



42
YEARS

REL

REVATHI EQUIPMENT LIMITED

C650
ROTARY
SERIES



C6550

REL C650 Rotary Series

REL C650 Rotary series is a Diesel-powered, Crawler mounted, Hydraulic top drive Rotary blast hole drill rig.

Designed to drill clean holes of 6 1/4-inch (159mm) to 9 inch (229mm) diameter, available with different mast configuration and rod carousel options.

REL C650 Rotary comes in three variants DI, DM, DH designed to deliver the required diameter hole based on your mining needs.

Prime Mover:

Optimized for higher productivity, with a reduced overall operating cost, we have designed the power pack with different power output options, that provide the right combination for each drilling condition. The engine and compressor range allow for optimized hole flushing and the most power for Rotary Drilling. Operating at rated speed and lower load factor assures longevity of the engine, that produces abundant power to work under extreme conditions.

Mast and Rod Carousel:

The C650 is available with different mast and rod carousel configuration options for achieving variable hole depth as required.

REL MaxxDrill Mast:

Designed by taking actual drilling parameter into consideration, allows the drill to achieve single pass depth of 40 Feet and a multipass depth of 80 feet using single rod carousel and 160 feet using 3-rod carousel.

Tall Mast:

Tall Mast to drill a maximum single pass depth of 9 Meters (30 Feet) and a multi-pass depth of 18 meters using single rod carousel or 36 meters using 3-rod carousel.

Cabin:

We have designed the cabin of the REL C650 to provide with maximum comfort, safety, and usability while conforming to required regulatory standards.

The FOPS, 80db cabin is mounted on anti-vibration mounting pads to keep the vibration away. The cabin is well illuminated, air-conditioned cooled, thermally insulated, pressurized, heated and ventilated. Assuring the safety of the personnel, drill rig, and its surroundings.



REL C650 - DI / DM / DH Selection Guide

C650 - DI

C650 - DM

C650 - DH

6 1/4" - 6 3/4"

6 3/4" - 7 7/8"

7 7/8" - 9"

MAST SELECTION

TALL MAST

SP - 30 Feet; 9 Meter

*MP - 60 Feet; 18 Meter
120 Feet; 36 Meter

REL "Maxx DRILL" MAST

SP - 40 Feet; 12 Meter

**MP - 80 Feet; 24 Meter
160 Feet; 48 Meter

* MP - Tall Mast Multipass Drilling System
uses a standard single or 3 rod carousel option.

** MP - REL "MaxxDrill" Multipass Drilling
System uses a standard single or 3 rod carousel option.

SP - Single Pass / MP - Multi Pass

SPECIFICATION	UNIT	C650 - DI	C650 - DM	C650 - DH
Drilling Method		Rotary		
Drilling Diameter	Inch	6 1/4-6 3/4	6 3/4-7 7/8	7 7/8 - 9
	mm	159-171	171-200	200-229
Pipe Size	Inch	5	5-6 1/4	6 1/4-7
	mm	127	127-159	159-178
SP - Single Pass Depth				
Tall Mast	feet (m)	30 (9)	30 (9)	30 (9)
REL Maxx Drill Mast	feet (m)	N.A.	40 (12)	40 (12)
MP - Multi Pass Depth				
Tall Mast Carousel	Single Rod	60 (18)	60 (18)	60 (18)
	Three Rod	120 (36)	120 (36)	120 (36)
REL Maxx Mast Carousel	Single Rod	N.A.	80 (24)	80 (24)
	Three Rod	N.A.	160 (48)	160 (48)
Compressor	CFM-PSI	750-75	900-75	1050-75
	CuM-bar	21.2-5.2	25.5-5.2	29.7-5.2
Pull Down Capacity	lbs	35,000	40,000	50,000
	Kg	15,900	18,100	22,700
Pull Up Capacity	lbs	20,000	22,000	28,000
	Kg	9,100	10,000	12,700
Bit Load	lbs	37,600	43,400	54,600
	Kg	17,100	19,700	24,800
Feed Rate Rapid	ft/min	60	60	85
	m/min	18.3	18.3	25.9
Rotary Torque	in.lbs	40,000	48,000	70,000
	Kg.m	461	553	806
Rotary Speed	RPM		0 - 175	
Engine Cummins	HP	385	415	530
Engine CAT	HP	385	415	540
Undercarriage	Triple Grouser with 600mm width & sufficient rollers			
Ground Bearing pressure	MPa	0.078	0.071	0.081
Speed in slope / Plain	kms/hr	1.5 / 3.2	1.5 / 3.2	1.5 / 3.2
Weight Estimated	lbs	67,000	71,000	81,000
	Kg	30,400	32,200	36,700

