six endoscopic instruments with both ultrasonic energy and internal flushing (specify-E).

Right to Left Work Flow Console rather than Standard Left to Right Work Flow (specify-HAL 11, 15 or 20 RW). For WR and WRD systems only.

The rinse chamber provides both external water spray and internal flushing followed by a final pure water rinse and lube (if pure water is not available tap water is used). WR and WRD systems only.

The final process of a Hot Air Dry during an internal instrument purging with hospital grade air. For WRD system only.



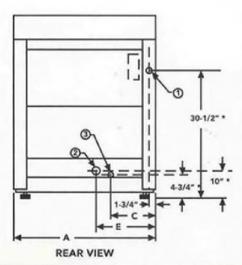
# **Architectural Specifications**

Ultrasonic cleaning system shall be a freestanding console type constructed of stainless steel. Unit is to incorporate a wash tank (and rinse / dry tanks depending on system) with automatic lid(s) and load elevators. The unit is to include ultrasonic generators with slide out chassis for ease in service. The generators are to provide constant output power to assure constant and consistent

energy levels in the wash process. Energy output is to be in the 40 kHz range and complemented with complex resonance frequencies to assure zero gap cleaning efficiency. Wash unit to be Crest Model HAL 11W (11 gal. tank), HAL 15W (15 gal. tank) or HAL 20W (20 gal. tank).

### Wash System (HALW)





### Notes

- 1. 208V/60HZ/3-1PH
- 2. Drain: 1-1/4" CPVC Male Slip
- 3. Hot Water Fill (100/120° F): 1/2" CPVC Male Slip

Electrical connections can be performed from front of unit. All plumbing and electrical connections to be in accordance with local codes. 3 Ph requires 5 wires including Neutral and Ground, 1 Ph requires 4 wires.

### Important

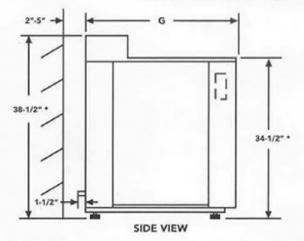
Equipment distance from rear wall is dependent on location of utilities connections.

### Maximum Tray Size

- HAL 11 20-1/2" x 10-1/2" x 3-1/2"
- HAL 15 20-1/2" x 13" x 3-1/2"
- HAL 20 24" x 15" x 3'-1/2"

Model	Dimension (inches)										
Wodel	A	В	С	D	E	F	G				
HAL11W	30		12		8-1/2		31				
HAL15W	30	-	12	-	8-1/2		33				
HAL20W	36	-	12		8-1/2		35				

\* Add 2 inches for casters if applicable



Power	r Requir	ements	- Amp	Sonic	Ship	Fluid	Heat				
Model	Model 208V	208V		208V		0V	Power	Weight	Cap.	Diss.	Tray Size*
	1PH	3РН	1PH	зРН	Watts	Pounds	Gal.	BTU			
HAL11W	15	14	14	14	750	425	11	210	20 x 10-1/2 x 3-1/2		
HAL15W	15	14	16	16	1000	450	15	225	20 x 13 x 3-1/2		
HAL20W	26	22	22	22	1500	500	20	275	24 x 13 x 3-1/2		

# Wash-Rinse System (HALWR)



### Notes

- 1. 208V/60HZ/3-1PH
- 2. Drain: 1-1/4" CPVC Male Slip
- 3. Distilled Water Fill (100/120°F): CPVC Male Slip
- 4. Hot Water Fill (100/120° F): 1/2" CPVC Male Slip

Electrical connections can be performed from front of unit. All plumbing and electrical connections to be in accordance with local codes. 3 Ph requires 5 wires including Neutral and Ground, 1 Ph requires 4 wires.

## Important

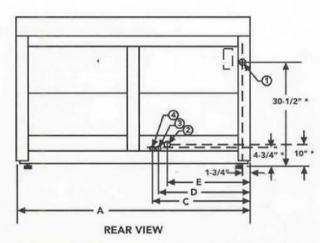
Equipment distance from rear wall is dependent on location of utilities connections.

