# **Caster Water Filtration — Aluminum Producer**

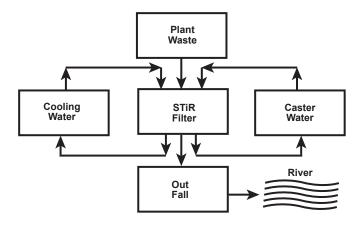
### INDUSTRIAL OIL FILTRATION | COOLING WATER TREATMENT | EFFICIENT WATER PURIFICATION

## Oil & TSS Removal From Water Streams



END USER:	Aluminum Producer
LOCATION:	Southeast, USA
UNITS:	(2) model STiR-39V (39 ft2/filter)
FLOW RATE:	600 gpm (0.9 Million gallons of water per day)
PROCESS:	Oil and TSS removal from outfall, cooling, and caster waters

#### COOLING AND CASTER WATER FILTRATION-PROCESS FLOW DIAGRAM



### **MORE INFO**

An Aluminum producer uses the STiR Filter to remove oil and suspended solids from 3 unique water streams, which are 1) general plant waste water, 2) plant cooling water, and 3) caster water.

The wastewater was previously treated with API separators, and a series of ponds, prior to discharge via the plant outfall.

Onsite pilot testing provided that the STiR technology exceeded plant discharge requirements while **producing 20 times less waste/recycle**, **when compared to membrane technology**.

The cost of the STIR filter was ½ that of the membrane technology, and the membranes would need to be replaced annually, while the walnut shells "green technology" have a 30-year life.

The filters also provide cooling water treatment and caster water stream filtration.

By filtering the cooling water, maintenance and cleaning of the cooling tower has decreased significantly, resulting in a more efficient water purification process.

Filtering the caster water, the water is now clean enough to recycle back to the caster which has significantly reduced cleaning and maintenance of the continuous caster, and has improved the efficiency of the caster by 10+%.

Recycling the water has also eliminated the need for daily caster water make up, which reduces plant and environmental costs.

Do you have oil or TSS in your manufacturing water stream you must remove? Call us today for help solving this critical problem, 248-427-9090.

