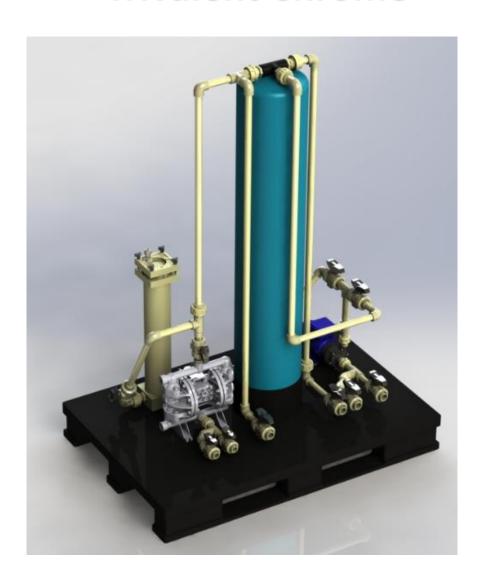


SERFILCO® INTERNATIONAL LTD



Global Products, Local Service & Advice You can Rely on

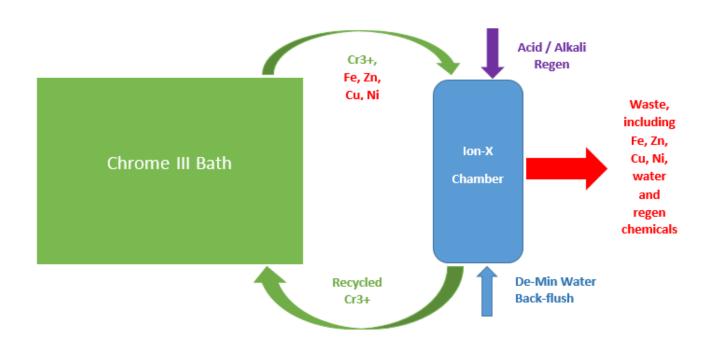
Ion Exchange Regeneration for Trivalent Chrome



SERFILCO Filter Chambers, Filtration Systems, Filtration Media, Pumps, Pump Accessories and Replacement Parts .

SERFILCO Ion Exchange for Cr III

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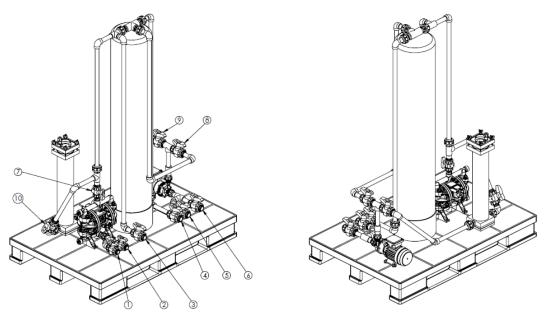


For successful trivalent chromium plating bath operation, SERFILCO provide simple, cost-effective equipment to remove copper, nickel and zinc from the bath without interrupting bath operation. Efficient and cost-effective treatment of contaminant metal ions is readily accomplished using ion exchange technology. The benefits gained include the following:

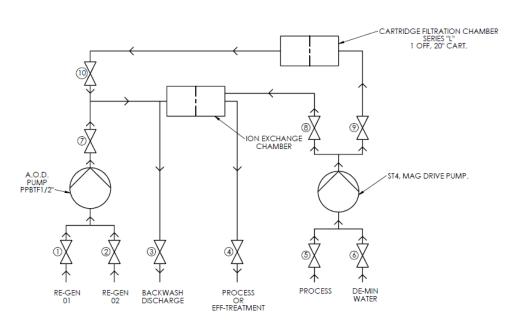
- Copper, zinc and nickel ions are all removed from the bath simultaneously.
- Treatment can be done during bath operation (no shutdown time required).
- Treatment can be done continuously or intermittently depending on need.
- The treatment units are small and usually can be located right at the plating tank.
- Treatment is simple, consisting of pumping solution from the tank, through the treatment unit and back to the tank.
- Regeneration of the ion exchange resin takes about two hours and occurs about every week to two weeks for a properly sized treatment unit.
- Options exist for acid, alkaline and de-min water feeds for regeneration.

SERFILCO Manual Systems for Treatment and Regeneration

SERFILCO systems use a simple Manual Operation Process

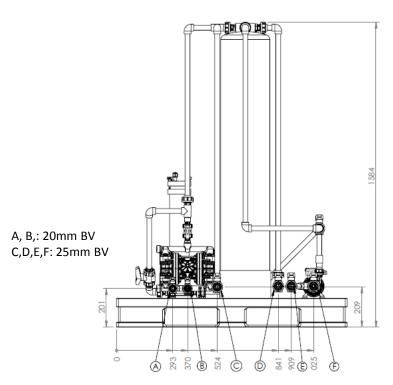


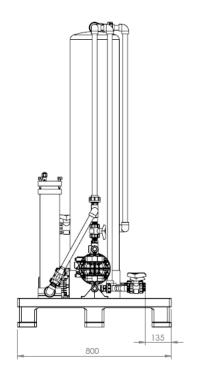
OPERATION	VALVE POSITION										
	1	2	3	4	5	6	7	8	9	10	
Normal Ion Filtration	Closed	Closed	Closed	Open	Open	Closed	Closed	Closed	Open	Open	
Back Wash	Closed	Closed	Open	Closed	Closed	Open	Closed	Open	Closed	Closed	
Regeneration - 01	Open	Closed	Closed	Open	Closed	Closed	Open	Closed	Closed	Closed	
Regeneration - 02	Closed	Open	Closed	Open	Closed	Closed	Open	Closed	Closed	Closed	



SERFILCO Manual Systems for Treatment and Regeneration

System Dimensions





Specifications for Tanks up to 6m3

Prefilter	Resin	Service Pump	Service Flow	Backwash flow	Regen Pump	Regen flow
1 x 20" PP L Series	42-51litre GR Series	S ST4 Series Mag-Drive		4 - 221	1/2" AODD	4 - 2 01
cartridge chamber	HDPE chamber	f/w 0.12kw motor	up to 15lpm	up to 22lpm	PP/TF	up to 3.8lpm

SERFILCO manufacture standard systems as above or can provide bespoke systems to suit customer tank and resin requirements. These can be assembled with or without a pre-filter chamber for depth wound cartridges as indicated, followed by a refillable resin chamber (82litre to 425litre capacity) with 250 micron PP strainers to prevent resin migration on service flow and resin regeneration.

The pump is magnetic coupled made of glass filled PP, with an air operated diaphragm pump for alkali and/or acid regeneration. Systems include PP pipe and valves and are fitted to a PE base.

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