BREAKERS DRILLS NORTH AMERICA

ECR18

CORE DRILL RIGS

HYUNDAI EVERDIGM

LET'S TALK ABOUT YOUR NEXT PROJECT.

SALES & ENQUIRIES

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SERVICE

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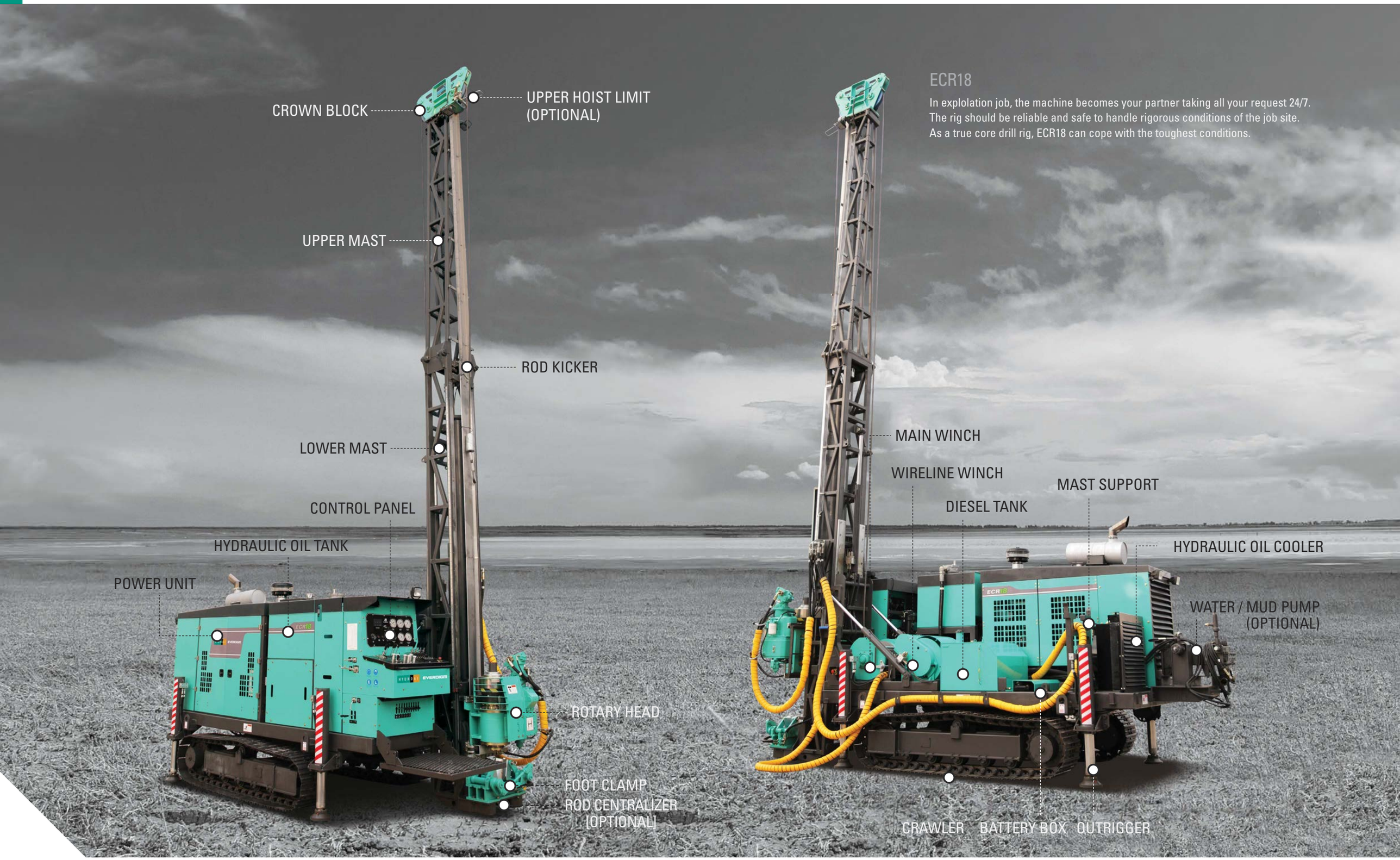
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ECR18

In explolation job, the machine becomes your partner taking all your request 24/7.
The rig should be reliable and safe to handle rigorous conditions of the job site.
As a true core drill rig, ECR18 can cope with the toughest conditions.

