



# Strainer Case Study

## **CLIENT:**

Microfiltration/Ultrafiltration Membrane Pilot Plant located in Southwest Arizona.

## **APPLICATION:**

This project's primary function was to remove arsenic from surface water supplies.

## **PROBLEM:**

Due to extremely high algae levels, the membranes faced severe plugging, which led to loss of efficiency, thus the membrane testing protocols were compromised.

## **SOLUTION:**

S.P. Kinney furnished a Kinney Model "A" automatic self-cleaning strainer for use as a pre-treatment strainer, removing both algae and larger solids, thus protecting the membranes from plugging. The Model "A" was successful in its task, so much so that the Design Engineer mentioned the Kinney name in a paper given at a Membrane Technology Conference in Texas. From the S.P. Kinney perspective, this name mention is very exciting, especially as the four membrane supplier's names were not specified in the report, nor was the eventual successful membrane supplier given name credit.

## **BENEFITS:**

### **AUTOMATIC STRAINING**

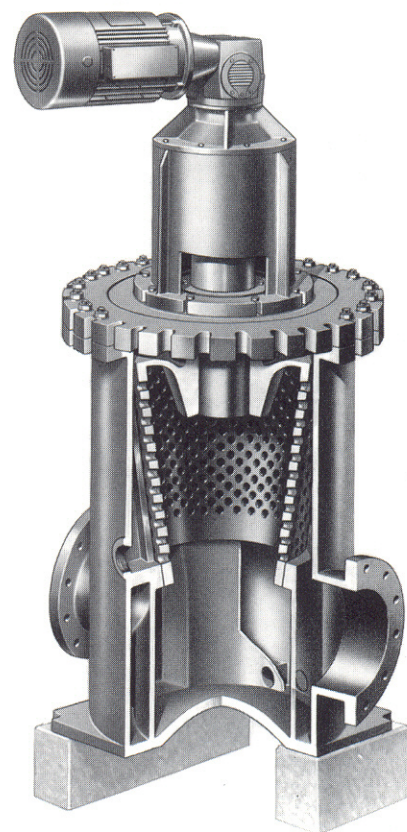
- Drum contains straining media. The drum rotates at a speed of 6 rpm, with automatic backwashing occurring for one minute, every 30 minutes.

Backwash flow regulated with a motor-operated valve, actuated via a timer and/or a pressure differential switch.

### **PROVEN MEDIA**

**STRENGTH** - Wire mesh cones, from 1/16" to as small as 40 microns, are available.

**CONSTRUCTION** - Cast iron body and rotating drum.



*Kinney Model A Automatic Strainer*

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