

RAPTOR 55-2R

Equipment for drilling long holes for medium sections



RAPTOR 55-2R is an electrohydraulic rig for long hole drilling, its hydraulic boom has automatic parallelism, equipped with two rotary actuators allow drilling very close to both walls of the section of the mine.

Its Feed 8000 series, with 2 Stinger provides the best stability to reduce the deviation.

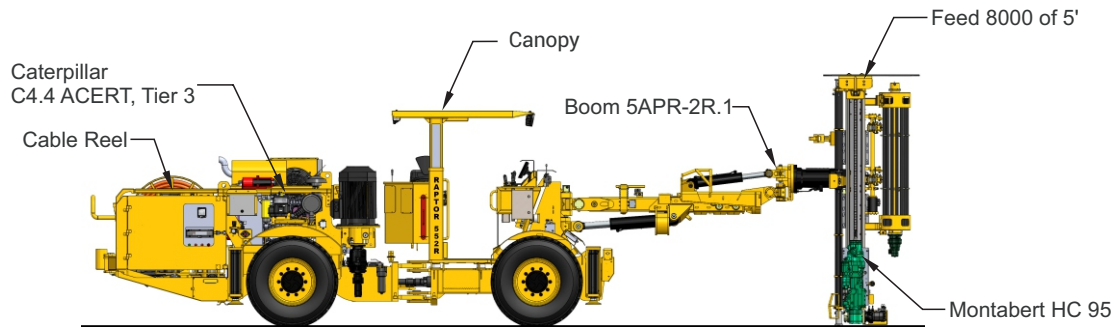
Equipped with Montabert HC 95 drifter with 24 kW and Back Hammering - rods extractor, the most modern on the market. Includes magazine and hydraulic clamp.

Chassis for heavy duty, articulated 4WD, self propelled with diesel engine, Poclain hydrostatic transmission, electrohydraulic system for drilling.

Applications:

- Sub level and benching.
- Block caving
- VCR and cable bolting application.

SPECIFICATIONS



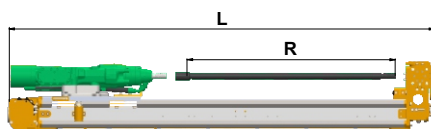
DRIFTER

• Model	Montabert HC 95 (095LQa)
• Percussion power	24 kW
• Percussion pressure	180 bar - 200 bar
• Frequency	57 Hz (3400 bpm)
• Rotation Speed	0 - 236 rpm
• Rotation torque	955 Nm
• Hole diameter	51 - 102 mm
• Rhymed diameter	75 - 127 mm
• Air consumption (flushing)	8000 l/min (7 - 10 bar)
• Air consumption (lubrication)	300 l/min (a 3 bar)
• Oil consumption (lubrication)	0.8 cc/min
• Water consumption	60 - 120 l/min (8 - 20 bar)
• Shank Adapter	R38, T38, T45, T51 - male
• Weight	181 kg

FEED

• Model	RE 8000 series
• Drifter advance	Hydraulic motor and chain
• Feed extension	715 mm
• Hydraulic clamp	BULL 120
• Stinger cylinder	2 units to stabilize when drilling
• Digital inclinometer	BAL - Boom Alignment Laser
• Magazine	T38 / 14 + 1 rods T45 / 12 + 1 rods T51 / 10 + 1 rods

Feed Type	Overall length (mm) (L)	Rod length (mm) (R)
Feed 8000 of 4'	2826	1219
Feed 8000 of 5'	3126	1524
Feed 8000 of 6'	3426	1829



