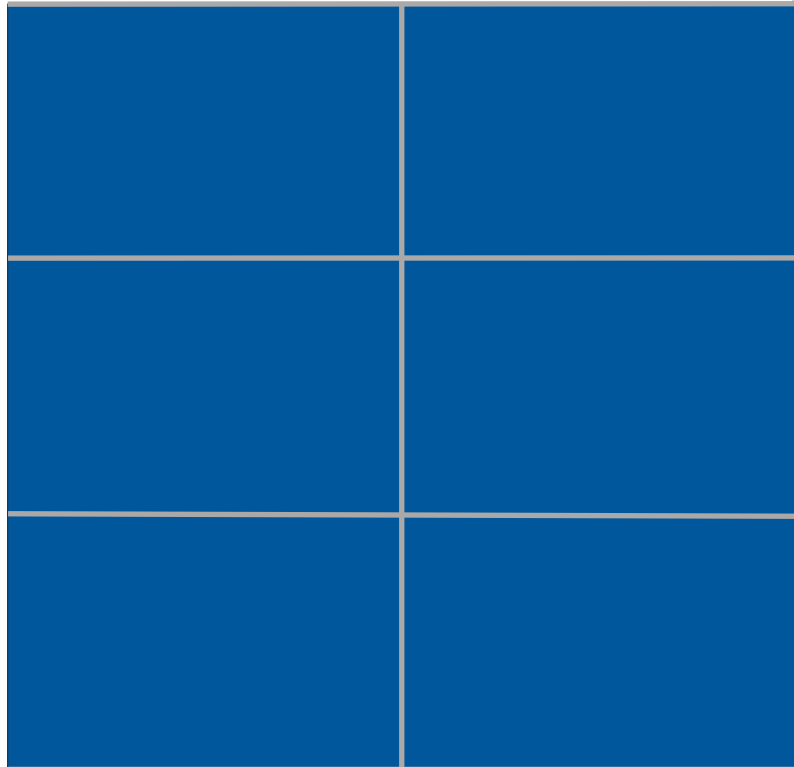


The Kleantek Corporation

Water Treatment Plant

for



Our Technologies

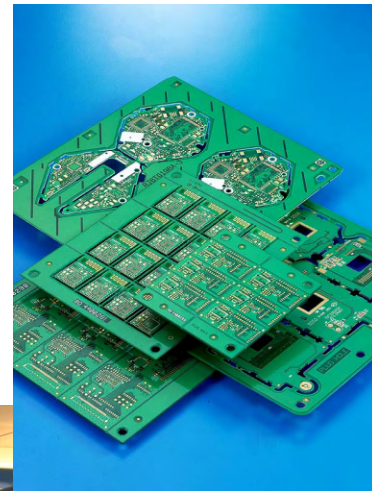
- Adsorption
- EDI
- Ion Exchange
- Electrowinning
- Membrane Systems

PCB  
Plating  
*manufacturing*



Every metal finishing shop generates varying liquid waste with metals and other contaminants. A successful waste management system must be custom designed to address each company's needs. Kleantek gains thorough understanding of our customers' processes and develops the most suitable system for each of them.

# PCB



## The approach

### 1. Define the waste problem

With a hands-on site survey, Kleantek's engineers get detailed information about the metal finishing shop process, such as rinsewater flowrates, volume and frequency of dumps, concentration of chemicals etc.

