

Steel Galvanizer Installs Automatic Magnetic Separators - Removed Double the Iron Fines Improved Overall Performance & Reduced Costs

The Most Advanced, Automatic, Non-Disposable Liquid Filtration System

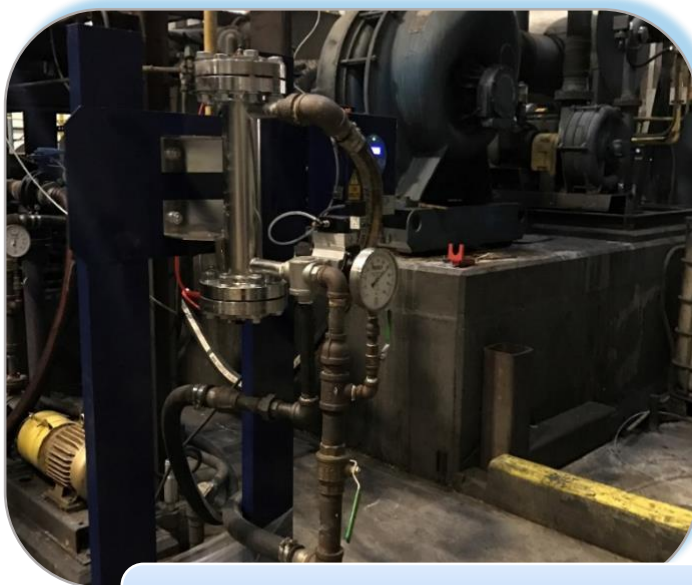


ZERO GRAVITY FILTERS

Steel Mill



**Maggie MG1200 rated at 125 gpm
Stage #2 - Alkaline**



**Maggie MG300 rated at 35 gpm
Stage #3 - Rinse**

Customer Challenge:

The cleaning section had the capability to remove steel fines from the strip. But the system did not have the capability to effectively remove the steel fines from the process (i.e. tanks and solution).

Steel fines were building up throughout the cleaning section – in the wash and rinse solutions and at the bottom of the tanks.

The build-up of steel fines had a serious negative impact on the consistency and reliability of the strip cleaning process, as well as overall operating cost and quality.

The mill needed a way to remove fines from the process continuously with minimal operator involvement.

Our Solution:

ZGF provided a Maggie automatic magnetic separator on each stage of the cleaning section. Maggie removes most ferrous particles 5 micron and larger and will also remove sub-micron particles.

Results:

➤ Implementation of ZGF Maggie technology has doubled the number of fines removed from the cleaning section.

- Before Maggie: 20 yards every 6 months.
- With Maggie: 20 yards every 3 months

With Maggie removing fines continuously from the process / cleaning section, the mill realized a multitude of benefits.

- Less Maintenance and Reduced Equipment / Component Wear (i.e. spray nozzles, pumps, etc.)
- Improved Process Reliability & Quality
- Improved Heat Transfer Efficiency – cleaner degrease solution reduces heat exchanger fouling and energy consumption, reduces heat exchanger maintenance, and improves process reliability
- Improved cleaning chemical performance and reduced chemical consumption
- Reduced water and energy consumption, and less discharge to WWTP