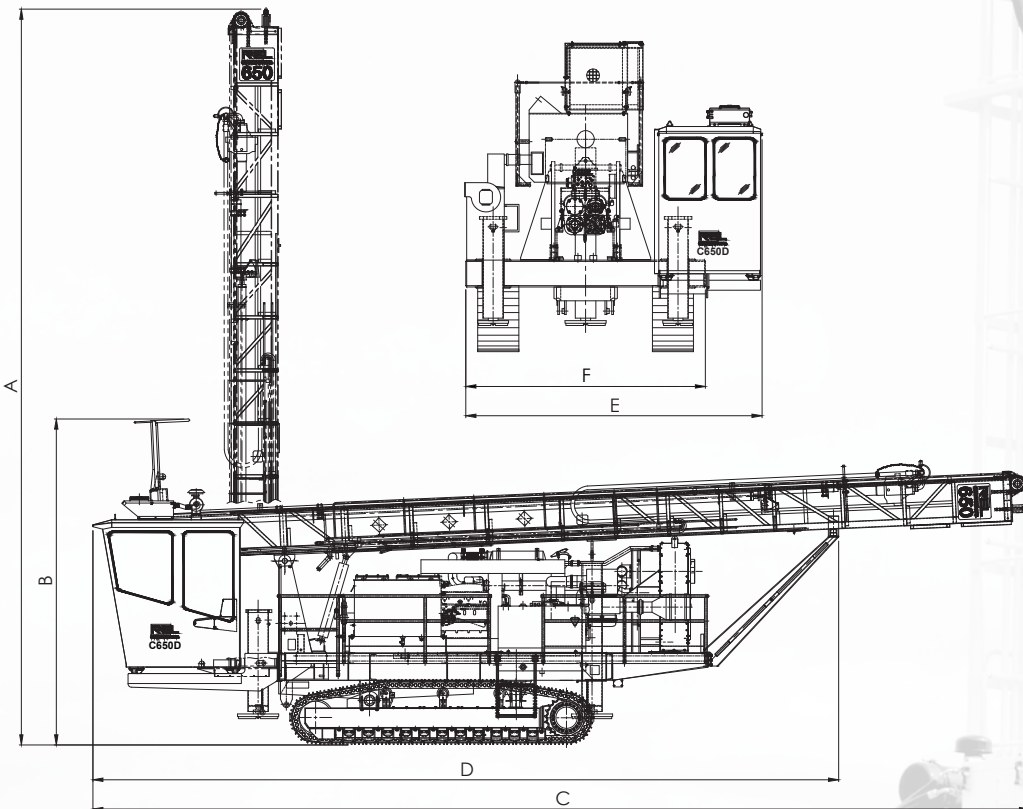
Selection of optional equipment

- Cold starting kit for -20 deg c & -40 deg c
- Wiggins fast fuelling system
- Retractable dust curtain
- Oil filling pump
- Drill monitoring system
- Drill positioning system
- Hydraulic powered winch
- Angle hole drilling package
- Auto levelling
- Auto power break out wrench
- Variable volume compressor
- Inline oil filtering system
- Centralized drain system
- Central hydraulic test station

DESCRIPTION		C650 - DI	C650 - DM	C650 - DH
REL Maxx Drill Mast				
A	Height - Mast Up Inch(Meter)	-	656 (16.66)	656 (16.66)
B	Height - Mast Down Inch(Meter)*	-	173.2 (4.40)	173.2 (4.40)
	Height - Without Mast Inch(Meter)	-	142 (3.60)	142 (3.60)
C	Length - Mast Down Inch(Meter)	-	658 (16.71)	658 (16.71)
D	Length - Mast Up Inch(Meter)	-	360 (9.14)	360 (9.14)

