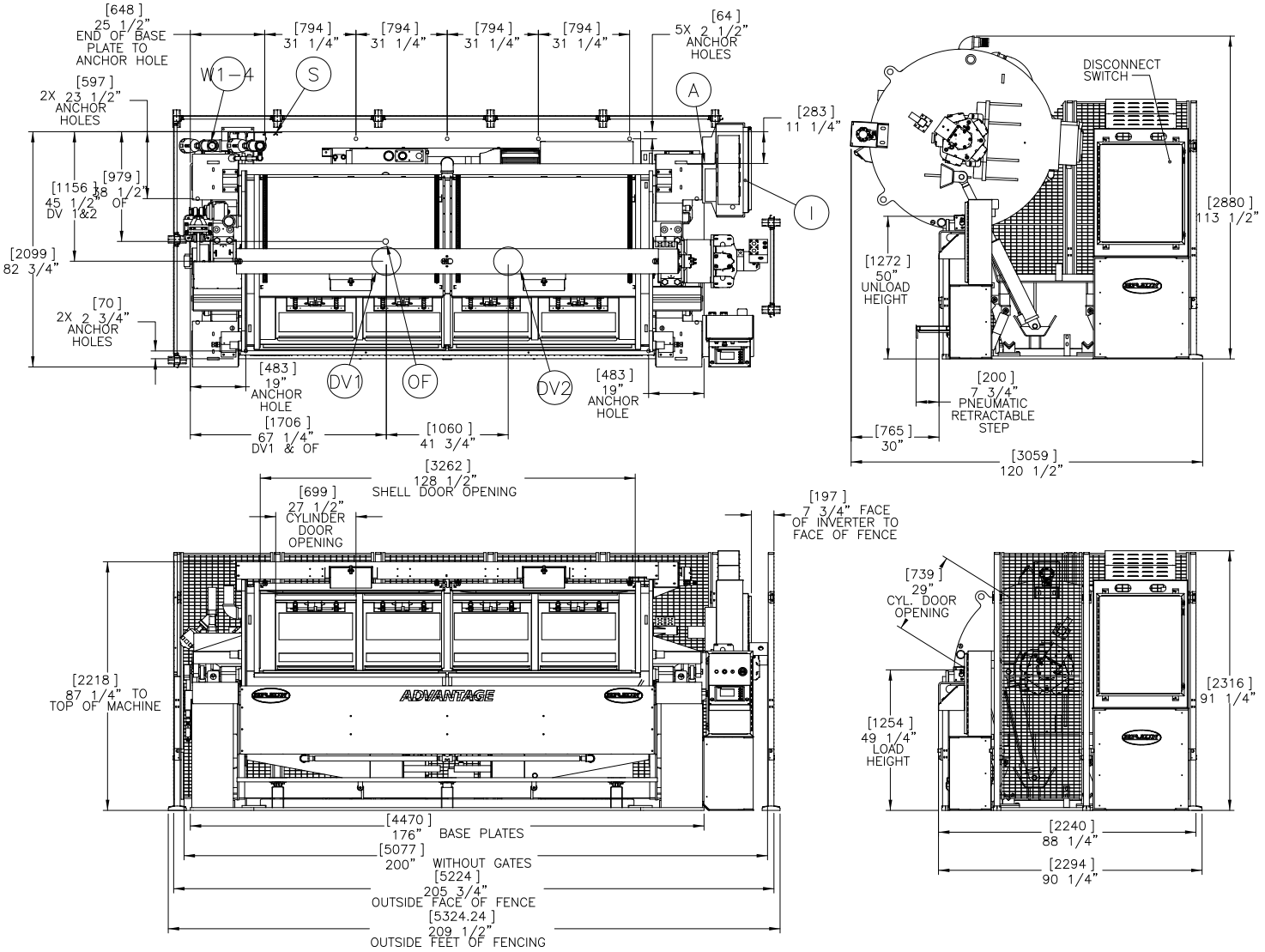
TILTING SIDE LOADER WASHER/EXTRACTOR SPECIFICATIONS

900 ADVANTAGE SIDE LOADER (900ASL)

G.A. BRAUN, INC., P.O. BOX 3029, SYRACUSE, NY 13220, 315-475-3123



All dimensions are reference and were rounded to the nearest ¼ inch (height does not include grout).

