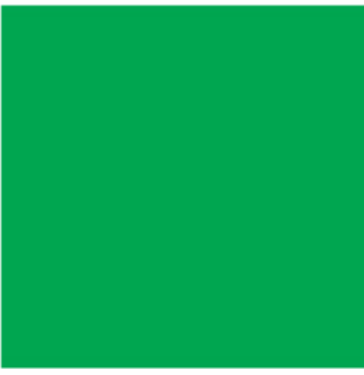


Hydraulic Microdrilling Rig

SM-30



soilmeco 
Drilling and Foundation Equipment

SM-30 APPLICATIONS



Hoist & Feed system	Winch & rope	Winch & rope
Feed stroke	14200 mm	559.1 in
Rod length type (c/w one rotary head)	12 m	39.4 ft
Maximum hoist pull/feed force	120 / 120 kN	26977 / 26977 lbf
Maximum speed (fast/low operation)	28 / 3 m/min	92 / 10 ft/min

Rotary head range	HT-3700	HT-3700	HHD-2500	HHD-2500	HD-2000	HD-2000	HR-1700	HR-1700
Gear box type	Variable	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Maximum torque	3659 daNm @ 21 rpm	26987 lb*ft @ 21 rpm	2622 daNm @ 31 rpm	19339 lb*ft @ 31 rpm	2167 daNm @ 37 rpm	15983 lb*ft @ 37 rpm	1863 daNm @ 44 rpm	13741 lb*ft @ 44 rpm
Max. drilling speed	83 rpm	83 rpm	97 rpm	97 rpm	117 rpm	117 rpm	136 rpm	136 rpm
Max. tools power (Max Power on rotary)	79 kW	106 HP	85 kW	114 HP	85 kW	114 HP	85 kW	114 HP

SM-30 JET GROUTING



JET GROUTING VERSION

Rod diameter	140 mm	5.5 in
Max treatment depth in a single passage	31,5 m	103 ft
Drillguide extensions	5 + 5 + 8 m	16.4 + 16.4 + 26.2 ft

