

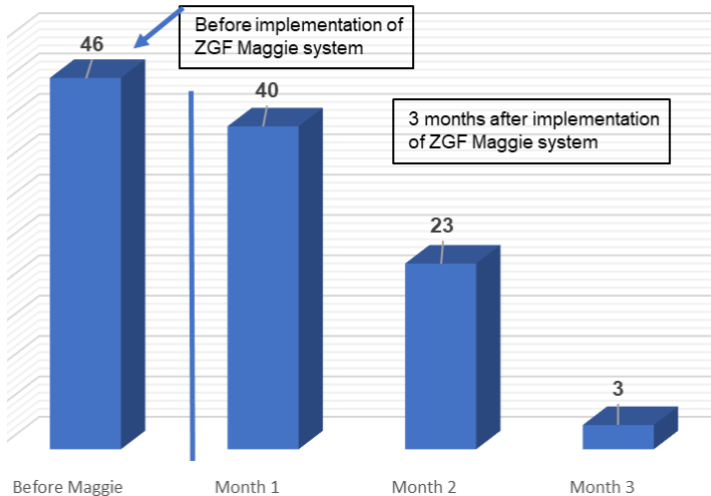
# Automotive Manufacturer – Reduces Scrap in Engine Block Honing Operation by over 90%

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



Metalworking / Honing

Engine Blocks Scrapped per Month  
Hone 3rd Station Initial Measurement



**Data shows immediate improvement after installation of the ZGF Maggie system.**

**Scrap / Size Excess Faults  
Reduced by 93.5% in 3 months**



**ZGF Maggie MG1200, 2-Station with SD+**

## **Customer Challenge:**

**A Japanese automotive manufacturer had to scrap over 800 engine blocks in a 6-month period.** More than one third and the single biggest cause for scrap was “size excess faults” in the measurement station following the rough hone and prior to the finish hone.

The root cause was determined to be sludge build up on the honing head which prevented accurate measurement.

## **Our Solution:**

ZGF worked with the plant engineering to implement a solution. It was determined that improving filtration would eliminate the fines that were the source of the problem.

ZGF provided a Maggie MG1200, 2-Station automatic magnetic separator with a Smart Drum PLUS fluid recovery system. The Maggie automatic magnetic separation system was installed in-line to ensure the cleanest coolant was delivered to honing operation. **Maggie removes most ferrous particles 5 micron and larger and will also remove sub-micron particles without damaging honing coolant.** The ZGF Maggie system was designed to provide full, uninterrupted flow of coolant to the hone.

## **Results:**

- Improved productivity, as well as overall process reliability while reducing total operating costs
- **Reduced Scrap / Size Excess Faults by 93.5% in just 3 months.**
- Extended bag filter life thereby reducing costs to purchase, ship, store, changeout and dispose of used filter media.
- Prevented plugging of coolant lines which eliminated a maintenance task that could only be completed during periods of non-production.
- Implemented a long-term solution that is virtually maintenance free.