EVERDIGM "EVERLASTING PARADIGM"

EVERDIGM is large sized company with $300M turnover manufacturing high-end Construction, Mining, and Special Purpose Vehicle in Korea. The products have been globally distributed and serviced in 90 countries through 140 distributors. EVERDIGM has been growing based on the platform of advanced quality, professionalism and real satisfaction. Standing behind the customers taking responsibility for its products at all of stage its product life cycle is always EVERDIGM's commitment.

TOTAL SOLUTION PROVIDER CREATING MORE VALUE FOR FUTURE GENERATION

EVERDIGM's decision making is a reflection of 3 principles: Our family, Future generation's life, and Your satisfaction. We are not just a manufacturer of equipments, but we put greater emphasis on providing high quality equipments that suits your needs in any sites around the world and provide efficient after-sales service to support your business, as a World Top Class manufacturer.
Our ultimate mission is to become 'Total Solution Provider in Construction, Demolition, Mining and Rescue industries' and 'A faithful supporter to make a real satisfaction for customer, employee, and society'.
EVERDIGM will continue to share ideas with our customers and be ready to Innovate and Implement changes that will keep us flexible and efficient in dynamic market place.

EVERDIGM EXPLORATION DRILL RIGS

CORE DRILL RIGS



*Specifications contained in the catalogue may be changed without prior notice for improvement of quality and performance.

HEAD OFFICE & FACTORY

49, Buyeong-gil, Jincheon-eup,
Jincheon-gun, Chungcheongbuk-do, Korea
TEL **+82-43-530-3921** FAX **+82-43-530-3470**

SALES & MARKETING

Room#1203, WoolimLion'sValley2,
2 Gasan digital 1-ro,Geumcheon-gu, Seoul, Korea
TEL **+82-2-801-0815** FAX **+82-2-830-0799**
Email **angelica@everdigm.com**

ECRE1403-01 Vol.01 14.Mar, 2014 © 2014 EVERDIGM Corp. Printed in Korea

EVERDIGM

EVERDIGM CORE DRILL RIGS

EVERDIGM CORE DRILL RIGS

CROWN BLOCK

UPPER HOIST LIMIT (OPTIONAL)

UPPER MAST

ROD KICKER

LOWER MAST

CONTROL PANEL

HYDRAULIC OIL TANK

POWER UNIT

ROTARY HEAD

FOOT CLAMP

ECR12/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, ECR12/18 can cope with the toughest conditions.

MAIN WINCH

WIRELINE WINCH

MAST SUPPORT

DIESEL TANK

HYDRAULIC OIL COOLER

WATER / MUD PUMP (OPTIONAL)

CRAWLER

BATTERY BOX

OUTRIGGER

EVERDIGM CORE DRILL RIGS

STANDARD FEATURES & OPTIONAL EQUIPMENT

As a true core drill rig, ECR12/18 can cope with the toughest conditions



ROTARY HEAD

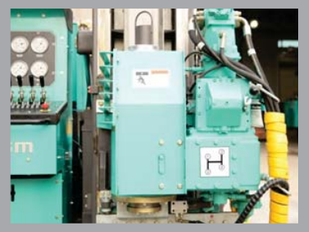
1 Standard Swing out rotary head





- Swings out on a pivot for rod handling
- Effective for vertical drilling

2 Optional Side shift rotary head





- Slide sideways for rod handling
- Makes it easier for rod handling at angle hole drilling
- Equipped with double safety device: lever lockout, on/off valve to prevent accidental actuation

FAIL SAFE FOOT CLAMP





- Fail safe mechanism: wedge force operated
- Designed for use with a working range of BQ, NQ, HQ, PQ, PW
- Easy to maintain and repair with spare parts
- Both mounting types available for swingout rotary head and side shift rotary head

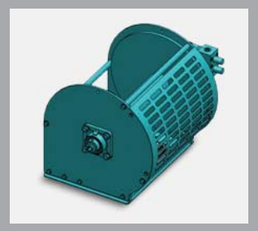




WIRE LINE WINCH

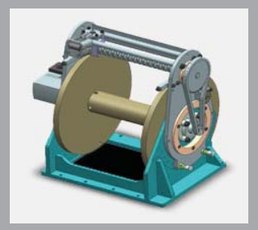
1 Standard Wire line winch





2 Optional Wire line winch with level wind





- Wire line wire is evenly distributed in spooling

OUTRIGGER

1 Standard Outrigger



2 Optional Extendable outrigger



- Extends vertically and horizontally to load on to low bed truck/trailer
- Makes it more stable on rough terrain
- Remote control or manual lever control is available

