ATABEY

EXPLORATION DRILLING RIGS

DP Series

DP 1500
DP 2500

Exploration Drilling Rigs

Drilling is the process of extracting rocks from various depths in the earth to determine the underlying geology or to obtain samples for chemical analysis. The tip of the tool, called the drill-bit, is attached to a longitudinal drill pipe and penetrates the ground to create a hole through which rock is collected. This method is important for determining the type and structure of the rock beneath your feet, since rock obtained through drilling can be classified at specific depths. Therefore, it is widely used in fields also other than mineral exploration, such as foundation strength studies and groundwater studies before infrastructure construction.
(Geotechnical Engineering)

DP Series: DP 1500 and DP 2500 Surface Coring Drill Rigs

Atabey DP Series of surface Coring Drill Rigs are the best compromise for using modern technology in distant research areas to cities. Carefully selected components with quality proven service life provide simple and user-friendly operation.
The all-hydraulic operating system components are configured in a way to command and access each-and-every necessary component for the best performance.

Depending on the trends of different local markets, multiple options of diesel engine brands are available for both models. All of these options are selected with well-proven performance.

The control panel is designed with easy access to all controls for the hydraulic jack, mast dump, and hinged topmast; and easy displays of gauges for the progress in drilling such as:
- Feed force
- Hold back force
- Rotation speed

Easy observation of necessary data as well as engine speed control is all provided on the control panel.

Both models in DP-Series, can be mounted on 3 different chassis.
- Crawler frame
- Skid frame
- Wheel frame

Crawler Frame

Skid Frame

Wheel Frame

More precise settings can be obtained as the hydraulic cylinder penetrates more on its way. A high progress rate is achieved with the automatic rod removal and clamping system to get an optimal core percentage with big time-saving.

Drilling Depth Capacity

Average drill depth capacities are listed below to serve as a guideline and refer to vertical down drilling. The average figures expected cannot apply to all kinds of different conditions that affect performance data.

Fluid Filled Drilling Depth Capacities				
	DP 2500 Serie		DP 1500 Serie	
Drill Rod	Metric	U.S. System	Metric	U.S. System
NO / NRO Wireline	2600 m	8530 ft	1700 m	5577 ft
NRO Thin Wall	2500 m	8202 ft	1500 m	4921 ft
HO / HRO Wireline	1800 m	5905 ft	1000 m	3280 ft
HRO Thin Wall	1650 m	5413 ft	900 m	2952 ft
PHP / PO Wireline	1150 m	3772 ft	500 m	1640 ft
PHD Thin Wall	1000 m	3280 ft	400 m	1312 ft

Rotation Unit	
Rod Sizes	B-P
Power	Hydraulic Motor
Transmission	Funk 4 Speed
Final Drive	Straight Cut Gears
Ratio	2:1
Rotation Unit Opener	Pivoting Style - Hydraulic Actuated
Hydraulic P Chuck	Hydraulic Open, Closed by Gas Pressure
Spindle Inner Diameter	127 mm (5 in)
Chuck Axial Holding Force	222 kN (50.000 lb)

Torque and RPM Ratings				
		Speed		Torque
Spindle Speeds	Ratio	RPM	Nm	lbft
1st Gear	6.27:1	144-199	5320-3825	3923-2820
2nd Gear	3.12:1	288-400	2647-1898	1952-1400
3rd Gear	1.75:1	514-714	1485-1065	1095-785
4th Gear	1.00:1	900-1250	848-610	625-450

System Power Unit		
Cummins, Ford, Deutz,Perkins Turbo-Charged, After Cooled Diesel Engine.	Metric (1500 / 2500)	U.S. System (1500 / 2500)
Volume	6.7 liter / 8.3 liter	1 / 1.77 gallons
Power	205 kW / 285 kW	280 bhp / 380 bhp
RPM	2200	2200
Electrical System	24V	24V
Coolimg System	Water	
Emmissions Certifications	Stage III	Tier 3

Hydraulic System		
	Metric (1500 / 2500)	U.S. System (1500 / 2500)
Primary Pump	160 l/min - 318 l/min - 310 bar	42 - 84 gal/min - 4500 psi
Secondary Pump	90 l/min - 210 bar	23 gal/min - 3000 psi
Auxiliary Pump	90 l/min - 140 bar	23 gal/min - 2000 psi
Hydraulic Oil Cooling	Air	

