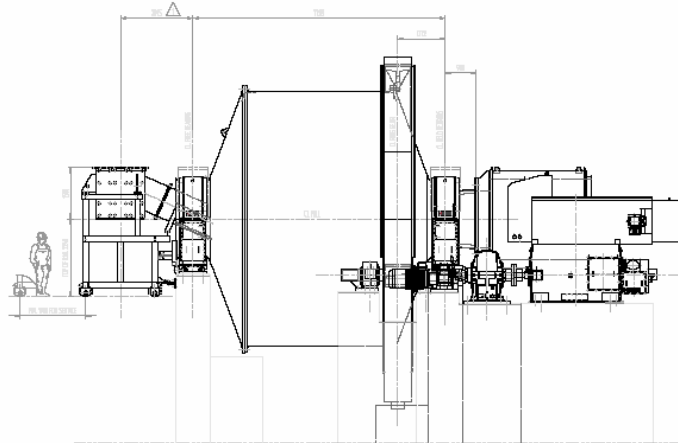


# OUTOTEC 3.6 MW GRATE DISCHARGE SAG MILL Ø 7.3m x 3.8m EGL

This mill is new, complete, and in original packing and consists of the following:

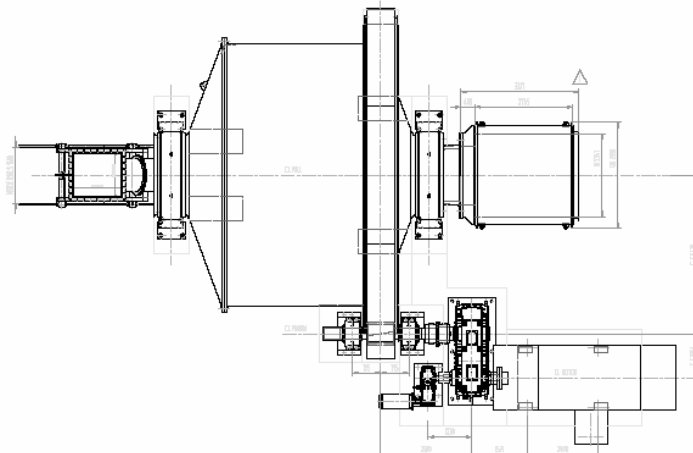
- **Mill Body**

- One-piece fabricated mill shell, AS 3678 grade 250 (no manhole)
- One-piece mill heads with integral cast trunnions, material AS 1831 grade 500-7



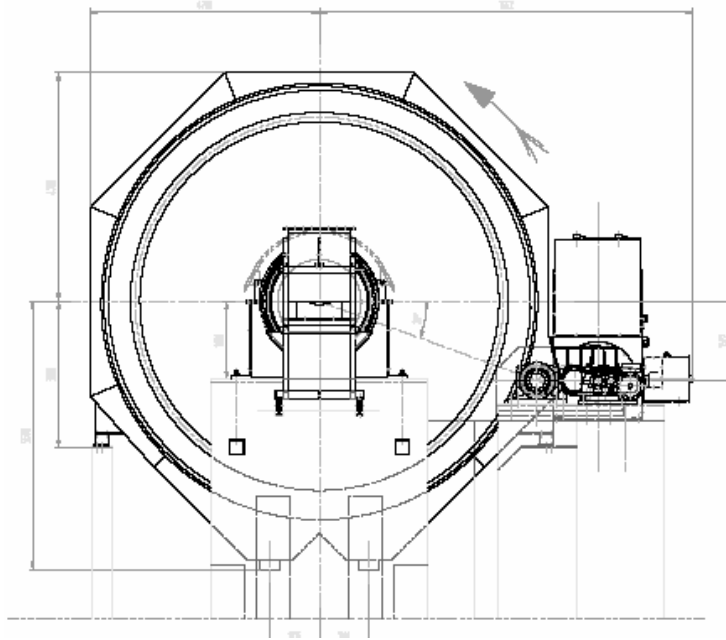
- **Drive Train**

- TECO AEDT 3200 kW high voltage wound rotor induction motor
  - 11 kV, 50 Hz, 6 pole
  - 80-120% speed
  - 2,475 – 3,600 kW
- IES liquid resistant starter
- IES hyper-SER for variable speed control from 55-80% NCr
- Elastomeric pin-type high-speed coupling
- Helical double reduction gear reducer
- Lubrication and air / oil cooler system for gear reducer
- Gearflex type low-speed coupling
- Electro-mechanical inching drive gearbox and brake motor for bi-directional inching
- Castell inching drive interlock (captive key and lock to engagement coupling)
- Guards and covers for couplings and brake



- **Ring Gear and Pinion**

- Cast SG iron ring gear, AS 1831 700-2
- Forged alloy reversible pinion with integral shaft, AS 1444 X9931
- Pinion bearings and solid-base cast SG iron housings with taconite seals
- Pneumatic ring gear and pinion grease lubrication system (single line progressive distributed – no standby)
- Ring gear and pinion guards



- **Main Mill Bearings (trunnion mounted)**

- Feed and discharge end multi-pad hydrostatic bearings
- Skid-mounted, stand-alone oil lubrication system including duplex filters, standby pump, accumulator system for emergency shutdown, oil / water heat exchanger (cooling water by others), moisture detection system, and complete factory test running
- Load measuring system based on hydrostatic bearing pressure
- Integrated jacking system including pipes and hydraulic hand pump

- **Lining System**

- 6mm rubber backing bonded to the shell and heads
- Feed end CrMo lifters and liners
- Shell CrMo lifters and liners
- Discharge end CrMo lifters, grates, and pulp discharge system
- Fabricated steel feed trunnion liner
- Fabricated steel discharge trunnion liner with 6mm rubber lining

- **Trommel Screen**

- Steel fabricated frame
- Rubber or polyurethane replaceable panels
- Tapered apertures
- Single start advancing spiral

- **Feed Spout on manually retractable single-direction Trolley**

- Replaceable wear liners

- Base plates
- Erection cradle
- Shims and packers
- Cast-in items
- Foundation bolts
- Vibration monitoring SPM studs
- Locked charge protection (detailed in control philosophy)
- Control panel
- Painted and packaged for transport to site
- Manufacturers data report and technical manuals
- **Spares include the following additional major components:**
  - TECO AEDT 3200 kW high voltage wound rotor induction motor
  - Helical double reduction gear reducer
  - Forged alloy reversible pinion with integral shaft, AS 1444 X9931
  - Pinion bearings and solid-base cast SG iron housings with taconite seals
  - Cast SG iron ring gear, AS 1831 700-2

*also available*

- **Russell 7-Axis Mill Relining Machine**
  - new as per Russell mill relining machine tech data sheet