

Metso

Grinding services

Ball mill feed spout



Application

Metso's range of ball mill feed spout designs are configurable to enable sites to optimize wear life and costs to align with maintenance schedules and use WearSense™ technology to de-risk operations when trialing with lining materials.

Ball mill feed spouts experience constant wear and need to be changed periodically to allow ongoing operation. Metso's design offers a holistic solution to common chute problems.

Design advantage

Metso's ball mill feed spout design allows operators to optimize the feed spout to align with your maintenance plan by combining a range of lining materials, sealing solutions and sensors to provide a complete feed end solution.

Ball mill feed spouts often play a support role in site maintenance plans, being replaced at time of failure and/or in line with major plant shutdowns. As sites operate with different maintenance strategies, we have worked hard to provide a selection of lining materials, seal designs and sensor capabilities to allow our customers to tailor a solution according to their needs.

Reductions in the mix

Lower the total cost of ownership (TCO) by tailoring the feed spout lining material and maximizing chute liner life or reducing lining

cost to align with established maintenance plans.

Operators can also de-risk operations when trialing new lining materials, ore characteristics and production rates by embedding WearSense technology to gain real-time monitoring of feed chute liner wear. Customers can also reduce mill spillage at the feed end of the mill with accompanying upgraded feed seal arrangements.

Doing our part for the planet

In line with our net zero target by 2030, we are taking strategic steps for all our solutions to ensure each component is contributing to achieving our sustainability goals. We're proud to say that the ball mill feed spout solution has significantly less embedded CO₂ emissions that previously supplied cast alternatives.



Benefits

- Lower cost of ownership against maintenance strategy
- De-risk operations using WearSense™
- Bolt-in, bolt-out compatibility
- Reduced emissions

Ball mill feed spout solution

Retrofit feed spout design

Our ball mill feed spout design offers a comprehensive solution to common feed chute problems and is configured for installation into existing feed spout constraints.

Feed chute lining packages

Each spout size has been configured to reduce waste material by integrating removable lining systems where possible. Lining packages include cast white iron, polyurethanes, ceramics and exotic compounds to ensure there is a solution for every application.

WearSense™ compatible

To allow lining solution and material performance tracking, each feed spout integrates WearSense™ mounting locations so that no site modifications are required to start capturing wear data in real time.

Feed end seal upgrades

Feed seals play a crucial role in limiting slurry egress from the mill feed end and potentially contaminating the trunnion and bearing system. Both our standard and new triple lip feed seal are available for each feed spout to maximize asset protection.



Comprehensive solution for ball mill feed ends to maximize mill availability while minimizing feed end leakages and material waste.



Scope of supply

- Fabricated feed spout with separable lining
- Site-specific feed spout lining system
- Feed seal arrangement
- WearSense™ compatible (optional)

Applications

- Metso and competitor ball mills
- Feed spouts/chutes