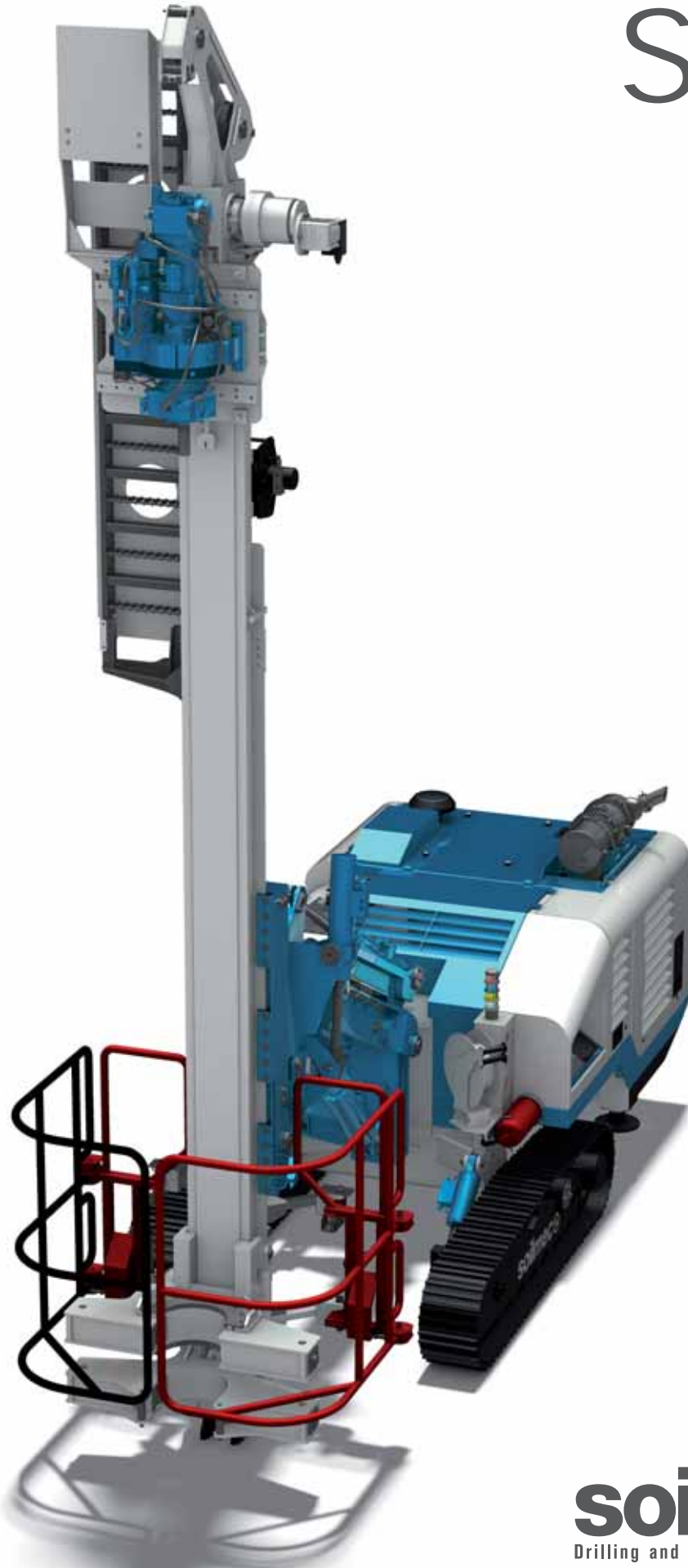


Hydraulic Microdrilling Rig

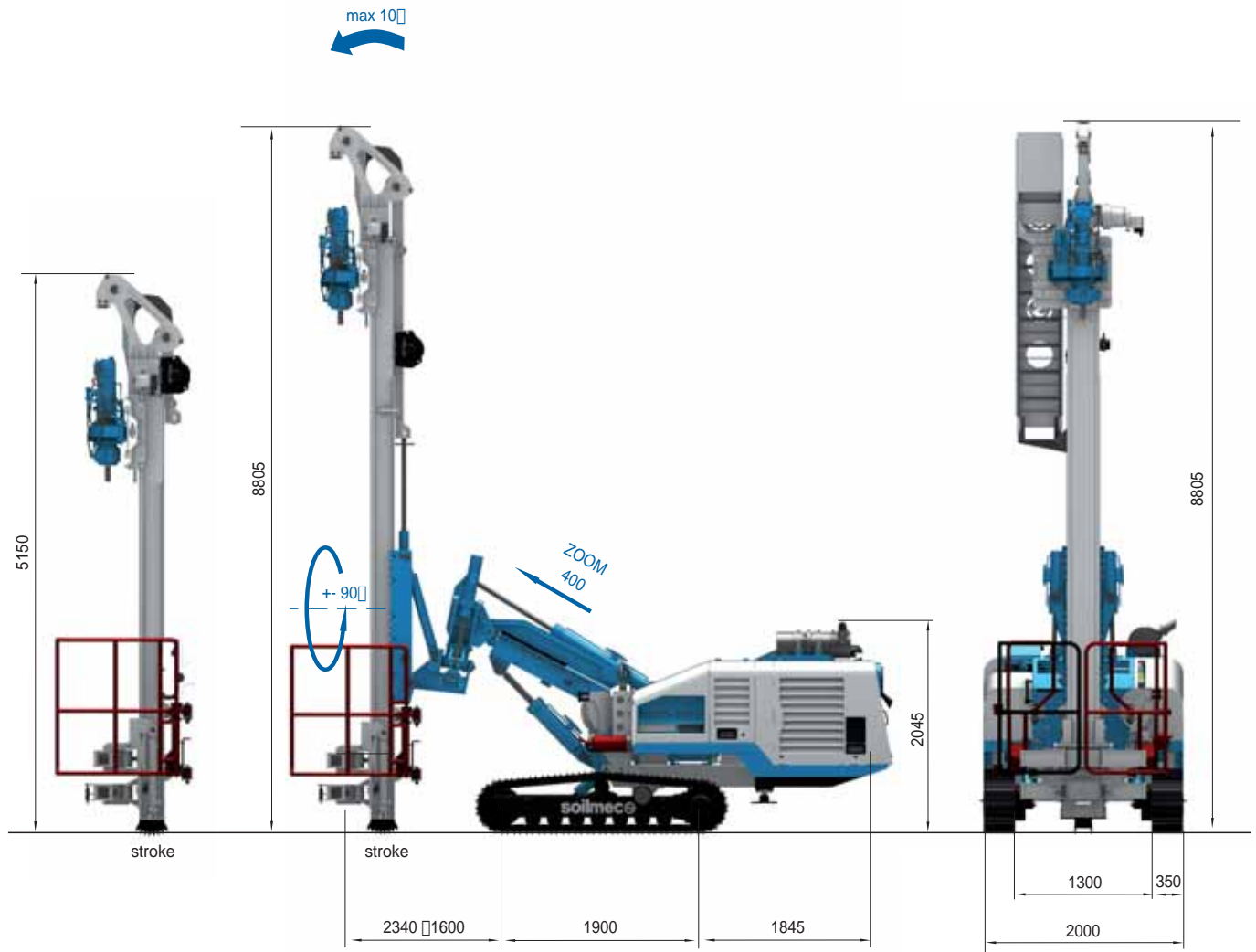
SM-9



soilmec 
Drilling and Foundation Equipment

SM-9 Microdrilling Rig

APPLICATIONS



Hoist & Feed system	Motoreducer	Motoreducer	Motoreducer	Motoreducer
Feed stroke	2200 mm	86.6 in	3800 mm	149.6 in
Rod length type (c/w one rotary head)	1,5 m	4.9 ft	3 m	9.8 ft
Maximum hoist pull/feed force	60 / 60 kN	13488 / 13488 lbf	60 / 60 kN	13488 / 13488 lbf

Rotary head range	HR10L	HR10L	HR13	HR13	HR9G	HR9G
Gear box type	Variable+ 2 Mech	Variable+2 Mech	Variable	Variable	6 gear for Coring	6 gear for Coring
Maximum torque	1000 daNm	7375 lbf*ft	1300 daNm	9588 lbf*ft	820 daNm	6048 lbf*ft
Maximum drilling speed	333 rpm	333 rpm	143 rpm	143 rpm	926 rpm	926 rpm
Inner passage	90 mm	3.5 in	152 mm	6.0 in	90 mm	3.5 in