EVERDIGM CORE DRILL RIGS

STANDARD FEATURES & OPTIONAL EQUIPMENT

As a true core drill rig, ECR12/18 can cope with the toughest conditions



TRAVEL CONTROL

1 Standard Manual lever control





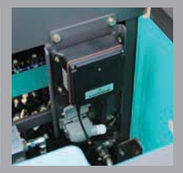
2 Optional Remote control



- Electrohydraulic travel valve with emergency override lever



- Proportional remote control transmitter



- Proportional remote control receiver

- Cable and wireless remote are available simultaneously

WATER / MUD PUMP PACKAGE OPTIONAL



- Mandatory for core drilling
- Composed of mud pump, motor, safety valve, mounting frame
- Easily attachable to the base machine with bolts
- Powered by hydraulics from base machine

ROTATION GUARD

1 Standard Rotation guard



2 Optional Spin cage with safety device



SIDE GUARD OPTIONAL



- Prevents human entrance during operation
- Easily removable

COOLING MODULE

1 Standard



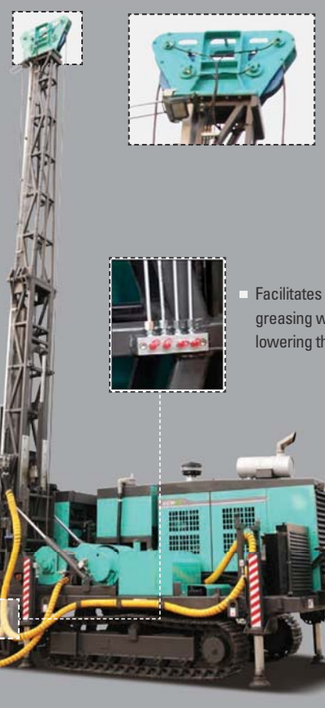
- Suitable for ordinary climate zone

2 Tropical Zone type



- Suitable for tropical climate zone

CENTRALIZED GREASE INLETS OPTIONAL



- Facilitates crown pulley greasing work without lowering the mast

UPPER HOIST LIMIT OPTIONAL



- Composed of U shaped lever, inductive proximity sensor, solenoid valve
- Gives signal to the solenoid valve to stop the main winch when main winch wire rope is fully wound and the hoisting plug activates the sensor on the U shaped lever



EVERDIGM CORE DRILL RIGS

SPECIFICATIONS ECR12 ECR18

DRILLING CAPACITY

	ECR12	ECR18
B wireline	1,500 m (4,921 ft)	2,250 m (7,382 ft)
N wireline	1,190 m (3,904 ft)	1,780 m (5,840 ft)
H wireline	790 m (2,592 ft)	1,180 m (3,871 ft)
P wireline	480 m (1,575 ft)	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

	ECR12	ECR18
Line pull capacity	Bare drum 79.4 kN (17,857 lb)	Bare drum 117.7 kN (26,455 lb)
Line speed	Bare drum 41 m/min (134 ft/min)	Bare drum 40 m/min (131 ft/min)
Cable size	16 mm (0.63 inch)	20 mm (0.79 inch)
Cable length	30 m (98 ft)	

WIRELINE HOIST

	ECR12	ECR18
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	1,500 m (4,921 ft)	2,300 m (7,546 ft)



MAST AND FEED SYSTEM

		ECR12	ECR18
Feed travel		3.25 m (10.7 ft)	3.5 m (11.5 ft)
Feed speed		Fast and slow with variable control	
Thrust capacity		45.3 kN (10,176 lb)	69.0 kN (15,505 lb)
Pull capacity		114.6 kN (25,761 lb)	171.2 kN (38,481 lb)
Drilling angle		45 to 90 degrees	
Rod pull length		6 m (19.7 ft)	
RPM and torque rating	Speed (RPM) 1st ratio	134 - 189	128 - 178
	Speed (RPM) 2nd ratio	303 - 426	288 - 400
	Speed (RPM) 3rd ratio	538 - 758	511 - 711
	Speed (RPM) 4th ratio	968 - 1,364	920 - 1,200
	Torque, Nm (lb, ft) 1st ratio	4,155 - 2,947 (3,064 - 2,173)	5,541 - 3,990 (4,086 - 2,942)
	Torque, Nm (lb, ft) 2nd ratio	1,847 - 1,310 (1,362 - 966)	2,462 - 1,774 (1,815 - 1,308)
	Torque, Nm (lb, ft) 3rd ratio	1,039 - 737 (766 - 564)	1,385 - 998 (1,021 - 736)
	Torque, Nm (lb, ft) 4th ratio	577 - 409 (425 - 313)	770 - 554 (567 - 408)
Hinged head		Swing away	
Chuck assembly	Type	Hydraulic opened, spring closed	
	Max. inside diameter	117 mm (4 5/8 inch)	
	Holding capacity	18,144 kg (40,000 lb)	

POWER UNIT

	ECR12	ECR18
Manufacturer	Cummins	
Model	6CTAA8.3C, Tier2	
Displacement	8.3 L, 6 cylinder	
Power	152 kW (205 hp)	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

	ECR12	ECR18
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	

FOOT CLAMP

	ECR12	ECR18
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

	ECR12	ECR18
Primary pump	Axial piston, variable displacement 28 MPa, 180 Lpm (4,061 psi, 47 gpm)	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

	ECR12	ECR18
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

STANDARD EQUIPMENT

Manual controlled crawler	Hydraulic connection for mud pump and mud mixer
4 hydraulic leveling jacks	Fail-safe foot clamp
Rod kicker	Hinged swing out rotary head
Drill speed gage	Rotation guard
Mud pump pressure gage	Support legs
Front, rear headlight and work light	

* Chuck and foot clamp are equipped with HQ-sized jaws as standard. Upon request, chuck and foot clamp can be equipped with BQ/NQ/PQ-sized jaws. Additional dimension kits(BQ/NQ/HQ/PQ/PW) are available.

