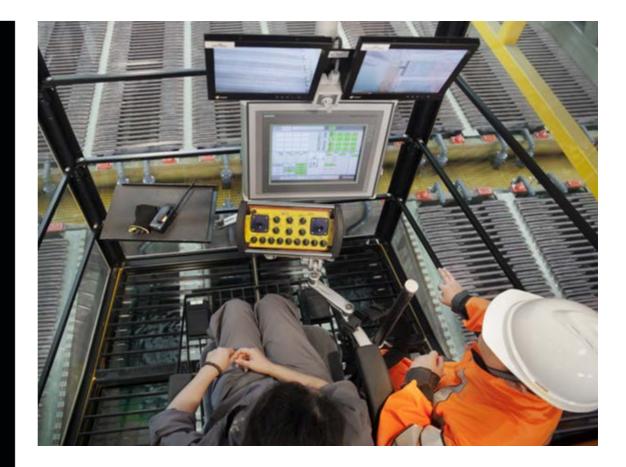
### Metso:Outotec

## OEM Spares -Permanent Cathodes



### **Benefits**

- Excellent availability of spare parts
- Guaranteed quality
- Permanent protection against corrosion
- Low energy consumption
- Low maintenance costs

# High-level performance with Metso Metso Outotec's cathode technology

The Metso Outotec Cathode has been developed to maximize tankhouse productivity with reduced need for maintenance. The high mechanical strength and dimensional accuracy, combined with superior acid resistance, provide a constant high-level performance over cathode's long operating life.

The production performance can be maintained at a high level throughout the plant lifetime, when the Metso Outotec Cathode is used together with the most advanced edge strip system.



#### Service description

Metso Outotec will initiate the scheduling of planned maintenance inspection visits with your plant's designated contact person. All site visits will be scheduled to the mutual convenience of both parties. It shall be the customer's responsibility to ensure that the plant is available for the inspection visit at the scheduled time.

Metso Outotec's experienced mill specialist performs the maintenance inspection on site. The two-day inspection is performed in two stages. During the first stage the mill is operating in normal condition and at normal load. We use advanced analyzers and instruments for the inspection. Graphics from these are enclosed in the report. The following is an example of the inspection checks that Metso Outotec recommends in the first stage:

- Trunnion bearings
- Pinion bearings
- Pinion gear
- Ring gear
- Electric motor
- Gearbox
- Bearing lubrication systems
- Pinion ring gear grease system

For the second stage the mill is kept running without feed until most of the material and water has passed through. The following is an example of the inspection checks that Metso Outotec recommends in the second stage:

- Trunnion bearing and labyrinth sealing—feed and discharge end
- Mill pinion gear
- Mill ring gear
- Mill pinion bearings
- Gearbox and inching drive
- Motor
- Couplings
- Coupling alignment
- Mill foundation
- Trunnion linings
- Discharge trommel
- Feed elbow
- Mill linings shell, feed and discharge heads
- · Parts supplied and required

#### Outputs and resulting actions

The condition and required action is evaluated for every procedure. The findings are summarised in Metso Outotec's mill inspection report. Metso Outotec's mill specialist evaluates the maintenance status of the equipment and gives feedback and recommendations.

Service history of the equipment installation is maintained in the Metso Outotec internal service information database. In this way, we provide the service team another tool to help evaluate trends that may alert them to impending process issues before they occur.

Based on the findings and recommendations, the next shut down can be accurately scheduled and the maintenance work planned with the highest details and carried out effectively.

Metso Outotec's recommendation for Preventive Grinding Mill Maintenance Inspection interval is 6 months.

Metso Outotec Corporation, PO Box 1220, FI-00101 Helsinki, Finland
Metso 20 484 100, fax +358 20 484 101
mogroup.com