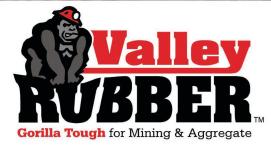


Rubber-Ceramic Liners are suitable in areas of severe impact and high abrasion.





## Why Rubber-Ceramics?

While rubber is more abrasion resistant than steel in the right application, ceramic is more abrasion resistant than rubber. Ceramics alone, without rubber, often are not the right solution.



HardCube Liners in this engineered TripleGate Feeder handle the extreme conditions of impact and abrasion for years.



Rubber Scalping Screen - Impact Area

Ceramic balls handle incredible impact because of their shape, but traditional mounting methods do not work. As an alternative, rubber is molded around tightly packed ceramic balls to create Valley Rubber's HardBall Liners for even the most severe impact application.

Ceramic tile will shatter under impact, but when molded into rubber creating a HardLine Liner, it absorbs the shock and prevents the ceramic from breaking, while taking advantage of the wear resistant properties of the tile.



Rubber Truck Bed Liner - Discharge Liners

### **Applications:**

Rubber-Ceramic can be incorporated into **Chute Liners, Screens, Haul Truck Liners, Canoe Liners, Impact Bars** and more.

Rubber-Ceramic can be included in the impact area of a Rubber Scalping Screen and also into the high wear area of a Rubber Truck Bed Liner for extended life.

Valley Rubber uses different ceramic chemistries and a wide variety of shapes like: custom cut tile, cubes, bricks, and cylinders to create the right product for the application addressing issues like impact, abrasion, heat, and material sticking.

Our Ceramic Liner (centered below) was installed at the same time as the chrome steel bars on each side. Note the excessive wear on the chrome bars compared to our product.

(Below) Launder Liner with Rubber-Ceramic held in place with internal magnets - no holes or hardware needed.

**Before** 



**After** 

# **Bonding**and Mounting

Valley Rubber uses the best available technology to bond the ceramic and rubber together. A special coating is applied to the ceramics prior to molding at high temperatures and extreme pressure for an extended time creating a molecular bond between the coating and rubber. The ceramic cannot be pulled out of the rubber.

# Installation

Individual ceramic pieces are labor intensive to install and replace, but Valley Rubber's Modular Rubber-Ceramic Liners significantly reduce the effort required and the time it takes for installation. In addition, our Rubber-Ceramic Liners are lighter than the steel counterpart.



This HardLine-Plus Canoe Liner utilizes a combination of ceramic to maximize performance. Engineered beveled ceramic is used closest to the belt while HardCylinders are used above the brick.



The photo on the left illustrates poor bonding while the photo on the right demonstrates excellent Rubber-Ceramic bonding.



Wall Liners in VRM
Cast iron liners lasted 2-6 weeks in
this Vertical Roller Mill. Our RubberCeramic HardLine-Plus Wall Liners
and ArmorRing Liners have lasted over
two years.

## **Mounting Solutions**

Include

But Are Not Limited To:

- Studs on Backing Plate
- T-Tracks
- Counter Bored Holes
- Internal Magnets
- Weld Tabs
- Internal Threaded Mount

## Rubber-Ceramic **Benefits**

- Modular Bolt-In Sections
- Not Limited to Standard Sizes and Thicknesses
- Highly Customizable
- Fast Installation & Replacement
- Cost Effective
- Impact Absorbing
- Abrasion Resistant
- Noise Reduction
- Lighter Compared to Steel

(Below) Every six months the customer would spend 16-20 man-hours repairing and replacing liners using AR plate, grader blade and plow steel. Our HardBall Rubber-Ceramic Liners have lasted over five years in the same application with inspections only, no man-hours needed.

**AR Steel Liner** 



**Rubber-Ceramic Liner** 