CARRIER

• Model	C66.3
• Diesel engine	Caterpillar C4.4 ACERT, Tier 3
- Power	106 kW @ 2200 rpm
• Exhaust catalyser	DOC (Diesel Oxidation Catalyst)
• Transmission	Hydrodynamics
• Powershift gearbox	Dana, T12000
• Differential axle	Dana, Series 112
• Rear axle oscillating	± 8°
• Trimming speed:	
- Horizontal	max. 16 km/h
- Positive ramp 15%	max. 4 km/h
• Positioning pump	Parker
• Service brakes	Wet discs
• Emergency and parking brakes	SAHR (Spring Applied Hydraulic Release)
• Steering (articulated carrier)	±40°
• Tyres	12 x R20
• Hydraulic jacks	2 extendable front, 2 rear
• Canopy	FOPS / ROPS
• Fuel tank	20.6 gal / 78 l
• Battery	2x12 V, 95 Ah
• Electric system	24 VDC
• Trimming lights	8X, LED 28W, 9-32V
• Centralized grease system	SKF
• Drilling lubrication system	SKF
• Automatic fire suppression system	ANSUL, 4 nozzles
• Fire extinguisher	1x20 lb (PQS)
• High pressure wash	Manual
• Reel grease gun	Manual

BOOM

• Model	Boom 5APR-2R.1
• Boom extension	1200 mm
• Lift angle	+60° / -50°
• Swing angle	±35°
• Rotation	360°
• Hydraulic cylinders	



HYDRAULIC CONTROL SYSTEM

• Válvula de control directo	Parker KA-18
• Drilling Control	PCS (Pilote Control System)
• Percussion pump (compensated pressure)	Rexroth A10VO100
• Double pump	Parker
• Working pressure	180 - 200 bar
• Hydraulic oil tank	37.5 gal / 142 l
• Hydraulic return filter	Parker, 10µ
• Hydraulic pressure filter	Parker, 10µ
• Hydraulic filter saturation indicator	Parker
• Low oil level indicator	Hydac
• Oil temperature indicator	Hydac

WATER AND AIR SYSTEM

• Compressor (Lubrication)	LE3-10UV
- Maximum capacity	5.1 l/s (10.8 CFM)@1800rpm
- Working pressure	3 bar
Optional:	
• Compressor (Flushing)	CT12G
- Maximum capacity	180 CFM
- Working pressure	8 bar
• Water pump and hydraulic motor	CR5-9
- Maximum flow	6.9 m³/h (115 l/m)@3500rpm,
- Minimum water inlet pressure	2 bar
• Bowman cooler	FG-120, 42 GPM, 20 bar

ELECTRIC SYSTEM

• Electric motor	75kW, 100 HP
• Voltage	380 - 440 VAC
	Options: 550 - 690 - 1,000 VAC
• Frequency	50 - 60 Hz
• Starting method	Star - Triangle
• Option to 1000 VAC	Direct start
• Overload protection and ground fault	
• Percussion horometer	24V
• Phase sequence indicator	
• Battery charger	IN 32 VAC, 300W 13A OUT 28 VDC
• Electric transformer	3.5 kVA
• Working lights	2X, LED 50W, 9-32 V
• Electric cable reel	90 m
• Electric cable	3x2/0 AWG
• Degree of protection	IP 55

OPTIONS

• Diesel engine	Deutz BF4L914, Tier II, EPA II 72.4 kW @ 2300 rpm
• A/C Enclosed Cabin	FOPS / ROPS certifications
• Drifter	Montabert HC 112, kW 26 (equipment with different configuration)

BAL SYSTEM (Boom Alignment Laser)

The Boom Alignment Laser (BAL) system is an electronic aid system in long drill rigs. Its main systems are the following:

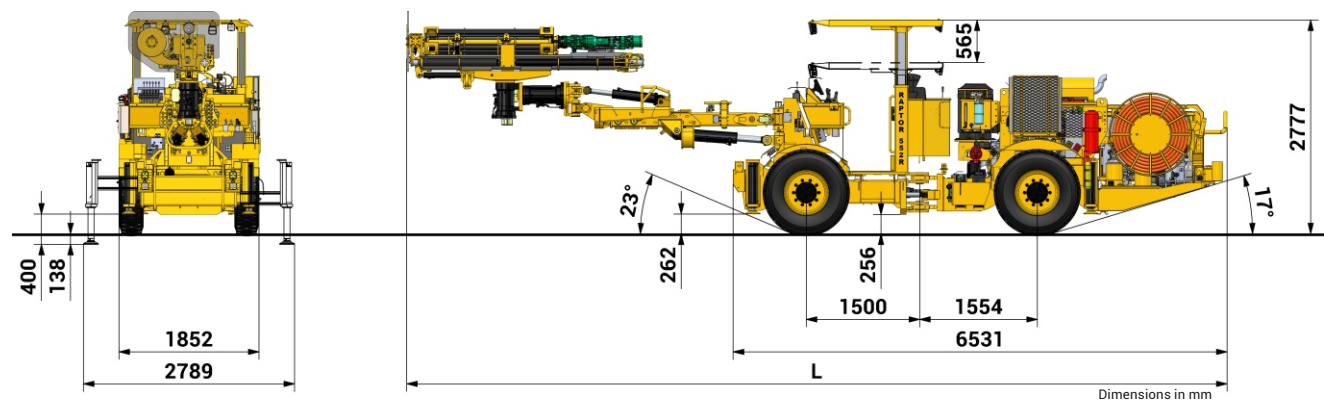
- Positioning of the beam with reference to the tunnel markings using the laser.
- Measurement of angles of rotation, inclination and beam parallelism (AMLH).
- Measurement of meters drilled per hole and totals.
- Electronic carousel control.