EXPLORATION DRILL RIGS
CORE DRILL RIGS

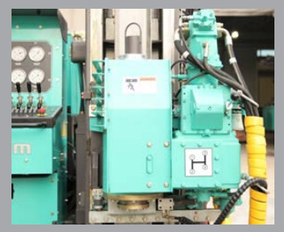
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STANDARD FEATURES & OPTIONAL EQUIPMENT

AS A TRUE CORE DRILL RIG, ECR18 CAN COPE WITH THE TOUGHEST CONDITIONS

SIDE SHIFT ROTARY HEAD




- Slides sideways to make it easier to handle the inner tube at both vertical drilling and angle hole drilling
- Equipped with the double safety device to prevent accidental side shift during drilling: lever lockout, on/off valve interlocked with the rotary head
- No need to adjust chain tension thanks to no chain inside the rotary head

FAIL SAFE FOOT CLAMP




- Prevents the drill rods from falling when power is lost Self locked by the wedge force derived from the weight of the drill rods by means of the foot clamp mechanism

TWO SPEED MAIN WINCH



- Equipped with fail safe spring applied hydraulic released brake with over center valve
- Selective two speed: one fast speed for quick pull-in, a second low speed for increased pull capacity.



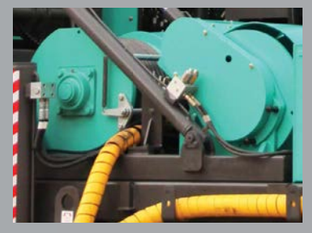
WIRE LINE WINCH

1 Standard wireline winch



- Equipped with fail safe spring applied hydraulic released brake with over center valve

2 Optional wireline winch with level wind



- Enables the wireline wire rope to be evenly distributed without kinks of the wire rope in spooling
- Can be placed according to drilling angle at angle hole drilling

OUTRIGGER

1 Standard outrigger



- Powerful jack cylinders provide increased stability during drilling

2 Optional extendable outrigger



- Extends vertically and horizontally to provide easy loading on the truck and the trailer
- Makes it more stable on rough terrain

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STANDARD FEATURES & OPTIONAL EQUIPMENT
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TRAVEL CONTROL

1 Standard manual lever control





2 Optional remote control



Electrohydraulic travel valve with emergency override lever



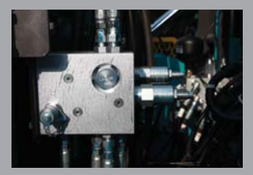
Proportional remote control transmitter



Proportional remote control receiver

- Cable and wireless remote control compatible simultaneously

ROD MAKEUP AND BREAKOUT VALVE



- Thread compensation can be fine adjusted by the valve while making and breaking the joint to increase life span of the rod threads

BOTTOM ROD CENTRALIZER OPTIONAL





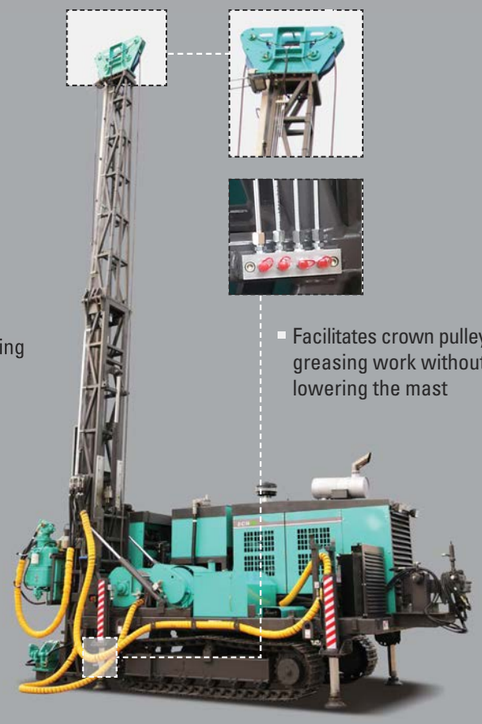
- Prevents the vibration of the rod and ensures the hole straightness by centralizing and aligning rods

