

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 | | |
|--------------------------------------|------------------------|---------------------|
| 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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