

APPLICATION

The Reliance 130/130L Cart and Utensil Washer/Disinfector is a high-capacity mechanical washer intended for use in the efficient washing, low-level disinfecting, and drying of carts, utensils, beds, and other miscellaneous reusable items used in the care of patients.

DESCRIPTION

The Reliance 130/130L Cart and Utensil Washer/Disinfector (patents pending) is a mechanical washer/disinfector equipped with a microprocessor control system. The unit is designed with four factory-set adjustable cycles: CART, UTENSILS, BEDS, and ALUMINUM SAFE (optional with the second detergent system).

Seven additional cycles are available for customized programming to meet specific operating requirements. Cycles are programmed with a vapor exhaust phase, and with minimal wash and thermal rinse duration. Two exterior mounted fluorescent lights are included to illuminate the wash chamber.

The Reliance 130/130L Cart and Utensil Washer/Disinfector is available in a double-door configuration. Reliance® 130L Load/Unload Modules (an accessory) are designed to automatically queue and transport surgical case cart(s) into and out of the 130L washer/disinfector wash chamber.

The washer/disinfector can be built to seismic design.

Size (W x H x L)

130 Version

- **Maximum overall dimensions:**
80-7/8" (washer cabinet) + 35" (mechanical core) x 120-1/2" x 92" (2054 + 889 x 3054 x 2337 mm)
- **Effective chamber load capacity:**
46" x 85-1/2" x 82" (1168 x 2172 x 2083 mm)



Floor Mounted Unit with Floor Ramps Shown - accessories not included. (Typical only - some details may vary.)

130L Version

- **Overall dimensions:** 80-7/8" (washer cabinet) + 35" (mechanical core) x 120-1/2" x 116" (2054 + 889 x 3054 x 2337 mm)
- **Effective chamber load capacity:**
46" x 85-1/2" x 106" (1168 x 2172 x 2692 mm)

STANDARDS

This washer/disinfector meets applicable requirements of the following standards:

- **Governing Directive for the affixing of the CE Mark:**
Medical Devices Directive (93/42/EEC) Annex II.
- **ANSI/UL 61010-1, second edition.**
- **CAN/CSA-C22.2, No. 61010-1, second edition.**
- **International Standard IEC 61010-1, second edition.**
- IEC 61010-2-040, IEC 61326-1.

The Selections Checked Below Apply To This Equipment

VOLTAGE

- Assembled:
 - 208 V, 3-Phase, 60 Hz, 3-Wire
 - 480 V, 3-Phase, 60 Hz, 3-Wire
- Disassembled:
 - 208 V, 3-Phase, 60 Hz, 3-Wire
 - 380-415 V, 3-Phase, 50 Hz, 3-Wire
 - 480 V, 3-Phase, 60 Hz, 3-Wire

CONFIGURATION

- 130 Double Power Door (Pass-Through)
- 130L Double Power Door (Pass-Through)

ACCESSORIES

- Barrier Wall Flange Kit (two sets)
- Nonservice Side Panels
- Service Side Access Panels
- Air Compressor (available only domestically)
 - 208 V 230 V 460 V
- Utensil Cart
- Floor Ramps for Floor Mounted Unit (two)
- Leveling Legs for Mechanical Core
- Automatic Descaler System
- Load/Unload Modules*
- Seismic Tie-Down Kit

* See separate product literature (SD775) for Reliance 130L Load/Unload Modules.

OPTIONS

- Second Detergent System
- Drain Discharge Cool Down System

Item _____

Location(s) _____

FEATURES

Sumless Solution Delivery System. The washer/disinfector cabinet base is 7-1/4" (184 mm) deep, eliminating the need for a traditional pit.

Solutions are heated by an in-line stainless-steel heat exchanger. A thermal rinse tank includes a steam coil to maintain water temperature for thermal rinse phases.

Spraying System. The washer/disinfector includes two horizontally mounted spray headers, one on each side of the wash chamber. Spray arms alternate movement vertically.

Inward Sliding Doors. Powered, interior sliding emergency safety exit doors are designed for hands-free door operation, and elimination of drippage on the floor. Doors open automatically when the load is placed in front of the chamber. Doors are made of #304 stainless steel (No. 4 finish). Two long, tempered, tinted windows allow the operator to view inside the wash chamber with the doors closed. Doors are equipped with Silicone and EPDM gasketing.

Mobile Mechanical Core contains all major mechanical and electrical components. The mechanical core is placed on casters to allow for easy access to the components of the system, and for efficient installation. The mechanical core is designed with hinged electrical and chemical compartments to further promote accessibility to all components of the system.

Interior Light. Two exterior mounted 23-W fluorescent lights are provided to illuminate the wash chamber.

Integral Self-Priming Automatic Chemical Dispenser.

Peristaltic pumps dispense a predetermined amount of liquid chemical into the wash solution staging tanks prior to treatment phases. Chemical flow meters measure the amount of the chemical to inject, and monitor the quantity of chemical used. Two pumps are included as standards: alkaline, and dry aid.

