

MRS 200 (DUO) Sonic Rig



MRS 200 (DUO): Multi-purpose sonic rig

- Mineral sampling
- Environmental research
- Geotechnical sampling and testing
- Geo-constructional drilling
- Seismic drilling
- Customised solutions

The MRS 200 is a sonic drill rig equipped with a powerful 40k MidRotoSonic drill head, designed to bridge the gap between the CompactRotoSonic 34K and LargeRotoSonic 50K.

This rig is also available as DUO, which is equipped with both a MidRotoSonic drill head and a four-speed rotation head. To combine sonic sampling and diamond core drilling in the same borehole, easily switch drill heads by shifting the trolleyboard.

MRS 200



MidRotoSonic drill head	Metric	Imperial
Max. frequency	0 - 150 Hz	0 - 150 Hz
Sonic vibration oscillator output force	181 kN	40 k lbf
Rotation torque: clockwise 0-183 rpm	3.900 Nm @ 185 bar	2,877 ft-lbf @ 2,752 psi
Rotation torque: counter clockwise	4.900 Nm @ 230 bar	3,610 ft-lbf @ 3,335 psi
Head tilt max.	90°	90°
Type of damper / buffer	Air cushion	Air cushion
Max. hydraulic pressure on sonic	240 bar	3,480 psi
Mass of head	890 kg	1,958 lbf
Pull up force in combination with sonic	6.000 daN	13,265 lbf
Pull down force in combination with sonic	6.000 daN	13,265 lbf
Pull up force static	10.000 daN	22,480 lbf
Pull down force static	6.800 daN	15,065 lbf
Drilling under angle perpendicular driving direction	10°	10°
Advised power from rig engine	140-150 kW	188-200 HP

4-Speed rotary drill head (in DUO)	Metric	Imperial
Hydraulically driven in serial or parallel mode mechanical 2 speed selection		
Shock absorber		
Sub saver from rotary spindle		
Air / Mud swivel, inlet available	60 mm	2.4"
Torque / speed to select from	450 Nm @ 950 rpm to 4.000 Nm @ 105 rpm	331 ft-lbf @ 850 rpm to 2,942 ft-lbf @ 65 rpm

Gear ratio	1^ speed		2^ speed		3^ speed		4^ speed	
	daNm	rpm	daNm	rpm	daNm	rpm	daNm	rpm
1^	45	950	90	475	200	210	400	105

Rig	Metric	Imperial
Caterpillar 4 cylinder water cooled engine	140 kW	188 HP
Dimensions folded (L x W x H) approx.	8.850 x 2.310 x 2.995 mm	29' x 7'7" x 9'11"
Height (when drilling) max.	7.500 mm	24'7"
Mass approx.	Between 10.000 and 13.000 kg, depending on options	Between 22,000 and 28,600 lbs, depending on options
Fuel tank (diesel)	170 liter	45 gallon
Load sensing hydraulic system	Yes	Yes
Control panel on turning arm	Yes	Yes
High pressure water pump	19 l/min. @ 210 bar	5 gpm @ 3,045 psi
Large flow water pump	285 l/min. @ 70 bar	75 gpm @ 1,015 psi
Aluminum water tank	500 liter	132 gallon
Rubber tracks	Yes	Yes
Radio remote for driving	Yes	Yes
Work lights	4	4

Mast	Metric	Imperial
Stroke	5.200/5.500 mm	17'1"/18'0.5"
Mast dump	1.000 mm	3'3"
Pull up	120 kN	27,000 lbf
Pull down	68 kN	15,285 lbf
Pull up and down speed	27 - 36 m/min	88.6- 118.1 ft/min
Triple floating break out clamp	60 - 280 mm	2 3/8" - 11"
Adjustable clamping force of	140 kN	31,473 lbf
Break out torque	38 kNm	28,027 ft-lbf
Hydraulic break out cylinder	Yes	Yes
Main winch	3,600 daN, speed 35 m/min, 50 m cable	8,093 ft-lbf, 115 ft/min, 164 ft
Wireline winch on hydraulic jib boom	1.000 daN 100 m/min, 200 m	2,248 ft-lbf, 328'/min, 657'

Rod / casing handler		
Mechanical separators among different rod layers	Yes	Yes
Casing or drill rod storage depends on diameter and length	Yes	Yes





Options	Metric	Imperial
SPT auto drop hammer with blow counter on control panel		
Casing lifter mounted on break out clamp	200 kN stroke 300 mm	45,000 lbs stroke 12"
Pneumatic separators among different rod layers		
Mud pump triplex piston	283 liter @ 70 bar	75 gallon @ 1015 psi
SPX40 hose pump	114 l/min @ 9.6 bar	30 gpm @ 140 psi
Steel tracks		
Triple floatable clamp		
ManipAll 250 (magnetic rod loading arm)		
Safety cage		
Slewable, extendable jibboom		



Choose your configuration

Royal Eijkelkamp provides the possibility of customising your MRS 200 and MRS 200 DUO. You can customise it yourself, or opt for one of our standard configurations and benefit from shorter delivery times due to our rigs in stock.

Our standard configurations are Pro and Royal; scan the QR-code for a complete overview.

Eijkelkamp Customer Service Agreement

Royal Eijkelkamp provides the possibility to add a tailor fit service contract to the extensive range of machines we offer. We call these the Eijkelkamp Customer Service Agreements. We have three types of Customer Service Agreements called Start, Pro and Royal. The Royal type is a service contract that can be tailor fit to the needs of the customer. All Eijkelkamp Customer Service Agreements will be delivered with the Eijkelkamp Service Assistant, this is an advanced track & trace system that is available for use by customer and driller on site via the mobile phone application and web browser.

For more information on demos, pilot projects or personal advice, contact our sales department!

For urgent service calls and/or technical information contact our special service telephone: +31 313 800 967

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