

## Coolant Lubricants – Industrial Fluids Filtration, Disposal, Cooling and Preparation with Turbo Centrifuges and Filter Systems without filter media

### Technical Data

#### Standard-Centrifuge T10

Rotor	Motor	Controls	Standard Equipment
- Capacity : total 9 dm <sup>3</sup> Sludge 3 – 5 kg - Processing capacity : 1 – 80 l/min (100l/min) - Acceleration : min.-max. 900 – 1320 g	- Performance : 2.0 kW - Rated speed : 50Hz = 2880 rpm 60Hz = 3400 rpm	- Contactor controls with thermal protection - Indicator lamps for operation and faults - Controls transformer - upon request PLC	- Cover security of lockup - 2 sludge baskets - Operators and Maintenance Instruktions

Model Designation	T10	K400/T10	K700/T10	K1100/T10
Configuration :	free standing	complete filter system	complete filter system	complete filter system
Inflow height min. :	1000 mm	only 175 mm	only 175 mm	only 175 mm
Clean fluid tank :	-	400 liter	700 liter	1100 liter
Pump, rated capacity :	-	60-80 l/min.	80-100 l/min.	100-200 l/min.
Connection :	G 5/4"	G 3/4"	G 5/4"	G 1 1/2"
Dimensions :	515x710x980	1200x800x1700	1500x1000x2000	2000x1100x2150
Weight approx. :	270 kg	320 kg	350 kg	650 kg
Options :	With re-cooling unit, magnetic-prefilter, variable frequency controlled supply pump etc.			

#### Your Cleaning Plant ?

- for example, for the separation of fine chips from the lathe processing machine in the secondary flow circuit
- with high- and low-pressure pump for internal cooled tools
- with immersion re-cooling unit
- with separating unit Turbo Ölex float for the separation of tramp oil from the emulsion

#### Turbo Prepares Projects and Produces

- Centrifuges with manual sludge removal for cleaning rates of up to 150 l/min
- Centrifuges with fully automatic sludge removal for cleaning rates of up to 350 l/min
- Central filtration systems for extensive and complex filtration tasks up to 1500 l/min



# Turbo-Separator



## Continuous Cleaning of Cooling Lubricants and other Industrial Fluids without filter media with the Turbo Model T10



## Turbo-Separator

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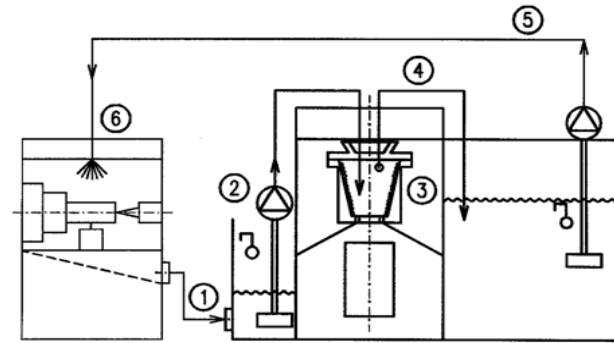


# Turbo-Centrifuge T10

## The Solution for the Filtration of a Variety of Fluids

### Function

- 1) Gravitational flow of the soiled fluid into the collecting tank.
- 2) Feeding of the soiled fluid to the rotor with a pump.
- 3) Separation of the foreign particles from the fluid, whereby the particles settle on the wall of the sludge basket.
- 4) The cleaning fluid is removed from the rotor with a scoop and directed to the coolant tank.
- 5) From the coolant tank, the correct quantity is pumped under the desired pressure to the machine tool (6).



The Turbo centrifuge T10 is especially suited for the filtration of small up to average volumes of fluids (up to approx. 100 l/min).

A wide range of particles, for example, all types of metal (both magnetic and non-magnetic), glass, ceramics, hard metals, graphite etc. can be filtered from a variety of fluids such as emulsion, oil, petroleum, solvents, water etc.

the high-speed aluminium rotor guarantees a high filtration quality. The robust plastic sludge basket facilitate simple operation. The massive reinforced mounting of the motor permits the application of the T10 Turbo centrifuge even under the most adverse ambient conditions.

The most stringent safety regulations are fulfilled with the reversed current brake and the electrical cover securing mechanism, which prevents the centrifuge from being activated when the cover is open.

The contactor controls, with all the respective indicator lamps and switches, are part of the standard equipment.

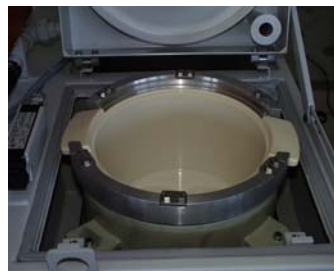
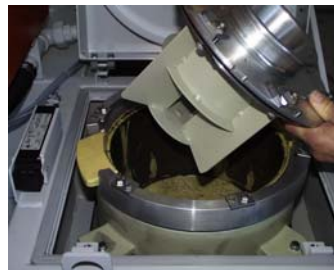
### Your advantage

- No costs for filter aids 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
- short-term amortization
- filtration system of the future

### Operation

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

Remove the sludge-filled basket.



Install the clean sludge basket.



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



### Fine Cleaning of Honing Oil

- Removal of steel and grinding agent fines from paraffin oil in the main flow from the gear honing machine
- Application with a recooling unit for ensuring a constant temp.
- Use of a magnetic prefilter unit to reduce the volume of sludge



### Treatment of Grinding Emulsion

- Removal of Carbide, HSS grinding agent fines from the emulsion from the machine tool
- Options :
  - Cooling unit
  - Electrostatic air filter
  - Variable frequency controlled supply pump etc.



### Coolant Cleaning from Ceramic application

- To remove glass particles from grinding applications, full flow and side stream
- With air-cooled chiller

### Emulsion Treatment

- Separation of steel, nonferrous metal or aluminium fines from automatic lathes in the main or secondary flow
- Application of the oil filtering unit Ölex float for the separation of tramp oil from the emulsion
- Application of an immersion cooling unit to eliminate the heat introduced by the intern cooled tools at the machining center



### Recycling of Fine Finish Grinding Waste Water

- Removal of steel, aluminium, brass and grinding fines from the processing fluid in the flow circuit of the fine finish grinding machine
- Incorporation of an integral fine separation circuit for premium filter quality