Toolless, Vertical Self-Cleaning Filter. During recirculation, solutions are filtered through a self-cleaning filter before being directed to their respective staging tank(s). The filter is thoroughly flushed between each cycle phase. The cartridge is easily removed for occasional maintenance by using a sanitary quick-disconnect clamp.

Wash Chamber is constructed of 14 gauge, #304 stainless steel (No. 4 finish), argon-welded and polished. Base is made of #304 L stainless steel. Chamber flooring consists of three removable stainless-steel panels designed with gratings running lengthwise in the chamber allowing for quiet loading and unloading.

Other Components. All components of the wash/rinse system, including screens, spray headers, piping, and booster in-line heat exchanger are constructed of #304 stainless steel. High-pressure recirculating and suction pumps are made of #316 L stainless steel. Ball valves are constructed of Teflon® and #316 L stainless steel.¹

Unit frame, cabinet, mobile mechanical core, and all fasteners are constructed of #304 stainless steel. Aluminum sheathed rigid fiberglass insulation, 1" (25 mm) thick covering the top

and sides of the chamber exterior, reduces heat loss and noise level to the work area.

Treatment Staging Tanks are equipped with an automatic solution level control, automatic hot water fill, and safety overflowing piping. Tanks are made of #304 L stainless steel and are fully insulated with 1" (25 mm) thick aluminum sheathed fiberglass to prevent heat loss and burn hazard. The bottom of the tanks are sloped toward the water outlet for optimum drainability. Each solution tank includes an internal baffle that deflects solutions to the tank walls to assure self-cleaning of the tank during the recirculation process. Capacity is 38 U.S. gal (143.85 L).

High Pressure Pump. All treatments are under pressure of a 10 HP motor, 60 U.S. gal/min at 125 psig (227 L/min at 8.6 bar) head pressure delivering solution at over 100 psi at each spray jet. Pump impeller, shaft, and casing (all #316 L stainless-steel construction) are fitted with a mechanical seal. The pump motor is equipped with a TEFC (totally enclosed fan cooled) drip-proof frame, magnetic starter, overload protection, and sealed bearings, requiring no lubrication.

Nonrecirculated, Vented Drying System. The vented drying system effectively dries the processed load at the completion of each cycle. Fresh, heated filtered air is blown at high velocity through all four corners of the wash chamber and to the load. Dry air is then evacuated through the chamber vent opening.

Automatic Floor Tilting System slopes the processed load at the start of the cycle to properly drain flat surfaces of carts. The floor is automatically returned to its level position at completion of the cycle for smooth loading and unloading.

Integral Exhaust Fan assists the building ventilation system when evacuating vapor from the wash chamber. Fan impeller, casing, and motor shaft are made of stainless steel.

CYCLE DESCRIPTION

ADVISORY NOTE: *This washer/disinfector is specifically designed to only process goods as outlined in this tech data. If there is any doubt about the use of a specific material or product, contact the manufacturer of the product for recommended washing techniques.*

STERIS does not intend, recommend, or represent in any way that this Reliance 130/130L Cart and Utensil Washer/Disinfector be used for the terminal disinfection or sterilization of any regulated medical device. The Reliance 130/130L Cart and Utensil Washer/Disinfectors are intended only to perform an initial step in the processing of soiled, reusable items used in the care of patients. If medical devices will be contacting blood or compromised tissues, such devices must be terminally processed in accordance with good hospital practices (GHP) before each use in human patients.

Wash solution from Tank 1 or Tank 3 (if the second detergent system option is present) is recirculated through the spray system for the selected time period (02:00-10:00). Solution can be heated from 120°F - 165°F (49°C - 74°C). Water can be saved and reused for subsequent cycles.

¹Teflon® is a registered trademark of E.E. Dupont de Nemours and Company.

Thermal Rinse. Fresh hot water from Tank 2 is sprayed over the load and recirculated for the selected time period (02:00-08:00). Solution temperature is 180°F (82°C) at the spray jets.

Vapor Exhaust phase removes hot humid air from the chamber. Selected time for this nonrecirculated phase is between 01:00 and 05:00.

Nonrecirculated, Heated Air Drying phase consists of blowing nonrecirculated air, heated to 220°F (104°C) on the load, and evacuating it through the vent connection. Selected time for this nonrecirculated phase is between 00:00 and 15:00.

CONTROL SYSTEM

Design Features

Microcomputers monitor and control washer operation and functions. Cycle progresses automatically through the designated phases, as programmed.

Control system features **preprogrammed parameters** for each cycle. If the operator selects an out-of-range setting when modifying the cycle values, the control system alerts the operator with a reference message and halts further operation until the correct value is entered.