### 2. Define the waste treatment process

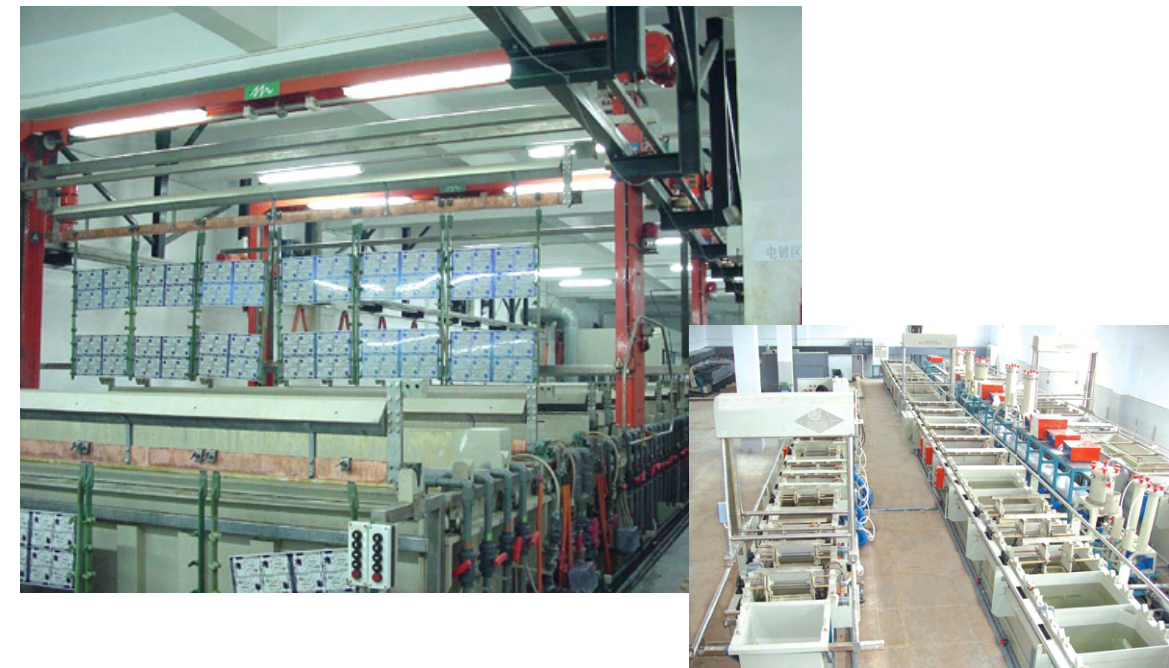
After analyzing the survey data, we prepare several alternatives with an economical analysis of each option for review with the customer.

