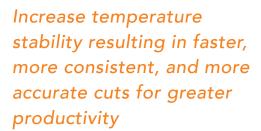
# **FlexForce**

High pressure coolant system for through-spindle coolant (TSC) applications with variable flow rate

options for high-performance adaptability





- Standard and variable flow rate options are available in 500 (34.5 bar) or 1,000 (69 bar) PSI configurations
- Improved tool lubrication and heat dissipation in the cutting zone
- Standard units filter to 10 microns; however, 5-to-25-micron filtration is available
- On-board coolant reservoir to continuously feed HP pump
- "Bag Filter Full" sensor and light indication
- Automatic pressure regulator and dump valve
- Multiple electronic sensors to monitor critical levels provide lights out operation
- Machine mating connector with interface



# **BENEFITS**

- Optimized machining speeds and feeds for increased productivity
- Improved surface finishes and part accuracy
- Improved chip evacuation and chip breakage control
- Reduced tool wear
- Breaks through the heat-generated vapor barrier created at the cutting tool and workpiece interface that causes surface deformities and damaged tooling
- Fail-safes and pressure regulation greatly reduce or eliminate system damage
- Safe and efficient operation
- Maintenance friendly design





Intelligently designed for fail-safe operation

# **HOW IT WORKS**

- 1. A low-pressure suction pump draws coolant out of the existing coolant reservoir.
- 2. Coolant flows through the bag filter into the FlexForce reservoir.
- 3. The high-pressure pump draws coolant from the designated reservoir and sends the high-pressure coolant to the machine
- 4. Pressurized coolant flows out of the Flex Force unit, through the spindle, and shoots directly at the cutting point.
- 5. Due to the force generated by high pressure, coolant is able to break the vapor barrier, and directly hit the cutting edge.

# **APPLICATIONS**

- Coolant Filtration
- Central Systems
- Water Filtration
- Fluid Filtration

# **DESIGN OPTIONS**

- Single or duplex bag filters
- 10-25 micron filtration
- 500 (34.5 bar) and 1000 (69 bar) PSI models available
- Fixed flow or variable flow between 2 gpm and 8 gpm

FlexFiltration design easily fits with existing coolant management and filtration systems.







