FILTRA-SYSTEMS PROJECT CASE STUDY

Aluminum Processing—Aluminum Filtration

SAND FILTER REPLACEMENT | WALNUT SHELL MEDIA FILTERS | FILTRA-SYSTEMS

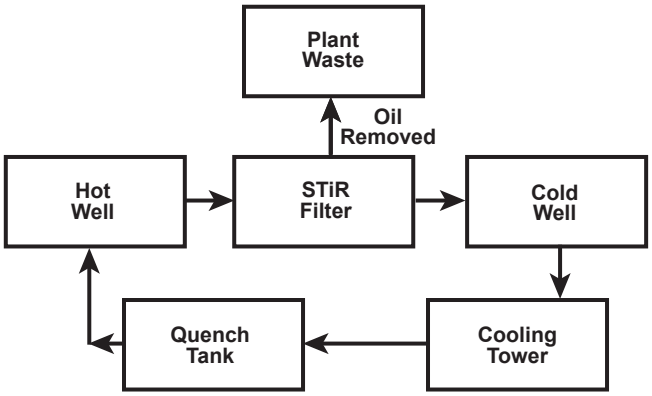
Oil & TSS Removal From Water Streams

PRODUCT USED:

STiR Industrial Water Filter

END USER:	Aluminum Producer
LOCATION:	Midwestern USA
COMMISSIONED:	Spring, 2014
UNITS:	(1) Model STiR-12V (12 ft2/filter)
PROCESS:	Hot Well oil and solids removal
FLOW RATE:	120 gpm

ALUMINUM PROCESSING/FILTRATION-PROCESS FLOW DIAGRAM



MORE INFO

A leading aluminum producer manufactures high grade, low weight aluminum for use in the aerospace industry at its plant in the Midwest US.

To prevent the buildup of oils, greases, and dirt on the produced billets during the quench process, installation of an aluminum filtration unit was required.

The STiR industrial water filter was selected for this aluminum processing application because of its ability to effectively remove both suspended solids (TSS) and oils from the casting water.

The STiR filter is an automatic, backwashable filter which uses a crushed walnut shell bed instead of a disposable filter media. The walnut shell media in the STiR can remove up to 90% of free oil, and 95% of suspended solids at 5 micron. The bed is permanent, and does not need to be replaced over the life of the product.

Walnut shell filters were selected during design as the best available technology for the aluminum processing, over induced gas flotation cells (IGFs) and other gravity separators. This is because walnut shell filters remove oils and greases more efficiently at lower concentrations (~50 ppm), and can continually provide clean water.

Contact us today to learn more about our aluminum processing solutions and other products.