

CRS 140 DUO Terramac Sonic Rig



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

Our CompactRotoSonic 140 is now also available mounted on the ultra-mobile Terramac RT7U Crawler Carrier. This powerful combination delivers unmatched performance in challenging terrains, ensuring precision, mobility, and efficiency.

This DUO Sonic rig is equipped with both a CompactRotoSonic drillhead and a four speed rotation head, for sonic sampling and diamond core drilling in the same borehole.



Unrivaled mobility and accessibility

Mounted on the Terramac RT7U, a low-ground-pressure crawler carrier, this rig provides exceptional off-road capability, making it ideal for remote and rugged locations. The crawler carrier provides the Sonic rig with higher driving speeds, very low footprint accessibility, and extreme terrain capabilities - including all kinds of obstacles.

| CompactRotoSonic Drill head | Metric | Imperial |
|--|--------------------|--------------------------|
| Max. frequency | 0 - 150 Hz | 0 - 150 Hz |
| Sonic vibration oscillator output force | 150 kN | 33.8 k lbf |
| 2 eccentrics, mechanically synchronized | | |
| Rotation torque: clockwise 0-120 rpm | 2,650 Nm @ 185 bar | 1,955 ft-lbf @ 2,680 psi |
| Rotation torque: counter clockwise | 3,000 Nm @ 210 bar | 2,210 ft-lbf @ 3,045 psi |
| Head tilt max. | 70° | 70° |
| Type of damper / buffer | rubber 4x | rubber 4x |
| Max. hydraulic pressure on sonic | 230 bar | 3,335 psi |
| Mass of head | 600 kg | 1,350 lbf |
| Pull up force in combination with sonic | 5,000 daN | 11,240 lbf |
| Pull down force in combination with sonic | 5,000 daN | 11,240 lbf |
| Pull up force static | 10,000 daN | 17,985 lbf |
| Pull down force static | 5,500 daN | 12,400 lbf |
| Drilling under angle perpendicular driving direction | 10° | 10° |
| Advised power from rig engine | 127 kW | 170 HP |

| R02 4-speed rotary drill head | 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 | 35 mm | 1 ³ /8" | | |
| Torque / speed to select from | 350 Nm @ 950 rpm to 8,200 Nm @ 40 rpm | 258 ft-lbf @ 950 rpm to 6,048 ft-lbf @ 40 rpm | | |

| Gear ratio | 1^ sj | peed | 2^ s | peed | 3^ s | peed | 4^ s | peed |
|------------|-------|------|------|------|------|------|------|------|
| | daNm | rpm | daNm | rpm | daNm | rpm | daNm | rpm |
| 1^ | 35 | 950 | 70 | 425 | 125 | 270 | 250 | 135 |
| 2 | 42 | 860 | 84 | 430 | 150 | 240 | 300 | 120 |
| 3 | 55 | 700 | 110 | 350 | 190 | 200 | 370 | 100 |
| 4 | 68 | 540 | 136 | 270 | 240 | 150 | 480 | 75 |
| 5 | 80 | 430 | 160 | 215 | 290 | 120 | 580 | 60 |
| 6 | 100 | 340 | 200 | 170 | 355 | 100 | 710 | 50 |
| 7 | 115 | 270 | 230 | 135 | 410 | 80 | 820 | 40 |

| Metric | Imperial | | | |
|--|--|--|--|--|
| Mounted on the RT7U Terramac Crawler Carrier | | | | |
| Powered by the Terramac crawler's PTO - 155HP cummins stage 5 engine | | | | |
| Dimensions folded (L x W x H) approx. 8,150 x 2,513 x 3,300 mm 26'9" x 8'3" x 10'10" | | | | |
| 8,100 mm | 26'7" | | | |
| 16,500 kg | 36,500 lbs | | | |
| 151 liter | 40 gallon | | | |
| Yes | Yes | | | |
| Yes | Yes | | | |
| 19 l/min. @ 210 bar | 5 gpm @ 3,045 psi | | | |
| 160 l/min. @ 48 bar | 42 gpm @ 700 psi | | | |
| 500 liter | 132 gallon | | | |
| Yes | Yes | | | |
| Yes | Yes | | | |
| 3 | 3 | | | |
| | | | | |
| Metric | Imperial | | | |
| 3,700 mm | 12'2" | | | |
| 600 mm | 24" | | | |
| | engine 8,150 x 2,513 x 3,300 mm 8,100 mm 16,500 kg 151 liter Yes Yes 19 l/min. @ 210 bar 160 l/min. @ 48 bar 500 liter Yes Yes 3 Metric 3,700 mm | | | |

| Stroke | 3,700 mm | 12.2 |
|------------------------|-----------|------------|
| Mast dump | 600 mm | 24" |
| Pull up | 8,000 daN | 17,985 lbf |
| Pull down | 6,800 daN | 15,300 lbf |
| Pull up and down speed | 30 m/min. | 98 ft/min. |



| Options | Metric | Imperial |
|---|-----------------------------|----------------------------------|
| SPX40 hose pump | 114 l/min. @ 10 bar | 30 gpm @ 145 psi |
| Double footclamp or triple footclamp | 60 - 280 mm | 2 3/8"- 11" |
| Adjustable clamping force of | 14,000 daN | 31,500 lbf |
| Break out torque | 3,800 daNm | 28,000 ft-lbf |
| Triple floating clamp stroke | 800 mm | 32" |
| ManipAll 200 RC | | |
| Safety cage | | |
| Wireline winch | 1,000 daN, 100 m/min. 200 m | 2,248 ft-lbf, 328 ft/min. 656 ft |
| Hydraulic winch | 2,000 daN, 55 m/min. 30 m | 4,496 ft-lbf, 180 ft/min. 98 ft |
| Radio remote control for all drilling functions | | |
| 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" |
| Mud pump Bean/FMC pump L06-18 | 160 l/m @ 48 bar | 42 gpm @ 700 psi |
| Mud pump Bean/FMC pump L11-22 | 238 l/m @ 70 bar | 75 gpm @ 1,015 psi |
| High pressure water pump | 18 l/m @ 210 bar | 5 gpm @ 3,046 psi |
| Full automatic SPT hammer | | |

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!



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