

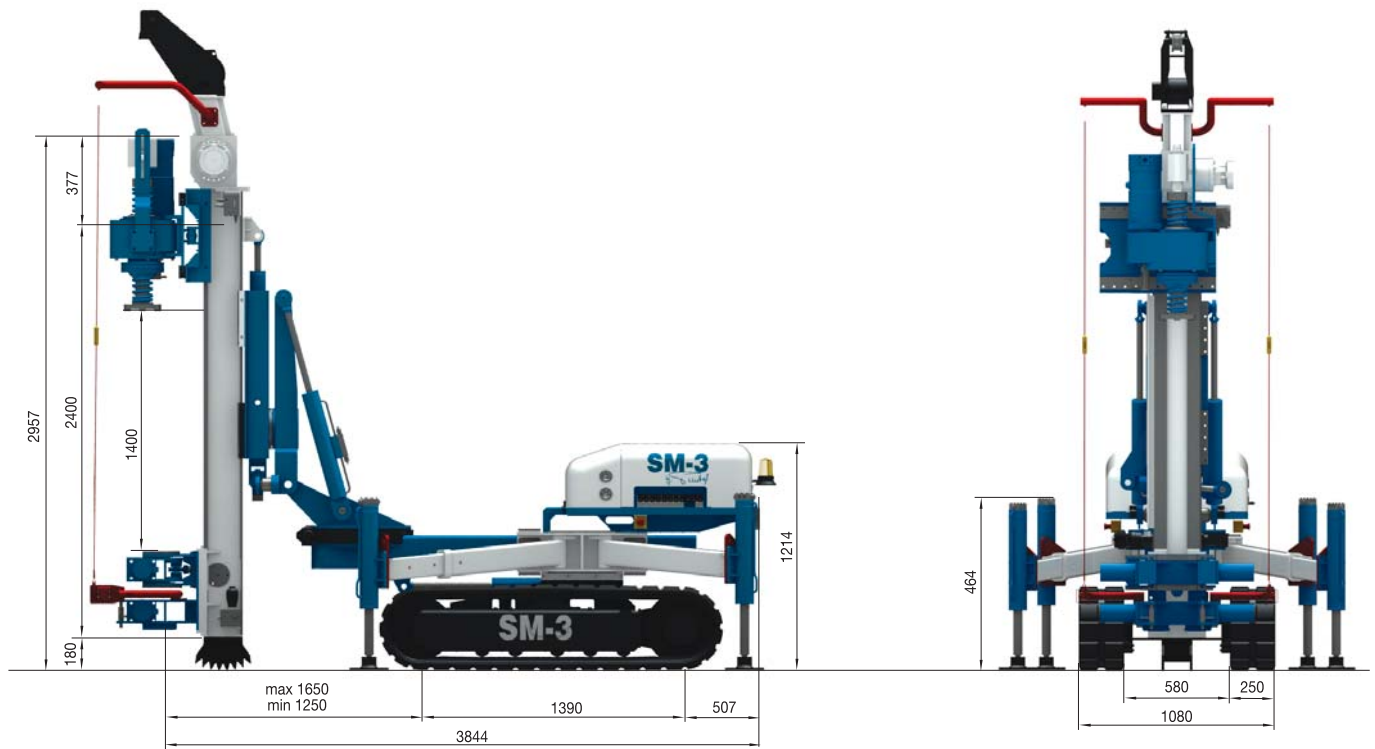
Hydraulic Microdrilling Rig

SM-3

by *Soilmec*



SM-3 APPLICATIONS



Hoist & Feed system	Motoreducer	Motoreducer
- Feed type	Two gears motor	Two gears motor
- Feed stroke	1400 - 2400 mm	55.1 - 94.5 in
- Rod length type (c/w one rotary head)	1m/2 m	3.3 / 6.6 ft
- Maximum hoist pull/feed force	40 / 40 kN	8992 / 8992 lbf
- Maximum speed (fast/low operation)	38 / 18 m/min	125 / 59 ft/min
Special Rotary head	Rotary with Rollstar motor	Rotary with Rollstar motor
- Gear box type	3 gear	3 gear
- Maximum torque	924 daNm	6815 lbf*ft
- Maximum drilling speed	434 rpm	434 rpm
- Inner passage	60 mm	2.4 in
- Hollow shaft	90 mm	3.5 in

