



# **Turbo-Separator**

**Centrifugal Cleaning of Coolants,  
Oils and other Industrial  
Fluids without the use of filter media**

**Turbo-Separator T10 Series**

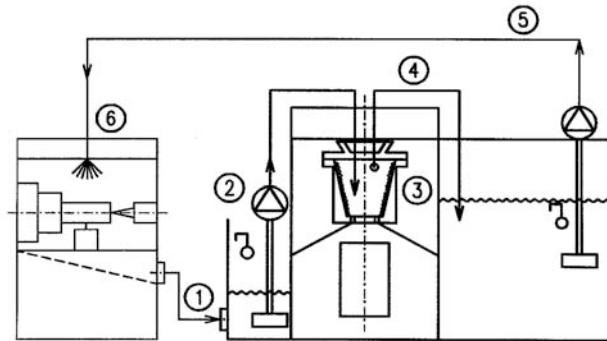


# Turbo-Centrifuge T10

## 26 GPM, 1 Gallon Sludge Capacity, Removable Liner, 3,000 RPM

### Typical Continuous Flow Process

- 1) Gravitational flow of the dirty fluid into the dirty collection tank
- 2) Feed pump lifts the dirty fluid up to the centrifuge rotor
- 3) Separation of the solids from the fluid, where the particles settle on the wall of the sludge basket
- 4) Cleaned fluid is removed from the rotor with a scoop and directed to the clean coolant tank
- 5) Pump returns the cleaned coolant from the coolant tank to the machine tool (6)



### Operation

The Turbo centrifuge T10 is designed to remove over a gallon of sludge before the liner needs to be serviced. Capable of processing liquids at flow rates up to 26 gpm, the 3,000 rpm rotor will remove fine solids down to 2-5 micron.

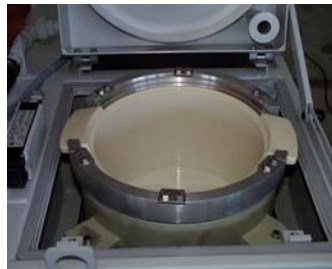
The separated sludge can be simply and quickly removed from the centrifuge. Switch off the centrifuge, raise the housing cover, disengage the lock catches and remove the rotor cover.

Remove the sludge-filled basket.

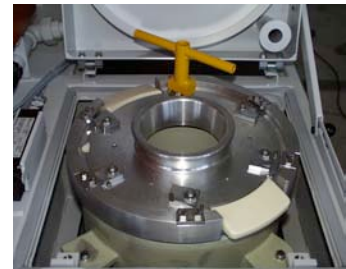
A wide range of solid particulate – all types of metal (both magnetic and non-magnetic), glass, ceramics, hard metals, graphite and plastics can be filtered from a variety of fluids such as emulsions, oils, solvents, water, etc.



The high-speed aluminium rotor guarantees filtration quality. The heavy duty plastic sludge basket facilitates simple operation.



Install the clean sludge basket.



Re-install the rotor, secure the lock catches, close the housing cover and switch on the centrifuge.

Operator Safety is paramount and designed into every Turbo-Separator. A Cover lock as well as other controls prevents the centrifuge from being opened when the rotor is spinning or activated when the cover is opened.

The electrical controls, with all the respective indicator lamps and switches are standard equipment.

### BENEFITS

- No costs for filter media such as non-woven fabrics
- Minimal disposal costs, due to the sludge cake being solid and dried without the additional burden of filter materials
- Optimal machining results due to the high level of purity of the cooling fluid
- Personnel satisfaction through simple operation
- No Obsolescence – centrifugal filtration that is flexible enough for future applications



#### ▲ Fine Cleaning of Honing Oil

- Removal of steel and grinding fines from paraffin oil in a gear honing machine
- Installation includes a chiller to ensure constant temperature
- Options can include a magnetic prefilter to reduce the frequency of changing the sludge basket



#### ▲ Purification of Carbide Grinding Coolants

- Removal of Carbide, HSS grinding fines from the emulsion
- Options can include a chiller, mist collector, variable frequency supply pump



#### ← Recycling of Vibratory Compounds

- Removal of very fine particles in steel, ceramic and plastic applications
- Options can include tankage, pumps, chiller, automatic proportional mixer system

#### Coolant Recycling – Solids & Tramp Oil Removal

- Separation of steel, nonferrous metal or aluminium fines from water soluble, semi-synthetic and synthetic coolants
- Separation of mechanically emulsified tramp oil from the coolant
- Options can include a pressurized return to supply cleaned recycled coolant directly to the machine tools



#### Purification of Fine Grinding Fluids

- Removal of steel, aluminium, brass and grinding fines from the processing fluid in a fine finish grinding machine
- Options can include a chiller and incorporation of an integral fine separation circuit for premium filter quality



# Coolants, Oils, Industrial Fluids Filtration with Turbo-Separator Centrifuges and Filter Systems

## Technical Data

### Standard-Centrifuge T10

Rotor	Motor	Controls	Standard Equipment
- Rotor Capacity: 2.4 gals Sludge Capacity: 10 pounds - Processing capacity 1 – 26 GPM - Acceleration : min.-max. 900 – 1320 g	- 3.0 HP - Rated speed: 3400 rpm	- Contactor controls with thermal protection - Indicator lamps for operation and faults - Controls transformer - Optional PLC	- Cover Lock - 2 sludge baskets - Manuals

Model Designation	T10-2-16	T10-2-121	T10-2-217	T10-2-322
Configuration :	free standing	complete filter system	complete filter system	complete filter system
Inflow height min (in):	6.75	6.75	6.75	6.75
Clean fluid tank (gals):	None	105	185	290
Pump, capacity (gpm):	None	16 – 21	21 - 26	26 – 50
Connection (in):	1.25 in	1.25 in	1.25 in	1.25 in
Dimensions (in) (LxWxH):	20x28x38	47x32x67	59x39x78	78x43x85
Weight dry approx (lbs):	595	705	775	1450
Options :	Immersion Chillers, magnetic-prefilters, variable frequency controlled supply pump etc.			

### Turbo-Separators – The Right Choice

- Centrifuges with manual sludge removal for processing rates of up to 40 gpm
- Fully automatic Centrifuges to process up to 150 gallons of sludge per day
- Central filtration systems for extensive and complex filtration tasks

From the free-standing T10-2-16 to an integrated T10-2-217 with tanks, chiller and supply pump we have a design to meet your needs.

