WATERJET FILTRATION
Closed Loop Filtration Systems
CLOSED LOOP FILTRATION

The Ebbco® Closed Loop Filtration System is designed to capture and filter the waterjet table overflow water, eliminating any water going to drain. This system can service single or dual cutting heads on any waterjet table.

The Ebbco® Closed Loop System eliminates the need to go to drain, by recycling your cutting water. This system will reduce your water consumption and your costs for treated water such as RO units or water softeners. The Ebbco® Closed Loop System protects your high pressure pump by always supplying the manufacturers specified water quality.

How it Works: The Waterjet table overflows into a setting weir where particles are settled out before entering the filtration system. Water enters the dirty side of the Stainless Steel Reservoir on the filtration system, the filter pump sends the water first through a Stainless Steel Bag Vessel containing a 1 micron filter bag, then a Stainless Steel Ebbco® Hurricane Filter Vessel containing a 0.35 Micron Filter Cartridge. The clean water is then sent through a chiller or heat exchanger, to remove the heat from the machining process. When necessary, water enters the Stainless Steel DI Resin Vessel containing a special blend of mixed bed resin specifically designed for waterjet applications. The DI Resin removes any dissolved solids, to meet the pump manufacturers specified water quality. Filtered, Chilled and Treated water enters the clean side of the systems reservoir. An ozone generator with Clean tank mounted stone provides bacteria control. Clean, Treated water is then sent by the feed pump through a 0.35 micron final filter for use at the high pressure pump.

Benefits from the Closed Loop Polishing System

- **Eliminate the Drain Completely**—by recycling the water no dissolved solids are sent down the drain.
- **Reduce Water Consumption up to 90% of Normal Usage.**—By Reusing your overflow water you reduce your water and sewage bills drastically.
- **Reduce the Requirement for Make up Water Treatments**—The Ebbco® Closed Loop System uses a small amount of makeup water and treats it before going to the high-pressure pump.
- **Protect you High-Pressure Pump**—ALWAYS supplies the manufactures specified water quality to the high pressure pump which results in reduced pump maintenance and machine down time.

**Inline Chillers**
Ebbco chillers are designed to cool the OEM’s high pressure pumps as well as the Ebbco® Closed Loop Filtration system, providing cooled, DI treated water for cutting purposes to maximize high pressure pump seal life. We offer various models such as Closed Loop Chillers, In-Line Chillers and Flow-Through Chillers to work with all Waterjet manufacturers high pressure pumps.

**Settling Weir**
The Ebbco® over-under settling weir system provides maximum settling time for removal of suspended solids. The Ebbco® settling weir is fitted with a disposable liner for easy change out. The liner is capable of holding up to 9 cu.ft. of abrasive. The Settling Weir has a compact foot print of 2’ x 3’ 10 Gauge Steel with a rust inhibiting finish. The Settling Weir has proven to lengthen filter life.

**TYPICAL LAYOUT**
A custom floor layout is provided, placing the filtration equipment utilizing the minimum floor space.

Closed Loop for Multiple Pumps
The Ebbco® Closed Loop Filtration System for multiple cutting heads and high pressure pumps is designed to filter up to 4 gpm, The system incorporates Dual Bag Vessel, Dual Hurricane Filter Vessels and Dual DI resin Vessels and a 200 gallon reservoir for larger holding capacity.