SM-3 TECHNICAL DATA SHEET

Operating weight (approx.)	3500 / 3600 kg	7716 / 7937 lb
Operating weight ext. power pack (approx.)	2000 kg	4409 lb
Undercarriage		
- Track shoe width	250 mm	9.8 in
- Wheel base (centre idler to centre sprocket)	1390 mm	54.7 in
- Overall length	1840 mm	72.4 in
- Overall width (ext/retr)	1080 / 780 mm	42.5 / 30.7 in
- Travelling speed	3,30 km/h	2.05 mph
- Ground stabilizers	n° 2 fixed on front + n° 2 fixed on rear	n° 2 fixed on front + n° 2 fixed on rear
Separated electrical Engine		
- Make and model	ABB/Siemens	ABB/Siemens
- Power rating	75 kW @ 1450 rpm	101 HP @ 1450 rpm
- Sound power level and sound pressure level	LwA 105 - LpA 74 dB(A)	LwA 105 - LpA 74 dB(A)
Separated diesel Engine (optional)		
- Make and model	DEUTZ - TCD 2012 L04 2V Tier III	DEUTZ - TCD 2012 L04 2V Tier III
- Power rating	85 kW @ 2000 rpm	114 HP @ 2000 rpm
Hydraulic system		
- Main pumps: variable axial pumps	280 l/min	74 US gal/min
- Set pressure main pumps	26 MPa	3771 psi
- Auxiliary pumps: gear pumps	76 + 22 l/min	20.1 + 5.8 US gal/min
- Hydraulic oil tank capacity	320 l	85 US gal
Clamp & guide		
- Nominal size	50 - 220 mm	2 - 8.7 in
- Maximum clamping force	127 kN	28550 lbf
- Maximum breaking torque	3000 daNm	22126 lbf*ft
Service winch		
- 1st layer line pull (nominal/effective)	5 kN	1124 lbf
- 1st layer nominal rope speed	42 m/min	138 ft/min
- Rope diameter	6 mm	0.24 in

Jet grouting		
- Rod diameter	90 mm	3.54 in
- Max treatment depth in a single passage	8 m	26 ft

Kinematic mechanism		
- Swiveling boom articulation by slew ring with motoreducer on the base machine enables parallel drilling to the tracks un to +/- 90°		
- Counter slide: mast side tilting of +/- 18° by cylinder		
- Sliding mast by cylinder		
- Telescopic boom of 400 mm on base carrier		