OPTIONS

Hydraulic driven mud pump	Manufacturer	American manufacturing
	Model	AW1122BCD
	Max. flow	130 Lpm (34.3 gpm)
	Max. pressure	5 MPa (725.2 psi)
Remote controlled crawler (cable and wireless remote control available simultaneously)		
Wireline hoist with level winder		
Side shift rotary head		
Upper hoist limit		
Spin cage with safety device		
Centralized grease inlets for crown pulley		
Side guard		
Dimension kit	BQ chuck jaw/bushing kit & foot clamp jaw kit	
	NQ chuck jaw/bushing kit & foot clamp jaw kit	
	PQ chuck jaw/bushing kit & foot clamp jaw kit	
	PW foot clamp jaw kit	

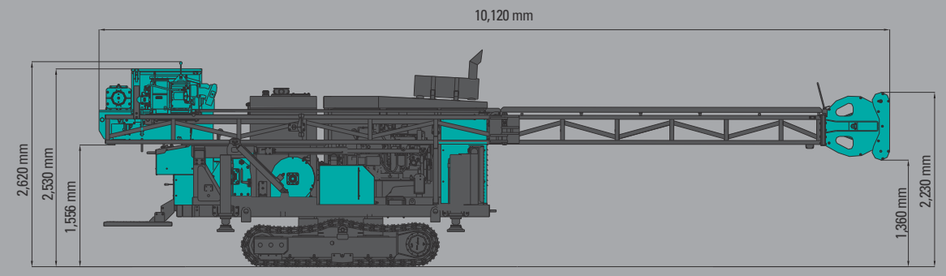
EVERDIGM CORE DRILL RIGS

WEIGHT AND DIMENSIONS

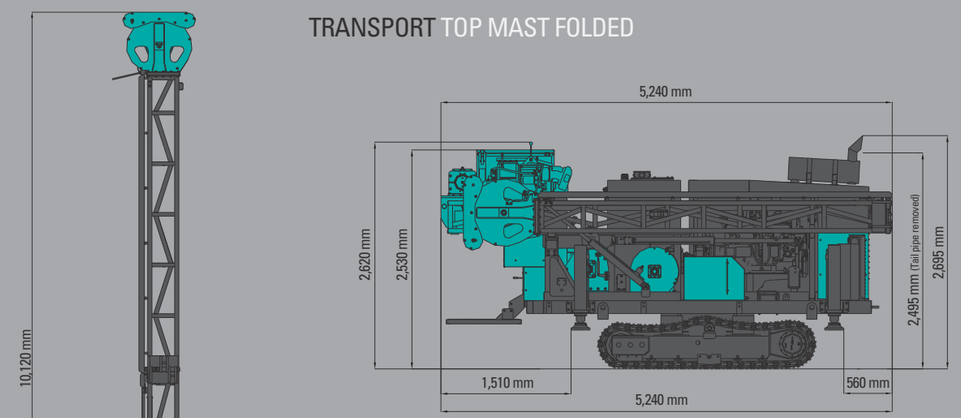
WEIGHT

ECR12	8,000 kg (17,636 lb)	ECR18	9,000 kg (19,841 lb)

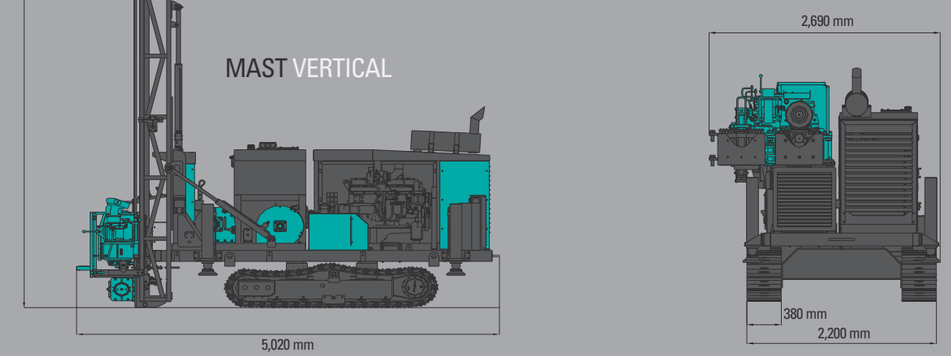
MAST HORIZONTAL



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.

EVERDIGM CORE DRILL RIGS

DRILLING CAPACITY

