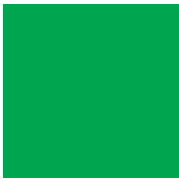


Hydraulic Microdrilling Rig

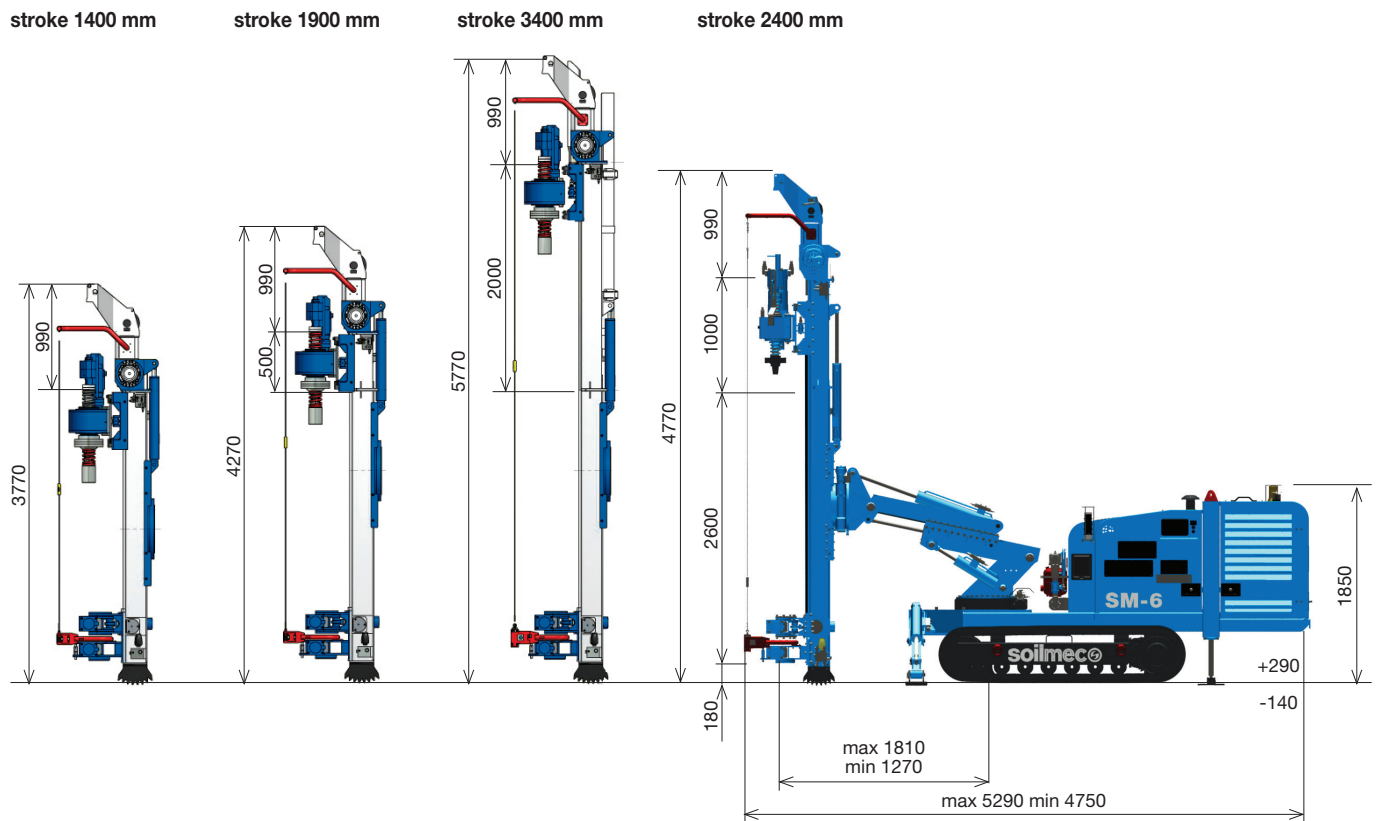
SM-6



soilmec 
Drilling and Foundation Equipment

SM-6 Hydraulic Microdrilling Rig

APPLICATIONS



Hoist & Feed system				Motoreducer					
Feed stroke	1400 mm	55.1 in	1900 mm	74.8 in	2400 mm	94.5 in	3400 mm	133.9 in	
Rod length type (c/w one rotary head)	1,0 m	3.3 ft	1,5 m	4.9 ft	2 m	6.6 ft	3 m	9.8 ft	
Maximum hoist pull/feed force	52 / 52 kN	11690 / 11690 lbf	52 / 52 kN	11690 / 11690 lbf	52 / 52 kN	11690 / 11690 lbf	52 / 52 kN	11690 / 11690 lbf	

Rotary head range	HR6F		HR7G		HR9F		HT1700		HT3400	
Gear ratio / Type	2/Hydraulic	2/Hydraulic	6/Manual	6/Manual	2/Hydraulic	2/Hydraulic	3/Hydraulic	3/Hydraulic	3/Hydraulic	3/Hydraulic
Max torque	575 daNm	4241 lbf*ft	700 daNm	5163 lbf*ft	810 daNm	5974 lbf*ft	1900 daNm	14013 lbf*ft	3400 daNm	3400 daNm
Max drilling speed	190 rpm	190 rpm	860 rpm	860 rpm	130 rpm	130 rpm	105 rpm	105 rpm	53 rpm	53 rpm
Inner passage	117 mm	4.6 in	66 mm	2.6 in	117 mm	4.6 in	100 mm	3.9 in	100 mm	100 mm

SM-6 Hydraulic Microdrilling Rig

TECHNICAL DATA SHEET

Operating weight (approx.)	7000 kg	15432 lb
Undercarriage		
- Track shoe width	300 mm	11.8 in
- Wheel base (centre idler to centre sprocket)	1780 mm	70.1 in
- Overall length	2303 mm	90.7 in
- Overall width (not extendable crawler)	1700 mm	67 in