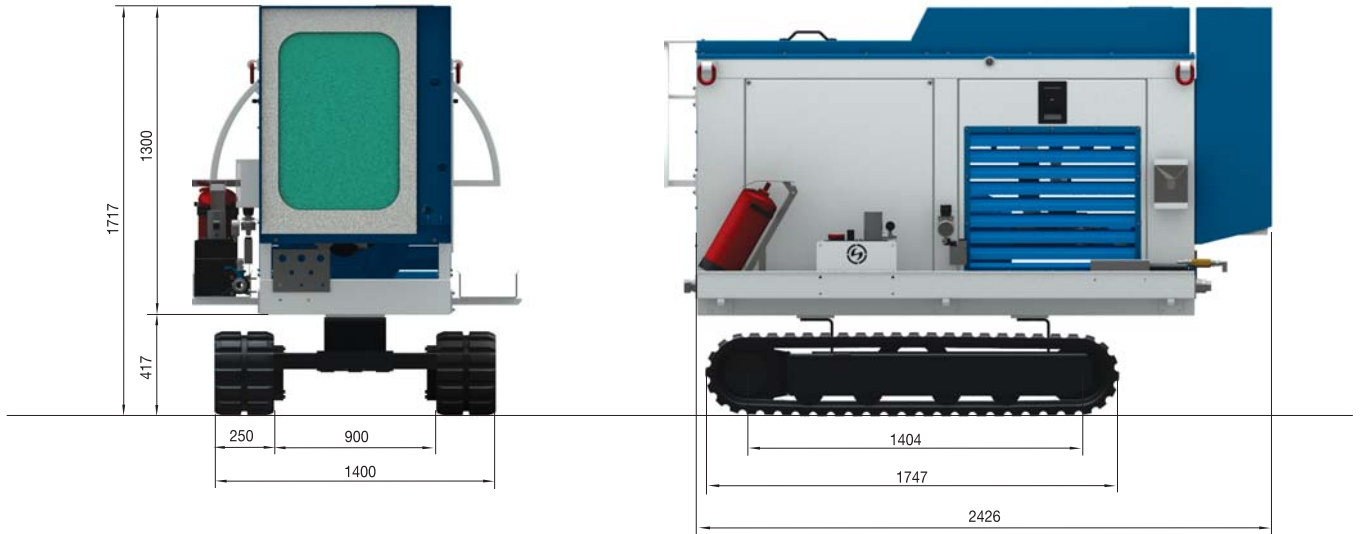
STANDARD EQUIPMENT

- Extendable undercarriage with rubber crawler
- Drill mast 1400 mm stroke
- Clamp and breaker 50-220 mm
- Slew ring on main body
- Prearrangement for mud pump
- Pneumatic inline DTH lubricator
- Cable remote for tramming
- Load Sensing hydraulic system
- Radio remote control for drilling operation
- Hydraulic control for kinematism
- Integrated foam pump

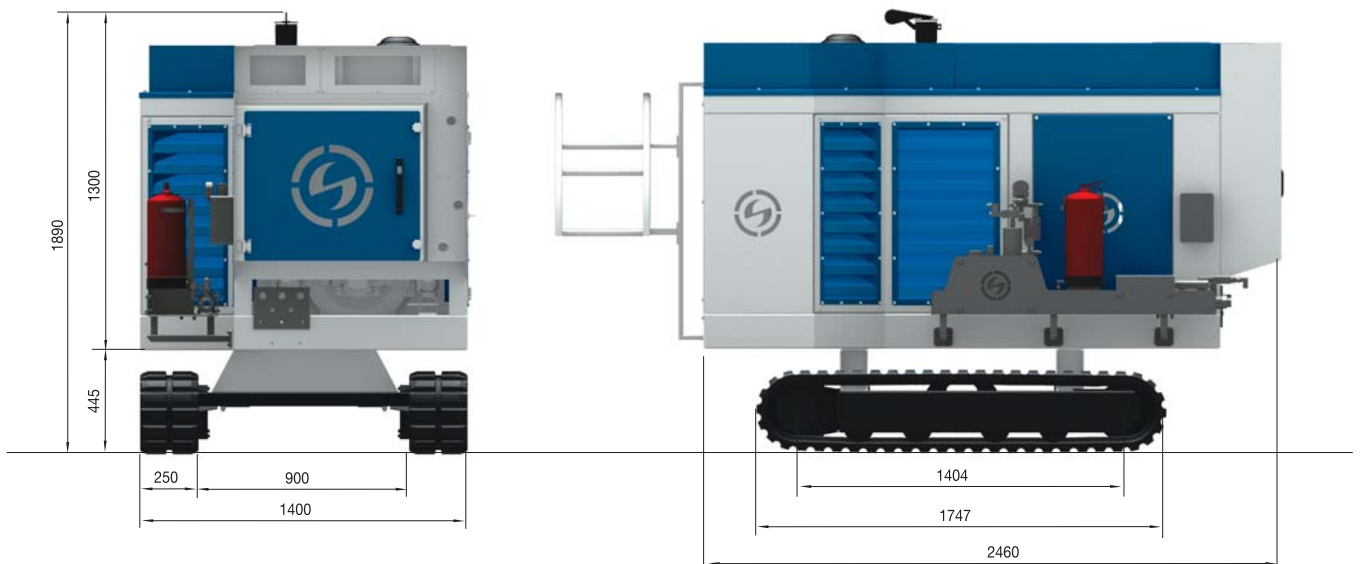
OPTIONAL EQUIPMENT

- Separated Diesel power pack (85 kW)
- Double slewing ring
- Wide range of feed stroke
- Wide range of rotary heads
- Power pack on crawler track or on skid
- Triplex pump for Foam
- CFA kit complete with special rotary head up to 1300 daNm and auger guide
- Top hammer kit
- Counter slide: slew ring on mast for +/- 105° rotation
- Jet grouting kit for 8 m depth treatment in single pass
- Mast kit for 1100 - 1900 - 2400 mm stroke
- Heavy duty mast with hoist system by cylinder, hoist force: 63 kN

