

PURGE Advanced Filtration

Full Flow System



Eliminates Common Machining Problems

For moderate volume production applications with or without filtering conveyors. Great for various metals, ceramics, composites, and other materials.



See Video

The Purge provides constant, full flow coolant filtration to prevent small chips and fines from entering a machine tool's flood pumps and high-pressure coolant system. It circulates coolant through its debris collection system, where the filters catch all debris before returning the ultra-filtered coolant back to the machine tool.

Clean coolant improves part quality, extends cutting life, and lengthens the time between tank clean-outs. When The Purge has reached maximum capacity, the dirty filter bags are simply taken out and disposed of without interrupting production. A variety of different types of filter media can be used depending on the application.



CLEAN SIDE OF COOLANT TANK STAYS FULL

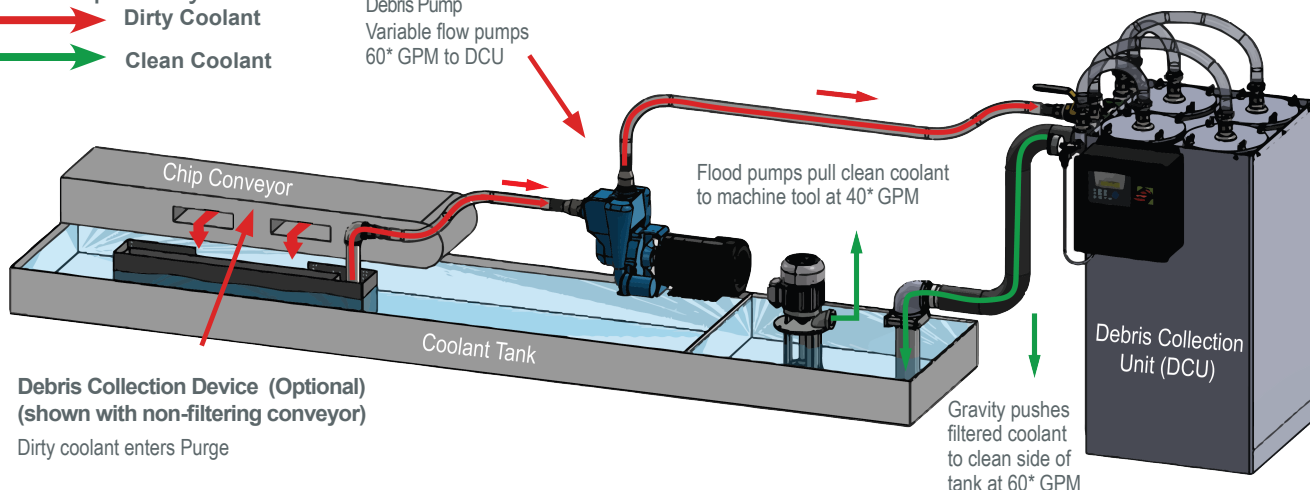
Clean, filtered coolant enters tank faster (60* GPM) than it's sent to machine tool (40* GPM)

*Example only

→ Dirty Coolant
→ Clean Coolant

Debris Pump
Variable flow pumps
60* GPM to DCU

Flood pumps pull clean coolant
to machine tool at 40* GPM



Debris Collection Device (Optional)
(shown with non-filtering conveyor)

Dirty coolant enters Purge

Key Features

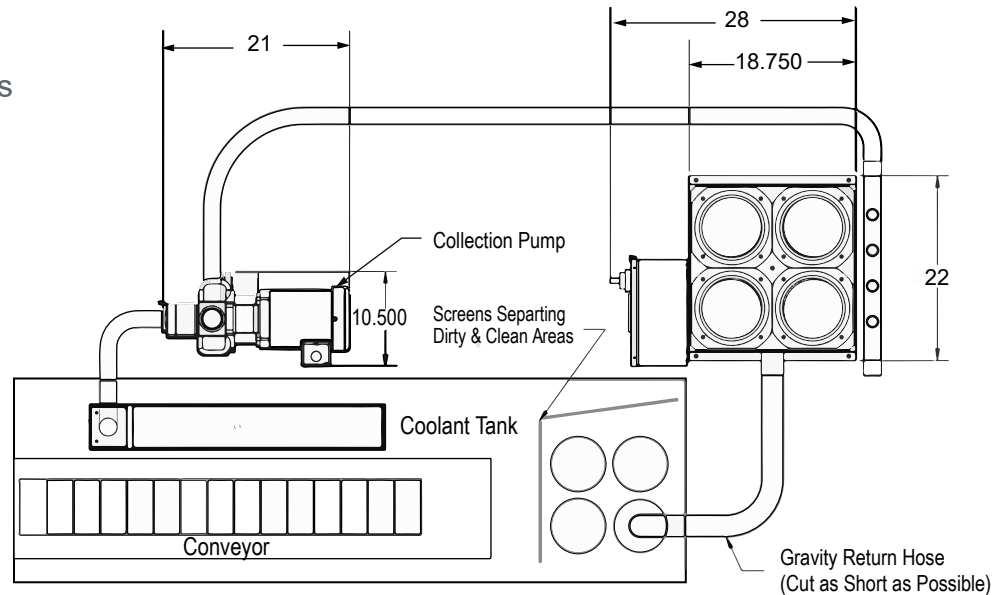
- Configurable flow rates depending on application
- Maintains constant flow rate as filters accumulate debris
- Accepts a variety of filtration media types
- Green/Yellow/Red Status Light
- 4 Easy, Quick Change Filters
- Holds up to 20 Gallons of Chips
- Compact Footprint
- 2-Year Parts Warranty
- Full Installation Kit Included

Specs

- Flow Rate - 30-60GPM
- Filtration - Down to 5µm
- Power - 208-230 VAC 3PH
- FLA - 9FLA
- Motor - 3HP
- 480V Optional FLA 4amps

Dimensions

- 22"W X 28"L X 48"H



The Purge includes four quick change 5µm filter bags. The system is designed to accept most #2 filter bags/baskets. For general machining applications, use standard felt bags. If long-term use with fine debris is required used pleated paper bags.

- **MP Systems provides 5µm polyester felt bags for \$5 each. Only 20\$ each filter change.**
- **No tools are required to change the filters and it can be done while the machine tool is still running!**

Filtering Chip Conveyors/Drum/Filter Box:

- Provides exceptional performance in most environments.
- Purge suction inlet can be placed directly at output of filtering conveyor.

Non-Filtering

- A screen basket with perforations 1/4" or smaller is required to capture chips before the suction inlet to The Purge filtration system.
- Some machines come standard with a screen basket. Custom baskets are available upon request. Contact MP Systems for more information.

MP Systems' Full-Flow Filtration products like The Purge and the CDR operate as a kidney loop. The filters are completely separate from machine operations, so there is no interference with production.

The Purge's filtration method is superior to typical in-line filters between a flood pump and coolant nozzle. These systems cause degraded flow performance at the nozzle because the in-line filters accumulate debris and create a pressure drop.