- Travelling speed	1,65 km/h	1.03 mph
- Max climbing capacity (gradeability)	34 % (19°)	34 % (19°)
- Average ground pressure	0,067 MPa	9.7 psi
- Ground stabilizers	n°2 fixed with inclined arm on front + n°2 fixed on rear	n°2 fixed with inclined arm on front + n°2 fixed on rear
Power pack		
- Diesel Engine make and model	Deutz TCD3.6 L04	<i>Deutz TCD3.6 L04</i>
- Emission certification	EU stage IV - US EPA tier4f	<i>EU stage IV - US EPA tier4f</i>
- Diesel Engine power rating	100 kW @ 2000	<i>134 HP @ 2000</i>
- Fuel tank capacity	160 l	<i>42 US gal</i>
- Sound power level and sound pressure level	LwA 105 - LpA 74 dB(A)	<i>LwA 105 - LpA 74 dB(A)</i>
Hydraulic system		
- Main pumps: variable axial pumps	200 l/min	<i>53 US gal/min</i>
- Set pressure main pumps	300 MPa	<i>43511 psi</i>
- Auxiliary pumps: gear pumps	86 + 23 l/min l/min	<i>23 + 6 US gal/min</i>
- Hydraulic oil tank capacity	270 l	<i>71 US gal</i>
Clamp & hydraulic joint breaker		
- Nominal size	50 - 220 mm	<i>2.0 - 8.7 in</i>
- Maximum clamping force	140 kN	<i>31473 lbf</i>
- Maximum breaking torque	3000 daNm	<i>22127 lbf*ft</i>
Service winch		
- Type	controlled descent	<i>controlled descent</i>
- 1st layer line pull	5 kN	<i>1124 lbf</i>
- 1st layer nominal rope speed	42 m/min	<i>138 ft/min</i>
Rope diameter	6 mm	<i>0.24 in</i>

