

CASE STUDY #1

Parker Hannifin saves \$308,000 in first year

THE PROBLEM: Parker Hannifin, one of the leading producers of hydraulic quick couplers in the nation, was getting ferrous contaminates in their brass chips. Business and supply demanded this company go through multiple alloy and size setups in the same machine. In order to process just-in-time (JIT) manufacturing, lead time and setup had to be reduced. Changing setups and clean outs to remove the ferrous contamination led to eight hours of additional clean out labor and downtime.

This also produced contaminated chips for the first 1.5 yards of material, creating excess waste. Production was suffering and the alternatives of outsourcing or moving the job to other equipment within the same plant were not desirable to our customer.

THE HARRIGAN SOLUTION

Harrigan Solutions began by surveying Parker Hannifin's contamination issue. We completed tests on various samples of chips to determine moisture and contamination levels. After lab testing and consulting with scrap brokers, Harrigan Solutions discovered that allowable limits should be less than 2% moisture and 1% ferrous contamination.

Harrigan Solutions designed and built a magnetic processing and separation system to handle up to 100,000 pounds of chips per week.

RESULTS

Harrigan Solutions exceeded the client's goal of handling 10% contaminated material by 500%! The new Harrigan Solutions system achieved up to 50% separation of contaminated material.

Furthermore, Harrigan Solutions met allowable limits of less than 2% moisture content and .5% contamination to scrap yard.

ESTIMATED SOLUTION CAPITAL: \$198,000

ESTIMATED FIRST YEAR SAVINGS: \$308,000

ESTIMATED REDUCED LABOR AND DOWNTIME: 70%