

# Metso

Mill lining solutions

## Poly-Met mill linings



Application

SAG mills, AG mills, ball mills, FGD mills, rod mills, scrubbers and washing drum.

Skega Poly-Met™ mill linings from Metso are carefully designed to maximize the availability of your mill and keep your costs to a minimum.

### Targeting increased uptime

Mining operations aim to reduce downtime of equipment so that production time can be maximized. This is crucial as production lost due to downtime represents significant financial loss. To improve mill availability and safety, it's critical to find products and partners that you can rely on.

### Ready to take on any challenge

Every mill is unique, and Metso can, from the world's widest range of products, find exactly the right solution for your application.

Metso Poly-Met mill linings combine the most desirable properties of rubber and steel to maximum advantage. This combination allows the use of more wear resistant alloys of iron and steel than can be used in a conventional metallic lining, as the rubber substantially dampens the impact forces and also results in a lower lining weight. This makes Poly-Met an outstanding solution, particularly in heavy applications. The rubber imparts flexibility, facilitating ease of maintenance, and in combination with extremely hard metallic inserts maintains an efficient profile over the entire lining life.

### The optimal solution for your mill

Metso offers a complete Poly-Met solution including lifter bars, plates and grates. Alloys and profiles are selected based on your specific application and operating conditions. Different lining materials such as rubber, metallic and Poly-Met can be combined in the same mill to achieve optimal performance.

Design and material selection is executed using High Fidelity Simulation (HFS) and experience from thousands of real-world cases.

Metso invented the Poly-Met concept over 30 years ago, and our linings are still the world's most widely-used today. The reason is simple, we offer our customers solutions that improve grinding efficiency and lead to increased profitability.

**Read more at**  
[metso.com/mill-liners](http://metso.com/mill-liners)

### Benefits

- Low lining weight
- Long wear life and increased availability
- Continuous design improvement
- Engineering capabilities to enable liner customization
- Fast and safe installation
- No leakage or peening
- No pegging of rubber or Poly-Met grates
- Retain an adequate profile
- Produced close to our customers
- Worldwide service network

## Poly-Met mill lining solutions

# One product, many fields of applications

Its low weight in combination with long and predictable wear life makes Poly-Met beneficial in most applications. Poly-Met is a versatile product that can solve various problems due to its unique characteristics.



### Feed end head plates - Balance the wear life

Minimizing downtime and balancing wear life of mill lining components like head plates, lifters, and liner rings is challenging.

**Solution:** Poly-Met head linings are strategically designed to use a minimum amount of the metallic component, placed in strategic locations, which result in a lightweight, predictable system that minimizes maintenance stoppages.



### Lifter bars - Keep the profile

Mines often struggle to reduce lining mass and maintenance stops, while maintaining liner efficiency throughout its lifespan.

**Solution:** Using Poly-Met with other Metso mill lining offerings provides a balanced solution, where it's possible for complete renewal in one maintenance. Combine this with efficiency of operation and long service life, and you have a proven solution to improve your bottom line.



### Shell plates - Avoid cracking

Cracking and breakage are a common problem that results in big losses.

**Solution:** Poly-Met shell plates can withstand high impact as they are made of highly resistant alloys in combination with rubber. This results in less cracking and thereby fewer unplanned stops.



### Grate plates - Eliminate pegging problems

Some mill operators struggle with pegging problems and grate breakage, resulting in production disruption.

**Solution:** Poly-Met and rubber grates, made of strong, flexible materials, can reduce or eliminate pegging issues and maintain aperture size, and stabilize product size distribution and circuit capacity.



### Discharge - Save weight and predict wear life

Replacing discharge systems like pulp lifters and cones in grate discharge mills is difficult and time-consuming.

**Solution:** Lightweight, steel-reinforced rubber components are easy to install, durable, and can increase mill charge volume by reducing system mass, without risking structural overload.

**Metso Poly-Met™** is a true problem-solver that can be used in any part of the mill

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