Controls are housed in a vertical column, mounted flush with the face of the chamber. Salient features include:

- **Hinged Door** provides access to the main control panel.
- **POWER-OFF/STANDBY Switch** includes two settings which direct operation of the control. Positioning the switch to POWER initializes the controls and prepares the washer for daily cycle operation. Positioning the switch to OFF/STANDBY places the washer in Standby mode, and turns off all AC power to the control after piping and all tanks have drained.
- **Printer Function Switch** controls the following two printer functions:
 - » **Print.** Pressing the top of the printer function switch generates a printout of the actual water temperature, actual solution temperature in Tank 2, actual pump pressure during process, and actual temperature of effluent (optional Drain Cool Down System).
 - » **Print Values.** Pressing the bottom of the printer function switch generates a complete printout of all currently set cycles and cycle values.
- **Integral Thermal Printer** provides an easy-to-read printed record of whether the load was properly processed at the preset temperature, as well as a complete list of the alarm and abort in-cycle messages. Printer take-up spool automatically stores an entire roll of paper, providing cycle records which can be saved for future reference.
- **Main Control Panel** can be installed on either the load or unload side of the washer. It allows the operator to select, modify, and review cycles and treatment values, as well as to start, stop, and reset cycles, and monitor cycle performance and status.
- **Remote Control Panel.** A second control panel can be installed on the opposite side of the washer. All washer functions (except for POWER-OFF/STANDBY and PRINT/PRINT VALUES) can be directed from the remote control panel. The display screen concurrently shows the same message as displayed on the main control panel. There is no printer on the remote control panel.

- **Display Window** features a two-line x 20-character, easy-to-read vacuum fluorescent display. The display shows cycle status, time, temperature, warnings, and instructional messages. The display also indicates any abnormal condition that may occur when a cycle is in progress. All messages are complete readouts, with no codes to be cross-referenced.
- **Status Touch Pads** allow the operator to view available cycle menus, select a cycle, review a cycle before processing, start, stop, and abort cycles.
- **Manual Operation Touch Pads** allow the operator to acknowledge alarm conditions, and open/close chamber door(s).
- **Program Touch Pads** allow the operator to bypass cycle phases, and/or modify preset cycle values to meet specific operating needs. Cycle parameters may be protected by a security access code. Available cycles, along with phase times and temperatures for each cycle, can be modified using the CHANGE VALUES touch pad.
- **Service Mode** is accessible through the main control panel for service and maintenance purposes.
- **Time Display and Printout Units** permits selection of either standard AM/PM or 24-hour military (MIL).
- **Security Access Code** requires entry of a four-digit access code to change cycles and cycle values. Pressing the CHANGE VALUES touch pad causes the display to request the entry of an access code. If the access code is not properly entered, the display advances to the first cycle (and related cycle values) not requiring an access code.
- **Date and Time** permits change of date and time.

TECHNICAL DATA

The Resistive Temperature Device (RTD) sensor is used to provide accurate control input and readout throughout all cycles. The RTD sensor is located in-line, just prior to the spray jets, to assure load temperature is reached.

An **internal battery** backs up all cycle memory for up to 10 years. In case of a power failure, once power returns the event is recorded on the printout. Even if the RAM (random access memory) battery should fail, factory-setting values will be preserved in the control's main EPROM (erasable programmable read-only memory) chip.

Water Level Sensors monitor water level of the staging tanks. If water level sensor failure occurs, the alarm sounds and a message is printed.

Printer Board has a 24-column, alphanumeric printer which produces characters within a 5 x 7 dot matrix on 2-1/4" (57 mm) wide, single-ply thermal paper. Printer is controlled by a **dedicated microcomputer**. Print speed is approximately 48 lines per minute. Paper tape exits from an opening flush with the surface of the control panel, and is taken up automatically by an idler spool mounted above the main printer assembly. Five paper tape rolls are furnished with each unit.

SAFETY FEATURES

Emergency Exit Safety. Washer is provided with four emergency safety exit doors from the wash chamber. Operator simply needs to push between the door panels from inside the wash chamber for doors to open.

Safety Door Switch. A microswitch prevents a cycle from starting if the doors are not fully closed, and also stops the unit if doors are opened during a cycle. Doors must be closed to continue operation.

Emergency Stop Pushbuttons. The washer/disinfector is equipped with two external Emergency Stop pushbuttons that automatically stop operation of the unit.

Door Interlock. The safety interlock mechanism prevents both doors from being opened simultaneously, preventing cross-contamination. The clean side/unload door cannot be opened until the cycle has been successfully completed.

Labeling. The washer/disinfector is labeled with warning and caution pictograms to warn the operators and service technicians of precautions to be taken.

Emergency Stop Cables. Located on each side of the interior wash chamber, instantly stop washer/disinfector operation if pulled.

Interior Warning Light. Light flashes once prior to cycle start. The washer/disinfector then waits for the programmed period of time before initializing the washing process.

