



C1500 SURFACE CORING DRILL

Technical Overview

SOLID DRILLING SOLUTIONS

C1500 SURFACE CORING DRILL

Mobility

C1500 surface coring drill features a telescoping mast with dump capability. There are options for on skid, crawler or truck.

Reliability

Easy to operate, maintenance and control.

Safety

Designed for continuous and safety operations





1 CONTROL PANEL

Easy to operate with functional design

2 HYDRAULIC DESIGN

Load sensitive hydraulic system support energy saving.

3 GAS SPRING CHUCK

Gas spring chuck allows to use without changing springs for a long time and provide safe operations.

4 ROTATION BARRIER

Rotation cage prevents accidents because of connection to rotation unit during the operation.

5 HYDRAULIC SIDE SHIFTING HEAD

Lowers working height when handling inner tube.

6 DUMP / TELESCOPING MAST

Dump feature enables mounting on different size platforms while telescoping mast makes drill compact for transportation.



C1500 TECHNICAL INFORMATION

Drilling Depth Guidelines		
	Fluid Filled	
Drill Rod / Core Barrel	Hole Depth (meters)	Hole Depth (feet)
BRO / BO	2 900	9 500
NRO / NO	2 000	6 500
NRO TC	2 300	7 545
HRO / HO	1 350	4 430
HRO TC	1 500	4 920
PHD / PO	800	2 625
PHD TC	900	2 950

Prime Mover		
	Metric	U.S.
Standard Unit	Cummins, Ford, Volco or Deutz	
Displacement	8.3 L	409 in ³
Power (maximum) at 2200 RPM	153-194 kW	260 - hp
Emissions Certification	Stage III	Tier 3

Torque and RPM Ratings			
(Hydraulic motor at max./min. displacement, prime mover at 2,200 RPM)			
	Speed	Torque	
	RPM	Nm	lbft
1st Gear	122 - 199	5 322 - 3 254	3,925 - 2,400
2nd Gear	246 - 400	2 648 - 1 620	1,963 - 1,195
3rd Gear	439 - 714	1 486 - 908	1,096 - 670
4th Gear	769 - 1,250	849 - 519	626 - 383

Hydraulic System		
	Metric	U.S.
Primary Pump	Axial piston, variable displacement load sensing, pressure compensated with low pressure standby.	
Max Flow	190 L/m	50 gpm
Max Pressure (factory setting)	28 MPa	4,061 psi
Secondary Pump	Axial piston, variable displacement load sensing, pressure compensated with low pressure standby.	
Max Flow	64 L/m	17 gpm
Max Pressure (factory setting)	20 MPa	2,900 psi
Auxiliary Pump	Axial piston, variable displacement, pressure compensated	
Max Flow	90 L/m	23,7 gpm
Max Pressure (factory setting)	18 MPa	2,610 psi
Hydraulic Tank Capacity	400 L	105 Gal

Drill Head		
Rotation Motor	Rexroth hydraulic motor - variable/reversible	
Mechanical Transmission	Funk 4 speed	
Ratios	1st	6.27:1
	2nd	3.12:1
	3rd	1.75:1
	4th	1.00:1
Final Drive	Straight cut gears	
Ratio	2:1	
Head Opener	Side shift style - hydraulically actuated	
Hydraulic PQ Chuck	Gas Chuck	
	Hydraulically opened, gas spring closed	
	Axial holding capacity of 222 400 N (50,000 lbf)	
Drill Head	Force fed bearings, oil bath for gears	
Drill Head Lubricating Oil Filtration	25 micron suction oil filter - independent constant flow	

Drill Mast and Feed System		
	Metric	U.S.
Feed Stroke	3.35 m	11 ft
Max Pull Capacity	213,7 kN	47,884 lbf
Max Thrust Capacity	108.4 kN	24,370 lbf
Rod Pull	3 or 6 m	10 or 20 ft
Drilling Angle	45° off horizontal to 90° vertical down	
Mast Dump (Crowd)	2.34 m	7.7 ft
Mast Telescope	3.35 m	11 ft