STANDARD EQUIPMENT

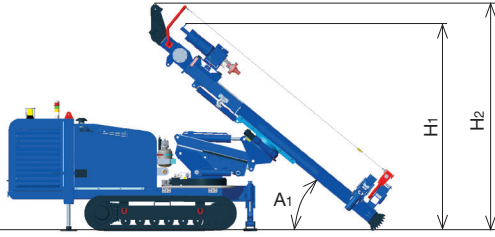
- Steel undercarriage: width 1700 mm and shoes 300 mm
- Load sensing hydraulic system. Main pump: variable axial type
- Kinematic mechanism: Swiveling boom articulation by slew ring on the base machine enables parallel drilling on the tracks up to +/- 90°
- Counter slide: slew ring on mast for +/- 180° rotation
- Sliding mast by cylinder
- Telescopic boom of 400 mm on base carrier
- Modular mast and hoist system by motoreduced
- Rotary cradle with side shifting
- Full radio remote control

OPTIONAL EQUIPMENT

- Undercarriage with rubber crawler
- Wide range of feed stoke: 1400 - 1900 - 3400 mm
- Wide range of rotary heads
- Jet grouting kit
- Top hammer kit
- 320 mm clamp & breaker
- DTH lubricator
- Double rotary kit
- EN16228 safety cage kit
- Tier 3 EDG Diesel engine
- Special Low Headroom mast
- Cylinder hoist & feed
- Foam pump & washing kit
- Wire line winch
- Led working lights
- Workin parameters monitoring & recording system
- Triplex pump 200 lt/min
- Extractor device

SM-6 Hydraulic Microdrilling Rig

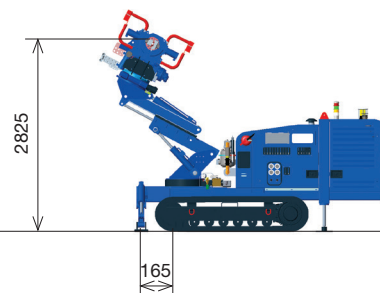
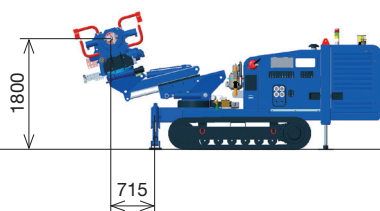
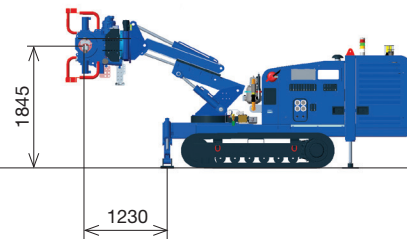
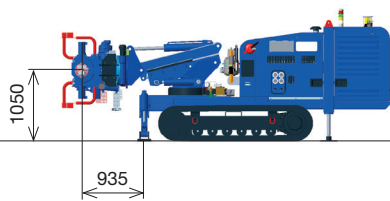
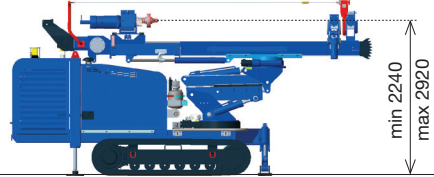
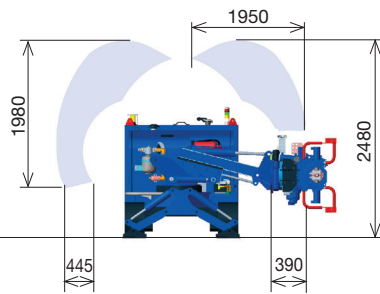
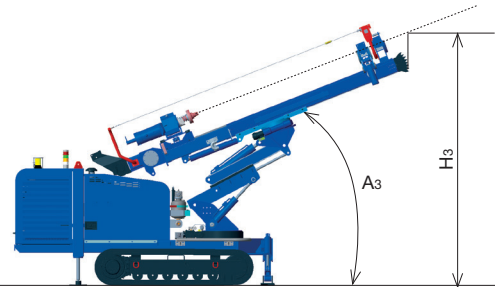
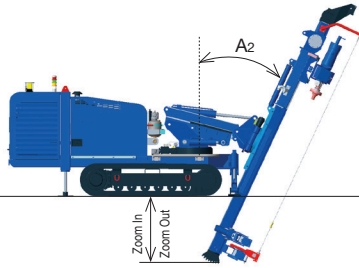
MOVIMENTATIONS