SM-30 TECHNICAL DATA SHEET

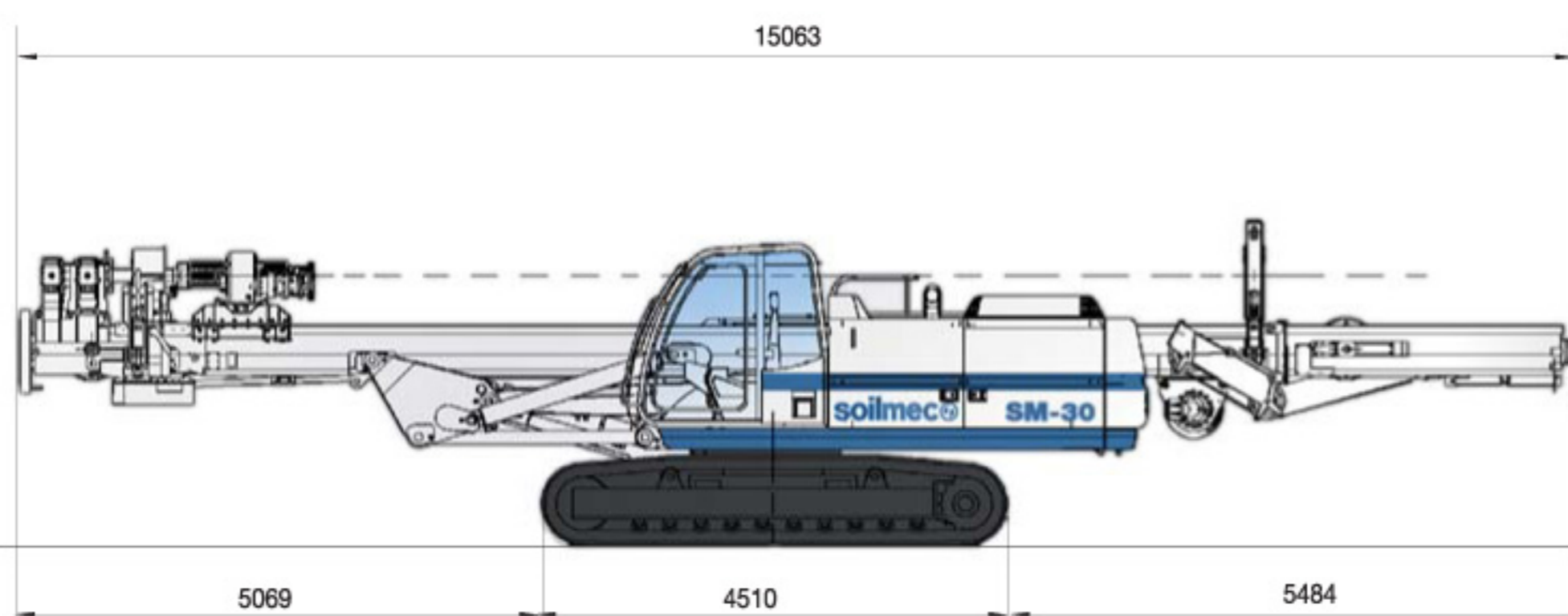
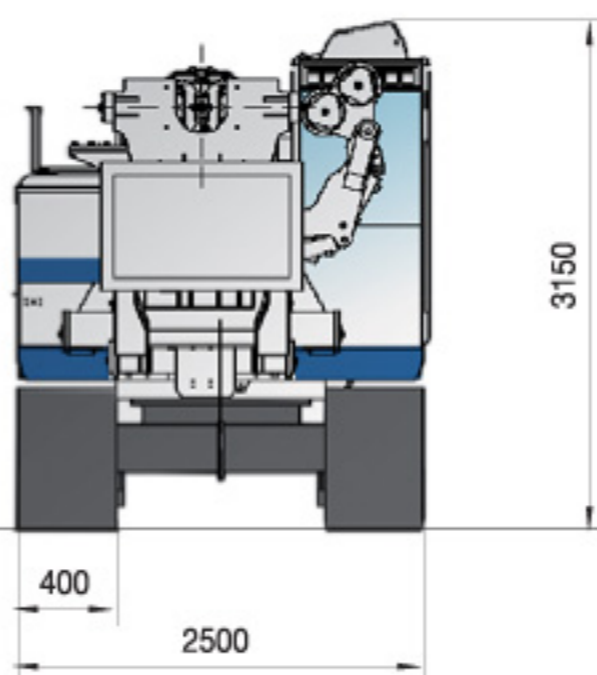
Operating weight (approx.)	32600 kg	71871 lb
Undercarriage		
- Type	Variable gauge, telescoping side frames	<i>Variable gauge, telescoping side frames</i>
- Track shoe width	800 mm	31.5 in
- Wheel base (centre idler to centre sprocket)	3710 mm	146.1 in
- Overall length	4510 mm	177.6 in
- Overall width (ext / retr)	3700 / 2550 mm	145.7 / 100.4 in
- Travelling speed	2,20 km/h	1.37 mph
- Traction force	290 kN	65193 lbf
- Average ground pressure	0,062 MPa	9 psi
- Tail swing radius	3810 mm	150 in
- Ground stabilizers	n° 1 front sliding foot	n° 1 front sliding foot
Power pack		
Diesel Engine		
- Make and model	CUMMINS QSB6.7	CUMMINS QSB6.7
- Emission certification	USA EPA Tier III, CARB Tier III, EU Stage IIIA	USA EPA Tier III, CARB Tier III, EU Stage IIIA
- Power rating	164 kW @ 2200 rpm	220 HP @ 2200 rpm
- Fuel tank capacity	350 l	92 US gal
- Sound power level and sound pressure level	LwA 108 - LpA 85 dB(A)	LwA 108 - LpA 85 dB(A)
Hydraulic system		
- Main pumps: variable axial pumps	352 l/min	93 US gal/min
- Set pressure main pumps	31 MPa	4496 psi
- Auxiliary pumps: gear pumps	65 + 72 + 17 + 108 l/min	17.2 + 19 + 4.5 + 28.5 US gal/min
- Hydraulic oil tank capacity	380 l	100 US gal
Clamp & hydraulic joint breaker		
- Nominal size	60 - 415 mm	2.4 - 16.3 in
- Maximum clamping force	266 kN	59798 lbf
- Maximum breaking torque	7900 daNm	58267 lbf*ft
Service winch		
- Type	controlled descent	<i>controlled descent</i>
- 1st layer line pull	65 / 25 kN	14612 / 5620 lbf
- 1st layer nominal rope speed	58 / 57 m/min	190 / 187 ft/min
- Rope diameter	16 / 10 mm	0.63 / 0.39 in
- Rope capacity / Rope fitted	52 / 40 m	171 / 131 ft
Rod carousel		
- N. of rods	2	2
- Rod diameters	90 - 200 mm	3.5 - 7.9 in
- Max rod length	12000 mm	472.4 in

STANDARD EQUIPMENT

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> • N° 2 hydraulic outriggers + N° 2 front • Articulated bom for mast positioning • Kinematic mechanism <ul style="list-style-type: none"> - Side movements +/- 23° - Counter slide • 1590 mm stroke cylinder for mast shoring • Control board on rotating arm for drilling and | <ul style="list-style-type: none"> • service functions • Rotary cradle with side shifting stroke 450 mm • Floating system • Service winch with jib • Guiding and lay-out device for hydraulic hoses • Load Sensing hydraulic system • Air/water system and line lubricator for DTH | <ul style="list-style-type: none"> • Kinematic mechanism are actuated by means of hydraulic panel on base carrier • Drilling operations are actuated by hydraulic panel on pivotal support arm • Tramming by hydraulic control on board |
|--|---|--|

OPTIONAL EQUIPMENT

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • Mast kit for 7000 and 9500 mm stroke • Jet Grouting kit for mono, bi or three fluids treatment and steeples lifting speed (max treatment depth 20 m in T1) • Top hammer kit • Rod carousel (6, 8, 10 rods), for mast with | <ul style="list-style-type: none"> • stroke 7000 mm and 9500 mm • Radio remote control for drilling operation • Double rotary kit • Service crane • Clamp and breaker up to 415 mm • Flushing pumps | <ul style="list-style-type: none"> • Track shoe 600 mm width • Casing extractor (max. extraction force 200 kN) • Openable guide for casing and auger |
|--|---|---|



Transport configuration			
Transport length	15063 mm	593 in	
Transport width	2550 mm	100.4 in	
Transport height	3150 mm	124 in	
Transport weight	32600 kg	71871 in	

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