

# CASE STUDY - Ceramic and Silicon Carbide

## Details

**Industry:** Industrial Machinery

**VSM Products:** VSM Ceramics Plus (XK885Y) & Silicon Carbide (CK721X)

**Competitor Products:** Norton Blaze (R980P) & Merit A0

**Workpiece Material:** Stainless Steel

**Belt Sizes:** 37" x 75"

## Challenge

The customer was having supply chain issues with both of their belts prompting them to look into a better fit solution.

## Solution

VSM provided products for testing from their stable inventory of jumbo product. Both products reduced the roughness average of the finished part while providing substantial cost savings. The VSM Ceramics Plus and Silicon Carbide belts improved the customer's finish by 25% taking their roughness average from 40 microns ( $\mu\text{m}$ ) down to 32 microns  $\mu\text{m}$ .

## Result

- **Cost savings:**
  - VSM Ceramics Plus belt: 43% cost savings
  - VSM Silicon Carbide: 56% cost savings
- **Improved finish:** Roughness Average (Ra) of ground pieces lowered from 40  $\mu\text{m}$  to 32  $\mu\text{m}$  for a 25% smoother finish.
- **Steady supply chain:** VSM delivered finished product from their stable inventory in 5 business days.



VSM Ceramics Plus

VSM Silicon Carbide



**43% cost savings**  
with VSM Ceramics Plus

**56% cost savings**  
with VSM Silicon Carbide