



## Terms of Reference

Company: **RMG GOLD**

Item: **Electrolysis Bath**

Kazreti village, Georgia

2023

## Background data

### 1. Purpose of purchase:

Replacement of the worn-out electrolysis bath

### 2. Item description:

Electrolysis bath. The electrolysis solution comes from the precious metal desorption cycle of the ion exchange resin regeneration process in a continuous mode. The electrolysis bath must be equipped with: a comfortable bottom, allowing the cathode deposit to be easily washed away; a protective device to calm down the flow of solution that is passing through; and a cover that opens 90° vertically.

### 3. Technical conditions:

Materials	Inner/outer/partial	Inner
Min. temperature	C <sub>o</sub>	50
Max. temperature	C <sub>o</sub>	98
Rate of flow through electrolyser	m <sup>3</sup> /h	14 - 33
Cycle		Closed
Electrolyser type		Flow-through
Material of the frame		Polypropylene
Description of solution materials		Saturated solution of the precious metals desorption cycle Using NaOH 30-40 g/l, thiourea-15-25 g/l, also contains NaCN, -2.5-3%, PH-11.5-12.5
Quantity of cathodes	pc	9
Cathode material		SS-316
Cathode frame area	m <sup>2</sup>	0.7
Quantity of anodes	pc	10
Anode material		SS-316
Busbar material		Copper
Inlet pipe	Diameter mm	76
Outlet pipe	Diameter mm	76
Solution drainage pipe	Diameter mm	60
Pipe for washing off cathode residue	Diameter mm	60
Bath dimensions	L.W.H.	1600*850*860
Bath foot height	mm	400

### 4. Project requirements:

Electrolysis bath	Included
Stop valves for the supply pipeline, drain and discharge of cathode sediments	Included
Collector for the exhaust gases and vapors generated during the electrolysis process	Included

Cathodes and anodes	Included
Bath Operation Manual	Included
Warranty	Included
Important/critical spare parts	Included
Spare parts for 1-year operation	Included
Special tools for installation	Included