SM-9 TECHNICAL DATA SHEET

Operating weight (approx.)	9350 - 9550 kg	20613 - 21054 lb
Undercarriage		
- Track shoe width	350 mm	13.8 in
- Wheel base (centre idler to centre sprocket)	1900 mm	74.8 in
- Overall length	2424 mm	95.4 in
- Overall width (not extendable crawler)	1900 mm	75 in
- Travelling speed	1,80 km/h	1.12 mph
- Max climbing capacity (gradeability)	42 % (19°)	42 % (19°)
- Average ground pressure	0,071 MPa	10.3 psi
- Ground stabilizers	pivoting crawler track complete c/w n² 2 rear outriggers	<i>pivoting crawler track complete c/w n² 2 rear outriggers</i>
Power pack		
- Diesel Engine make and model	Deutz TCD 4.1 L04 4V	<i>Deutz TCD 4.1 L04 4V</i>
- Emission certification	EU Stage IIIB - EPA nonroad Tier 4i	<i>EU Stage IIIB - EPA nonroad Tier 4i</i>
- Diesel Engine power rating	105 kW @ 2000	141 HP @ 2000
- Fuel tank capacity	160 l	42 US gal
- Sound power level and sound pressure level	LwA 105 - LpA 87 dB(A)	<i>LwA 105 - LpA 87 dB(A)</i>
Hydraulic system		
- Main pumps: variable axial pumps	200 l/min	53 US gal/min
- Set pressure main pumps	30 MPa	4351 psi
- Auxiliary pumps: gear pumps	19 + 86 l/min	5.0 + 22.7 US gal/min
- Hydraulic oil tank capacity	330 l	87 US gal
Clamp & hydraulic joint breaker		
- Nominal size	60 - 320 mm	2.4 - 12.6 in
- Maximum clamping force	180 kN	40465 lbf
- Maximum breaking torque	2700 daNm	19914 lbf*ft
Service winch		
- Type	controlled descent	<i>controlled descent</i>
- 1st layer line pull	19 kN	4271 lbf
- 1st layer nominal rope speed	32 m/min	105 ft/min
- Rope diameter	10 mm	0.39 in

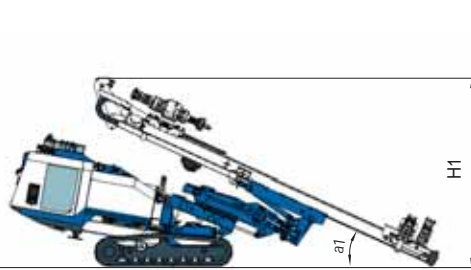
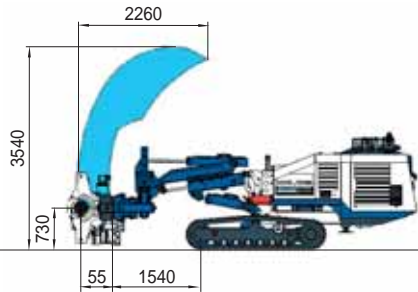
STANDARD EQUIPMENT

- Modular mast for 3800 mm stroke
- Clamp and breaker 60-320 mm, w/o pin remover
- Telescopic boom and sliding mast
- Full radio remote control
- Oscillating system on track
- Rotary heads up to 1063 daNm
- Rotary cradle side shifting
- Service winch
- Triplex pump for foam

OPTIONAL EQUIPMENT

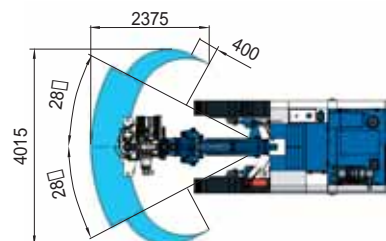
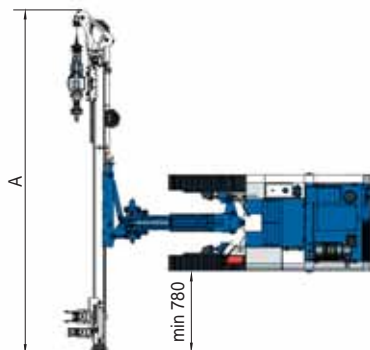
- Undercarriage with rubber crawler
- Wide range of feed stroke: 2100 - 3800 mm
- Wide range of rotary heads
- Jet grouting kit
- Top hammer kit
- Radio remote control for drilling operation
- Cable remote control for tramming
- Triplex pump for mud water
- Soil investigation kit

SM-9 Microdrilling Rig MOVIMENTATIONS



Zoom	a1	H1
Motoreducer 2100 - ZOOM IN	28°	2910 mm
Motoreducer 2100 - ZOOM OUT	25°	2670 mm
Motoreducer 3800 - ZOOM IN	28°	3650 mm
Motoreducer 3800 - ZOOM OUT	25°	3360 mm

Zoom	a2	H2
Motoreducer 2100 - ZOOM IN	40°	4920 mm
Motoreducer 2100 - ZOOM OUT	40°	5160 mm
Motoreducer 3800 - ZOOM IN	24°	4540 mm
Motoreducer 3800 - ZOOM OUT	27°	4860 mm



Stroke	A
Motoreducer 2100	5150 mm
Motoreducer 2100	6805 mm

SM-9 Microdrilling Rig JET GROUTING



Jet Grouting Version

Rod diameter	90 mm	3.54 in
Max treatment depth in a single passage	12,0 m	39 ft



Transport configuration	Length		Weight	
Stroke version 2100 mm	4750 mm	187 in	9350 kg	20613 lb
Stroke version 3800 mm	6680 mm	263 in	9550 kg	21054 lb

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