

5000 TPD Silver and Gold Ore Processing and Recovery Plant with Metso Filters for Dry Stack Tailings

[Inventory ID #230471]



The 5000 TPD Gold Silver plant at Goldcorp's Mina Marlin Mine has a traditional hydrometallurgical design for the treatment of ore containing gold and silver. The operation of the plant was performed through 8 main processes; crushing, grinding, gravity recovery, Gekko plant, CCD circuit, Merrill Crowe, refinery and finally a Metso filter plant was installed for dry stack tailings in 2013. The plant was designed to treat approx. 5000 tons per day, depending on type of ore being processed. Capacity varied between 4000 and 7000 TPD.

Savona Equipment Ltd. has been contracted to liquidate the Mina Marlin mill assets and we invite you to contact us for more information and pricing.

The plant is available as a complete package; however, offers will be considered for reduced packages and/or individual components.

Inspections are available if arranged in advance.

Professional personnel, equipment, and transport companies are available to provide dismantling, packaging, loading, and transportation services.

A mass balance flow sheet is available on request. Drawings and other technical information is stored on-site and/or in digital files.

Please inquire for more details.

The complete plant includes the following processes:

1. Size reduction.
2. Gravity Circuit



3. Leaching in tanks.
4. Gold & Silver recovery.
5. Tailings treatment.

5000 TPD Gold and Silver Processing and Recovery Plant Equipment:

- BTI Rock Breaker w. Hydraulic Controls and Control Room
- Metso Apron Feeder
- Metso Vibrating Grizzly Feeder
- Nordberg C125 Jaw Crusher
- Stacking Conveyor to Sag Mill Tunnel Feeder + Feed Conveyor
- Hardinge SAG Mill 6.4m Dia x 3.35m EGL (21 ft. x 11 ft.)
- Terex Vibrating Pan Feeder
- Sag Mill Return Conveyor
- Fuller Traylor Ball Mill 4.88m dia x 7.47m EGL (16 ft. x 24 ft.)
 - Complete Spare Mill Available
- 2 x Weir (Warman) Cyclone Feeding Pumps
- 6 x Weir (Warman) 15 in. Cyclones
- Sepro Falcon SB2500 Centrifugal Gravity Concentrator
- Gekko ILR Inline Leach Reactor
- Outotec 25m Dia High Rate Grinding Thickener
- 2 x Weir (Warman) 16 x 10 x 18 Slurry Pumps
- 6 x Outotec 23m Dia High Rate CCD Thickeners with Hyd. Lift
- 5 x Weir (Warman) 16 x 10 x 18 Centrifugal Pumps
- Goulds 12 x 10 x 16 Centrifugal Pump
- Rich Solution Tank 10m dia x 7.7m H
- 6 x Leach Tanks with Lightnin Mixers
 - 16.8m Dia x 17.5m H. Tanks
 - Dual Impeller, Rubber Lined, Air Sparge Down Shaft
- 2 x Agitator Neutralization Tanks and Mixers with Hansen Reducers
- Lime System with Silos, Grinding Mill, Tanks, Pumps, etc.
- Process Water Tank 12m Dia x 12m H
- 2 x Agitator Neutralization Tanks
- Merrill Crowe System
- 3 x Whittier Pressure Leaf Filter Clarifiers, 174.6 m² each.
- 2 x Goulds Precipitator Feed Pump 8 x 10 x 16
- 3 x J-Press Precipitator Filter Presses with Recessed Plate Filters, 186 m² Each.
- 2 x Summit Valley Mercury Retort Dryers
- 2 x Atlas Copco Neutralization Blower
- 4 x Atlas Copco Process Air Compressors
- 2 x 69000 Volt GE Transformers

Metso Filter Plant for Dry Stack Tailings:

- Automated Controls with Control Room or Manual Controls at Machine
- Outotec 24m Dia Paste Thickener
 - High Capacity
 - Hydraulic Raise
- 2 x Filter Feed Tanks with Lightnin Mixers
 - Single Stage
 - 4.2m Dia.
- 2 x Weir (Warman) Thickener Pumps
- 8 x Metso VPA 240-54 Pressure Filters
- 2 x Weir (Warman) 6/4 FHH Primary Filter Feed Pumps
- 16 x Weir (Warman) CCAH 3 x 2 Secondary Filter Feed Pumps
- 2 x Tipic 12m Dia. X 13m High Filter Feed Tanks with Agitators
- 2 x Conveyor Engineering 900mm Wide Filtered Material Conveyors to Filter Cake A-Frame Storage Building
- 3 x Atlas Copco Compressors

Additional Equipment Available:

- 5 MW Cat Standby Generator
 - Cooling Station
 - Transformers
- Eurostar Concrete Technology S.p.A Shotcrete Plant
- Concrete Batch Plant
- Spares for Processing, Recovery, and Filter Plant Equipment
- Underground Mining Equipment