

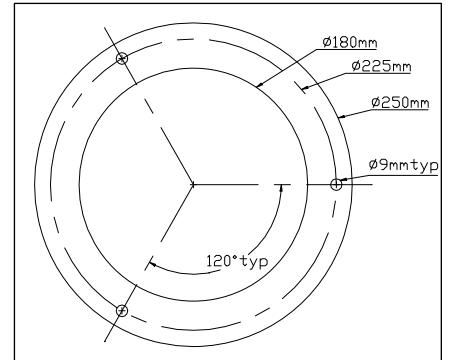


# DSC

The Disti Super Cleaner (DSC) is a portable high pressure washing system used primarily for cleaning the interior surfaces of Tote tanks and stationary tanks. The DSC demonstration system is a valuable tool for evaluating cleaning performance and is helpful in identifying if any modifications in design are required for resulting purchased systems. This memo briefly outlines the criteria for preparation and use of the DSC demonstration system.

### General Specifications:

- ✦ **Classification** - The DSC systems and DSC Demo system are designed for use in Class I, Division 1, Group D hazardous locations.
- ✦ **Voltage** - Any 3-phase voltage between 220 and 480 can be connected to the Demo systems drive motor by changing the arrangement of the wires at the motor. The motor identification plate indicates proper wire arrangement for different voltages. The motor starter switch must be checked to ensure that the proper overload heaters (two sets supplied with unit) are installed for the connected voltage.
- ✦ **Pneumatic** - Compressed air of approximately 12 CFM (.35 m<sup>3</sup>/min.) at a pressure of 55–85 psi (4-6 bar) is required for operation of the cleaning head.
- ✦ **Power** - 7.5 hp (5.6 kW) drive motor - 22 FLA @ 230 volts / 11 FLA @ 460 volts
- ✦ **Pressure** - The DSC systems are designed to operate at a maximum pressure of 725 psi (50 bar) when using solvent and 1200 psi (80 bar) when using aqueous solutions. Adjustment of system pressure is by alteration of nozzle orifice diameter. A pressure gauge is installed for direct reading of system pressure. The DSC Demo system is presently fitted with an overpressure valve set at 1000 psi (70 bar).
- ✦ **Flow** - 13.2 gallons per minute (3000 liters per minute) for all media types, at all pressures.
- ✦ **Weight** - The mobile pump unit of the demo system weighs approximately 430 lbs. (195 kg.). The standard cleaning head weighs 55 lbs. (25 kg.). Shipping weight is approximately 800 lbs. (362 kg).
- ✦ **Dimensions** - System dimensions are 41" (1040mm) Height x 80" (2030mm) Length x 30" (762mm) Width. Shipping crate dimensions are 51" (1295mm) Height x 86" (2185mm) Length x 38" (965mm) Width.



### Cleaning Media:

- ✦ **Type** - DSC systems utilize many different types of cleaning solutions. The design of the present Demo system is for use with solvent, solvent blends or water. The material of construction for the Demo system does not support use with Caustic and has limited pressure output when used with aqueous solutions because of its present motor horsepower and overpressure valve. Please consult factory when using detergents.
- ✦ **Temperature** - The cleaning media temperature must not exceed 140°F (60°C).

### Tanks:

- ✦ **Condition** - The tank being cleaned must be completely sealed to prevent leakage of the cleaning media. Loose fitting tank covers or unsealed openings are not recommended.
- ✦ **Head Insertion** - The tank must have an opening to facilitate installation of the cleaning head. The opening must be at least 7.87 inches (200 mm) in diameter, with the preferred location being on the tank's top, as close to center as possible. See drawing for detail of the cleaning head-mounting flange. Use this drawing if fabrication of a mounting adapter is necessary for installation of the cleaning head.

### Connections / Utilities:

- ✦ **Electrical** - The Demo system is equipped with approximately 50 feet of AWG 10/4 SO type electrical cable attached. The user must connect a plug to the cable end that is suitable for use with users existing hazardous location receptacles. Start and stop of the wash pump is by manually operated motor starter switch that is pre-wired and installed on the system.
- ✦ **Pneumatic** - The Demo system is equipped with an air regulator that is pre connected to the cleaning heads pneumatic drive motor. The user must attach an air hose to the regulator. See General Specifications – Pneumatic above for required air.
- ✦ **Cleaning Media Supply** - The user must connect an adequate supply of cleaning solution to the inlet side of the filter housing mounted on the wash cart. A flexible hose ten feet long, with 1-inch cam-lock type fittings is supplied for this purpose. Usually a reservoir containing no more than 55 gallons of wash media is required. The pump is a flooded suction design, i.e. the supply must be at or above the elevation of the pump.
- ✦ **Cleaning Media Discharge and Return** - A twenty-one foot long high-pressure hose is supplied with the unit for discharge from the pump to the cleaning head. The user must supply a means for returning the wash media to the wash reservoir. In some instances, this can be by gravity, but usually a pump is required for this purpose, especially if the tanks drain is below the elevation of the DSC wash pump. The diagram to the right indicates the flow concept of the washing system when followed in a clockwise direction, starting at the "DSC Wash Pump".
- ✦ **Earth Ground** - The DSC system is equipped with two retractable grounding reels that must be used when washing with solvent. Bonding of the various system components prevents a buildup of potentially dangerous static electricity. One reel should be connected to the users wash media reservoir and the other connected to the tank being cleaned. There is an additional grounding cable already installed between the wash pump and cleaning head.