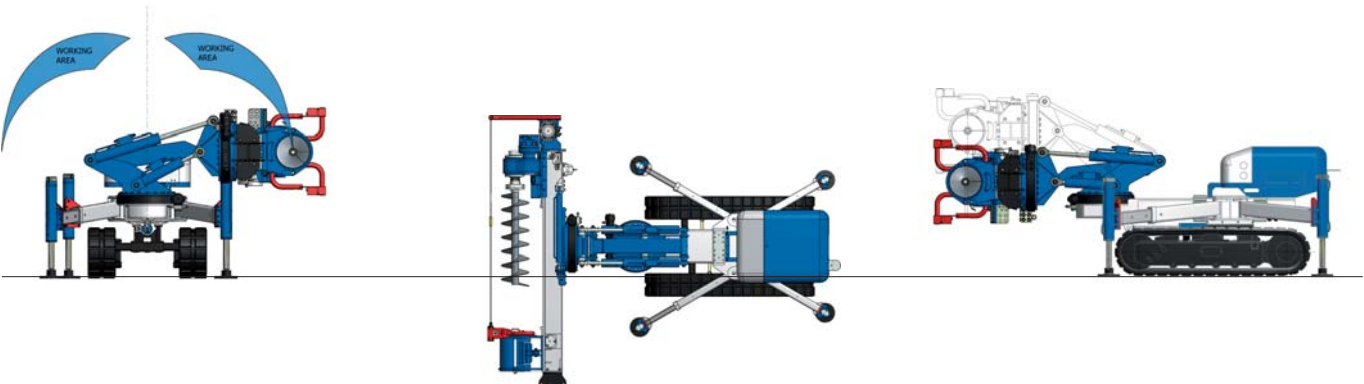
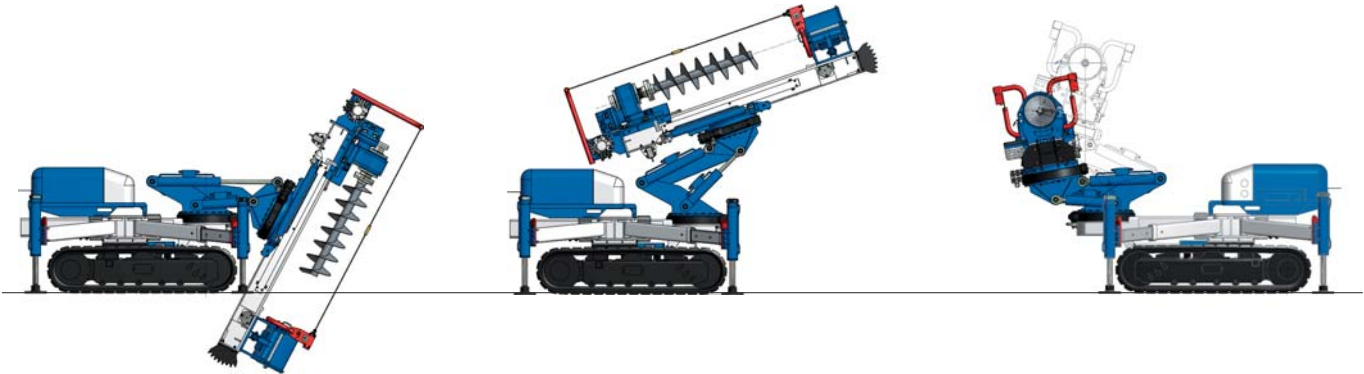
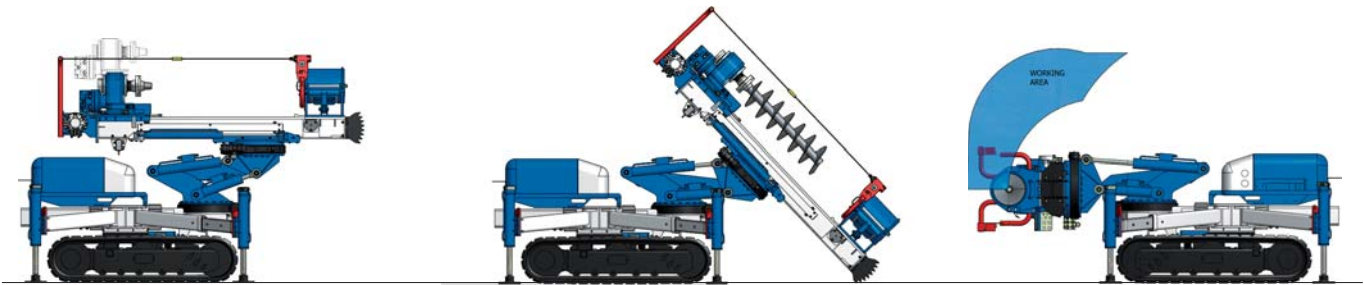
SM-3 ELECTRIC POWER PACK

