

# \$90K Savings and Improved Sealing Solution for Grinding Mill

## Challenge

### Background

A customer at an Ore Processing site used RTV silicone to seal the door of a vertical grinding mill. The adhesive was so strong that the door could not be removed for scheduled maintenance.

To open the door, four hydraulic rams were used. The force needed to open the door was so high that the door would sometimes deform, making resealing difficult. It required 4 to 6 workers and three hours to scrape off the silicone material.



Vertical grinding mill.

## Solution

### Product

**Chesterton® 860 Moldable Polymer Gasketing** was chosen due to its permanent elasticity, gap filling ability and non-adhesive nature.

The silicone material was removed from the surfaces with scrapers, strippers and grinders. **860 MPG** was applied on mill housing and door flanges (as shown in picture). The 860-curing agent was sprayed on the 860 polymer, and the door was assembled. The bolts were tightened to form a tight, metal to metal seal.



860 MPG applied to the door flanges and mill housing.

## Results

### Reduced Down-Time and Cost

The use of 860 MPG has significantly decreased the force required to open the door, and as a result, no deformation has been encountered.

The introduction of **860 MPG** has made the overall process easier and reduced the labor time. The polymer comes off very easily, saving three hours of downtime for every maintenance cycle and resulting in savings of \$90K USD.

\$ = USD



Grinder door closed after applying 860 MPG.