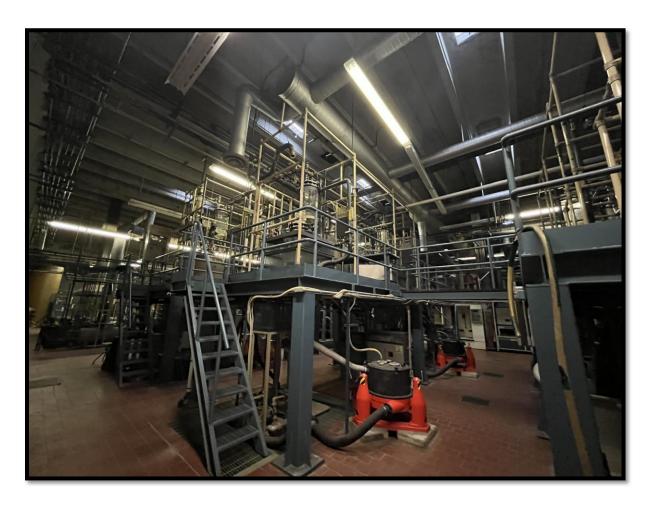
# Complete Precious Metals Refinery System

Produce up to 100-150 Kilo of Gold & 250 Kilo of Silver per Day

- Available For Sale -

## All in New Condition - Never Put Into Production!



Contact Greg Erickson for More Details & Pricing greg@goldmachinery.com | 401-724-3200

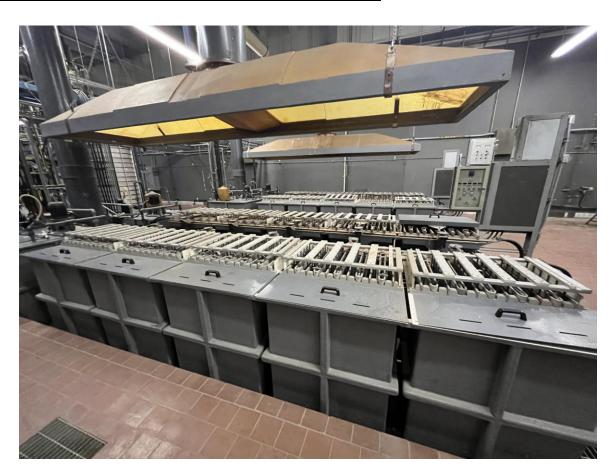
#### **Overview Description of the Refinery:**

The refinery is referred to as a precious metals refinery, having advanced automation technology that is capable of recovering a high content of precious metals. The electrodeposition modules are an example of the advanced technology used to recover silver in the form of a cathode metal and gold form of a sludge. The decomposition, extraction and filtration applied to the hydro-metallurgy are designed and manufactured with the wet and corrosive environment in mind. All units are built of anti-corrosive materials such as stainless steel, glass, plastics and other corrosion resistant materials.

The processing plant involved usage of noxious chemicals which are stored in corrosion resistant containers plumbed and fitted with the latest safety precautionary technology. The plant has a 10,000 M3/H filtration system with pumps, fans and two towers for air filtration as well as a 20,000 M3/H splash type scrubber for washing dust from the facility.

There is also a large stock of spare parts to assure minimum downtime for production. The plant has the potential of processing 100-150 kilo in gold and 250 kilo in silver per day. The gold can be processed to 99.99% pure.

## This refinery plant is located in North America.



#### **Description of the Plant:**

#### **Receiving Area:**

- 30 kilo scale
- 2 anti-vibration tables

#### Laboratory:

- Crushing rolls
- Ball mill
- Atomic absorption unit
- Fisher lab equipment and electronic sales, sieves, etc
- 3 anti-vibration tables
- Instrumentation and equipment including: electric furnace for cupellation and smelting table for rolling and annealing

### **Materials Preparation and Quality Control:**

- 100-200 kilo scale
- 1.000 kilo scale
- 1 anti-vibration table
- 1 hydraulic shear
- Barr mill for fine gold

#### **Gold Electrolysis:**

- 3 rectifiers
- 1 plant for electrolysis, gold refining including: cap for chemical treatments, two tanks consisting of three electrolytic refining plant for washing and treatment of fine gold cathodes cell for electrolytic refining of silver in ammonia solution, tower for neutralization of ammonia vapors

#### **Silver Electrolysis:**

- 5 rectifiers
- 1 plant for silver electrolytic refining including: 4 plants consisting of 5 cells and cell for recirculation, 3 suction plants, 5 exhausters, 3 centrifuges, post-centrifuge 3 plants for the extraction of silver in crystal and the extraction of gold and copper sediment
- 5 plants consisting of vacuum pumps and spare parts

#### **Foundry:**

- Incinerator
- Portable pyrometer
- Crucivle furnace
- Demineralizer
- Cooling tanks
- Steel foundry tables
- Ladle, etc
- Smelting induction plant with two crucibles and medium frequency static generator, 100Kw
- Natural gas tilting furnace for cc 100 Morgan crucibles
- 2 natural fired furnaces for AC.20 Morgan crucibles

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- Natural gas furnace for A-3 Morgan crucibles
- 5 tapered cast iron ingot moulds
- 75 ingot moulds for fine gold, fine silver and alloys
- 3 plants for picking bars
- Furnace for heating ingot moulds
- 2 containers for silver anodes and 24 ingot moulds
- 2 containers for gold anodes and 25 ingot moulds
- Ingot dogs for small and big crucibles
- 4 furnace and burners for pure silver grain

#### **Dissolution Reactors:**

- Racking for reactors
- 3 plants for chemical solution of gold alloys including: 3 quarts reactors for chemical solution of alloys, 3 centrifuges for chemical solution of gold alloy, 3 plants post-filtration, two quarts reactors for gold precipitation and separation. 2 plants for chemical solution by nitric acid, including: 2 stainless steel and quartz reactors, 2 plants post-filtration for chemical solution

#### **Air Pollution Control:**

- Filter 10.000 M3
- Corrosive gas suction and cleaning: 2 groups of towers
- Pumps and fans capacity M3/40,000
- Splash type scrubber for laying and washing dust with capacity of 20,000 M3H

#### **Reagent Storage Area:**

- Stainless steel storage tank
- F.R.P. Tanks
- 9 groups of pumps, valves to service the acid and reagent
- Storage tanks

#### **Scrubbers:**

- Plant for treatment and recovery of silver from nitric solution
- Plant for cleaning nitrous and acid gas coming from reactor for chemical solution

#### **Treatment and Recovery:**

- Four tanks for treatment and recovery of silver from nitric solution
- 5 cells for silver impoverishment and recovery
- 4 cells for copper treatment and recovery

#### **Water Pollution Control:**

Discharge water treatment system for refinery waste

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