TALL MAST				
A	Height - Mast Up Inch(Meter)	550 (13.97)	550 (13.97)	550 (13.97)
B	Height - Mast Down Inch(Meter)	192 (4.87)	192 (4.87)	192 (4.87)
	Height - Without Mast Inch(Meter)	142 (3.60)	142 (3.60)	142 (3.60)
C	Length - Mast Down Inch(Meter)	552 (14.02)	552 (14.02)	552 (14.02)
D	Length - Mast Up Inch(Meter)	360 (9.14)	360 (9.14)	360 (9.14)

E	Width - Drilling End Inch (Meter)	181.5 (4.61)	181.5 (4.61)	181.5 (4.61)
F	Width - Non Drilling End Inch (Meter)	168 (4.27)	168 (4.27)	168 (4.27)



Following ISO standards of Earth-moving machinery form part of Specification

ISO 10263	Operator enclosure environment	ISO 6165	Basic Types - Vocabulary
ISO 10264	Key locked starting system	ISO 6405-1	Symbols for operator controls and other displays - Common symbols
ISO 10567	Lift arm support device	ISO 6405-2	Symbols for operator controls and other displays - Specific symbols for machines, equipment and accessories
ISO 10968	Operator control	ISO 6682	Zone of comfort & reach for control
ISO 11112	Operator Seat	ISO 6683	Seat Belt & Seat belt anchorage
ISO 12508	Operator station & Maintenance area	ISO 6746	Commercial Nomenclature - definition of dimensions & symbols
ISO 12509	Light signal & marking	ISO 6750	Operation and maintenance - Format and content of manuals
ISO 13766	Electromagnetic compatibility	ISO 7095	Operator's controls
ISO 2687	Access systems Human physical dimension of operator & minium	ISO 7096	Operator seat vibration
ISO 3411	Operator space envelop	ISO 9244	Safety signs & hazard pictorials
ISO 3449	FOPS structure	ISO 9249	Engine test code - Net power
ISO 3457	Guards and Shields - Definitions and specifications	ISO 9533	F & R audible warning alarm
BS EN 791	Drill rig Safety	ISO 9953	Warning device
ISO 5006	Operator Visibility from Cabin	ISO/DIS/16001	Hazard detection & visual aid
ISO 6014	Testing the ground speed	ISO/TR/25398	Exposure to body vibration of ride-on machine

Safety:

As a policy, REL always emphasizes the importance of providing drill rigs with the highest level of safety and operator comfort. Our drill rigs are provided with:

Starter and Battery Isolator | AFDSS - Auto Fire Detection and Suppression System
 FOPS - Falling Object Protective Structure | Whip socks and Whip checks
 Flame Proof Jacket for Engine Exhaust Muffler | Lightning arrestor | Emergency Stop Switch
 Shutdown Switch | Over Centre Check Valve on all load cylinder | Relief Valves for hydraulic circuits
 Pop Safety Valve | Approved type dust suppression system | Low lube. oil switch | Seat belt
 Propel interlock | High air discharge temp. switch | Moving parts of the machinery, guarded/fenced
 Propel joystick, spring-loaded type (Deadman safety) | Approved type of audiovisual alarm
 Disc Brake and brake valve for propel circuit | Flame resistant hydraulic hoses and wiring near hot zone
 Turbocharger guard | Walkway with hand railing for easy access and safe maintenance

Always Dependable.

REL drill rigs have earned a reputation for dependability and productivity, Operator safety and Ergonomics. We believe in working closely with our clients to achieve optimum safe and cost-effective performance in drilling. Whatever your requirement may be standard or custom, simple and rugged, or advanced and automated you can depend on REL.

Revathi Equipment Limited

Pollachi Road, Coimbatore - 641 050. India.

Ph : 0422 66551 00

Fax : 0422 6655199

Mail: globalsupport@revathi.in

www.revathi.in

www.revathiequipment.com