

## Technical specification for the purchase of a peristaltic (hose) pump

### 1. Purpose, justification and quantity

The equipment is designed for pumping concentrate Pb-Zn from the thickening process to the filter press storage tank.

### 2. Scope of application

Pumping the condensed product into an intermediate vat for feeding the filter press.

### 3. Supplier requirements

The equipment supplier is the manufacturer or official representative. He has experience in installation and maintenance, including at mining and processing enterprises.

### 4. Technical Specifications

#### 4.1. Basic requirements

№ n/a	Indicators	Basic technical requirements
<b>Operating conditions:</b>		
1	Climate version	Moderate
2	Operating air temperature, C	-10+40
3	Operating mode	All year round, around the clock
4	Equipment utilization rate	0,85
<b>Characteristics of the pumped medium:</b>		
5	Abrasive grad	5
6	Pump performance , τ/our	7
7	Density, τ/m3	1,6-1,7
8	Specific gravity of solid, τ/m3	3
9	Solid concentration, %	40-55
10	Material type	Lead-Zinc Concentrate
11	Maximum particle size	0,3
12	Fluid type	Water
13	Type of pumped medium	Slurry

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Проект фильтрации Pb-Zn концентрата в ФСО ОФ Маднеули		Версия ТЗ №	1
		Всего страниц	4
		Страница	2

14	PH	9-11
15	Foam factor (1-3)	3
16	Particle size,(P80), micrometers	74
<b>Electric motor:</b>		
17	IP	57
18	U, V	380-400
19	Rated network frequency, Hz	50
<b>Installation data:</b>		
20	Height above sea level, m	640
21	Location	Outdoors
22	Head, H, m	10
23	L pipe, m	80
24	Suction - upper branch pipe	
25	Pulsation dampener.	Yes
26	Hose rupture sensor	Yes
27	<b>Hose type</b>	For highly abrasive media

#### 4.2. Basic technical and technological requirements for materials and equipment

4.2.1. The characteristics of the design and materials of parts and systems must be suitable for climatic conditions and make it possible to quickly replace wear parts at the pump installation site.

4.2.3. The main blocks and assemblies must operate on all-weather hydraulic and transmission lubricants and oils.

4.2.6. The guaranteed resource of the electric motor and gearbox must be at least 10,000 hours.

#### 5. Requirements for electrical equipment

5.1.1. Cable and wiring products must be flexible (with stranded wires) with non-combustible insulation that does not lose plasticity at temperatures from +45 to -10 degrees. WITH.

#### 6. Dimensions

Determined by the supplier, based on the selected internal overall dimensions.

#### 7. Terms of the warranty period

Warranty period 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 the event of a suspension of operation due to the supplier, the warranty period is extended by the downtime period.

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#### 8. Completeness of goods:

№	Name	Quantity, units
1	Pump with electric motor	2 units
2	Devices, tools and instrumentation intended for installation, repair and maintenance.	1 kit
3	A set of spare parts and accessories for repair for a period of operation of 24 months.	1 kit

#### 9. List of required documentation

**The Supplier provides the Customer with technical documentation:**

- Instructions for use, maintenance
- Drawings for wear parts
- Equipment passport
- Electrical circuits

Documentation is provided in English, Russian.

#### 10. Requirements for packaging

Not regulated

#### 11. Additional terms

Missing

#### 12. Involvement of sub-suppliers

Allowed by agreement with the Customer.

#### 13. Terms of delivery

- The goods must be delivered on the terms: DDP station town. Kazreti, Georgia.

#### Characteristics of the pumped material:

Size, mm	
	balance
	%
.+0,200	10,05
.-0,200+0.140	11,25
.-0.140+0.100	7,60
.-0.100+0.071	11,30
.-0.071+0.044	10,55
.-0.044+0.032	15,0
.-0.032+0.016	16,6
.-0.016+0,008	5,0
.-0.008+0	12,7