

**SPECIFICATIONS  
FOR  
TURBO-SEPARATOR T15-2  
SELF-CLEANING CENTRIFUGE**

Specification ML-07-026-T15-2

## TURBO-SEPARATOR T15 -2 Self-Cleaning Centrifuge

The TURBO-SEPARATOR T15 -2 self-cleaning centrifuge is designed to remove solid particulate from various fluids down to the 5-10 micron range (particle range is typical and will depend upon the specific application.)

The unit utilizes centrifugal force to perform the liquid/solids separation, and automatically discharges the dewatered (relatively moisture free) solids via a timer cycle or by automatic sensing of rotor weight and vibration. Its rugged industrial design makes it suitable for removing highly abrasive solids such as metallic and ceramic fines from process liquids. This unit contains a variable frequency drive with a dynamic braking system reducing the discharge cycle time of the centrifuge bowl.

The TURBO SEPARATOR Self-cleaning centrifuge...

- Maintains fluid clarity without the use of expensive filter cartridges.
- Minimizes fluid replacement.
- Minimizes waste disposal by generating relatively moisture free solids.
- Requires minimal operator attendance and maintenance.
- Significantly reduces downtime for, and frequency of, tank/sump clean-outs.

For a technical evaluation of the TURBO SEPARATOR centrifuge, the principal components of the system include the following:

<u>Item</u>	<u>Qty.</u>	<u>Description</u>
1.	1 ea.	TURBO SEPARATOR 15-2 centrifuge - including centrifuge drive motor, solids scraper drive motor, and solids scraper actuator assembly. The feed inlet connection is a 1 " NPT fitting and the clarified fluid outlet is a 1" NPT fitting. The centrifuge rotor spins at 2,950 rpm and generates up to 1,420 Gs. The maximum feed rate is 25 GPM and the solids discharge capacity is 12 pounds/hour. <b>The unit has a 2" Drain line that must flow by gravity back to the dirty feed tank.</b>
2.	1 ea.	Vibration sensor device for detecting out of balance condition
3.	1 ea.	Drive motor, 4 HP, 460 VAC, 3 Phase, 60 Hz, 1730 RPM, Induction Motor, TEFC.
4.	1 ea.	Scraper system to automatically remove solids from the bowl
5.	1 ea.	Structural mounting stand - epoxy coated

fabricated steel stand to accommodate the mounting of the centrifuge, and the placement of a 20 gallon sludge cart. (Sludge cart sold separately)

6. 1 ea. Control Panel - NEMA 12 enclosure, designed for 460 VAC, 3 Phase, 60 Hz, 30 Ampere service. 24VDC control circuit, Siemens S7-200 with through the panel display. Controls include motor starter for automatic operation during system start and cleaning cycles.
7. 2 ea. Instruction Manuals

**Customer to supply feed pump, electrical power, installation**

**Optional:**

1. 1 ea Sludge Discharge Container, 20 gallon, steel, with casters and fork lift guides

## Technical Specifications

### TURBO SEPARATOR T 15-2 Self-Cleaning Centrifuge

#### Centrifuge Data:

Model	TURBO SEPARATOR T 15-2 (Automatic)
Speed Capability	2,950 RPM
Rotor Volume	3.0 Gallons
Maximum Feed Rate	25 GPM
Drive Motor	4 HP, TEFC, 460 V, 3 Phase, 60 Hz, 1730 RPM, with VFD Drive
Solids Discharge	Automatic by timer, weight or vibration
Maximum Operating Temperature	140° F
Operating pH Range:	6.5 – 9.5

