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## CLOSED LOOP FILTRATION SYSTEM

**APPROXIMATE OPERATION COSTS**  
(Based on 200 hours/month plus 10¢per Kilowatt Hour)

Item	Part NO.:	Hours	Change Out	Cost	Extended Cost
BAG FILTER #1	WJF-1-G2PS-EA	20	10	\$9.50	\$95.00
HURRICANE FILTER #2	WJF-HR930-Q.35	200	1	\$165.00	\$165.00
WATERJET RESIN BAG #3	WJF-100-PKG	200	1	\$175.00	\$175.00
FEED PUMP FILTER	WJF-801-0.35	200	1	\$15.50	\$15.50
<b>Consumable Total:</b>					<b>\$450.50</b>
<b>CLS-141 Filtration System with 40,000 BTU/Hour Chiller Energy Consumption:</b>					<b>\$110.00</b>
<b>\$560.50 ÷ 200 HOURS= \$2.80 PER HOUR</b>				<b>TOTAL</b>	<b>\$560.50</b>

*NOTE: These figures are based on city water of 150 PPM and a properly working Abrasive Removal System in place. This does not account for table make up water (i.e. evaporation, splash, or carry off).*

### THINGS THAT COMMONLY CAUSE INFLATED CLOSED LOOP OPERATING COSTS:

- Poor Quality Makeup Water.** In cases where makeup water is 300 ppm or higher a Reverse Osmosis System should accompany a Closed Loop System.
- Poor Control of Water.** Using a Closed Loop Water to wash floors, draining vessels and not capturing water during filter service or no shields on catch tank to capture water when spraying off parts.
- Improper Cooling.** All Closed Loop Systems need a chiller or heat exchanger to dissipate heat from the Closed Loop System to insure less than 70°F water is sent to the high pressure pump. Warm stagnant water is the breeding ground for bacteria growth leading to shortened filter life. In high ambient conditions it is suggested that the Closed Loop System re-circulate 24/7 with the high pressure feed pump shut off. Bacteria cannot form in cool recirculating water.
- No Abrasive Removal System.** As the catch tank fills with spent abrasive, a higher concentration of abrasive laden overflow water will go into the Closed Loop System turning it into an Abrasive Removal System.

### THINGS THAT WILL REDUCE OPERATING COSTS ON CLOSED LOOP SYSTEMS:

- The use of an Ebbco Settling Weir System as a prefilter to the Closed Loop Filtration System will increase filter life.
- If D.I. or R.O. water is available; always use it for makeup water to the Closed Loop Filtration System.
- Service the filters in the Closed Loop Filtration System at the proper intervals.
- Clean and reuse the Closed Loop Filters. Both Prefilter and Polishing filter #2 are cleanable/re-usable. **Note: Many customers clean and reuse two or three times to lower operating costs. Cleaning Procedure is included in the Closed Loop Operations Manual.**
- Purchase an Abrasive Removal System to eliminate abrasive build up in the catch tank. By maintaining a clean catch tank you reduce the percentage of spent abrasive that overflows into the Closed Loop Filter System.