WATER / MUD PUMP PACKAGE OPTIONAL



- Mandatory for core drilling
- Easily attachable to the base machine with bolts
- Powered by hydraulics from the base machine

CENTRALIZED GREASE INLETS



- Facilitates crown pulley greasing work without lowering the mast

ROTATION GUARD

1 Standard rotation guard



2 Optional spin cage with safety device



- Protects the operators from the rotating drill rod by reducing the rotation speed and the fast feed speed when the cage is opened

SIDE GUARD OPTIONAL



- Prevents human entrance during operation
- Easily removable

UPPER HOIST LIMIT



- Prevents accidental rod handling by stopping the main winch or the wireline winch if the drill rod or the inner tube comes into contact with the loop lever



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SPECIFICATIONS ECR18

DRILLING CAPACITY

B wireline	2,250 m (7,382 ft)
N wireline	1,780 m (5,840 ft)
H wireline	1,180 m (3,871 ft)
P wireline	800 m (2,625 ft)

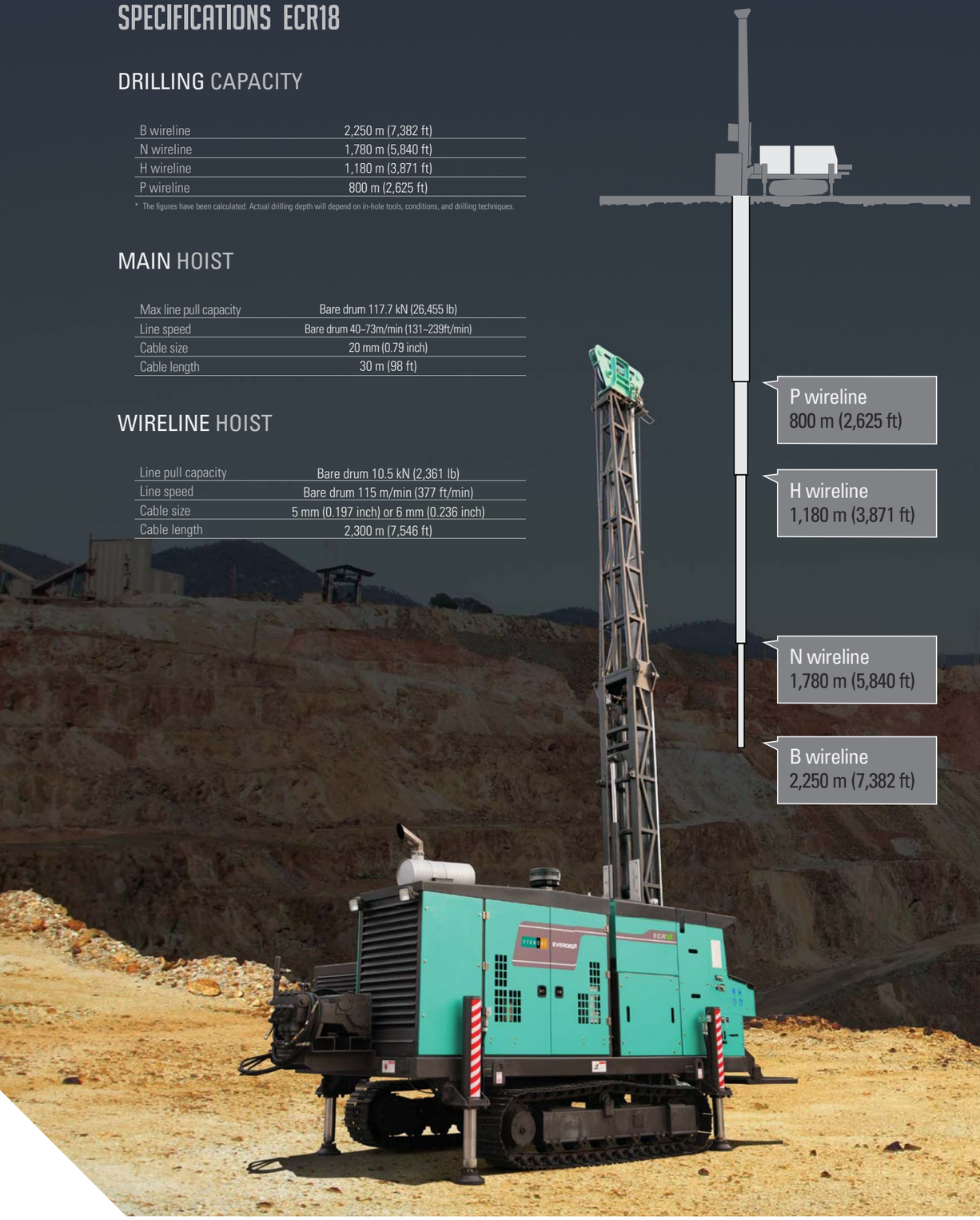
* The figures have been calculated. Actual drilling depth will depend on in-hole tools, conditions, and drilling techniques.