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CAPACITY
Dry Weight: 600-900 Lbs [272-408* kg]
* varies depending on type of material

OPENING REQUIREMENTS TO RECEIVE UNIT
Height: 98-3/4" [2,496mm] Width: 89-3/4" [2,280 mm] ‡
(Includes 3" [76mm] skids and 3" [76mm] rolls
2"[51mm] clearance all around)
‡ Varies depending on options ordered
Dimension include shipping with inverter stand

OVERFLOW
2" [51mm] Overflow

VENT SPECS (V)
3" [76mm]Vent

AIR SPECS (A)
Air Connection: 3/8" [9.5 mm]
Flow Rate: 7.9 CFM [3728 cm^2/sec]
Pressure: 90-100 PSIG [6.2 – 6.9 bars]
Connection: use minimum 12" [305mm] long flex hose

DRAIN SPECS
DV1: 10" [254mm] Dump Valve Location 1
Discharge Rate 2,500 GPM [160 liters/sec]
DV2: 10" [254mm] Dump Valve Location 2
Discharge Rate 2,500 GPM [160 liters/sec]

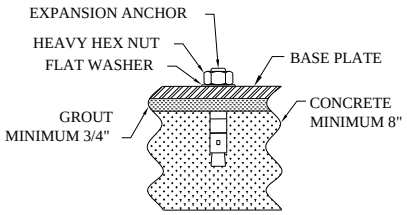
ELECTRICAL SPECS

SERVICE	480/3/60
Machine Disconnect (Internally Mounted Circuit Breaker-Amps)	100
Machine (FLA)	70
Minimum Branch Circuit Requirements (Amps) (See Note Below)	100

- **Grounding:** Ground machine to an earth ground (zero potential) per National Electric Code (NEC) section 250 and any applicable local codes. Use a ground wire sized in accordance with NEC Table 250.122. Do not rely on conduit, machine anchorage, etc. Connect the ground wire between the ground lug on the incoming power junction box on the machine and the external disconnect box or other location as required to assure a reliable earth ground.
- **Branch Circuit Protection:** Size external fuses or circuit breakers per the recommended minimum branch circuit requirements listed above. Installation of this branch circuit must be in accordance with the National Electric Code (NEC) and any applicable local codes.
  - Use only Dual Element (Time-Delay) fuses FRS (250 to 600V).
  - If an inverse time circuit breaker is to be used instead of fuses, it should have the same characteristics as FRS type fuses.
- **Wire Sizing:** Wire shall be sized in accordance with the National Electric Code and any applicable local codes. The required wire size will vary with the length of the wire run as well as any specific local codes. The use of THHN type copper supply conductors with a minimum of 90 deg C insulation is strongly recommended.

FOUNDATION
Use a minimum of 3/4" [19mm] grout to level machine.
Floor must be able to support operating weight of machine, minimum of 8" [152mm].

Customer is responsible to meet all Local, State and Federal Code requirements to include obtaining any applicable permits to install or operate this equipment



KEEP 1 INCH ANCHORS, 6 INCHES FROM TRENCH WALLS

INVERTER DRIVE CONTROL (I)

DRY CHEMICAL SUPPLY FEEDER (F)

FLOOR LOADING
The following figures are based on 95% isolation efficiency with a 15% dry weight imbalance

Shipping Weight	22,670 lbs [10,283 kg]
Operating Weight	26,295 lbs. [11,927 kg]
Static Base Plate Loading	1,270.9 lbs/sq.ft. [6,205 kg/m^2]
Dynamic Base Plate Loading	±176.5 lbs/sq.ft. [862 kg/m^2]
Static Project Area Loading	447.4 lbs/sq.ft. [2,184 kg/m^2]
Dynamic Project Area Loading	±62.1 lbs/sq.ft. [303 kg/m^2]

Project Area = Base plate area plus 12" [305mm] wide area around the base plates.

