

# Ministry of Mines and Metals, Iran National Iranian Copper Industries Co.



# SAR CHESHMEH Expansion Phase I



**Type of process:**  
Copper Concentrator  
with froth flotation

**Primary Feed rate:**  
900 MTPH

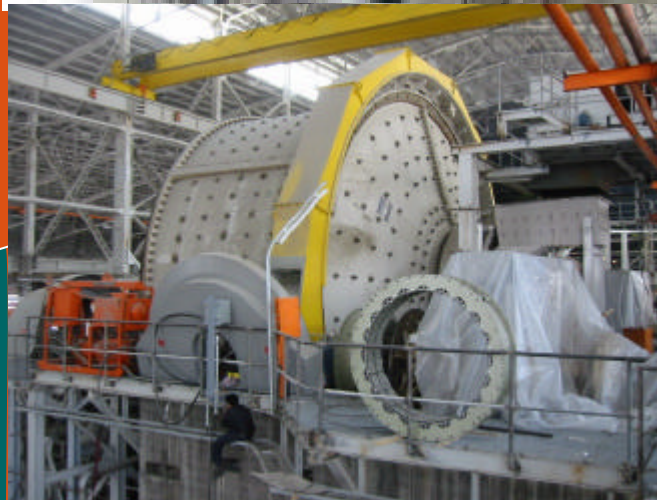
**Concentrate production:**  
35 MTPH

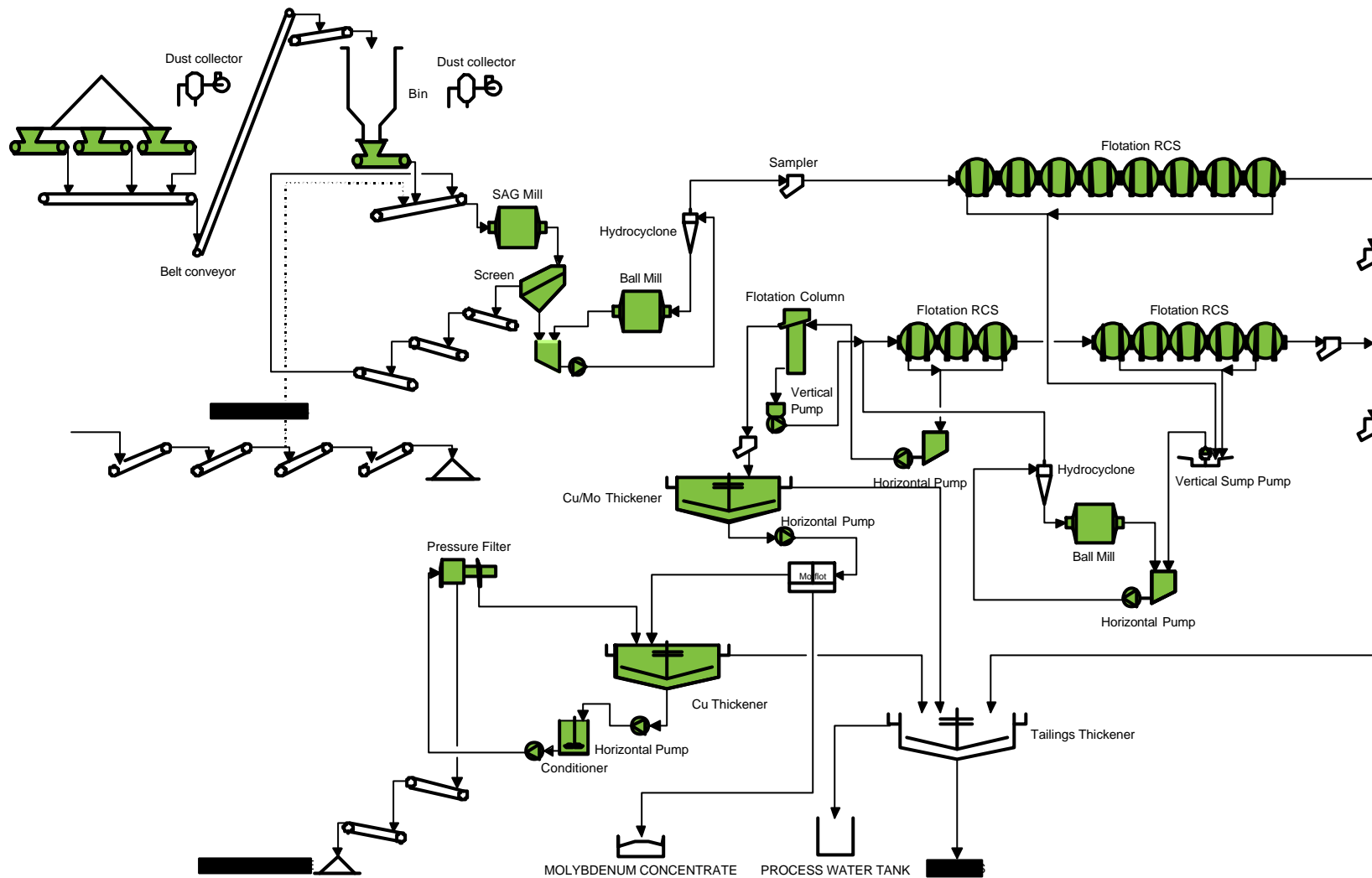
**Commissioning:**  
2004











# Scope of Supply:

Basic Engineering and Project Management

## Main Process Equipment Metso Minerals:

- Feeders and Screens
- Primary SAG mill, 9,75 m x 4,90 m, 2 x 4100 kW
- Secondary Ball mill 6,71 m x 9,90 m, 2 x 4100 kW
- Regrind Ball mill 3,95 m x 5,80 m, 1250 kW
- Rougher Flotation cells, 8 x RCS 130 m<sup>3</sup>
- 1<sup>st</sup> Cleaner Flotation cells, 3 x RCS 50 m<sup>3</sup>
- 2<sup>nd</sup> Cleaner Flotation cell, Column 4 m x 11m
- Cleaner Scavenger Flotation cells, 5 x RCS 50 m<sup>3</sup>
- Concentrate Thickeners, 2 x dia. 35 m
- Concentrate Pressure Filters, 2 x VPA 1,5 x 1,5 m with 46 chambers
- Conditioners and surge tanks
- Slurry Pumps
- Slurry Piping

Spare and Wear parts for commissioning and 2 years of operation

Off-site and on-site training

Customized documentation and manuals

Erection and commissioning supervision

## Main Sub-suppliers:

Electrical equipment and process instrumentation, ABB

Tailings thickener dia. 120 m, EIMCO

Air compressors, Ingersoll Rand

Air blowers, Hick Hargraves

Hydro cyclones, KREBS

Slurry valves, various suppliers

Gearboxes for belt conveyors, Flender

Metering pumps, Bran & Lubbe

Flocculant stations, TOMAL

Analyzer and samplers, Gamma-Metrics

Scrap magnets, Eriez Magnetics

Consumables (flotation reagents and lubricants) for commissioning and initial operation, various suppliers