MAIN HOIST

Max line pull capacity	Bare drum 117.7 kN (26,455 lb)
Line speed	Bare drum 40~73m/min (131~239ft/min)
Cable size	20 mm (0.79 inch)
Cable length	30 m (98 ft)

WIRELINE HOIST

Line pull capacity	Bare drum 10.5 kN (2,361 lb)
Line speed	Bare drum 115 m/min (377 ft/min)
Cable size	5 mm (0.197 inch) or 6 mm (0.236 inch)
Cable length	2,300 m (7,546 ft)



MAST AND FEED SYSTEM

Feed travel	3.5 m (11.5 ft)
Feed speed	Fast and slow with variable control
Thrust capacity	69.0 kN (15,505 lb)
Pull capacity	171.2 kN (38,481 lb)
Drilling angle	45 to 90 degrees
Rod pull length	6 m (19.7 ft)

POWER UNIT

Manufacturer	Cummins
Model	6CTAA8.3C, Tier2 / B6.7, Stage 5
Displacement	8.3 L, 6 cylinder
Power	193 kW (260 hp)
RPM	2,200
Engine type	Turbocharged, after cooled diesel engine
Cooling	Water
Electrical system	24 V (Alternator 24V/70A)

ROTARY HEAD

Hollow spindle (Inside diameter)		117 mm (4 5/8 inch)
Rotation motor		Variable/reversible hydraulic motor
Mechanical transmission		4 speed
	1st ratio	7.16:1
	2nd ratio	3.17:1
	3rd ratio	1.76:1
	4th ratio	1.00:1
Final drive		Gear driven in oil bath Ratio : 2.5:1
RPM and torque rating — Speed (RPM)	1st ratio	128 - 178
	2nd ratio	288 - 400
	3rd ratio	511 - 711
	4th ratio	920 - 1,200
RPM and torque rating — Torque, Nm (lb, ft)	1st ratio	5,541 - 3,990 (4,086 - 2,942)
	2nd ratio	2,462 - 1,774 (1,815 - 1,308)
	3rd ratio	1,385 - 998 (1,021 - 736)
	4th ratio	770 - 554 (567 - 408)
Hinged head		Swing away
Chuck assembly — Type		Hydraulic opened, spring closed
Chuck assembly — Max. inside diameter		117 mm (4 5/8 inch)
Chuck assembly — Holding capacity		18,144 kg (40,000 lb)

