



Shot Blasting Results After Replacing Zinc Cut Wire

BUSINESS CHALLENGE

Reduce blasting cost by finding a more effective media to work faster and last longer, without damaging the delicate detail of the parts.

Participant Companies:

Large Tier-One Automotive Supplier

Reported per part blast cost reduction of 50%

Simplified process by reducing two sizes of shot to one standard size

Japanese Automotive Assembly Plant (Tennessee)

Reported 5x longer life than Zinc Cut Wire

74% reduction in blast cycle time on threaded paint fixtures

Japanese Automotive Assembly Plant (Ohio)

Ran trial side-by-side in identical machines (see graph on next page)

Custom Die Caster (Michigan)

30% reduction in blast cycle time with Cast Zinc Shot

Significant dust reduction in blast area

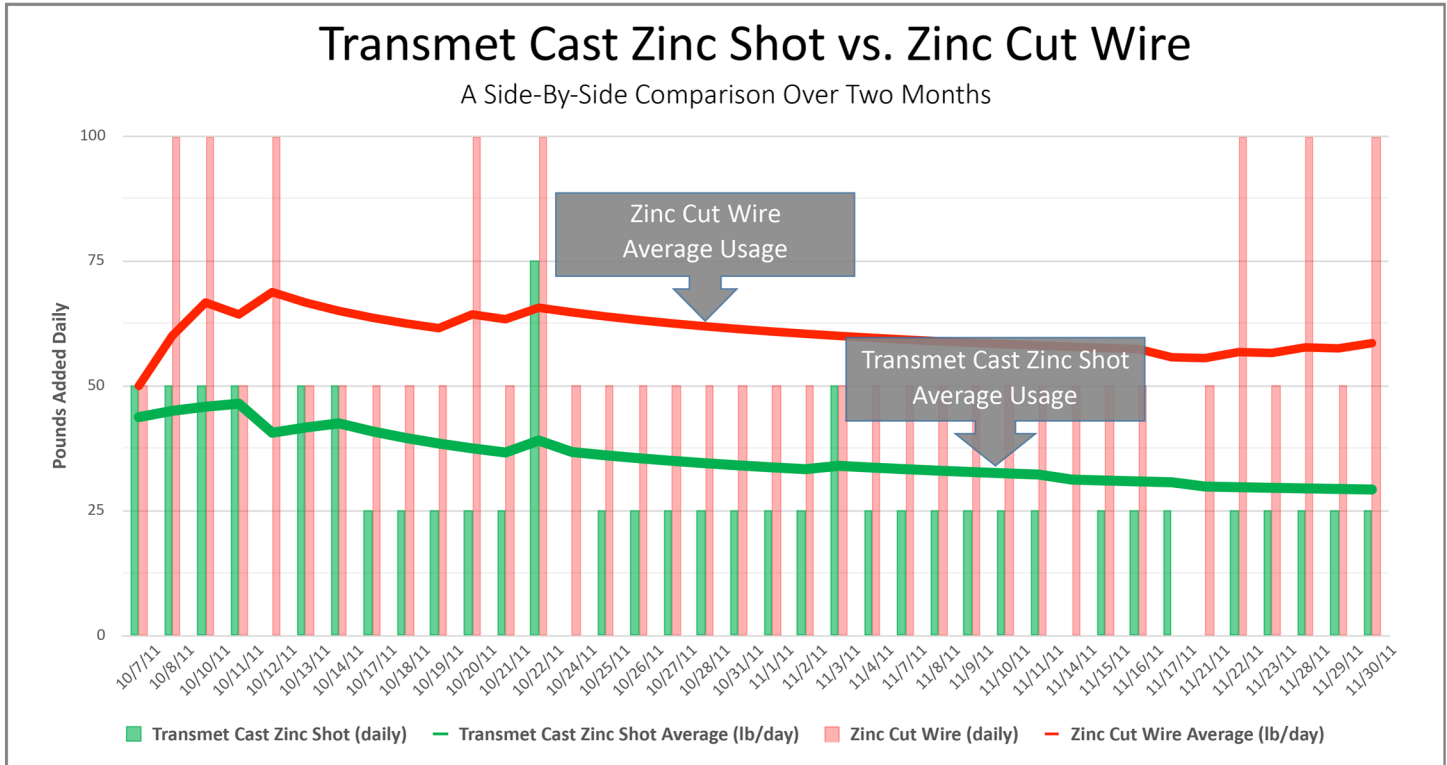
TRANSMET APPROACH

All four companies were using Zinc Cut Wire for blasting. Transmet was challenged with the task of reducing blasting costs, eliminating dust, and improving the efficiency of the blasting operation.

Transmet first tested various media sizes in-house as a process development step. Once the optimal process parameters were identified, the best-performing shot was supplied for on-site trials.

Transmet was present at the trials to help with implementation of Cast Zinc Shot to replace Zinc Cut Wire.





PROJECT OUTCOME

Transmet lab data shows Cast Zinc Shot outlasting Zinc Cut Wire by an average of 3x. Actual customer data supports a savings between 2x and 5x.

The Large Tier-One Automotive Supplier reported per part blast cost reduced by 50%. Transmet Cast Zinc Shot stays on size longer than Zinc Cut Wire, making the process more efficient.

The Japanese Automotive Assembly Plant in Tennessee reported a 74% reduction in blast cycle time. The Assembly Plant in Ohio reported a 50% decrease in shot consumption, as shown in the chart above. This test was carried out side-by-side over the course of two months.

All three companies above, in addition to the Custom Die Caster in Michigan, reported brighter surface finishes and significant reductions in dust generated from shot blasting.