### 3. Evaluate treatment technologies

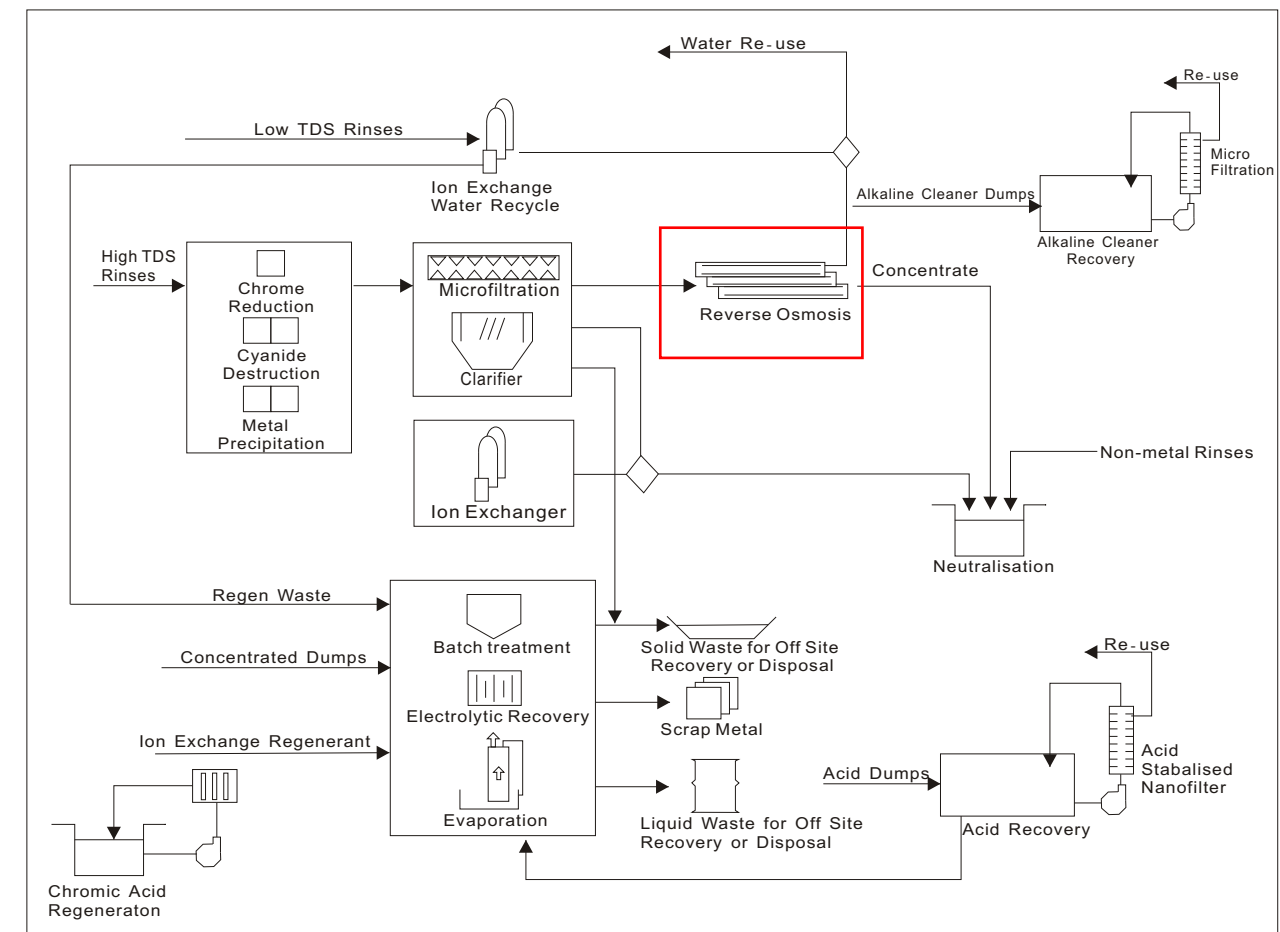
Kleantek evaluates the economics and expected performance of the waste treatment technologies. The goal is to get the system design Right the first time by evaluating all the factors during design.

