

# Coolant Recycling Systems

## Recycle Used & In Process Machine Tools Coolants .

Systems been designed and manufactured by I.T.L.

Systems are an outcome of years of experience and R&D in Industrial Filtration.

Systems shown, are Stationary or mobile Skid Mounted Recycling system.

When application is std. machining, Solutions suggested are the **ABWD** -Auto Back Wash Drum Recycling series. When sludge and fines are involved (grinding, composite materials.) **HMR** -Hydrostatic Media Recycling series are suggested.

Our systems are capable to recycle used water-based coolants and /or serve factory plant as mobile or stationary solutions.

### **The Conception:**

System can be used as a mobile or MC local system in the factory. System is connected to MC tank by simple suction pipe, treat coolant and return it to MC tank by a Service pump or simple overflow.

When stationary used coolant applications chosen, system can be combined with the factory RO and Emulsion preparation system in order to maintain the right coolant concentration (Top Up) before returned to machines. Recycled Coolant is held in the clean tank, continuously cycled until its requested in the factory. In such a case, we suggest system to be located in the swarf room, receive used emulsion from the machining department (by fork lifts, vacuum sump cleaners, piping ..) , recycle it and return it to factory again. It's although a reasonable solution for small size factories who can't afford investment in central systems. Then unit is connected to the MC's tanks in the factory by pipes and auto valves. Periodically system take and replace a certain amount of coolant. One machine at a time. So, during the day all machines sumps are recycled. Depend on the application systems modules consist of:

### **1.The Skid Module consist of:**

- 4 wheeled skid assays easily mobilized manually or by a fork lift.

### **2.0.ABWD Module for Machining applications consist of;**

- Modular Auto Back Wash Drum Filter. 100,200,400 lpm modules.
- Auto Back Wash unit utilizing clean effluent to remove fines from the filter.
- 25-50-micron levels of filtration.
- Debris are discharged into a through away or washable bag filter.
- Maintenance Free system.

### **2.1.HMR Module for sludge removal consist of;**

- Hydrostatic Media Filter. 150;300,500 lpm modules.
- 15-30-micron levels of filtration.
- Fines are removed with the media and disposed in an integral bin.
- Media Sensor to notify periodically media replacement.

### **3.500, 1000 , 1500 liter Clean tank modules consist of:**

- Clean tank suited with full level sensors.
- Effluent are returned to machine by return pump or simple overflow.



Mobile ABWD Used Coolant Recycling

#### **4.Tramp Oil Separator**

- Clean Tank Integrated Coalescing **TOS** removes free oils and suspended particles of the effluents.
- Residual Coolant recycling of the free oils removed.

#### **5.Bacterial and Fungi's Treatment.**

- Ozone Generator to periodically inject Ozone into the coolant.
- Air Bubbler to aerate coolant.

#### **6.Control Panel.**

- Friendly HMI with parametric set up to fit applications.

#### **Benefits:**

- System been designed to filter various water base- coolants, Industrial Waste water etc.
- System is a cost-effective unit to service small and medium work shops.
- Various level of filtration between 10– 50 microns.
- Various flow rates to handle large or small sumps.
- Media Free and Maintenance free system.
- Finish: RAL colors painted or Stainless-steel fabrication.

#### **Options:**

- Add in Service pumps for Machining and bed flushing.

#### **Technical Information:**

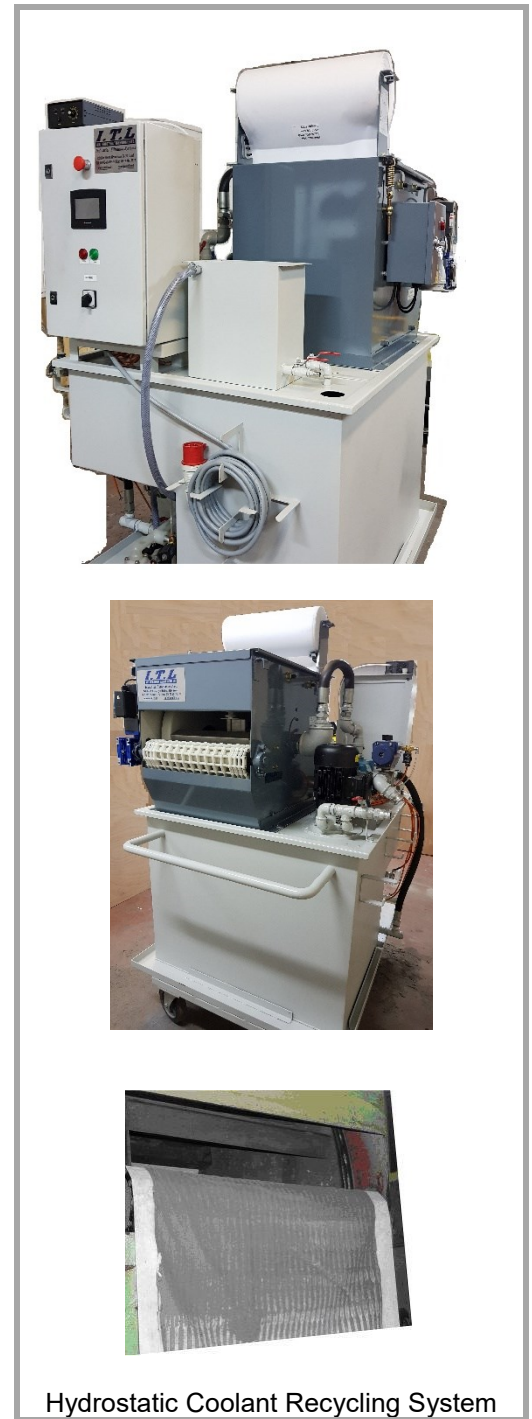
- Dimensions of 1000 L System: 1200x1000 MM. Overall Height 1900 MM.
- 380VAC ,50(60)Hz , 16A

ITL design & manufacture Various Filtration system for machine tools, grinding, process industry including High Pressure System, Recycling of liquids and solids. Our system can be local, Central or Mobile, Std. or Tailor Made.

- Our System service HNK, Okuma, Maho Dekel, Mori Seiki, Makino, Mazak, Doosan , Haas, Blohm, Rolomatic, Bridgeport ,Michael Dekel and more.



We supply Peripheral solutions such as pumps, Air filtration, Chillers, Sump Cleaners and disposables.



Hydrostatic Coolant Recycling System

For more details contact:



**A.M.ITL Industrial Technologies Ltd.**

ENGINEERING AND PRODUCTION OF INDUSTRIAL FILTRATION, RECYCLING, ENVIROTECH SOLUTIONS.  
SALES AND AFTER SALES SERVICES.

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