INSTALLATION

The washer/disinfector can be fully enclosed for freestanding or recessed installation. Clearance between the floor and ceiling must be at least 120" (3048 mm) for pit-mounted units, and 127" (3225 mm) for floor-mounted units. If the washer is recessed through one or two barrier walls, stainless-steel barrier flanges can be purchased to provide a finished appearance.

OPTIONAL FEATURES

Second Detergent System allows an additional detergent to be introduced to the wash cycle. The washer/disinfector comes with additional staging tank, valves, chemical dispenser, and flowmeter. The second detergent solution is saved for subsequent cycles.

Automatic Descaler System allows the operator to automatically process a descaling cycle without having to handle strong chemicals. The system includes a chemical injection pump with flowmeter, 50' (15 m) of tubing and pick-up tube for use with remote 5 to 45 U.S. gallons (20 to 170 L) chemical containers.

Drain Discharge Cool Down (by Cold Water Injection) allows the injection of cold water into the drain piping to cool down effluents during draining. A cold water inlet valve is provided and a RTD is integrated in the drain piping to monitor the temperature of effluents during the draining phase. Cold water will automatically be injected to effluent when temperature reaches 140°F (60°C). A cold water connection is required for this option.

ACCESSORIES

Reliance 130L Load/Unload Modules* are designed to directly interface with a 130L Cart and Utensil Washer/Disinfector (pit-mounted units only) to automatically queue and transport surgical case carts into and out of the wash chamber, providing a fully automated cart conveyor system.

**See SD775 for details.*

Service Side Enclosure Panels and supports are provided to enclose the mechanical core. Enclosure is designed to be easily cleaned, and offers access to the mechanical core.

Nonservice Side Enclosure Panels are provided to cover insulation on the nonservice side of unit cabinet.

Remote Air Compressor, complete with tank and pressure switch, is available in either 208 V or 460 V. Oilless air compressor operates at 59 dBa. Wiring at installation not provided by STERIS.

Floor Ramps, 4' (1.2 m) long, are provided with guards on each side to help the operator guide the load into the washer. Slope of the ramp not to exceed 6.5° to enable easy loading of carts in the wash chamber.

Barrier Wall Flange Kit consists of stainless-steel side, top, and bottom flanges to seal the openings between the unit, wall, floor, and ceiling.

Leveling Legs for Mechanical Core are supplied to facilitate leveling of the mechanical core. The legs are threaded and provide up to 2-1/2" (63 mm) of adjustment.

Seismic Tie-Down Kit includes hardware for properly securing the washer to the building floor. The washer is designed to comply with Seismic Zone 3 and 4 requirements.

Utensil Cart is designed to process large volumes of reusable stainless-steel, plastic, or aluminum basins, bedpans, beds, surgical lamp handles, rigid instrument containers, and various utensils through automatic cart washers. Cart frame is all welded stainless-steel tubing. Racks are steel wire, PVC (poly vinyl chloride) dipped to eliminate scratching the utensils. Casters are 5" (127 mm) swivel.

PREVENTIVE MAINTENANCE

A global network of skilled service specialists can provide periodic inspections and adjustments to help ensure low-cost peak performance. STERIS representatives can provide information regarding annual maintenance programs.

CHEMICAL ADDITIVES SPECIFICATIONS

To achieve optimal performance, the selected chemical additives must meet, as a minimum, the specifications in the chemical additives chart.

Follow detergent label recommendations for the concentration of chemical to use.

To achieve maximum cleaning efficiency, STERIS recommends the following chemicals:

- **Kart Klenz® III Cart Detergent**, formulated for cleaning carts and stainless-steel utensils.
- **Alsa-Klenz® Neutral pH Cleaner**, a neutral pH formula for cleaning stainless-steel, aluminum, and plastic utensils, as well as accessories commonly used in healthcare facilities.
- **Dri 'N Shine® Drying Agent**, formulated for rinsing accessories, utensils, carts, as well as miscellaneous stainless-steel, and plastic accessories.
- **Liquid Descaler Liquid Scale Remover** used for descaling washer/disinfectors in healthcare facilities. Not recommended for use on aluminum surfaces, galvanized metals, and mild steel.

IMPORTANT: STERIS does not promote, recommend, or endorse the use of any other type of chemical additives in the processing of articles in the Reliance 130/130L Cart and Utensil Washer/Disinfector, such as high alkaline detergents (pH > 12), alcohol rinses, and liquid disinfectants, including hypochloric acid (bleach).

NOTES

1. Machine is shipped in four crates if disassembled (knockdown), three crates if assembled.

The following dimensions are W x H x L (each crate)

130 and 130L washers – disassembled: maximum size is 49 x 95 x 121" (1245 x 2413 x 3073 mm). Maximum weight (each crate): 2000 lbs (907 kg).

130 and 130L washers – assembled: maximum size is 89 x 117 x 109" (2260 x 2972 x 2769 mm). Maximum weight is 4000 lbs (1818 kg).