Stroke	A1	H1a	H1b
1400 - Zoom In	53°	2910 mm	114.6 in
1400 - Zoom Out	48°	2780 mm	109.4 in
1900 - Zoom In	40°	2815 mm	110.8 in
1900 - Zoom Out	35°	2665 mm	104.9 in
2400 - Zoom In	40°	3130 mm	123.2 in
2400 - Zoom Out	35°	2955 mm	116.3 in
3400 - Zoom In	40°	3765 mm	148.2 in
3400 - Zoom Out	35°	3540 mm	139.4 in

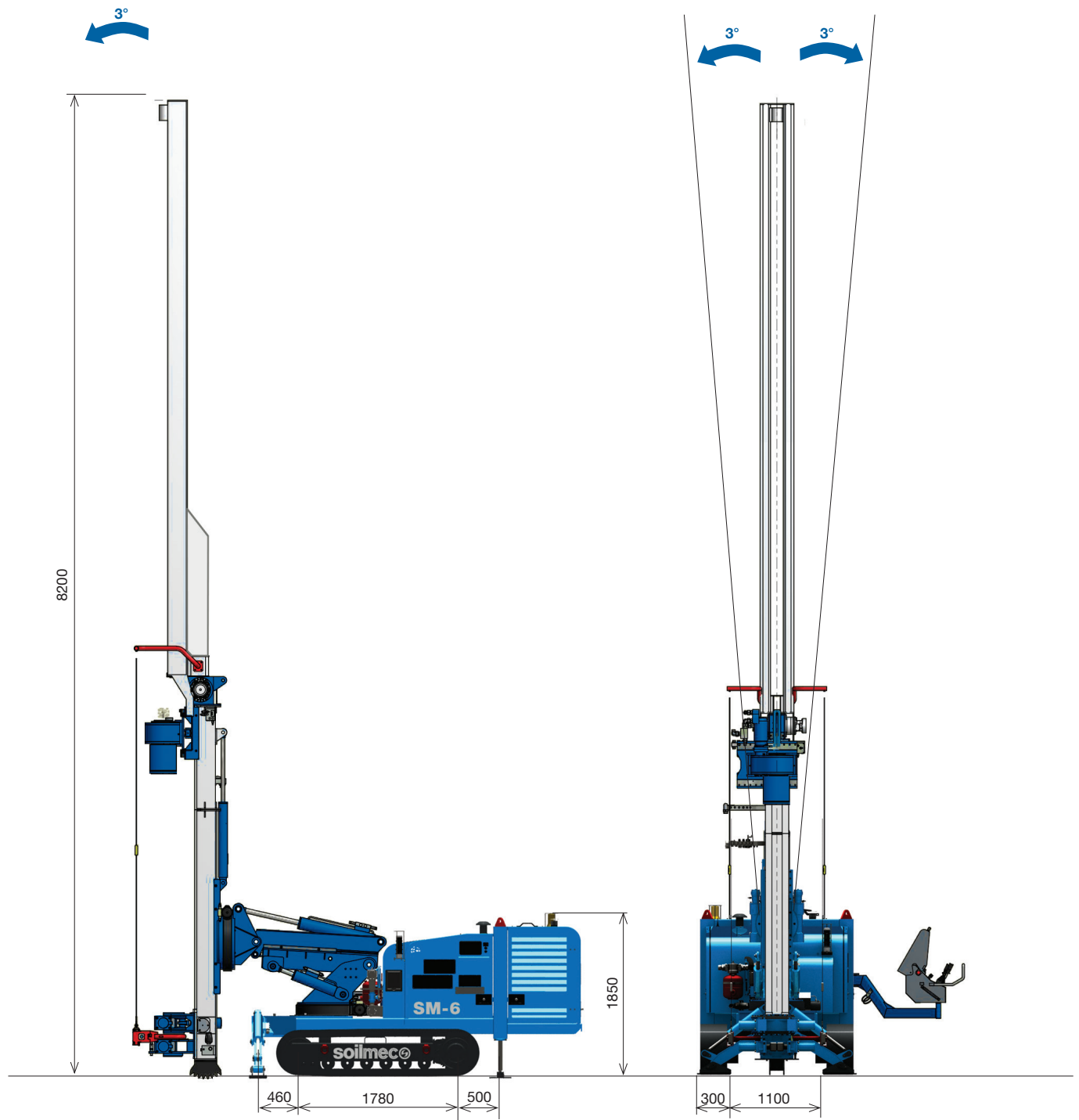
Stroke	A2	H2
1400 - Zoom In	25°	625 mm 24.6 in
1400 - Zoom Out	35°	720 mm 28.3 in
1900 - Zoom In	25°	1075 mm 42.3 in
1900 - Zoom Out	35°	1030 mm 40.6 in
2400 - Zoom In	25°	1075 mm 42.3 in
2400 - Zoom Out	35°	1030 mm 40.6 in
3400 - Zoom In	25°	1075 mm 42.3 in
3400 - Zoom Out	35°	1030 mm 40.6 in

