# BELZONA SOLVES FLAP VALVE DAMAGE

ID: 1231

Industry: General Industry Customer Location: Door Component Plant, Central Missouri

Application: SHM-Solids Handling Machinery Application Date: May, 2008

Substrate: Aluminum/Rubber

Products: \* Belzona® 1812 (Ceramic Carbide FP),

\* Belzona® 2111 (D&A Hi Build Elastomer),

#### **Problem**

The valves suffered damage on the back of the valve plate due to impact with the valve "stop". This impact would cause breakage/failure of ceramic tiles on the front of the valve, allowing gypsum/perlite mix to cause abrasion damage and prevent valve from sealing upon closure leading to repeated outages of the system.









## **Photograph Descriptions**

- \* Valve plate showing impact damage on back from striking the valve stop ,
- \* Striker plate and valve plate prepared for application,
- \* Striker plated bonded to back of valve plate with Belzona® 2111,
- \* Ceramic tile repaired with Belzona® 1812 on one valve, tile replaced with Belzona® 1812 on second valve,

## **Application Situation**

Flap valves used in gypsum/perlite transfer system. the valves were lined with ceramic tile.

### **Application Method**

Application was carried out in accordance with Belzona Know Show System Leaflet SHM-7. Belzona® 2111 was used to bond a stainless steel striker plate to the back of the valve plate to absorb and distribute the sharp point impact from the valve stop. Belzona® 1812 was used to repair valve with broken tile and ultimately replace tile altogether for abrasion resistance on front of valve.

#### **Belzona Facts**

For more examples of Belzona Know - How In Action, please visit https://khia.belzona.com

ISO 9001:2015 Belzona products are
FS 695214 manufactured under an ISO
ISO 14001:2015 9000 Registered Quality
EMS 695213 Management System.

BELZONA®
Repair • Protect • Improve

After 7 months in service, valve plates show no signs of damage, compared with average life of 1-2 months before failing prior to Belzona Solution. Based on this success, customer has extended use of Belzona® 1812 and 2000 series products to many other applications throughout the plant.

ISO 9001:2015 Belzona products are
FS 695214 manufactured under an ISO
ISO 14001:2015 9000 Registered Quality
EMS 695213 Management System.

www.belzona.com