C1500 TECHNICAL INFORMATION

Draw Works		
	Metric	U.S.
Main Line Hoist	Two speed motor	
Hook Load (single part line)		
Bare Drum	177 kN	39,791 lbf
Hoisting Speed (single part line)		
Bare Drum	16 m/sec	52,5 ft/s
Main Hoist Cable	18 mm	0.7 in
Minimum Breaking Strength	450.0 kN	101,164 lb
Note: Do not use multiple part lines with the main line hoist, use single part line ONLY.		
Foot Clamp Capacity	HWT	
Wireline Hoist		
Level Wind	N/A	
Level Pull		
Bare Drum	12 kN	2,700 lb
Full Drum	2.2 kN	502 lb
Line Speed		
Bare Drum	123 m/min	405 ft/min
Full Drum	321 m/min	1054 ft/min
Drum Capacity (4.8 mm/316° swaged)	1 890 m	6,200 ft
Minimum Breaking Strength	2 268 kg	5,000 lb
Note: Wireline cable length to be specified at time of order		

Additional Information		
	Metric	U.S.
Fuel Tank Capacity	400 L	105 Gal

C1500 TECHNICAL INFORMATION

Weight on crawler = 11.700 KG

Width: 2300 mm

Lenght: 6700 mm

Height: 2600 mm

Draw Works Grp. c/w 16,000 lb Main Line Hoist with Cable, Wireline Hoist less Cable

Hydraulic Mast Raising

Hydraulic Mast Dump

Telescopic Mast Assembly

Rotation Unit Grp. c/w PQ Gas Chuck/Head Guard

Base Frame

Fuel Tank (400 L)

Battery - 12V

Hydraulic Foot Clamp HWT Capacity

Options

Truck

Catwalk, Railing and Access Stairs

Rod Rack Platform

Hydraulic Leveling Jacks/Outriggers

Truck Mounting Sub-frame

Hot Weather Hydraulic Cooling Group

CE Certification

Decals available in multiple languages

Fluid circulation pumps

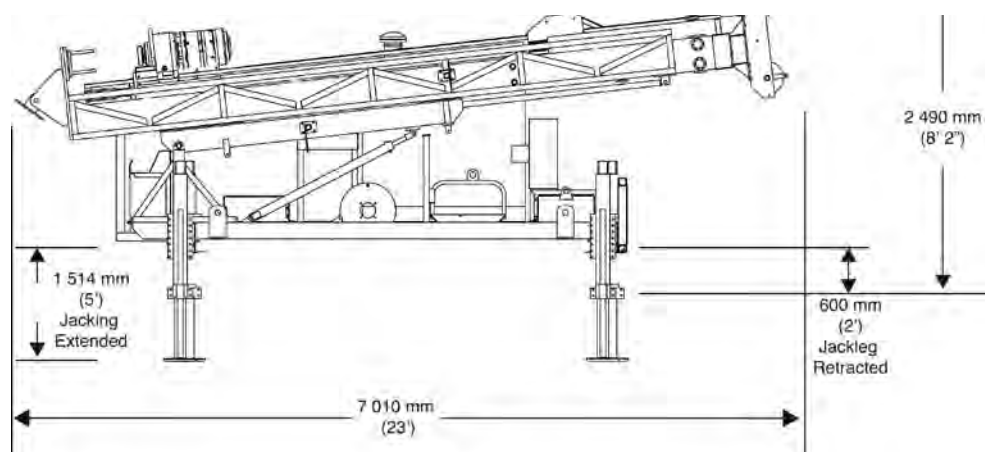
Mud Mixer

Drill Transport and Position -Basic Drills

Wet weight = 18600 lbs (8437 kg)

