



- Primary/secondary ball mills
- SAG mills
- Grate discharge ball mills
- Re grind mills

R67 Rubber - The New Standard in Rubber Mill Lining

R67 is a newly developed rubber with very high tensile strength and tear resistance properties while possessing high hardness. The combination of superior physical properties and the high hardness makes the rubber highly wear resistant making it ideal for use in SAG mill and ball mill applications. Vulco® liners made of R67 rubber have been trialed in a variety of applications including gold, copper, phosphate, iron ore, nickel, and mineral sands.

Over two years of active trials in the mining industry, R67 rubber has outlasted other mill lining compounds significantly in side by side trials. R67 rubber liners have been installed in SAG mills as large as 28' in diameter, and in ball mills up to 24' in diameter.

Features

- Excellent wear resistance
- Excellent tear resistance
- 65 Durometer (Shore A)
- Natural rubber blend
- Used in lifter bars, head/shell plates, and grates

Sizes/Availability

R67 lifter bars can easily be identified by their green end caps.

Manufactured at multiple Weir facilities across the globe.



Comparative tests:

Test lifter bars in 28' SAG Mill. This picture was taken at Simplot in their 28' SAG mill. The side by side test shows the bars when they were both brand new. R67 liner is on the left, R63 liner is on the right.

Comparative tests:

R63 mill liner rubber is on the left, R67 rubber liner is on the right. Both bars were installed and removed on the same date.





Top and Middle: Vulco® mill liner with R67 rubber compound installed in ball mill.

Bottom: Shell lifter bars being measured inside mill.

Typical Physical Properties

Density (g/cm ³)	1.17
Hardness (Shore A)	65
Resilience (Baysshore %)	40
Tensile Strength (MPa)	25
100% Modulus (MPa)	2
300% Modulus (MPa)	7
Elongation at Break	700
Tear Propagation Resistance (N/mm)	110

Key Features and Benefits

- Vulco® wear resistant rubber and metal cap mill liners are versatile, economical and efficient.
- Rubber and metal cap liners weigh up to 80% less than steel alone and are faster, easier and safer to install.
- Liners are engineered to promote ideal ball charge motion and to optimise grind.
- The rubber compounds used in Vulco® liners are specially formulated for maximum abrasion resistance and are custom engineered to fit specific geometry and operating conditions.
- Rubber liners have higher noise absorption properties than traditional composite or metal liners thus reducing the likelihood of hearing impairment due to grinding noise. They are also lighter in weight which can help prevent lifting strain injuries.



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