

# Automotive OEM Installs In-line, Automatic Magnetic Separator To Improve Cleanliness of Paint Shop Pre-Treatment System

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



Paint Pretreatment



ZGF Maggie MG2600, 3-Station



Internal View of Maggie  
Weld Balls & Metal Fines Captured by Maggie

## Customer Challenge

The quality of the paint finish is one of the most critical aspects of the automotive manufacturing process. Finish quality and long-term corrosion protection impact JD Power ratings, warranty claims, and ultimately vehicle sales.

An automotive manufacturer determined it must keep the paint treatment system cleaner to produce higher quality vehicles.

Tramp metal contamination (steel fines, weld balls, etc.) is introduced into the paint shop from the body shop. The current filtration equipment could not effectively remove the metal fines and weld balls.

If not effectively removed, these metal contaminants can result as surface finish defect.

## Paint Shop Production Data

- ✓ 2 shift operation, 9 hours / shift
- ✓ 900 vehicles produced in 18 hours
- ✓ 50 vehicles per hour

## ZGF Solution

ZGF installed a Maggie MG2600, 3-Station automatic, in-line magnetic separation system. The system has a design capacity of 750 gpm. The Maggie system is installed in an existing circulation loop. No additional pumps were required.

## Results

- The Maggie system removes 30 pounds metal contamination (weld balls, weld splatter, etc.) per day.
- Since implementation of the Maggie system an additional 15.42 grams of contamination per vehicle is removed that previously remained in the pre-treatment system.

- ❖ **Improved Pre-treatment System Cleanliness**
- ❖ **Reduced Labor and Maintenance**
- ❖ **Improved Process Reliability & Quality**