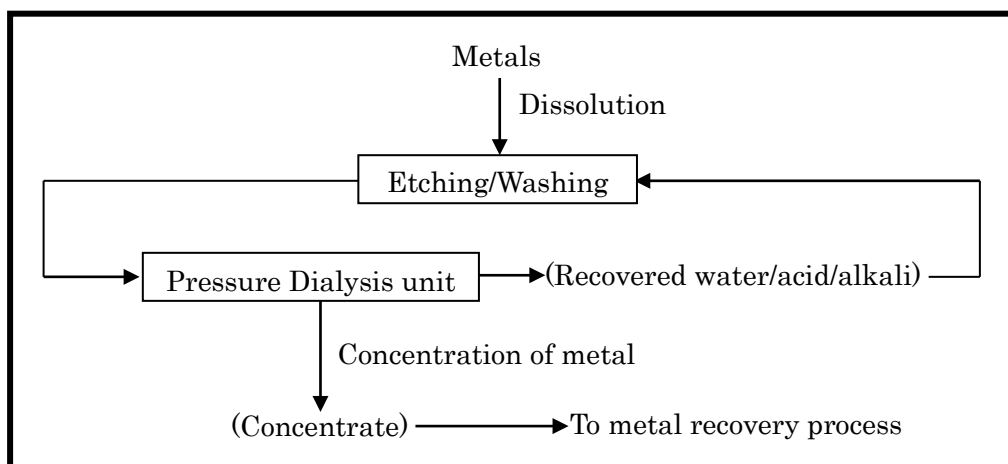


Regeneration of Waste Water / Acid / Alkali and Recovery of Valuable Metals



New Resources Recovery System by Membrane Energy Saving Process

Waste liquor and water contain various resources such as acids, alkali and metals. Recovery of resources is very important for elimination of cost and pollution control.

New membrane resources recovery system — Pressure Dialysis — is developed supporting by NEDO (New energy and industrial technology development organization).

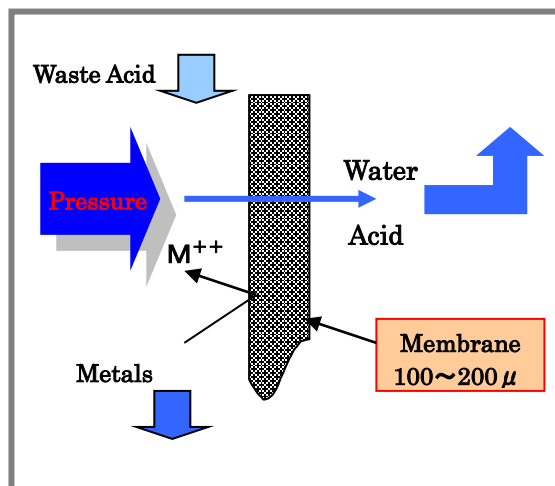
This system has several features such as

1. Acids, alkali and water are separated from waste and re-utilized.
2. Metals and high molecular substances are concentrated.
3. Energy saving due to no necessity of distillation / solidification.

This system is very useful for utilization of waste containing metals, quality control of metal finishing.



●Specification(Standard);250l/hr per Element (4) (Ni-plating washing)



TOTAL PLATING SYSTEMS

NOSAKA ELECTRIC CO., LTD

2-2-9 KEIHINZIMA OHTA-KU TOKYO JAPAN

TEL:+81-3-3790-1531

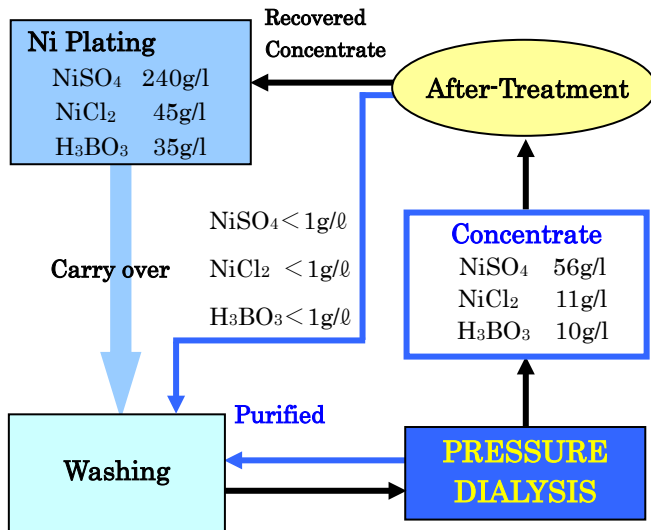
<http://www.nosaka.co.jp>

FAX:+81-3-3790-0224

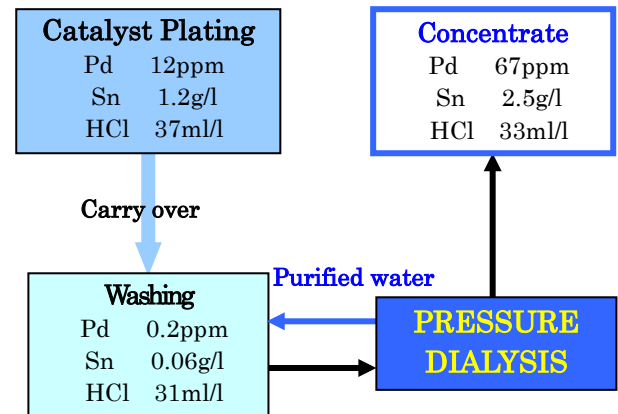
● Typical Examples of Application

1. Recovery of Ni & Boric acid and

Regeneration of water from Waste Water



2. Recovery of Pd from Waste water



● Advantage

1. Reduction of Waste for Pollution Control
2. Elimination of Cost
3. Improvement of Quality

● Advantage

1. Elimination of Cost
2. Improvement of Quality
3. Reduction of Waste for Pollution Control

3. Other applications

- Metal plating field
- Electronics field
- Nonferrous metal field

Regeneration of plating liquor and recovery of metals
 Recovery of waste acids and reduction of waste volume
 Copper plate etching, aluminum foil etching
 Alumite, nonferrous smelting and refining, rare earth metals