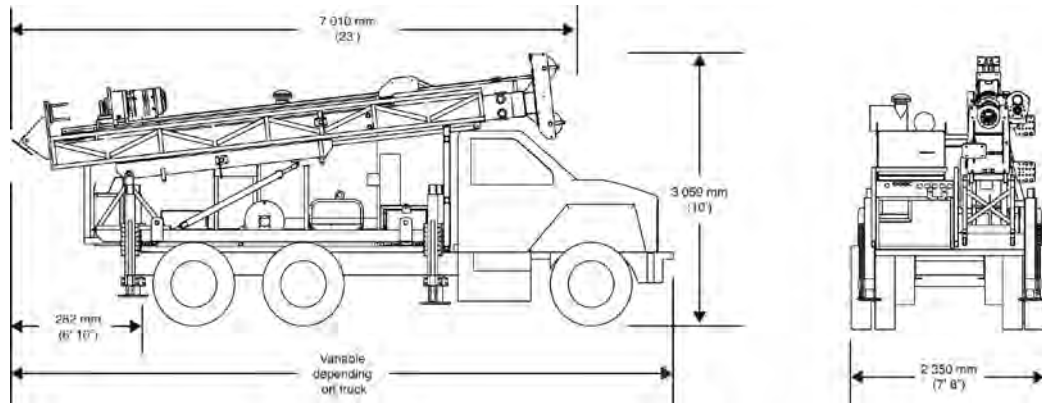
Ground pressure: 0.6 kg/cm²

Max speed: 2.4 kph



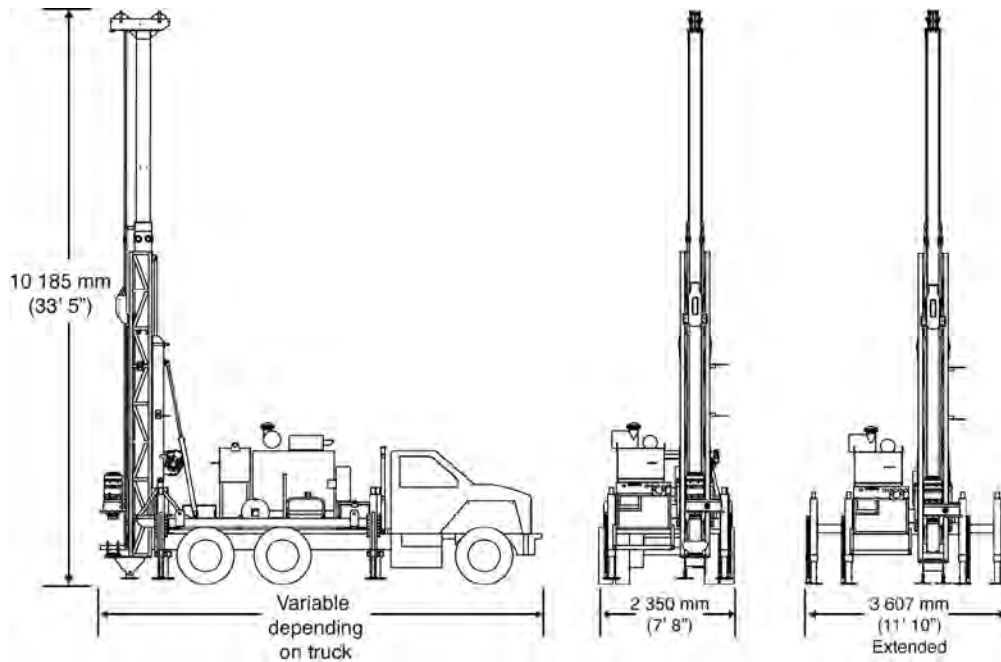
Drill Transport Positions C/W Optional Truck

(shown with optional truck)



Drill Mast at 90° C/W Optional Truck

NOTE: Dimensions are with optional truck and hydraulic leveling jacks extended to ground level. Leveling jack full stroke is 914 mm (3').