130 and 130L washers – disassembled: maximum size is 89 x 117 x 126" (2260 x 2972 x 3200 mm). Maximum weight is 2000 lbs (907 kg).

2. STERIS recommends that shutoff valves and vacuum breakers (not provided by STERIS) be installed on service lines, and that fused disconnect switches (with lockout in OFF position; not provided by STERIS) be installed in electric supply lines near the equipment.
3. Pipe sizes shown indicate terminal outlets only. Building service lines provided (not provided by STERIS), must supply the specified pressures and flow rates.
4. For all ventilation ducting from the washer, STERIS recommends installation of a dedicated corrosion-proof, water-tight duct, rated to an operating temperature of 210°F (99°C) or more, to the exterior of the building, sloped toward the washer with condensate drain connection.
5. Minimum ceiling height from the floor is 120" (3048 mm) for pit mounted units, and 127" (3226 mm) for floor-mounted units.
6. STERIS recommends a well-lighted service area (if applicable), along with the provision of a convenience outlet for maintenance.
7. Recommended air compressor:
3 HP POWEREX, 30 U.S. gallons (114 L) tank, 7.7 CFM at 100 psig (689.5 kPa); noise level is 59 dBA.

The base language of this document is ENGLISH. Any translations must be made from the base language document.

Reliance 130/130L Chemical Additives Chart

Product Description	Use-Dilution Range oz/gal (mL/L)	pH Range at Use-Dilution	Other Applicable Requirements
Kart-Klenz III	1/4-2 (2-16)	9.0-12.0	liquid, nonfoaming and viscosity below 200 SSU (0.0004623 ft ² /sec.)
Alsa-Klenz	1/4-2 (2-16)	7.5-8.0	liquid, nonfoaming, free rinsing and viscosity below 200 SSU (0.0004623 ft ² /sec.)
Liquid Descale	1/2-2 (4-16)	<2.5	liquid, nonfoaming, phosphoric acid based and viscosity below 200 SSU (0.0004623 ft ² /sec.)
Dri 'N Shine	0-2/100 gal. (0-16/100 mL)	(6.8-7.2)	liquid, nonfoaming and viscosity below 200 SSU (0.0004623 ft ² /sec.)

ENGINEERING DATA	
Shipping Weight (max): Chamber	4000 lbs (1814 kg)
Mechanical Core	2000 lbs (907 kg)
Operating Weight: Washer Disinfector	2800 lbs (1270 kg)
Mechanical Core	2640 lbs (1197 kg)
Hot Water Consumption per cycle:	16 U.S. gal (61 L)
Steam Consumption per cycle (with hot tap water heated at 140°C):	85 lbs (39 kg)
Noise Level¹:	84.9 dBa
Heat Loss:	12,000 BTU/hr

¹ Calculated as described in ISO-3746 standard

Reliance 130/130L Cycle Description Chart
Adjustable Cycle Parameters

	Wash	Thermal Rinse (Guaranteed)	Vapor Exhaust	Drying	Floor Tilting
Selectable Tanks	Tank 1 or Tank 3 (opt.)	Rinse (Tank 2)	—	—	Yes/No
Injection Range	1/4 - 4 oz/gal (2 - 32 mL/L)	0-2 oz/100 gal (0 - 16 mL/100 L)	— —	— —	
Duration Range	02:00 to 10:00	02:00 to 08:00	01:00 to 05:00	00:00 to 15:00	
Temperature Range	120 to 165°F (49 to 74°C)	180°F (82°C)	—	—	