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WATER-STEAM CONNECTIONS
Pre-connected water supply inlets and steam supply inlets are vertical. The flexible hose furnished by G.A. Braun is mounted between valves and machine. On optional supply feeder water connection, use flex hose between machine and incoming line

STEAM SPECS (S)
Steam Connection: 1-1/4" [32mm]
Operating Range: 80-125 PSIG [5.5 – 8.6 bars]
Consult Factory for BHP

WATER SPECS
Operating Range: 10-100 PSIG [0.7 – 6.9 bars]
(Consult factory for Higher Pressures)
W1: Provision for alternate water connection: 2 1/2" [63.5mm] (Optional-Reuse)
W2: Hot Water Connect: 2 1/2" [63.5mm]
W3: Cold Water Connect: 2 1/2" [63.5mm]
W4: Cold Water Connect: 1-1/4" [32mm] (Optional – Wrinkle Arrest)

BRAUN WASHER/EXTRACTOR, SIDE LOADER, AIR BAG SUSPENSION-MOUNTED, FULLY AUTOMATIC CONTROL AND OPTIONAL WRINKLE-ARREST, RE-USE WATER INLET & RE-USE DRAIN, LIQUID SUPPLY MANIFOLD, DRY CHEMICAL SUPPLY FEEDER, RATIO METRIC/FLOW METER WATER FILL.

Cylinder Size	54" [1,372mm] Diameter x 119-3/4" [3,042mm]
Cylinder Volume (Gross)	159 ft^3 [4.5m^3]
Recommended Capacity	900 Lbs [408kg]
Maximum Capacity	900† Lbs [408kg]
Cylinder Opening (Usable) (per door)	27-3/4"W x 29-1/4"H [705mm x 743mm]
Cylinder Opening Area (per door)	812 $in.^2$ [5,239cm^2]
Cylinder Opening Height Load	49-1/2" [1257mm]
Cylinder Opening Height Unload	50" [1270mm]
Cylinder Shaft Size	6-7/16" [164mm]
Cylinder Unloading Angle	88 degrees
Wash Speed	25-35 RPM
Balance Speed	45-60 RPM
Extract Speed	50-580 RPM
Hydraulic Motor Size	50 hp [37kW]
Water Inlet Size	3" [76.2mm]
Water Outlet Size	10" [254mm] (2 Outlets)
Overall Dimensions	*200" [5.08m] Wide x 87-1/4" [2.22m] High x 85-3/4" [2.18m] Deep

*Does not include fence
†Varies depending on type of material
‡ Varies depending on options ordered

DETAILS:

1. **Materials Used** All parts in contact with the goods processed to be of Type 304 Stainless Steel.
2. **Shell** The end plates to be 1-1/4" Carbon Steel lined with 14 Ga. Type 304 Stainless Steel. The wrap around casing shall be 3/16" thick Type 304 Stainless Steel. Two drain troughs, to contain the first rush of extracted water, constructed of 11 Ga. Type 304 Stainless Steel, shall be pitched toward the drain valves.
3. **Shell Door** To be sliding type, that is hydraulically driven both open and closed, using self aligning, non-inflatable door seals. The hydraulically operated door locking shall be "fail-safe." Unit to be equipped with two sliding shell doors for loading and unloading.
4. **Drain Valve** 10" diameter to be air operated. Provision for optional 10" diameter re-use drain provided.
5. **Water Inlet Valves** One for hot water, one for cold water, one provisional port for optional water re-use valve, and one for optional wrinkle arrest, if specified, shall be provided with all fittings and flexible connection to unit. Valves to be air operated. Connection to the unit shall be above the overflow and the chemical supply inlets, providing an air gap, making vacuum breakers unnecessary. Connections 2 1/2" NPT, with a flow rate of 105.3 GPM @ 65 PSI per valve, for hot and cold water fill valves only.
6. **Steam Valve** 1-1/4" NPT shall be provided with all fittings and flexible connections to unit. Valve to be air operated, suitable for steam pressures up to 125 PSIG max. Injector holes to be oriented downward, away from cylinder, to prevent contact of live steam with goods processed.
7. **Vent** 3**"**
8. **Chemical Inlets:**
   Soap chute for the manual addition of chemicals is located on both shell doors.
   Liquid supply coupling for the addition of liquid chemicals is standard. There are eight ¾" stainless-steel fitting, four located above the water line and four located below the water line on the shell for connection of water flushed supply systems only.
   Liquid supply manifold option for the addition of eight liquid chemical supplies is attached to the stationary portion of the machine. Manifold is made of PVC and includes eight ¼" supply couplings and one ½" flush valve. This option uses the liquid supply coupling. Consult the factory for other available liquid supply systems.
9. **Air Bag Suspension** to be an integral part of, and completely assembled to the unit. The suspension mounting shall provide an isolation efficiency of 97% or better for all modes of vibration and shall be completely stable, both statically and dynamically. The unit shall be suspended on the inflated air bags during the extract cycle only. The suspension system shall not require an external frame around the unit and shall consist of four round pneumatic air bags with hydraulic dampening elements. All suspension elements to be accessible for service and inspection purposes without the dismantling of system.
10. **Drive** for washing and extracting to consist of one hydraulic motor only, connected directly to the cylinder shaft and requiring no clutch, belts, or pulleys. Balancing prior to extractions shall be performed by a controlled rate of acceleration, providing proper distribution of goods.
11. **Cylinder** wrapper sheet, end discs and all reinforcing, in contact with the load, to be Type 304 Stainless Steel. End discs to be un-perforated. Wrapper to be perforated 11 Ga. Material. Two ribs to be 6-1/2" high. Four cylinder door openings each to have a usable area of 805 in^2.

