

Refining Plant TB-10



The chemical installation includes:

- N°02 Reactors in PVDF of 100 liters each one with a rotating perforated cylinder inside
- pneumatic pumps with a membrane for acids transfer
- Steam generator
- Refrigeration unit
- N°01 smoke tower
- N°01 tower in PVC for smokes neutralization
- Precipitator for refined metal
- Filters for gold and silver chloride recovery
- Electric panel

The Refining equipment with aqua regia (hydrochloric acid and nitric acid) & sodium metabisulfite

This machine can make 1 to 10 kg 18 or 21 k in 4 hours and it is complete with one steam machine to heat the aqua regia and one scrubber for recovery of nitric acid fumes with water cooler and one scrubber to wash hydrochloric acid.

- 3 pneumatic pumps.
- 2 metal filtration buchners.
- 1-750 liter tank for exhausted water.

Technical Data

Plant Physical Dimensions

Total length	3500 mm
Height	3200 mm
Total width	1000 mm
Weight when empty	450 kg

Technical features

Reactor rated capacity	1×40 liters
Alloy dissolution capacity	3-10 kg
Max. operation temperature PP <	70°C
Max. operation temperature PVDF >	100°C

Electrical features or required voltage and frequency

Max. electric power absorbed by the plant	0.37 kW
Max. electric power absorbed by the fridge	2 kW
Max. electric power absorbed by the heating vessel	6 kW
Rated power supply voltage	380 V 50 Hz + neutral

Acid Loading Pump

Pump body	PP/PVDF
Membrane	PTFE Teflon
Spheres and seats	PTFE Teflon
Maximum cycles	170 /min
Load capacity per cycle	340 cc

Input pressure	6 bar
Use pressure	4.5-5 bar

Hydrochloric Acid	3 L per Kg
Water(for washing)	About 200 liters
Nitric Acid	0,7 L per Kg