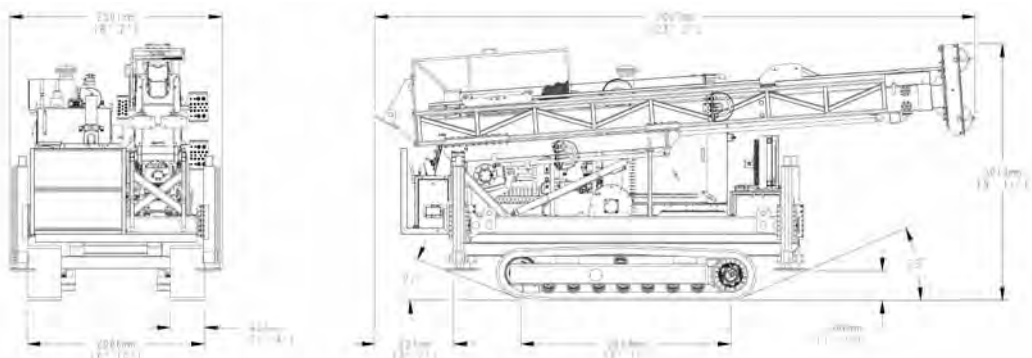


Drill Transport Positions C/W Optional Crawler

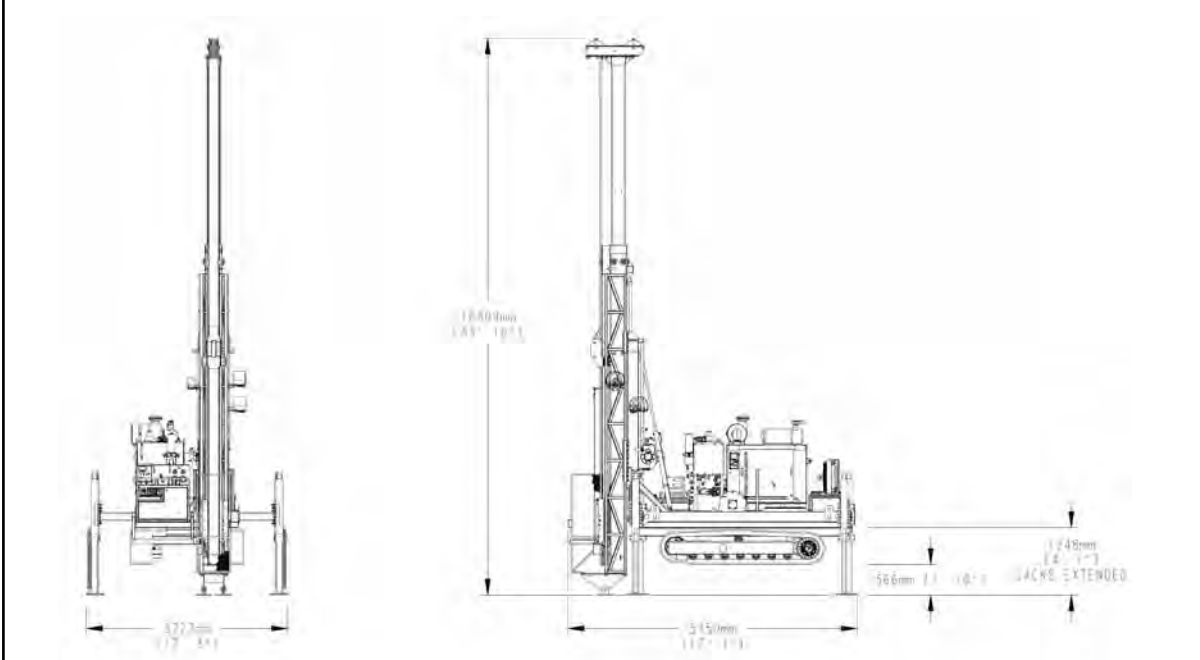
Wet weight = 25950 lbs (11771 kg)