### 4. Integrate treatment plant into your manufacturing

During site survey, we measure the area available for installing the equipment. We ensure our equipment will integrate into the plant



# Electroplating





# Water Treatment

$\text{Zn}^{2+}$

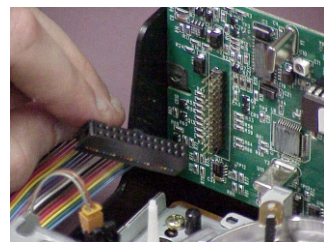
$\text{Cu}^{2+}$

$\text{Pb}^{2+}$

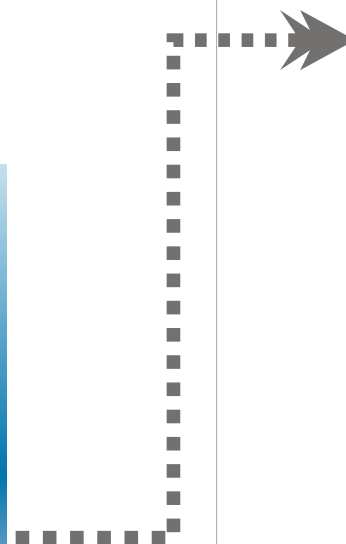
$\text{Ag}^+$

$\text{Cr}^{3+}$

$\text{Ni}^{2+}$



From  
manufacturing



Discharge

$\text{Pb}^{2+}$

$\text{Cr}^{3+}$

$\text{Ag}^+$

$\text{Cu}^{2+}$

$\text{Ni}^{2+}$

$\text{Zn}^{2+}$

# Water Recovery

$Pb^{2+}$

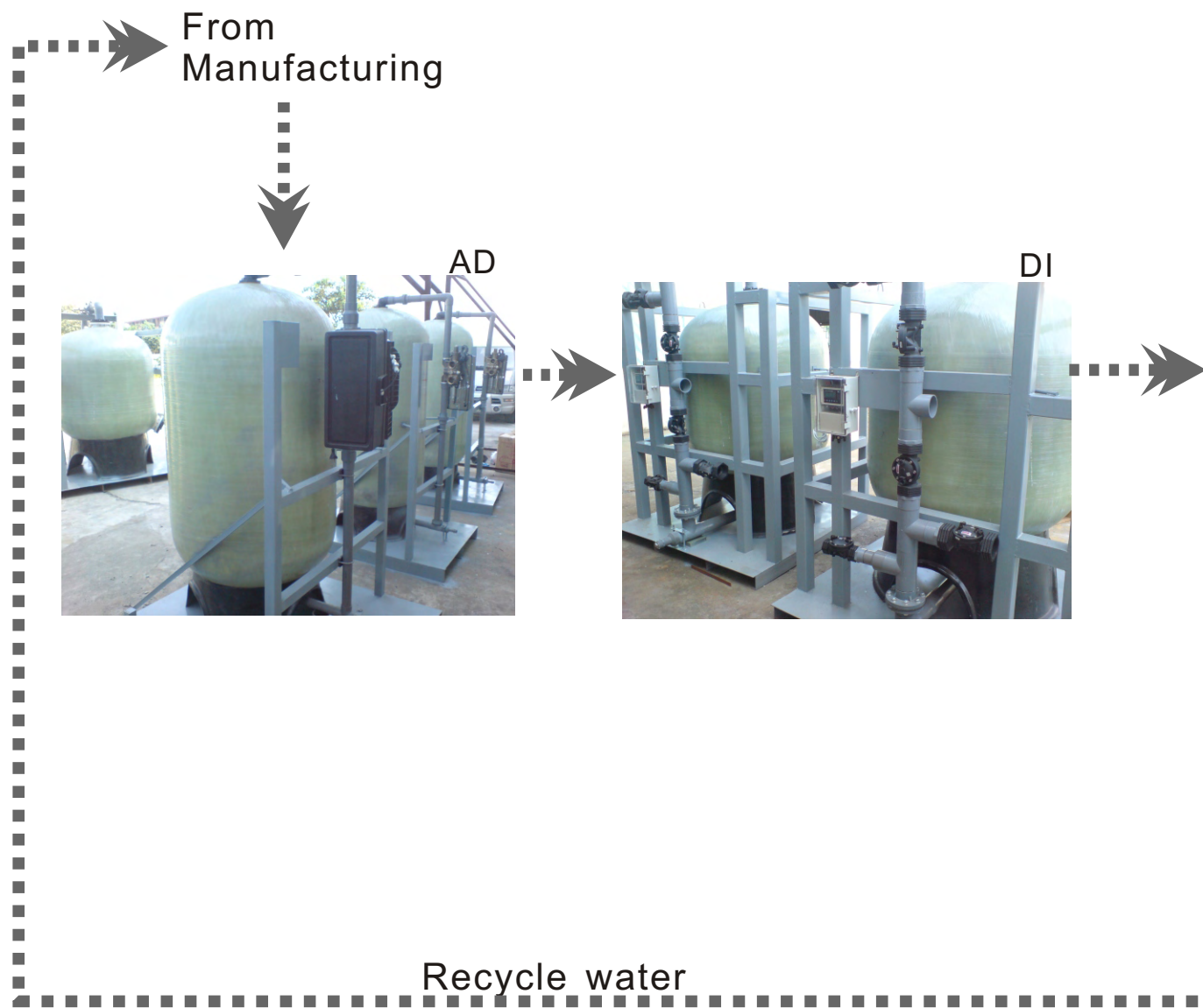
$Cr^{3+}$

$Ag^+$

$Cu^{2+}$

$Ni^{2+}$

$Zn^{2+}$



## Reverse Osmosis



Excess dump

$Cr^{3+}$

Discharge

$Cu^{2+}$

$Ag^+$

$Pb^{2+}$

$Cr^{3+}$

$Zn^{2+}$

$Ni^{2+}$

## ROX - Membrane System(膜處理系統)

Model 型號	Capacity (m <sup>3</sup> /hr) 設計流量	Plant Dimensions 設備呎吋 (L x W x H) (長 x 寬 x 高)
ROX - 5	5	2500 x 1200 x 1850
ROX - 10	10	2500 x 1200 x 2250
ROX - 20	20	3800 x 1200 x 2250
ROX - 50	50	3800 x 1500 x 2250
*	*	*

\* : Custom Model 其他等訂流量