#### Material of Construction

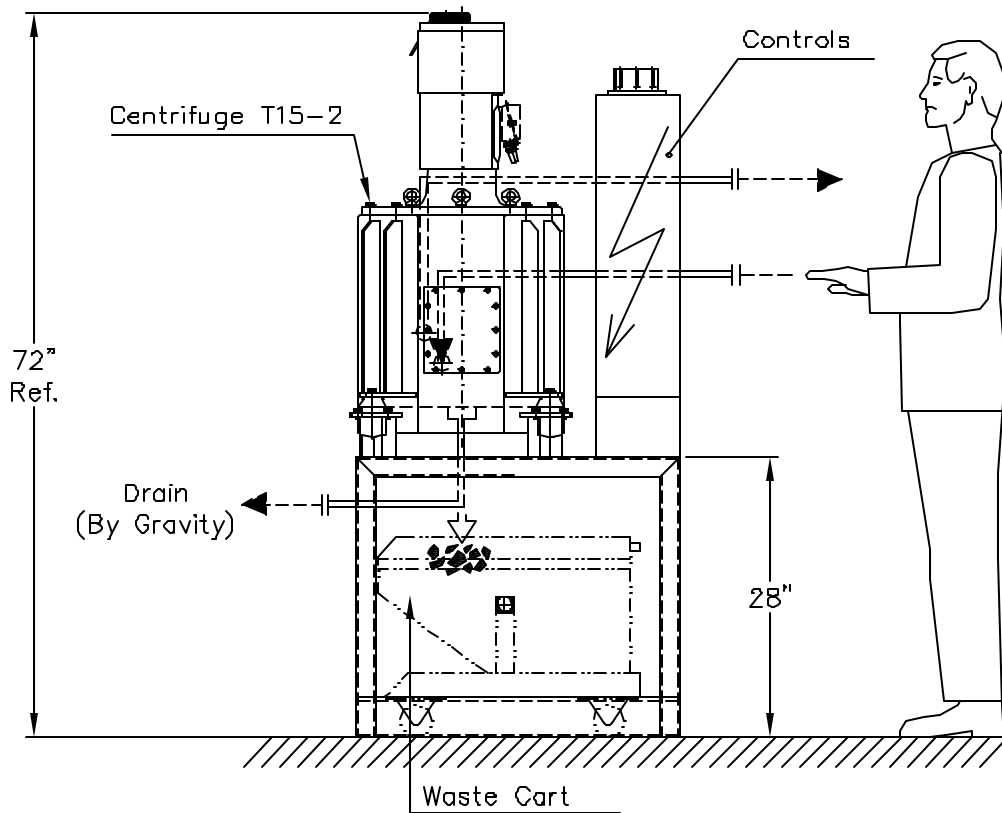
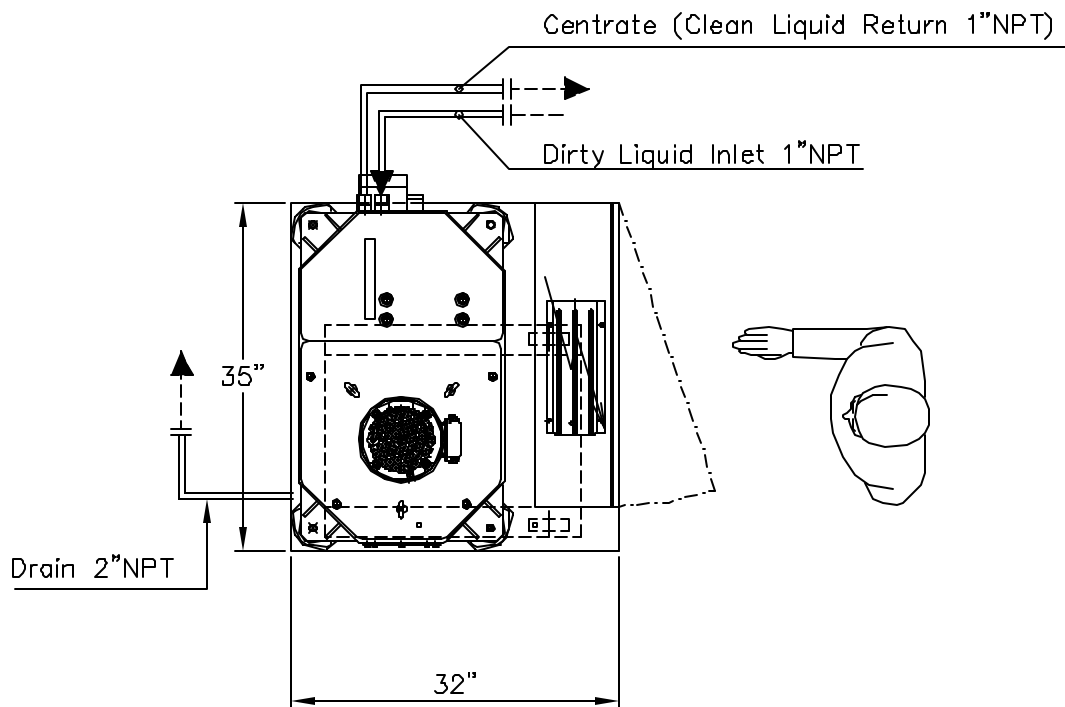
Frame	Carbon Steel
Centrifuge Rotor	Aluminum
Scraper	Stainless Steel

#### Piping Connections:

Inlet	1" NPT
Outlet	1" NPT
Drain	2" NPT

#### Controls:

Control Panel:	NEMA 12, enclosure, 460 VAC 10 HP, 60 Hz, 30 ampere service. Step-down transformer provides 24 VDC control circuit. Siemens S7-200 with TD 200 Display Microprocessor. Controls include motor starters for centrifuge and customer supplied feed pump
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Dimensions for Reference Only



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DRAWING TITLE

T15-2 Centrifuge

SIZE <b>A</b>	DRAWN BY: JAP	DATE: 1/29/2007	SCALE NTS	DRAWING NO. 01292007A	VD-15.5B17.00.01	SHEET 1 of 1
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