



DYNATECH

DYNATECH INDUSTRIES PVT LTD

CD – SERIES

Heavy Duty Diamond core Drill

MODEL – CD75

TECHNICAL SPECIFICATIONS

Dynatech Industries Pvt Ltd

Core Drill - CD-75

Technical Specifications

Product Introduction

Dynatech Industries Core Drill- CD75 is a versatile heavy duty Hydraulic Diamond core drill in compact frame size for surface mineral exploration Applications where the sites are located at remote places & hard to access. The drills are built with long experience and knowledge which

Features

The making itself propelled to access the difficult sites OR it can be Truck Drills are fitted on crawler tracks powered from rig hydraulics Mounted for greater maneuverability and easy to relocate between sites.

Drills are built with well market proven components which providing more Durability, easy to service, user friendly, improved power factor with Highly efficient hydraulics.

Slide/Dump mast lowers the working height dramatically which helps to Have more stable working platform

Long stroke mast with powerful feed system with fine control option Improves bit life and production rated at higher depth of drilling. Drills open design makes easy accessibility to Daily checks and for minor And major maintenance works.

Drilling Depth Capacity

Method of drilling Diamond core (Wire line-Conventional)

B-Size - 950 Meters (3116ft)
N-Size - 750 Meters (2460ft)
H-Size - 455 Meters (1492ft)
P-Size - 300 Meters (984ft)

Note: Diamond core drilling Depth are based on Straight, Vertical, Clean fluids fill holes.

The depth capacities mentioned above are calculated by field experience. Actual drilling capacity depends on conditions, drilling techniques, In-the whole tools and equipment used.

Prime Mover

Engine	Cummins.
Model	6BTA5.9
Power	126 Kw / 169HP
Speed	2100Rpm
Engine type	Diesel Turbo charged
Cooling	water
Emission Norms	Non Certified
Warranty	Warranty only for INDIA
Enclosure	Fully covered steel enclosure with Lockable Door

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Mast & HEAD TRAVERSE SYSTEM

Box type construction fully welded RHS lattice with cross Bracing
 Designed for drilling angles between vertical to 45 Degree
 Mast is fitted with safety guards and adjustable roller for rod handling,
 Tie rod supports in angle degree drilling.

Type	Hydraulic cylinder Direct coupled.
Head travel length	3, 65 m (12 ft)
Mast length	9, 5 m (app), (31.2ft)
Rod hosting length	6, 09 m (20 ft)
Retract force	80, 4 KN (18040 lb)
Pull down force	37,26 KN (8360 lb)
Pull up speed	25 meters/min
Pull down speed	25meters/min
Fine feed speed	4.5metres/min

Dump

Stroke	1000 MM (for crawler) 2000 for Truck version.
Mechanism	Hydraulic cylinder with locking valves.
Drilling Angle	90 degrees vertical down to 45 degrees Horizontal
Mast raising	two independent hydraulic cylinders with lock Valves.

ROTATION HEAD

Model	Top Drive
Gear Change	Two speed High/low gear manual change
Drive Motor	Hydraulic -Variable displacement
Spindle bore	119mm
Lubrication	Forced lubrication
Mounting	Hydraulic Slide – Sideways
Features	
Cooler- lubrication	Air to oil
Speed control	Steeple speed control can be very precise Improves bit life time .Speed and torque Controlled. By operator from control panel.

TORQUE AND SPEED RATINGS

Hydraulic motor at minimum/maximum, engine at 1800 rpm.

Gear	Speed	Torque	
	Rpm	Nm	(lbft)
Low Speed Gear	118 – 340	4510- 1556	(3326 – 1147.65)
High Speed Gear	414-1200	1288 – 444	(950 – 327.5)

Note: Rotary Head torques and speeds are infinitely variable in each gear range as indicated
 Output Speeds & torques are on 100% efficiency, Actual rotation speed is effected by
 Engine Rpm and motor displacement settings

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Main Winch

Hoisting Capacity	58.83 KN (13200 lb) (Bare drum)
Hoisting speed	40 meters/min (131, 2 ft/min)
Cable diameter	19mm (3/4" inch)
Cable length	35meters (145 ft)
Drive motor	fixed displacement
Static / Dynamic Braking	Spring applied hydraulic release / Over center valve
Mounting	Deck
Rope winding	spring forced nylon roller

Note: Do not use multiple part lines with the main winch. Use only single line.
Wire cable not supplied with rig to be ordered separately.

Wire Line Winch

Hoisting Capacity	11.76 KN (2640 lb) (Bare drum)
Line speed	140 meters/min (460 ft/min) (Bare drum)
Line speed	465 meters/min (1525 ft/min) (Full drum)
Cable diameter	5mm / 6mm
Cable length	1150 meters (3772 ft) / 845 meters (2771ft)
Drive motor	fixed displacement
Braking	Over center valve
Mounting	Deck
Level winder	Standard (mechanical drive through winch shaft)

Note: Wire cable not supplied with rig to be ordered separately.