FOOT CLAMP

Type	Hydrauically opened/closed
Max. rod size	PW - 139.7 mm (5 1/2 inch)
Holding capacity	13,012 kg (28,680 lb)

HYDRAULIC SYSTEM

Primary pump	Axial piston, variable displacement 28 MPa, 250 Lpm (4,061 psi, 66 gpm)
Secondary pump	Axial piston, variable displacement 20 MPa, 70 Lpm (2,900 psi, 18 gpm)
1st auxiliary pump	Gear, fixed displacement 10 MPa, 44 Lpm (1,450 psi, 11 gpm)
2nd auxiliary pump	Gear, fixed displacement 6 MPa, 35 Lpm (870 psi, 9 gpm)
3rd auxiliary pump	Gear, fixed displacement 20 MPa, 10 Lpm (2,900 psi, 2.6 gpm)
Hydraulic oil cooling	Air

OUTRIGGER

Support	4 hydraulic leveling jacks
Pad diameter	220 mm (8.66 inch)
Travel length	600 mm (23.6 inch)

CRAWLER

Manual controlled, Max. speed 3.3 km/h (2.1 mile/h)
Heavy duty crawler band 380 mm (15 inch) wide

OPTIONAL MUD PUMP AND MUD MIXER

Hydraulic driven mud pump	
Manufacture	American manufacturing
Model	AW1122BCD
Max flow	130 Lpm (34.3 gpm)
Max pressure	5 MPa (725.2 psi)
Hydraulic driven mud mixer	
Max flow	56.7 Lpm (15 gpm)
Max pressure	10.4 MPa (1500 psi)

STANDARD ACCESSORIES

- Night light and work light
- Hydraulic connection for mud pump and mud mixer
- Drill speed gage
- Mud pump pressure gauge
- Gages for primary/secondary pump and feed/pullback pressure
- Gages for engine RPM, fuel, oil, temperature and engine monitor
- Cigar jack
- Warning horn
- Towing hook
- Emergency stop switches
- Basic toolbox for rig maintenance