Reliance 130/130L Cycle Description Chart
Preprogrammed Cycles Factory Settings

		Wash	Thermal Rinse (Guaranteed)	Vapor Exhaust	Drying	Floor Tilting
Cart	Selected Tank	Tank 1	Rinse (Tank 2)	—	—	Yes
	Injection Rate	1/4 oz/gal (2 mL/L)	2 oz/100 gal (16 mL/100L)	—	—	
	Duration	02:00	02:00	01:00	03:00	
	Temperature	120°F (49°C)	180F (82°C) ¹	—	—	
Utensils	Selected Tank	Tank 1	Rinse (Tank 2)	—	—	No
	Injection Rate	1/4 oz/gal (2 mL/L)	2 oz/100 gal (16 mL/100L)	—	—	
	Duration	06:00	02:00	01:00	05:00	
	Temperature	120°F (49°C)	180F (82°C)	—	—	
Beds	Selected Tank	Tank 1	Rinse (Tank 2)	—	—	Yes
	Injection Rate	1/4 oz/gal (2 mL/L)	2 oz/100 gal (16 mL/100L)	—	—	
	Duration	02:00	02:00	01:00	03:00	
	Temperature	120°F (49°C)	180F (82°C)	—	—	
Alumsafe	Selected Tank	Tank 3 (optional)	Rinse (Tank 2)	—	—	No
	Injection Rate	1/4 oz/gal (2 mL/L)	2 oz/100 gal (16 mL/100L)	—	—	
	Duration	06:00	02:00	01:00	05:00	
	Temperature	120°F (49°C)	180F (82°C)	—	—	
Custom Cycles	Selected Tank	Tank 1 or Tank 3 (opt.)	Rinse (Tank 2)	—	—	No
	Injection Rate	1/4 - 4 oz/gal (2 - 32 mL/L)	0 - 2 oz/100 gal (0 - 16 mL/100L)	—	—	
	Duration	02:00	02:00	01:00	03:00	
	Temperature	120 - 165°F (49 - 74°C)	180°F (82°C)	—	—	
Phases			Details			
Decontam (This cycle cannot be modified)	1. Drain Tanks 1 and 2 (3 optional) and piping			—		
	2. Fill Tanks 1 and 2 (3 optional)			Manually add descaler in each tank		
	3. Recirculate each tank			10 minutes each, 150°F (66°C) maintained non-guaranteed		
	4. Drain and refill all tanks			Fresh hot tap water		
	5. Recirculate each tank			1 minute each, 180°F (82°C) maintained and guaranteed		
	7. Vapor exhaust			1 minute	During that period tanks and piping are drained	
	8. Drying			15 minutes		
Drain	This cycle enables draining of tanks 1, 2, and 3 (optional), sump and piping, and purging of spray headers.					

¹ Selection indicates temperature at which water will be maintained. Temperature on items will be approximately 4°F (2°C) lower.

UTILITY REQUIREMENTS

Important: Refer to equipment drawing 122-998-076 for installation details and specifications.

Hot Water

1" NPT, 20-80 psig (37.9-551.6 kPa). Hot water must be supplied at 110°F (43°C) minimum. Flow rate: 25-54 U.S. gpm (76-204 L/min).

Cold Water

1" NPT, 55 psig (140 kPa) dynamic to 80 psig (551.6 kPa) static. Cold water must be supplied at 70°F (21°C) maximum. Flow rate: 40-54 U.S. gpm (151-204 L/min).

Steam

1-1/2" NPT, 50-80 psig (345-552 kPa) dynamic. Maximum static pressure: 90 psig (620 kPa). Average flow rate: 300 lb/hr @ 80 psig (135 kg/h @ 550 kPa). Peak flow rate: 1400 lb/hr (635 kg/h). Steam quality: clean and dry recommended.

Air

1/2" NPT, 100-125 psig (689-862 bar). Maximum particle size: 40 microns; maximum particle density: 10 mg/m³; maximum dew point: 45°F (7°C); maximum oil content: 8.3 ppm (25 mg/m³) as per ISO-8573-1.

Ventilation

6" (203 mm) O.D. vent connection. Maximum flow rate: 1,000 scfm (28.3 m³/min) for vapor exhaust. Building duct must be scaled to 10" (254 mm) O.D. minimum, as close as possible to washer duct connection.

Drain

3" (76 mm) O.D. A 4" (100 mm) O.D. floor drain and a floor sink is recommended for floor-mounted units. A 4" (100 mm) O.D. floor drain is recommended for pit-mounted units. Maximum flow rate: 60 U.S. gpm (227 L/min).

Condensate Return

1" NPT. Peak flow rate: 2 U.S. gpm (8 L/min).

Electricity

- » 208 V, 60 Hz, 3-Phase, 37.0 Amps
- » 480 V, 60 Hz, 3-Phase, 17.5 Amps
- » 380-415 V, 50 Hz, 3-Phase, 13.0 Amps

CUSTOMER IS RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE LOCAL AND NATIONAL CODES AND REGULATIONS.

NOTES

Recommended Air Compressor

1. Rotary scroll air compressor must be located in a clean, well lit, and ventilated area.
2. Never install the compressor where the ambient temperature is higher than 105°F (40°C), or where humidity is high. Clearance must allow for safe, effective inspection and maintenance. Minimum clearances required: above, 24" (610 mm); drive belt side, 12" (300 mm); and, other sides 20" (510 mm).

