



Situation

A major automotive parts' supplier to a variety of automobile assemblers had a difficult time consistently attaining engine head and block cleanliness on a well know North American High performance sports car. The engine heads & blocks were passed through a Valiant® parts washer in an attempt to meet the cleanliness requirements. "Dirty" engines would not pass the end users cleanliness requirements resulting in parts rejection at the assembly plant or ultimately be returned to the manufacturer under warranty concerns resulting in even higher manufacturing costs.

Solution

To better understand the entire problem the parts washer operating manual was completely dissected to determine all facets of the machine. Ironically it was found that cleanliness specification was *tighter* on the expensive high pressure pump that "sprayed" the wash solution on the engine parts than on the parts themselves thus any solution improvement would have to incorporate this fact to ensure machine longevity.

Value in Use

Payback on the new approach to contaminant removal was realized by the end of week 1 via both improved cleanliness levels and consumable expenses alone however the big impact was in extending the longevity of the plant asset.

The high pressure pump was \$10,000 to replace if it experienced high contamination ingress

Automotive Parts Washer

on a continuous basis thus a yearly investment of a fraction of that cost ensured that the asset would consistently maximize the production up time.

The positive fact was in addition to the solid record of consistent cleanliness performance on the engine parts themselves which resulted in less parts rejection and ultimately fewer warranty claims