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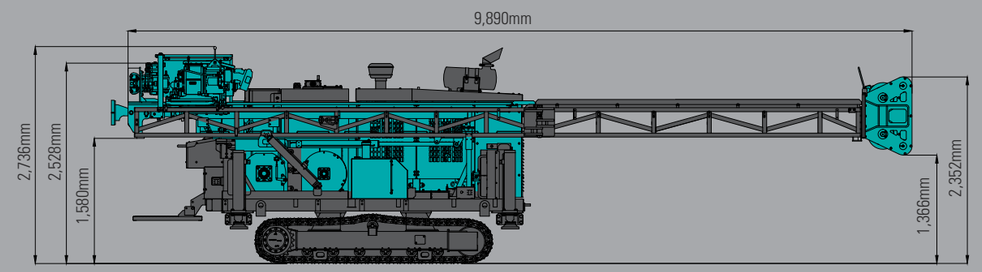
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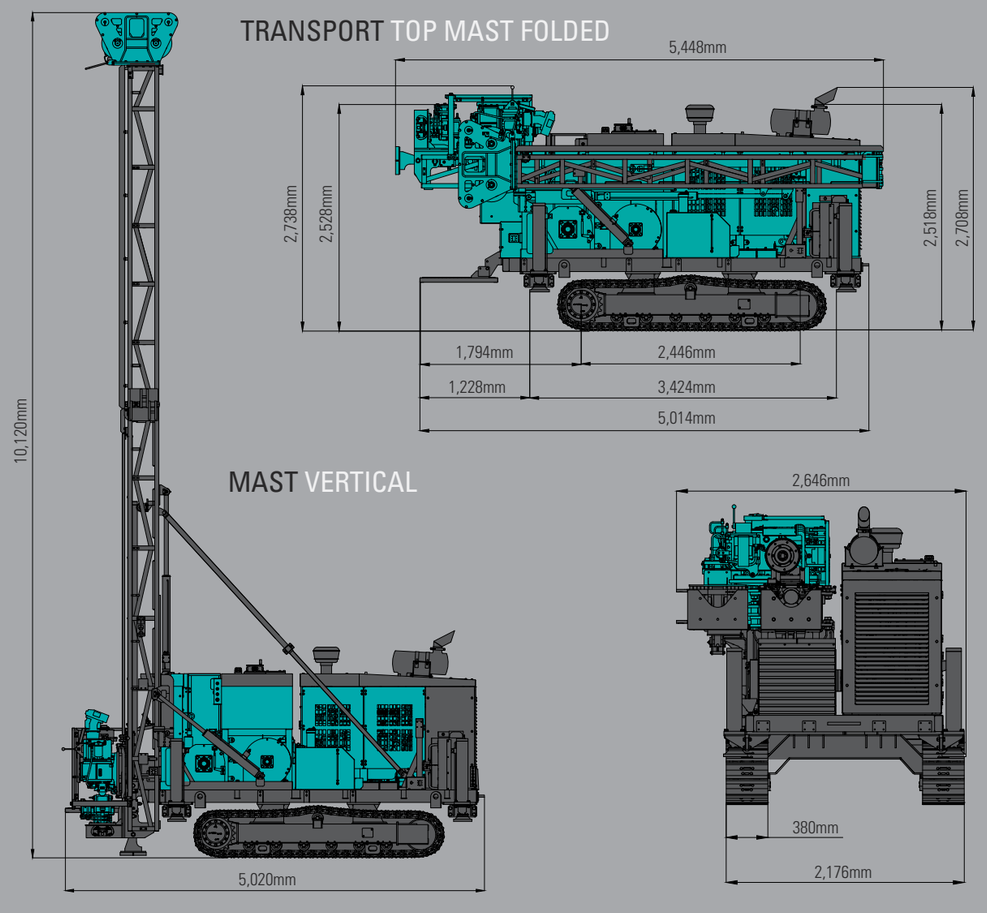
WEIGHT AND DIMENSIONS

ECR18 9,000 kg (19,841 lb)

MAST HORIZONTAL



TRANSPORT TOP MAST FOLDED



MAST VERTICAL

* Weight and dimensions are approximations based on the rig with standard equipment and should be checked before crating and lifting.

ITEM	STANDARD	OPTION
Engine cummins 6CTAA8.3C	✓	—
Side-shift rotary head	✓	—
Fail-safe foot clamp	✓	—
Wireline hoist normal	✓	—
Two-speed main hoist	✓	—
Outrigger normal	✓	—
Manual controlled crawler	✓	—
Big capacity cooler & radiator for ambient temperature upto 65º	✓	—
Grease line to mast pulley	✓	—
Rotation guard	✓	—
Safety lever locking	✓	—
Rod makeup/breakout valve	✓	—
Upper rod kicker	✓	—
Upper hoist limit	✓	—
HQ chuck/rod holder jaw and bushing dimension kit	✓	—
Water pump kit (Standard mud pump is american brand. Model name is AW1122BCD)	—	✓
Mud mixer	—	✓
Remote controller for tramming (Wire & Wireless both compatible)	—	✓
Extendable high rise outrigger	—	✓
Rod spinner	—	✓
Spin cage with safety device (Heavy duty type)	—	✓
Side guard group	—	✓
Wireline winch with automatic level winder	—	✓
Airconditioned cabin	—	✓
Rod stabilizer	—	✓
Engine coolant preheating system	—	✓
PQ Chuck/Rod holder jaw and bushing dimension kit	—	✓
NQ Chuck/Rod holder jaw and bushing dimension kit	—	✓
BQ Chuck/Rod holder jaw and bushing dimension kit	—	✓
PW bushing dimension kit	—	✓