Mast and Feed System		
	Metric	U.S. System
Feed Stroke	3.35 m	11 ft
Thrust Force	117.9 kN	13480 lb
Pull Force	223.6 kN	31000 lb
Must Dump Travel	2.74 m	3.9 ft
Mast Telescope	2.87 m	11 ft
Drilling Angle	45 to 90 degrees	45 to 90 degrees
Rod Pull Lenght	6.0 m or 9.0 m on telescopic mast	20 ft or 30 ft on telescopic mast

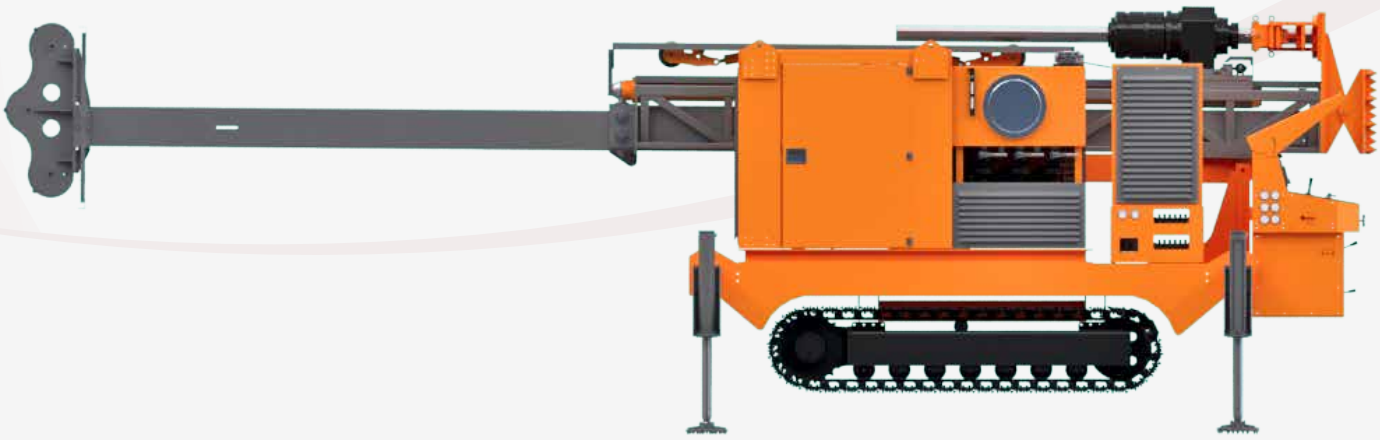
Rod Holder		
	Metric	U.S. System
Maximum Rod Size (HWT)	114.3 mm	4.5 in
Holding Force	178 kN	40015 lb

Wireline Hoist		
	Metric	U.S. System
Drum Capacity (6.35 mm - 1/4" wire)	3200 m	10500 ft
Line Pull Min. (full drum)	9.5 kN	2130 lb
Line Pull Max. (bare drum)	17.2 kN	3880 lb
Line Speed Min. (bare drum)	160 m/min	525 ft/min
Line Spped Max. (full drum)	285 m/min	932 ft/min

*** There is an automatic winding system to prevent the rope from making straight or mixed winding.

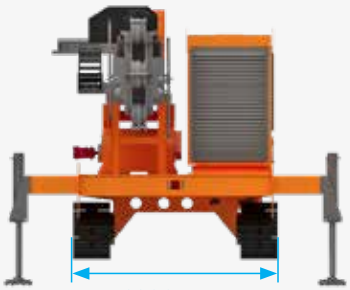
Main Winch		
	Metric	U.S. System
Single Line Capacity (bare drum)	180 kN	40000 lb
Line Speed (bare drum)	72 m/min	236 ft/min
Cable Size	22 mm	7/8 in
Cable Lenght	29 m	96 ft

Mud Pump		
TP 220H	Metric	U.S. System
Flow	200 l/min	52.8 gal/min
Pressure	70 bar	1000 psi