Ground pressure: 0.6 kg/cm²

Max speed: 2.4 kph



Drill Mast at 90_ C/W Optional Crawler

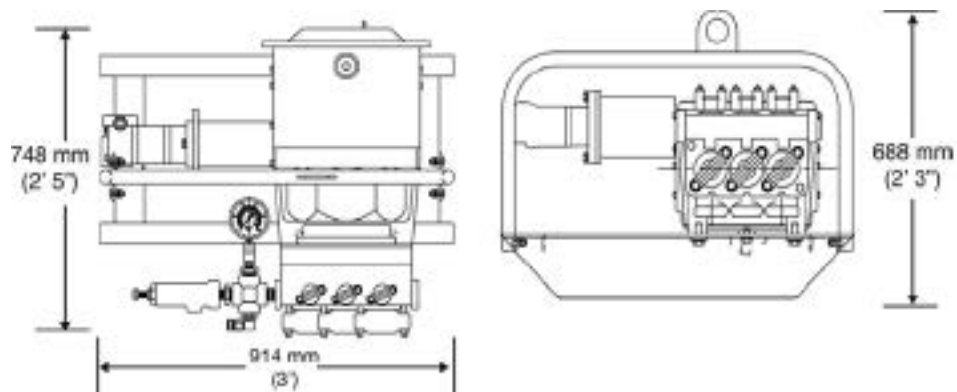


(SDS135) Fluid Circulation Pump Group (Optional)

Wet Weight = 254 kg (560 lb)

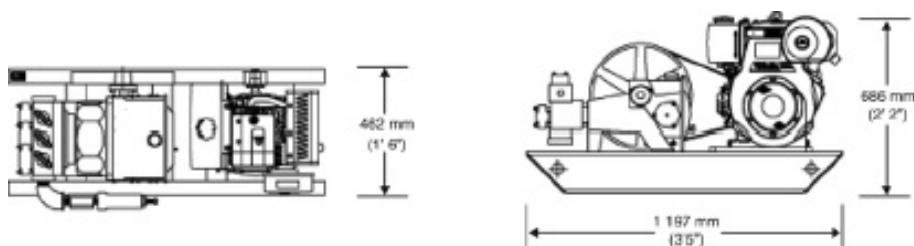
The max. output of SDS135 pump:
= 35 GPM @ 1000 psi (70 bar)

An optional liner kit is available to improve pump operation at lower flow rates. Max output with kit installed is limited to 20 GPM @ 1000 psi (70 bar)



(SDS135) Fluid Supply Pump Group - Diesel (Optional)

Output: 135 L/m @ 70 bar

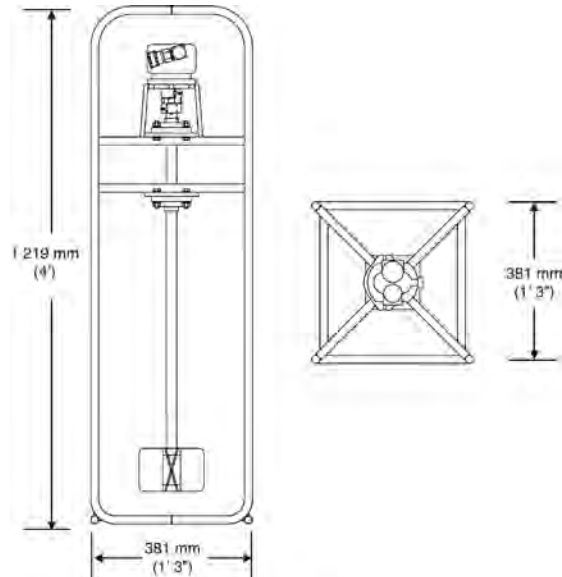


DIMENSIONS AND WEIGHTS

Mud Mixer Assembly (Optional)

Wet Weight 34 kg (68 lb)

Note: Maximum speed of the mud mixer shaft at full flow is 2300 rpm.





SOLID DRILLING SOLUTIONS

YOUR PARTNER WITH A SOLUTION

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