12. **Cylinder Shafts** shall extend through the turning blocks to the cylinder side discs and shall be welded both to the turning blocks and side discs. Shafts to be a minimum of 6-7/16" diameter and supported by 2 bearings.

13. **Cylinder Shaft Seals** shall be of long life V-ring type, requiring no adjustments and no lubrication. Two such seals shall be provided. An additional slinger ring shall be mounted on the shaft between the seal housing and the bearing, and shall be visible for inspection.

14. **Cylinder Shaft Bearings** shall be grease lubricated, single row cylindrical roller bearings with built-in mechanical seals. Both bearings shall be 6-7/16" diameter, pillow block, platform mounted.

15. **Microprocessor Control** shall automatically actuate filling, draining, extracting, and injecting of supplies and steam. All functions pertaining to washing and extracting shall be performed automatically without operator's attention. The program shall not advance while filling, signaling or injecting steam. The control shall be of modular construction consisting of plug-in modules, touch screen programmable with capacity of 99 formulas. The operator controls shall be made of a sealed front panel equipped with a touch screen, digital display for temperature in degrees, level in inches, remaining time of program step in minutes and an alphanumeric readout for display of programmed values in English and other languages. Program number and program step shall also be displayed. Built-in intelligence shall provide operator prompting by display of appropriate messages, on one color display readout, to assist in programming, editing, operating and trouble shooting of control and machine. Control shall be capable of testing itself, diagnosing failure and indicating same on readout. Monitoring of motor acceleration must be part of the control capability. The control shall connect to and operate motors and solenoid valves. Solid state water level and temperature controls with display of actual and programmed values in degrees and inches shall be part of the control. There shall be no limited number of controlled ranges of levels and temperature, but every inch and degree shall be programmable. All drain cycles and one-way drain operations prior to extractions shall be fully automatic and require no programming for time. Start up of extraction shall be prevented in case of insufficient drain. An editable password shall be incorporated to prevent programming by unauthorized personnel.

16. **Interlocks & Safety Devices:**
Outer Shell Door locking shall prevent opening the door until the cylinder has come to a full stop via the proximity sensor. Door shall be interlocked with machine tilting so that the door will open only in the loading or unloading positions. Door shall be interlocked so that it can not open unless there is a zero water level.
Inner Shell Door locking shall prevent the outer shell door from closing, and thereby starting a wash/extract cycle, until all four inner door interlocks are satisfied. The doors interlocks shall only be satisfied if all four doors are closed with the locking pins engaged.
A Vibration Sensitive Switch shall be provided to shut-off entire machine, and signal audibly in case of excessive vibration.
Overload Protection Device shall be provided for the hydraulic drive to shut off entire unit, apply the brake, and signal an alarm in case of an overload condition.
Guards shall be provided to cover all moving parts accessible from the floor level.
OSHA Unit shall conform to all requirements

17. **"Wrinkle Arrest" Optional Feature**: If specified, machine shall be equipped with a device to facilitate gradual cooling to prevent thermal shock to permanent press fabrics. Final temperature and rate of cooling to be adjustable and the whole process to be controlled automatically.

18. **Fencing** will be shipped separately and is to be installed and grouted at the customer site. Fences can be removed for maintenance on the machine by use of a quick release key.

Notes: 1. Specifications subject to change without notice.
2. Local codes will take precedence over any information found on this TM Sheet.