

Terms of Reference for manufacturing of self-propelled ANFO loader

Parameters	
Geometric characteristics of workings	
Height of working:	4 500 mm
Width of working:	4 500 mm
Cornering (T-section):	4 500 mm
Maximum slope of the ramp:	14 °
Road surface:	Rock
Environmental properties	
Mine water cut (moisture content), %	50
Air supply: m ³ /min/	6000
Content of aggressive impurities in water PH	5-7
Gas concentration	No
Dust concentration	1.6

MACHINE SPECIFICATION AND CONFIGURATION

Lenth	9 000-10 000 mm
Height	2 300-2 500 mm
Width	2 000-2200 mm
Maximum gradient;	15°- 20°
Turning radius (inner):	4 000-4 200 mm
Turning radius (outer):	6 500-7 100 mm
Basket lift height	6 000- 8 000 mm
Basket load capacity.	500-800 kg
ANFO tank	2x350л
Compressor	Self- 8bar air compressor.
Engine	
Emgine type	Liquid-cooled diesel engine. Diesel emission standards Euro 3, Tier III
Air intake system:	Dry air filter.
Exhaust system:	Catalyst, muffler.
Starter voltage: 24 V	24 V

Transmission	
Converter (Hydrotransformer):	Single stage converter with lockup
Transmission:	Hydromechanical gearbox Three forward three reverse
Axles	
Front axle;	Balancer. Differential
Rear axle	Differential
Tires	
Front wheels:	Tire size and type: 12.00x20
Rear wheels:	Tire size and type: 12.00x20
Breaking system	
Design:	Multidisc spring brake (SAHR).
Service brake: Closed hydraulic dual circuit braking system on both axles multi-disc brakes in oil bath.	Closed hydraulic dual circuit braking system on both axles multi-disc brakes in oil bath.
Safety / parking brake:	Reverse-acting, normally spring-applied, hydraulically disengaged
Performance data	
Maximum speed	(loaded forwards/backwards, on level road): 1 st gear: 6 km/h 2 nd gear: 12 km/h 3 rd gear: 24 km/h
Steering	
Steering	Hydraulic steering with articulated frame.
Frame joint steering angle	± 40°
Electrical system	
Operating voltage	24 V
Battery	2 x 12 V
Protection:	IP65
Main and rear lights:	LED
Auxiliary lights and signal lamps	LED
Sound and light reverse signaling	Sound and light reverse signaling
Electrical wiring.	Wiring cores in fireproof and watertight sheathing.
Other: Battery switch	Battery switch
Operator's cab	
Operator's cab type.	Enclosed cab: ROPS / FOPS certification

Operator seat.	Ergonomic seat with seat belt
Other	Space for mine self-rescuer
Other	Cabin air conditioning and heating system
Other equipment	
Safety.	Emergency stop buttons on the machine body
Option	Optional headlight guards
Lubrication system.	Central automatic lubrication system
Fire extinguisher.	Portable fire extinguisher 2 x 8 kg
Information plates.	Warning plates and inscriptions in Russian and English
Signal lights	Amber flashing beacon
Fire extinguishing system.	Fire extinguishing system (manual/automatic)with automatic shutdown
References	2 sets of operating and spare parts manuals in Russian and English. Spare parts catalog on CD.
Emergency brake system.	Hydraulic brake release
Chocks.	With brackets 2 pcs
CE certification, ROPS and FOPS level 2 certification for underground work	ROPS and FOPS level 2 certification for underground work