

GEOPROBE® 8140LS ...

Powerful Mid-Size Rotary Sonic Rig Easily Handles 10-ft. Tooling



Geotechnical testing using an 8140LS equipped with auto drop hammer for a highway relocation project across a mining pit.

8140LS RIG OPTIONS

Sonic Head

222919 GV4 High Speed Coring Head Drive

Automatic Drop Hammer

213902 DH104 Automatic Drop Hammer, 140 lb. no Mounting Kit
213903 DH104 Mounting Kit
216826 Automatic Drop Hammer 340 lb. Expansion Kit
217067 Automatic Drop Hammer 300 lb. Expansion Kit
221820 Automatic Drop Hammer 170 lb. Expansion Kit
210126 Automatic Drop Hammer 65 kg Expansion Kit

Rotational Safety Cage

215322 Safety Cage, compatible w/ Rod Handler
215025 Safety Cage

Rod Handler

212069 Rod Handling System
213555 Casing Stand Assembly

Control System

207870 LCD Display Heater Kit
211806 Head Feed Down Control Kit

Water / Mud Pumps

210991 SPX40 Pump & Mount
212398 Hose Reel Kit
209925 Moyno® 3L6 with Table - Operator Side

Air Compressor

218584 Air Line Oiler Kit

Toolboxes

212954 53 in. Toolbox
220333 48 in. Toolbox
207214 20 in. Toolbox

Model 8140LS Specifications

TRACK PLATFORM / UNDERCARRIAGE		
Width	85 in	2,159 mm
Length (transport)	298 in	7,569 mm
Length (deployed, lateral fully retracted)	185 in	4,699 mm
Length (deployed, lateral fully retracted, rod handler deployed)	270 in	6,858 mm
Height (normal transport)	114 in	2,896 mm
Height (deployed; winch mast up)	298 in	7,569 mm
Height (min standard working height)	NA	
Extension (fore and aft)	11 in	279 mm
Lateral (side to side)	NA	
Drill Mast Dump	NA	
Base Unit Weight	22,900 lb	10,387 kg
Head Travel	157 in	3,988 mm
Head Crowd/Pull Force	20,000 lb	89 kN
Head Feed Carriage	Comp. slides	
Head Feed Pressure Control (w.o.b)	Optional	
Head Sideshift	26 in	660 mm
Head tilt out	25 deg	
Outrigger travel	26 in	660 mm
Engine	CAT C4.4 Tier 3 Flex	
Engine Rated Power	142 hp	106 kW
Fuel Capacity	40 gal	151 L
Max angle drilling ability off vertical	NA	
Approach/departure angle in transport	24 deg	
Ground Speed	1.5 mph	2.4 km/hr
Electronic Controls	V1	
Sonic head	GV4	

HP LIMITED PUMP		
Max pressure	4,000 psi	275.8 bar
Max flow	100 gpm	379 L/min

HYDROSTATIC PUMP		
Max pressure	NA	
Max flow	NA	

Max oscillator speed		
	130 Hz	
Dynamic force @ max oscillator speed	33,000 lbf	146.8 kN
Rotation (high torque/low speed)	4,000 ft-lbf @ 80 rpm	5,423 N·m
Rotation (low torque/high speed)	2,500 ft-lbf @ 120 rpm	3,390 N·m @ 120 rpm

STANDARD WINCH		
Line pull	2,000 lbf	809 kN
Line speed	110 fpm	33.5 m/min

TRIPLEX WATER PUMP		
Max pressure	1,000 psi	69 bar
Max flow	25 gpm	95 L/min

DOUBLE WRENCH BREAKOUT		
Clamp force	0 to 21,000 lbf	0 to 93.4 kN
Breakout torque	13,500 ft-lbf	18,303 N·m
Casing size compatible	2 to 12 in	51 to 305 mm
Vertical travel	9 in	229 mm

Geoprobe® Tooling Run with 8150LS

- Casing Sizes: 10 in., 8 in., 6 in., 4.5 in.
- SDT60 and SDT45 Weighted Wire Line Sampling
 - SDT60 and SDT45 Sonic Sampling
- 8 x 10, 6 x 8, 4 x 6 Sonic Sampling
 - DT22 Soil Sampling
- SP60 Groundwater Sampling
- DH104 Auto Hammer for SPT

8140_{LS}

Rotary Sonic -- Long Stroke

- Geoprobe® Designed Rod Handling System
- Patented Geoprobe® GV4 Sonic Head
- Adjustable Swing-arm Control Panel
- 10-ft. Tooling Compatible
- 12-in. Double Wrench Breakout
- Front and Rear Outriggers (Four Point Stabilization)
- Centerline Side-Shift Function
- 5-in. Tooling Compatible
- Rock Coring Compatible
- Auto Drop Hammer Compatible (SPT)
- Rear Blade Stabilizer and Tooling Transport



8140LS at a geothermal installation site.



Geoprobe Systems®
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