The entire system is connected by CAN-BUS protocol and analog cables, which simplifies the number of cables. It is robust, with IP67 protection onwards.

The system goes hand in hand with the implementation of the control panel, with hydraulically piloted valves, simplifying the number of levers in the cabin.



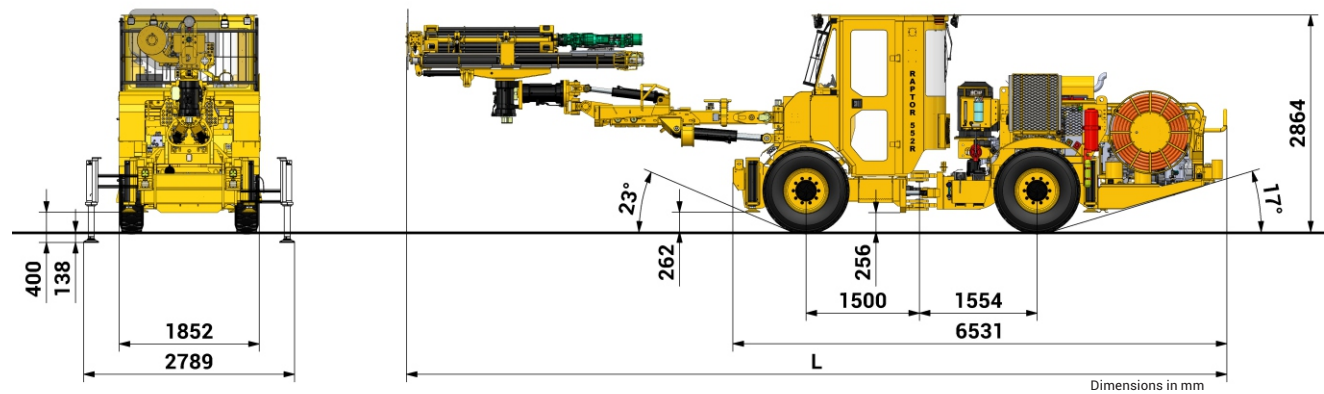
DIMENSIONS



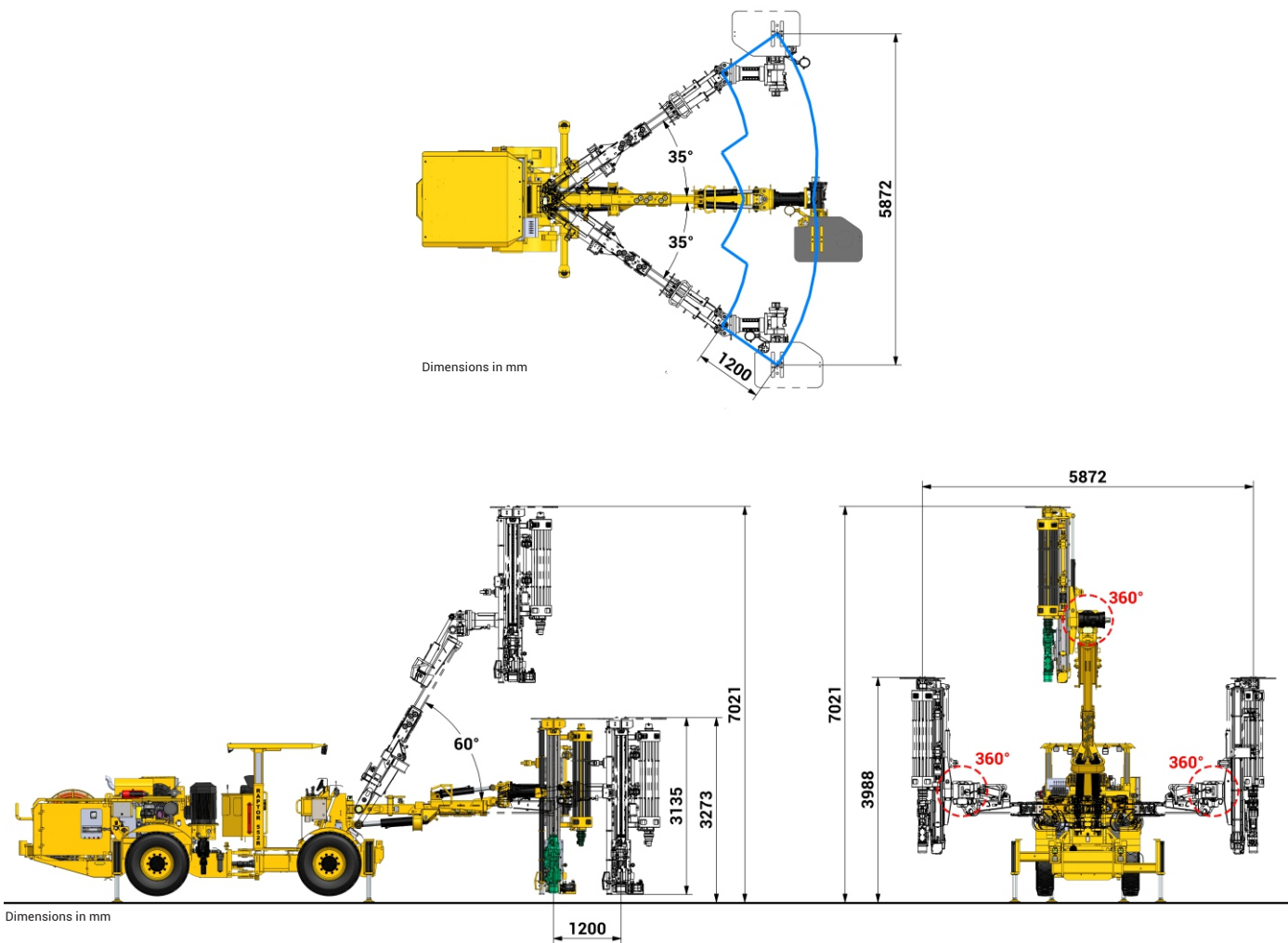
Feed	4'	5'	6'
Length of rig (L)	10,846	10,846	10,846

Total Weight
14,830 kg

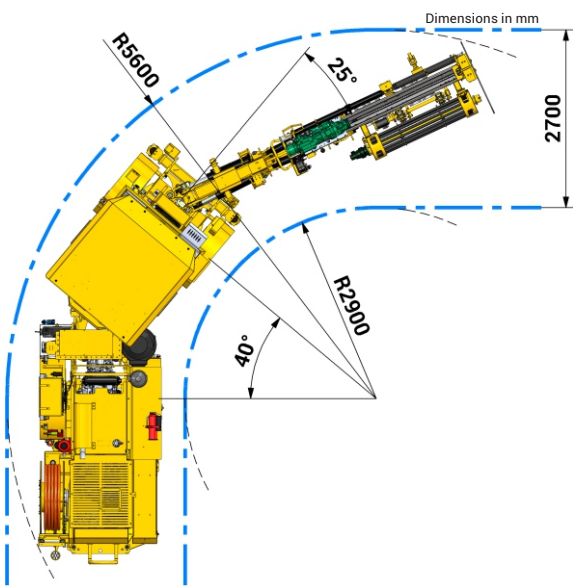
Option: A/C Enclosed Cabin



COVERAGE



TURNING RADIUS



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