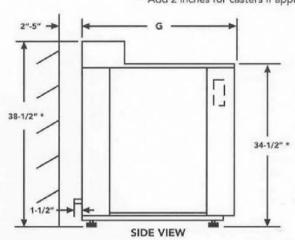
### **Maximum Tray Size**

HAL 11 20-1/2" x 10-1/2" x 3-1/2" HAL 15 20-1/2" x 13" x 3-1/2" HAL 20 24" x 15" x 3'-1/2"

Model	Dimension (inches)										
Model	A	В	С	D	E	F	G				
HAL11WR	60		25-1/4	23-1/2	21-1/4	-	31				
HAL15WR	60	-	25-1/4	23-1/2	21-1/4	-	33				
HAL20WR	70	-	25-1/4	23-1/2	21-1/4	-	35				
HAL11RW	60	-	34-3/4	36-1/2	38-3/4	-	31				
HAL15RW	60		34-3/4	36-1/2	38-3/4	-	33				
HAL20RW	70		42-1/2	44-1/4	46-1/2	-	35				

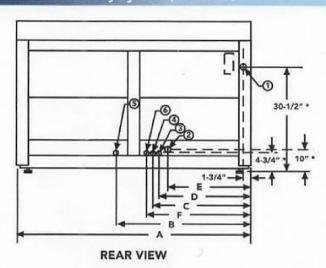
\* Add 2 inches for casters if applicable

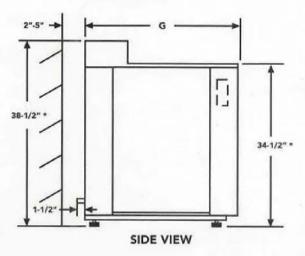




	Powe	r Requir	ements	- Amp	Sonic	Ship	Fluid	Heat	
	208V		208V 240V		Power	Weight	Cap.	Diss.	Tray Size*
	1PH	ЗРН	1PH	3РН	Watts	Pounds	Gal.	BTU	
HAL11WR	17	15	14	14	750	800	11	280	20 x 10-1/2 x 3-1/2
HAL15WR	17	15	16	16	1000	800	15	300	20 x 13 x 3-1/2
HAL20WR	30	26	22	22	1500	850	20	375	24 x 13 x 3-1/2
HAL11RW	17	15	14	14	750	800	11	280	20 x 10-1/2 x 3-1/2
HAL15RW	17	15	16	16	1000	800	15	300	20 x 13 x 3-1/2
HAL20RW	30	26	22	22	1500	850	20	375	24 x 13 x 3-1/2

# Wash-Rinse Dry System (HALWRD)





### Notes

- 1. 208V/60HZ/3-1PH
- 2. Drain: 1-1/4" CPVC Male Slip
- 3. Distilled Water Fill (100/120°F): CPVC Male Slip
- 4. Hot Water Fill (100/120° F): 1/2" CPVC Male Slip
- 5. Cold Water (40° 60° F) 1/2" CPVC Male Slip (Dryer)
- 6. Air (Hospital Grade) (Endo Options) 1/2" NPT Brass

Electrical connections can be performed from front of unit. All plumbing and electrical connections to be in accordance with local codes. 3 Ph requires 5 wires including Neutral and Ground, 1 Ph requires 4 wires.

### Important

Equipment distance from rear wall is dependent on location of utilities connections.

### **Maximum Tray Size**

HAL 11 20-1/2" x 10-1/2" x 3-1/2"

HAL 15 20-1/2" x 13" x 3-1/2"

HAL 20 24" x 15" x 3'-1/2"

Model	Dimension (inches)										
Model	A	В	С	D	E	F	G				
HAL11WRD	60	32	25-1/4	23-1/2	21-1/4	27-1/4	31				
HAL15WRD	60	32	25-1/4	23-1/2	21-1/4	27-1/4	33				
HAL20WRD	70	39	25-1/4	23-1/2	21-1/4	27-1/4	35				
HAL11DRW	60	28	34-3/4	36-1/2	38-3/4	42-3/4	31				
HAL15DRW	60	28	34-3/4	36-1/2	38-3/4	42-3/4	33				
HAL20DRW	70	38	44-1/2	46-1/2	48-1/2	42-3/4	35				

\* Add 2 inches for casters if applicable

Model	Powe	r Requir	ements	- Amp	Sonic	Ship	Fluid	Heat	
	208V 240		0V	Power	Weight	Cap.	Diss.	Tray Size*	
	1PH	ЗРН	1PH	3РН	Watts	Pounds	Gal.	BTU	
HAL11WRD	40	29	36	36	750	825	11	1600	20 × 10-1/2 × 3-1/2
HAL15WRD	40	32	37	37	1000	900	15	1725	20 x 13 x 3-1/2
HAL20WRD	55	43	45	45	1500	950	20	2100	24 x 13 x 3-1/2
HAL11DRW	40	29	36	36	750	825	11	1600	20 x 10-1/2 x 3-1/2
HAL15DRW	40	32	37	37	1000	900	15	1725	20 x 13 x 3-1/2
HAL20DRW	55	43	45	45	1500	950	20	2100	24 x 13 x 3-1/2

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