3. Never use any piping smaller than the compressor connection.

UTILITY REQUIREMENTS

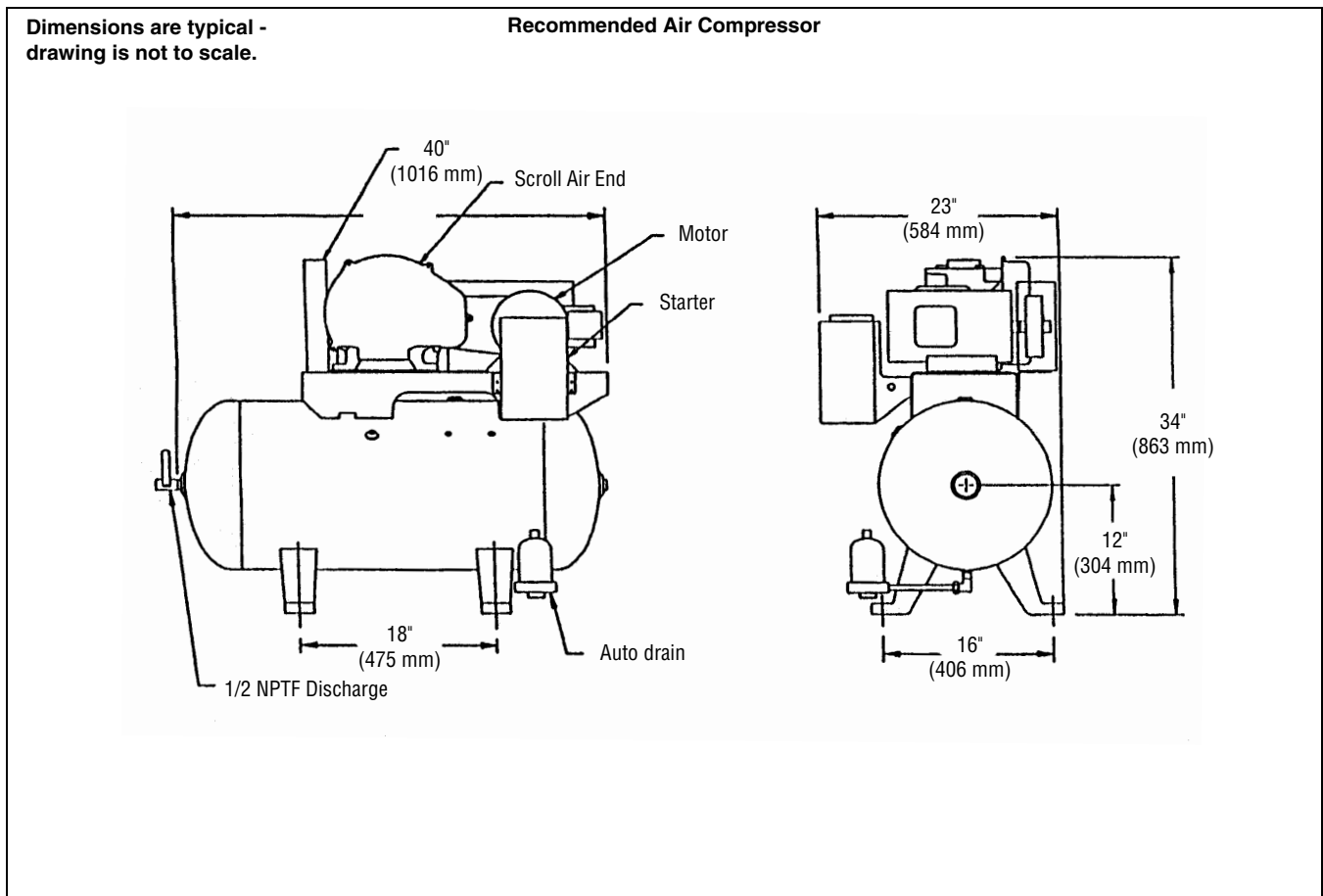
Recommended Air Compressor

Electrical – Compressor Motor

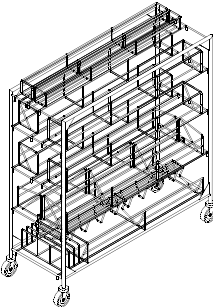
208 or 460 Volt, 60 Hz, 3-Phase

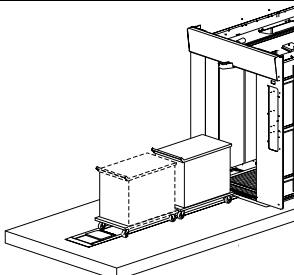
ENGINEERING DATA - RECOMMENDED AIR COMPRESSOR WITH AUTOMATIC TANK DRAIN

CFM Open Flow	Weight	Comp. Stages	TANK				MOTOR
			Lubrication	Size	Capacity	Max. Press	Operating Speed
7.7	240 lbs (108 kg)	1	Oilless	See Below	30 gal (114 L)	100 psig (690 kPa)	60 Hz (1725 rpm)