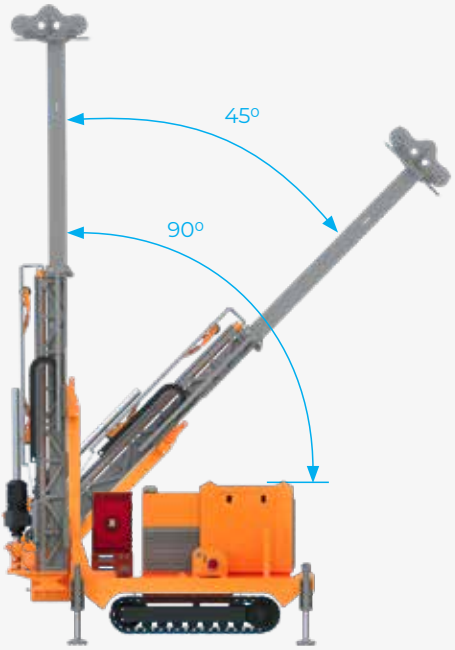


DP Series / Dimension Details

Side View

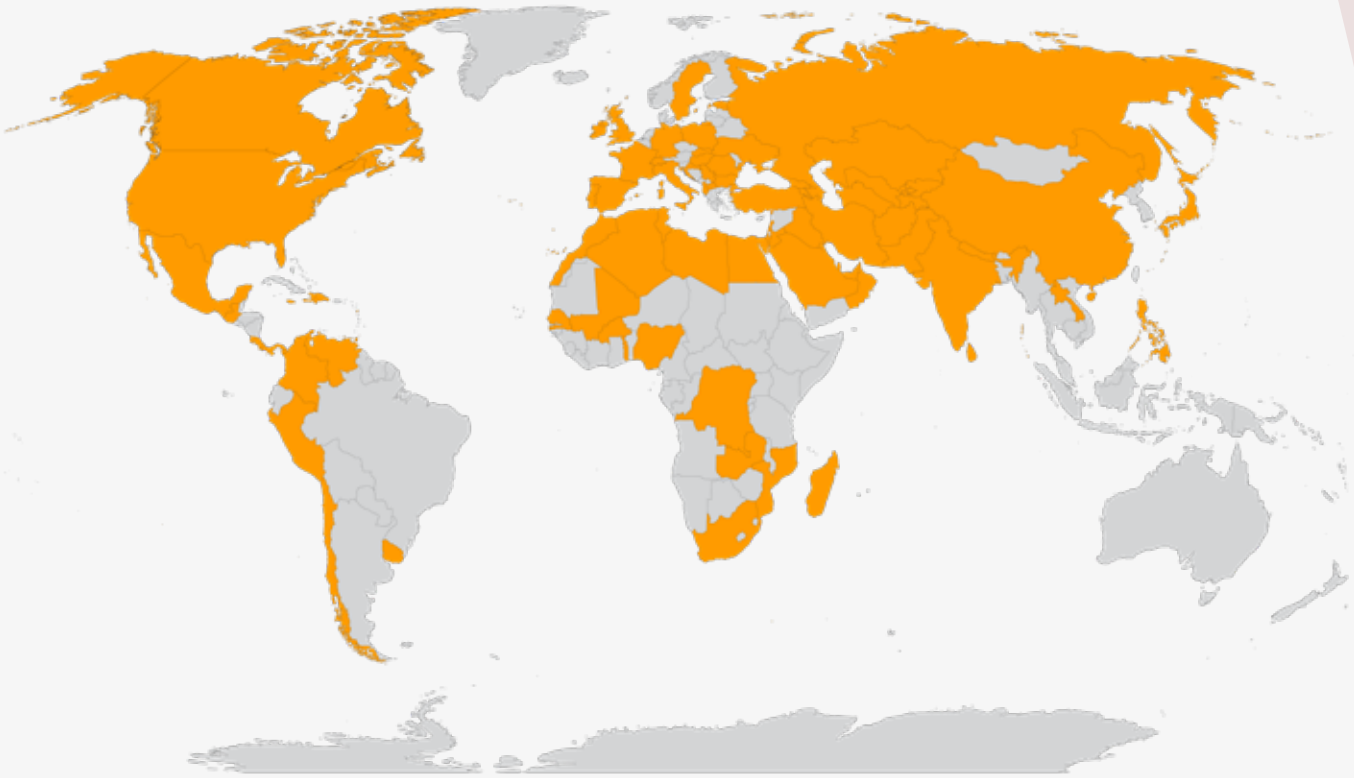


Front View



DP Series

Atabey; Common language of concrete placer's in more than 80 countries



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ATABEY CONSTRUCTION EQUIPMENT

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