



# Altering Blast Media Size to Improve Blasting Cycle Time

## BUSINESS CHALLENGE

A customer was looking to achieve a uniform finish with a specific surface profile in a shot blasting operation. With a recent influx of orders, the customer had difficulty keeping up with demand and the shot blasting step became a bottleneck issue.

## TRANSMET APPROACH

The customer shipped production parts to Transmet for evaluation. The goal was to uncover ways to speed up the blast cycle time without the need for additional capital equipment investments.

Transmet ran baseline tests to match the current blasting process. Once the baseline was established, Transmet changed various parameters (belt speed, wheel speed, media size, and more) to uncover improvements in blast cycle time.

## PROJECT OUTCOME

Transmet found that reducing the size of the blast media could improve cycle time by 300%. This came as a surprise to the customer who hypothesized larger shot would speed up their process (i.e. thinking a 'bigger hammer' would work faster than many 'small hammers').

Testing revealed the smaller shot providing better coverage and dramatically improving blast cycle time. This was consistent with conventional shot blasting advice to use the smallest media that will get the job done.

Compare the number of pieces in a pound for each size of Transmet Cast Aluminum Shot:

Shot Size (Microns)	400	600	900	1200
Pieces Per Lb	2,270,000	1,135,000	325,000	145,000

