

The High Quality Route to clean water.



## Water Quality values

ProFilter<sup>®</sup> TREATING RINSE WATER CONTAINING HEAVY METAL CONTAMINATION FROM TREATMENT CFS. THE HIGH QUALITY ROUTE TO CLEAN WATER



# Selective Ion Exchange ProFilter<sup>®</sup>

## Treating Rinse water Containing heavy Metal Contamination

Today tough discharge limits require rinse water Recycling systems that produce little or no waste and Use less energy.

Using time proven and tested techniques of ion Exchange, TREATMENT<sup>®</sup> range of systems offer the most versatile solutions in treating rinse waters containing heavy metal contamination.

### **The Process**

In a typical application, final rinse water is run through The system for removal of surfactants other organics and heavy metals either in elemental, chelated or otherwise complexed form. The treated water is recirculated back to the rinse tanks as deionized water in closed loop. The resins are replaced or regenerated periodically generating a small amount of waste to be treated and discharged as a batch. Our systems use a proprietary regeneration technique that minimizes regeneration waste and optimizes chemical usage. Each system is skid mounted, pre-plumbed, pre-wired and pressure tested at the factory. The waste minimization techniques used in our systems support and enhance the sound design principles of ion exchange systems.

- Essential for optimum performance, there is always sufficient space in the vessels for proper backwash and bed reclassification.
- A minimum of 0.5 cubic foot of resin is provide for every gallon per minute flow of rinse water providing the most optimum resin capacities. Systems typically run two or more weeks between regenerations, thus generating only 2-3 gallons of regeneration waste per 1000 gallons purified.



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## CONSTRUCTION

The **Dimetal<sup>®</sup>** vessels are fabricated from seamless glass Reinforced plastic coated with polyethylene and Supported on a curved section skirt mounted on the bottom Dished end. Vessel internals, pipe work and distribution and collection systems are manufactured from corrosion resistant material

## PVC -PP-PVDF-PE

The broad programme makes it possible to choose the optimum plant for the project whether the need is continues or discontinues water supply. Frame-mounted plants ensure a short installation time. The choice of materials and the simple and robust design of plant and valve unit result in a long plant life, 15 years are not unusual. The name TREATMENT<sup>®</sup> stands for reliable pure water technology and satisfied customers. In all areas where pure water is required TREATMENT<sup>®</sup> provides clear solutions

## CIRCUIT BOARD RINSES

Hot deionized water rinsing is the CFC- free method of choice.

Rinse water is completely recycled by the **ProFilter<sup>®</sup>** **Dimetal<sup>®</sup>** systems after elimination of organics surfactants and heavy metals.

The benefits to users are:

- Less energy is used as a result of retaining some of the heat in the system, rather than draining to the sewer.
- Less cost by lowering R.O or DI water use
- no waste and Use less energy
- Hi purity effluent 1- 0.5 meg-ohm-cm
- Less to zero waste
- Less cost by recirculating the wastewater as deionized water of any desired purity.



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### **AQUEOUS CLEANER RINSES**

With the elimination of TCE vapor degreasers aqueous Cleaners are now being used extensively. final rinses from aqueous cleaners often have traces of heavy metal.

The **ProFilter<sup>®</sup> Dimetal<sup>®</sup> systems** are used to recirculate hot deionized water back to the rinse tank Removing surfactants and heavy metals. Saving are realized by the user as:

- Less energy is used as a result of retaining some of the heat in the system, rather than draining to the sewer.
- Less cost by lowering R.O or DI water use
- No waste and Use less energy
- High purity effluent 1- 0.5 meg-ohm-cm
- Less to zero waste
- Less cost by recirculating the wastewater as deionized water of any desired purity.

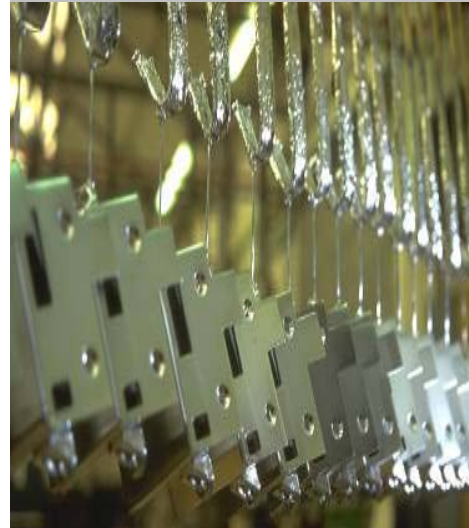
### **PLATING /ANODIZING RINSES**

Most plating shops are equipped with metal hydroxide precipitation systems. with the discharge limits for heavy metals constantly being lower, ion exchange is being used as the technology of choice to achieve reliable and predictable performance.

The **ProFilter<sup>®</sup> Dimetal<sup>®</sup>** series offer these additional benefits.

- Less water
- Less waste
- Less energy
- Less hassle

## **MORE SAVINGS**



# Selective Ion Exchange ProFilter<sup>®</sup>

## Treating Rinse water Containing heavy Metal Contamination

During the Planning of **ProFilter<sup>®</sup> Dimetal<sup>®</sup>** Systems TREATMENT<sup>®</sup> specialists draw on practical Standardized system components without neglecting user Demands. This allows customer orientated Solution and offers at the same time the assurance of a successfully operating System as well as modern, economical series production. This kind of state of the art production practiced at TREATMENT<sup>®</sup> for a long time has contributed most decisively to **ProFilter<sup>®</sup> Dimetal<sup>®</sup>** Systems not being easily beaten in their price Performance Ratio.

The critical area of automation is handled using only in-house Resources. Unlike many suppliers TREATMENT<sup>®</sup> Water Technology utilizes their own specialist departments for the design and Construction of the control cabinets and For the development and writing of software.

### **SERVICE AFTER SYSTEMS HANDOVER**

The TREATMENT<sup>®</sup> Customer Services include fault diagnosis Systems up to and including remote assistance and a 24-hour Hotline.



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## MODEL CLASSIFICATIONS

### **Dimetal<sup>®</sup>- 100**

Adsorbent column follow by two bed deionizer  
Basic metal removal including cyanide  
complexes. Effluent purity 0.5 mega-ohm-cm.

### **Dimetal<sup>®</sup>- 200**

Backwashable adsorbent column follow by two  
bed deionizer with polisher column.  
Effluent purity 1-2 mega-ohm-cm.

### **Dimetal<sup>®</sup>- 300**

Backwashable adsorbent column follow by self  
regenerating two bed deionizer with polisher.  
Effluent purity 1-2 mega-ohm-cm.

