The DSC-12 Dry Solids Centrifuge filters and re-circulates industrial process fluids. Employing a unique combination of low-energy particle separation and low-force solids discharge, it is designed to handle exceptionally difficult applications where particles in suspension can easily load process fluids. By continuously removing suspended particles from liquid finishing compounds and industrial coolants, it provides cleaner and cooler process fluids to equipment without requiring the use of settling tanks, holding tanks, filters, magnetic separators or other types of equipment. It provides separation capabilities equivalent to 1800 sq ft of settling area, with the ability to remove particles down to 2μ at flows of 6 gpm.

### DSC-12 Automatic Purge Process

- Automatic check valve stops the flow of process fluid to the bowl
- Solids collected on wall of centrifuge bowl spin dry as the centrifuge slows
- Auto-application of caliper brake brings rotating assembly to a complete stop
- Gear motor drives scraper blades on the inside wall of the bowl
- Low-force scraper blades shave off all near-dry waste matter
- Discharge solids drop into waste container for easy disposal
- Caliper brake is released after scraper blades complete their cycle
- Centrifuge resumes normal operating speed and flow

This process runs continuously, supplying cleaned and recycled process fluid for low-cost, high-efficiency operation. The unique design of the DSC-12 typically permits the discharge of solids in less than 60 seconds, minimizing the interruption of flow. In addition, cycle times and parameters can be optimized for application-specific requirements, including the ability to vary the dryness of discharge solids.

### Features

- Self-purging – dry solids go directly to a waste container
- Cleaned process fluids can be reused multiple times, significantly extending coolant or fluid life
- 25 gallon processing tank with a processing capacity of 120 gallons per hour
- Compact design / small footprint – 47” long x 39” wide x 76” high / requires less than 13 sq ft of floor space
- Purity of cleaned process water often meets local or EPA standards and can be discharged directly to drain
- Low maintenance operation

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Eco-Friendly Dry Solids Centrifuge – For Safe Disposal of Solid Waste Discharge

Dry solids discharge (primarily plastic) from DSC following 20 minute cycle
The DSC-12’s method for centrifugal contaminant removal does not destroy the original characteristics of the process fluid, which greatly extends fluid life. This significantly reduces machine downtime caused by the need to clean out settling tanks, replace filters, or change out process fluids – steps that are often required with other systems. As a pollution abatement device, the DSC-12 significantly reduces the need to regularly dispose of fluids or to contract with commercial waste haulers to dispose of bulk, contaminated process fluids.

**Specifications**
- Standard wiring: 460 Volts, 3 Phase, 60 Hz - all electrical components UL approved or recognized
- Machine is wired in accordance with NEC (NFPA 70) and NFPA 79 standards, ready for electrical connection
- Cooling fan removes heat generated by the bearing housing assembly and disk brake
- Pneumatic system controls flow of compressed air to calipers in brake system, and built-in sensor prevents the machine from operating without sufficient air pressure
- Manually operated ball valve permits shut-off of air supply for maintenance purposes
- All moving components are fully guarded to protect equipment operators. Guards are removable for servicing the upper rotating assembly and the scrapers inside the process bowl
- Mechanical float-valve system uses venturi and metering orifices to accurately add make-up fluids and/or compounds (if desired) to the process tank
- Design equations permit tradeoffs between particle size, speed and efficiency, providing scalability beyond 6 gpm

**Applications**
- Centerless grinding
- Machine coolant treatment
- General coolant treatment
- Thread grinding
- Belt grinding
- Tungsten carbide grinding
- Glass grinding
- Burnishing
- Vibratory finishing
- Crush roll grinding
- Parts washing
- Honing

**Benefits**
- Effectively removes fine suspended particulate - down to 2μ at 6 gpm – with scalability beyond 6 gpm
- Continuously aerates process fluids, slowing the growth of anaerobic bacteria and decreasing rancidity risk
- Efficiently removes both ferrous and non-ferrous contaminants (burrs, metal fines, particulates, etc.)
- Improves surface finish of production parts
- Lengthens tool life
- Reduces service requirements and machine downtime
- Increases production

**Warranty and Technical Support**
The DSC-12 comes with a one-year standard factory warranty, good for one year from the data of shipment. Warranty covers parts and ground shipping only, and does not include installation, air freight, or other costs. The DSC-12 is designed for years of maintenance-free operation. Service training is available upon request.

For More Information: Contact your authorized distributor or send your question or request to info@3Dcentrifuges.com.

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