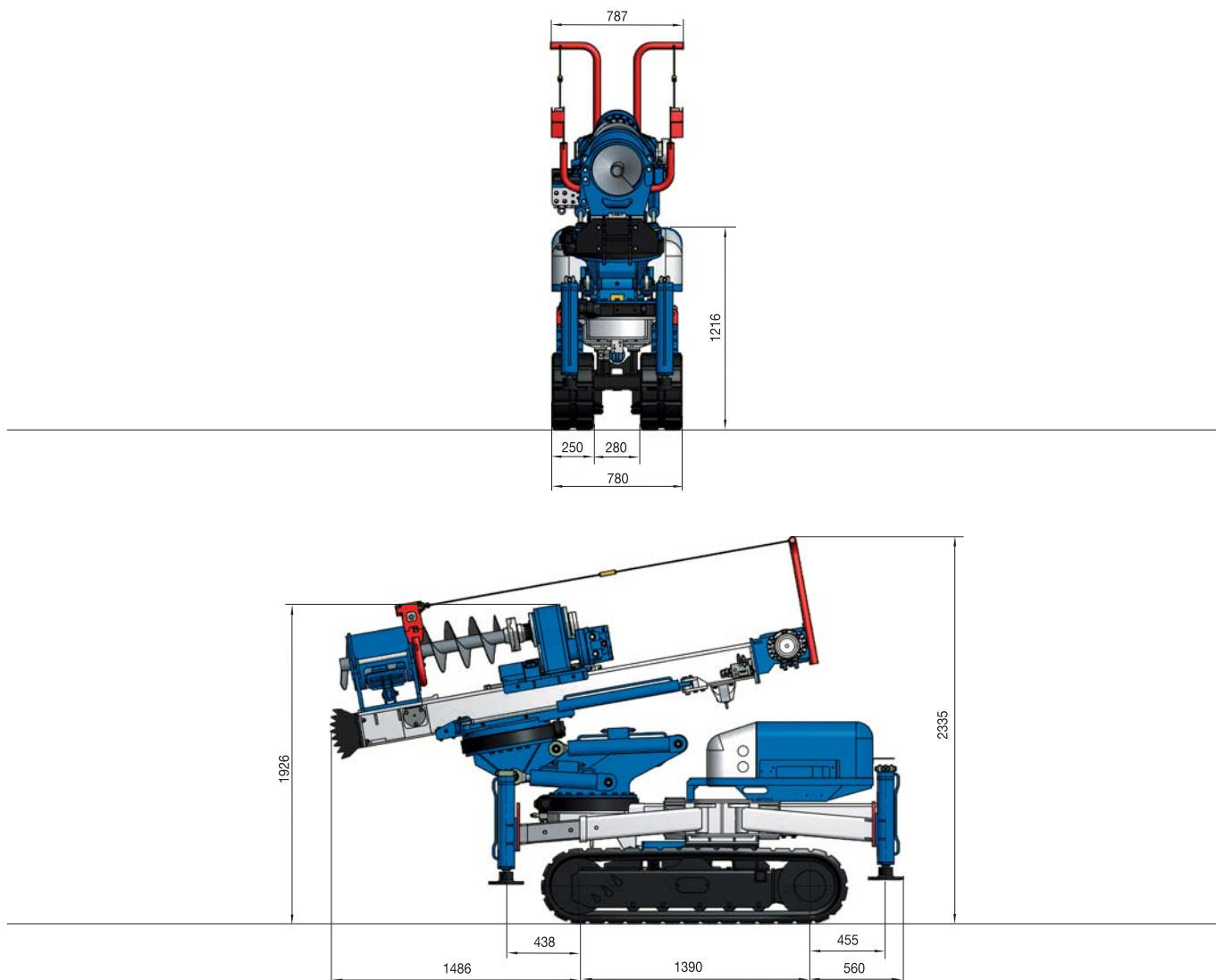


SM-3 DIESEL POWER PACK



SM-3 MOVIMENTATIONS





Transport configuration		
Length	2900 mm	114.2 in
Width	780 mm	30.7 in
Height	2000 mm	78.7 in
Weight	3500 kg	7716 lb

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