Stroke	A3	H3
1400	27°	3660 mm 144.1 in
1900	27°	3880 mm 152.8 in
2400	20°	3660 mm 144.1 in
3400	12°	3350 mm 131.9 in



SM-6 Hydraulic Microdrilling Rig

JET GROUTING

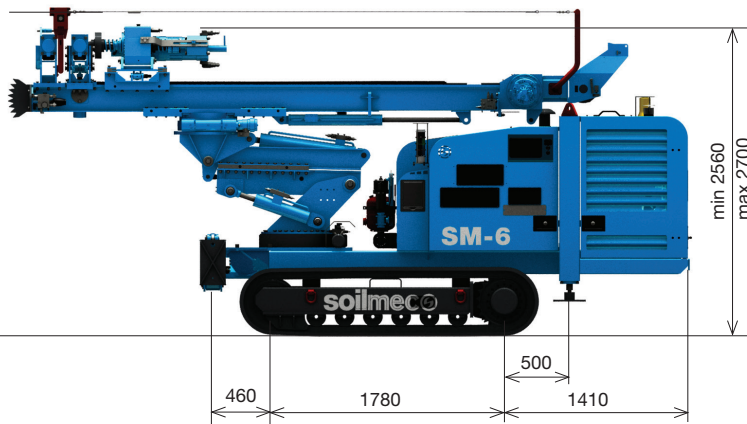
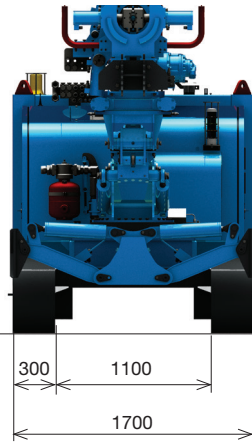


JET GROUTING VERSION

Max rod diameter	114 mm	3.54 in
Max treatment depth in a single passage	8 m	26 ft

SM-6 Hydraulic Microdrilling Rig

TRANSPORT, DIMENSIONS AND WEIGHTS



Transport configuration	Length		Weight	
Stroke version 1400 mm	5260 mm	207.1 in	6750 kg	14881 lb
Stroke version 1900 mm	5350 mm	210.6 in	6800 kg	14991 lb
Stroke version 2400 mm	5350 mm	210.6 in	6850 kg	15102 lb
Stroke version 3400 mm	5740 mm	226.0 in	7150 kg	15763 lb

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