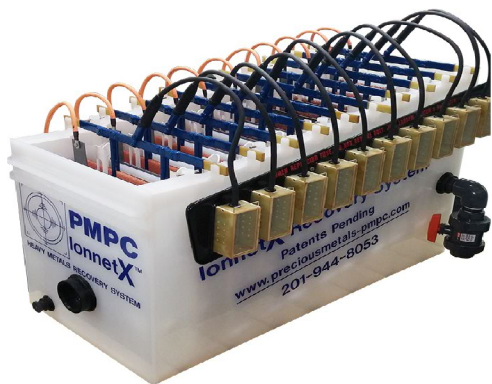


Why Electrowinning?



Electrowinning, also called electroextraction, is the recovery of metals from solutions through the use of electrolysis. All over the planet metals are being dissolved in solutions for processes ranging from plating to anodizing to refining and more. **AND THAT CREATES WASTE.**

Here's why, in general, electrowinning should be done:

- In one step, It enables the recovery of metal in recyclable and saleable form
- In some cases it can completely obviate the need for sludging or ion-exchange recovery and the requisite regeneration
- In many cases there is less than a one year payback
- It simplifies compliance with discharge limits
- Low initial costs
- Low operating costs
- Simple to operate and maintain

Here are some of the applications:

- Any copper-sulfuric acid dumps, including:
 - Copper plating bath or drag-out rinses
 - Micro-etch and sulfuric acid dumps
 - Acid cleaner dumps
 - Ion-exchange regenerations
- Silver, gold, palladium rinses and dumps
- Silver, gold, palladium cyanide stripper solutions
- Entek dumps
- Electroless copper bailouts
- Nickel plating drag-out rinses and dumps
- Cyanide cadmium plating
- Acid cadmium plating
- Cyanide zinc plating
- Cyanide copper plating

But what is so special about the IonnetX™ Electrowinning System?

- The IonnetX™ system was designed after 15 years of observation of our earlier Ionnet™ system's performance. The lessons learned from that experience in the field were the driving forces to redesign what we felt could be done better. And the IonnetX™ system is the result of all the changes.
- For the first time, a high capacity system, has the ability to bring metal concentrations to compliance levels. This system will take copper, cadmium, silver, gold, and palladium down to a fraction of a part per million. This is documented.
- Because of the design using expanded surface area cathodes, the foot print is minimal.
- Our rugged design and durable components assure many years of trouble-free service.

To see more about how the IonnetX™ system works, and its special features please see our accompanying brochure or go to our web site: preciousmetals-pmpc.com/IonnetX/catalog