

**Terms of Reference for the Purchase of Equipment for JSC RMG Copper**

**Single girder electric overhead cranes with a load  
capacity of 2 tons**

Tbilisi  
2023

## 1. DESIGNATION

The equipment is designed to perform loading and unloading operations at the filtration area..

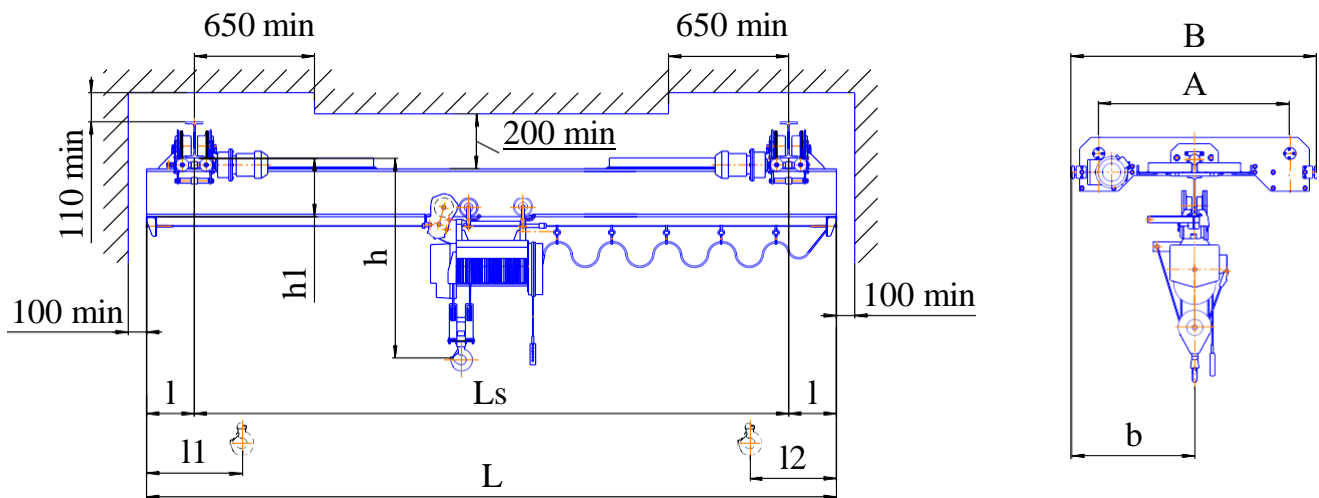
## 2. REQUIREMENTS TO SUPPLIER

The equipment supplier shall be a manufacturer or authorized representative. Shall have experience in installation and maintenance, including at mining and processing enterprises..

## 3. TECHNICAL SPECIFICATIONS

### 3.1 Basic requirements

Single girder electric overhead cranes with a load capacity of 2 tons (mode A3).



Full length L, m	Span Ls, m	Length of cantilever l, m	11.12 mm	A	B	b	h*	h1	No. of crane track I-beam sections	Track load from the wheel, wH	Design mass, t
				Mm, noy more than						Not more than	
10.2 – 12	9.0	0.6 – 1.5	710	1120	1460	730	1620	450	24M GOST 19425	7.0	1.35

\* the size is determined by the type of the selected hoist;

Installed total power of motors not more than 5 kW. Crane travelling speed 0.5 m/s. Speed of load lifting and hoist travelling - according to the hoist passport. Lifting mechanism - two-speed.

### Operating mode 3K GOST 25546-82 (A3 ISO 4301). Operating voltage 380 V.

Span Ls, m:	9	Number of cranes	3 pieces
Full length of the crane, L, m:	10.8	Ambient t (°C):	-15...+40
		Climate version:	M
Stroke of the crane, m:	12	Location category:	4
Crane design:	Fire safe, fire hazardous area class PI		
Seismicity, MSK-64	9	Protection rating	IP-54

### **3.2 Basic technical and technological requirements for the MTP**

- 3.2.1 The design and material characteristics of parts and systems shall be suitable for the climatic conditions and enable quick replacement of wear parts at the engine installation site.
- 3.2.2 The main units and assemblies shall operate on all-season hydraulic and transmission greases and oils.
- 3.2.3 The guaranteed life of the electric motor and gearbox shall not be less than 10,000 hours.
- 3.2.4 Provide guaranteed time runs of major motor components and parts.
- 3.2.5 Equip the crane with a soft start of the crane travelling mechanism and hoist.
- 3.2.6 Equip the crane with a brake on the hoist travelling mechanism.
- 3.2.7 Equip the crane with a lifting capacity limiter.
- 3.2.8 The hoist with disc brake on the hoisting mechanism.

### **4. REQUIREMENTS FOR ELECTRICAL EQUIPMENT**

Cable and wiring products should be flexible (with stranded wires) with non-flammable insulation that does not lose plasticity at temperatures from +45 to -15°C.

### **5. OVERALL DIMENSIONS**

To be determined by the supplier based on the selected internal overall dimensions.

### **6. WARRANTY PERIOD CONDITIONS**

The warranty period is 12 months from the date of completion of the acceptance test or 24 months from the date of delivery to the customer's warehouse. In case of suspension of operation due to the supplier, the warranty period is extended for the period of downtime.

### **7. COMPLETENESS OF GOODS:**

NN	Name	Number, units
1	Single girder electric overhead crane with a load capacity of 2 tons	3 pieces
2	Set of spare parts for repair for the period of 24 months.	1 set

### **8. LIST OF REQUIRED DOCUMENTATION**

The Supplier shall provide the Customer with technical documentation::

NN	Documentation	Deadline **
1	Dimensional drawing	10 days after signing the contract
2	Instructions for installation, operation, maintenance	Together with equipment

3	Spare parts catalogue (electronic version)	Together with equipment
4	Drawings for wearing parts	Together with equipment
5	Equipment passport	10 days after signing the contract
6	Electrical diagrams	Together with equipment
7	Certificates of conformity and origin	Together with equipment

\*\* Drawings should be provided electronically in dwg and pdf format.  
Documentation shall be provided in English, Russian.

#### **9. PACKAGING REQUIREMENTS**

Not regulated.

#### **10. ADDITIONAL CONDITIONS**

None.

#### **11. INVOLVEMENT OF SUB-SUPPLIERS**

Allowed by agreement with the Customer.

#### **12. TERMS OF DELIVERY**

The Goods shall be delivered on the terms: DDP Kazreti , Georgia.