ROD CLAMP

Capacity	PQ
Make	DynatechIndustries
Jaw Sizes	PQ/HQ/NQ/BQ
Mode of operation	Hydraulic

Hydraulics

Main pump

Type	Variable displacement
Controller	Load sensing
Working pressure	280 Bar

Auxiliary pump (water)

Type	Variable displacement
Controller	Load sensing
Working pressure	280 Bar

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Auxiliary pump (auto feed & Cooler)

Type	Variable displacement
Working pressure	210 Bar

Hydraulic Valve Group

Mail control valve

Proportional ,Load sensing
Rotation, Main Winch, Wire line Winch, Feed.

Auxiliary valves

Mobile control valve
Auxiliaries, Auto feed, Water Pump

Water Pump

Mobile control valve
Coarse control/Fine control

Hydraulic Filters

Return Line filter, lubrication oil filter for Rotation head.
10 Micron absolute. Mechanical Clogging Indicator.
Hydraulic oil fills up filter & hand pump.
Air breather assembly fitted on tank.

MICRO FEED

Separate control valves for Hold Back and Thrust.
Separate valve for regulating Travel Speed of rotary head while drilling.

Control panel

Gauges	Hold back, pull down, main pressure, water pressure,
Indicator	Lube oil indication in the panel.
Engine speed	lockable control handle for controlling engine RPM.
Stop	Emergency engine stop
Rotation control	manually adjustable control for rotation Speed. Control knob for torque control of Rotation Head.
Load Indication	Load gauges are mounted for hold back, pull down.
Water pump	Fine control valve has been provided on the panel
Pilot controls	Hydraulic operated Joysticks For Rotation/Feed/Main Winch/Wire line Winch.

Hydraulic/Gear oil cooler

Type	Air to Oil
Heat Rejection	30KW
Drive	Hydraulic
Construction	Aluminum

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Spin guard

Location for Rotation Head
Cage Round the rotation head, manual opening.

JACK LEGS

Style Box type construction Bolted to base frame
Qty 4Nos
Fixing Welded to Main Base Frame
Lifting Capacity 88.25 KN (19872 lb) Each

Rig Lighting

Tower mounted flood lights 2nos
Control panel 1no

Mud Gauge

F - Type Mud Gauge, Rotary dial with steady pointer.

Safety

House guard High density plastic Spiral Guard for sliding Hoses.
Emergency Emergency stop fitted on two different locations to Switch of the engine.

Fuel Filter

High capacity Water separator cum fuel Filter fitted in engine fuel system.
Make Racor

Driver Cab

(Optional)
Mounted in front of the Rig with control valves for trimming.

Approximate Weight/Dimensions.

Bare Drill Rig without Carrier rested on Jack frame.
Weight 8750Kgs (Bare rig)
Weight 11000Kgs(Including Crawler)
Length 10000mm - long Mast In horizontal when rested
And Straight.
Width 2400mm.
Height 2500mm. Without Carrier rested on Jack frame

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Options

Auto Chuck

Chuck	Spring Closed Hydraulic open.
Rod Size	PQ, HQ, NQ, BQ.
Thrust Holding Capacity	19000Kgs

Speed indicator- RH

Rotation Gear box RPM Indicator	
Location	located on control panel
Type	Digital LCD Display, with life time battery

Wire ropes

Main winch	16mm X 35meters long
Wire line	6mm X 800 meters long

Safety

Extinguisher	Dry type Fire Extinguisher fitted on the machine For easy handling.
FOPS	Falling Objects Protective Structure
Spin guard –RH Speed	Controllees the speed of Rotation Gear box as The spin guard is opened.

Water Pump

Type	Triplex Piston Pump
Power	Hydraulic operated
Max flow	140 LPM
Max pressure	6.895 MPa (1000 PSI)

Engine

Emission Norms	Tier III certified ,With International Warranty
Power	160HP(119.3KW)@2200Rpm

Lighting & Horn

Beacon Flash Light, Drive lights for CAB.
Horn & Reverse Horn

RH – Float

Function	hydraulically operated by separate lever
Application	Used for controlling load on rod joints while Making and breaking

Tramming Controls

Crawler controls	Wireless Remote Control up to 20 meters Distance Foot operated Dead man switch
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Mud Mixer

Hydraulically operated.

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Core Drill - CD-75 **Technical Specifications**

Carrier

Truck

**4x2 or 4X4 rigid truck chassis.
Pay load capacity of 10000Kgs.**

Track (Crawler) assembly

Grouser construction	Triple Grouser
Total length of track	3040
Total width of track	2350
Gradeability – degree	20
Travel speed-Kmph	2

Specifications are subjected to modify or change ,Which are made time to time by DynatechIndustries Pvt Ltd and their suppliers according to their polices for upgrade their products.
All Dimensions and weights are approximate and are subjected to change without notice.



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