Accessories for use with Reliance 130/130L

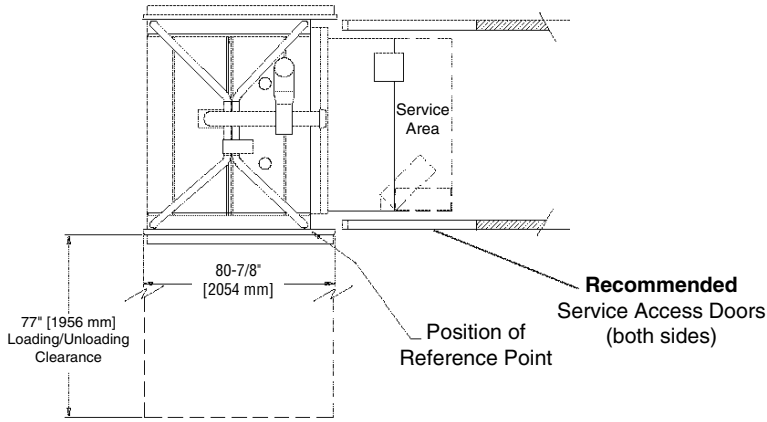
Utensil Cart (FD00-0007)	Overall Size W x L x H (600 x 1613 x 1702 mm)	Weight (300 lbs (136 kg))	Application/Load Capacity		
			Items	Description of Item	Quantity
			Row 1	Kidney Bowls	6
			Row 1	Surgical Lamp Handles	9
			Row 2	Male Urinals	11
			Row 2	Bowls	4
			Row 3	Adult Bedpans	8
			Row 4	Adult Bedpans	8
			Row 5	Instrument Containers	4
			Row 5	Instrument Container Perforated Plates	8
			Row 5	Instrument Container Covers	4

Load/Unload Modules (FD00-0011 - 208 V) (FD00-0014 - 480 V)	Overall Size W x L (356 x 3048 mm)	Application/LoadCapacity
		<p>Automated loading and unloading modules for surgical case carts. Pit-mounted at floor level, the load/unload modules are designed to transport up to four surgical case carts at a time.</p> <p>Utensil Cart (FD00-0007) cannot be used with Load/Unload Modules.</p> <p><i>See SD775 for more detailed information on Reliance 130L Load/Unload Modules.</i></p>

Refer to the Following Equipment Drawings for Installation Details

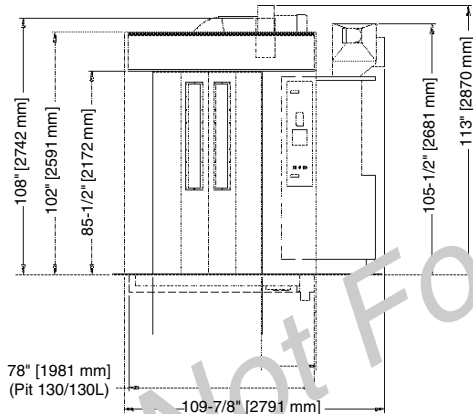
Equipment Drawing Number	Equipment Drawing Title
122-998-076	Reliance 130 Cart and Utensil Washer/Disinfector 50/60 Hz
920-003-480	Reliance 130L Cart and Utensil Washer/Disinfector 50/60 Hz

PIT-MOUNTED UNIT

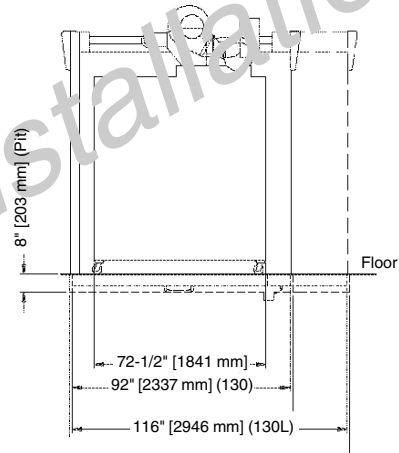


Dimensions are typical – drawing is not to scale.

TOP VIEW

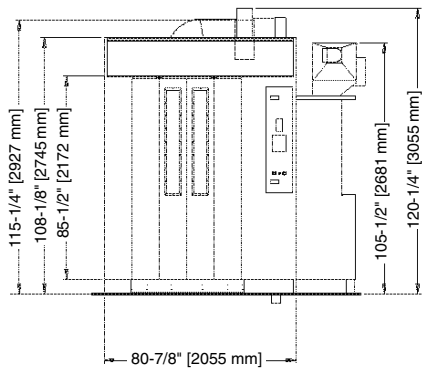


FRONT VIEW

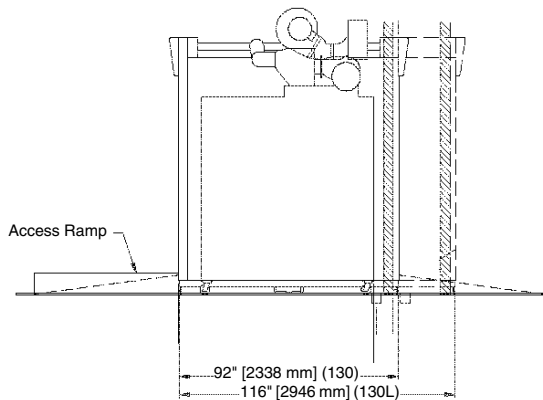


SIDE VIEW

FLOOR MOUNTED UNIT



FRONT VIEW



SIDE VIEW

For further information, contact:

STERIS®



STERIS Corporation
5960 Heisley Road
Mentor, OH 44060-1834 • USA
440-354-2600 • 800-548-4873
www.steris.com