

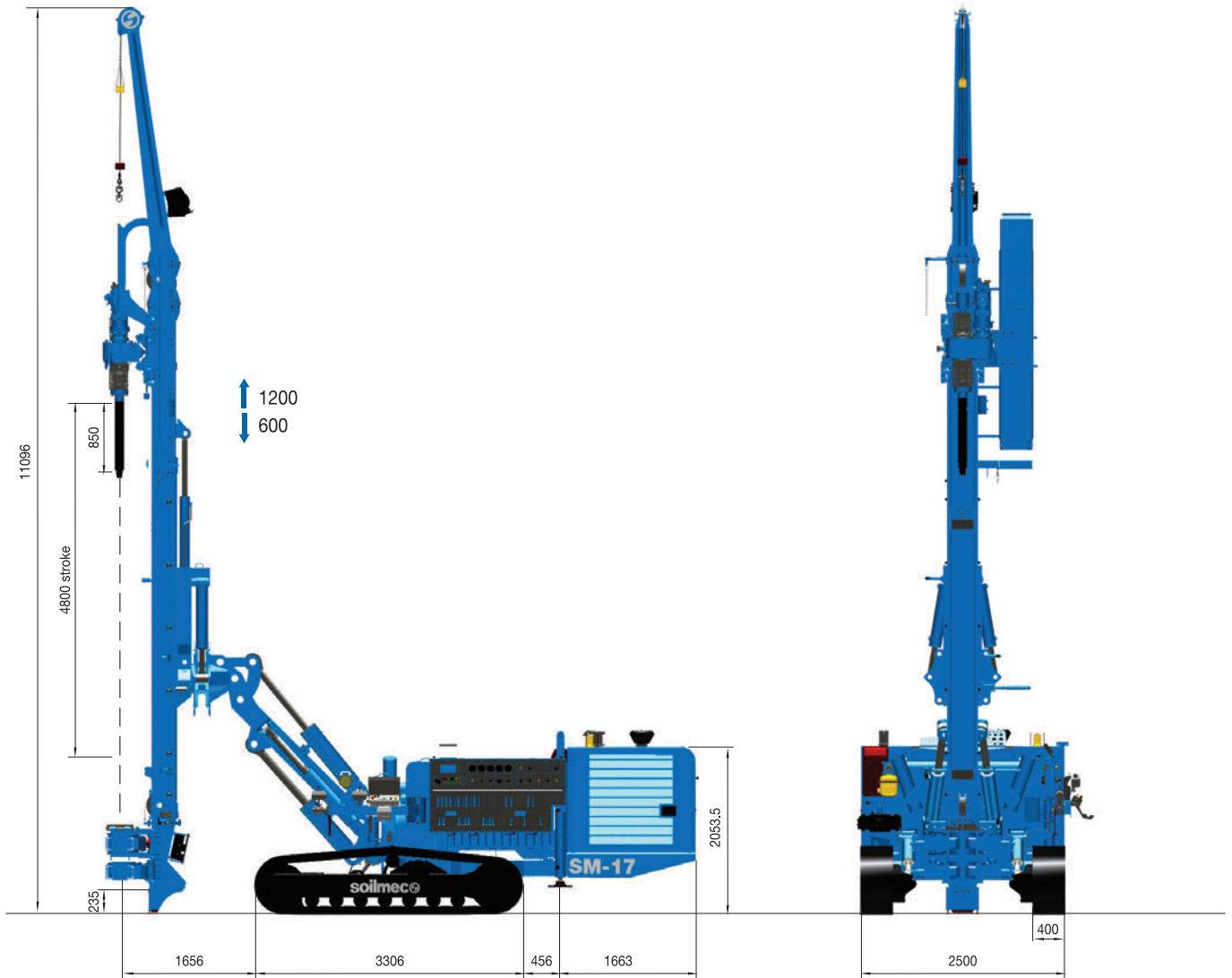
Hydraulic Microdrilling Rig

SM-17



soilmec 
Drilling and Foundation Equipment

SM-17 APPLICATIONS



Hoist & Feed system	Cylinder	Cylinder	Motoreducer	Motoreducer				
Feed stroke	4800 mm	189.0 in	4800 / 6400 / 9800 mm	189.0 / 252 / 358.8 in				
Rod length type (c/w one rotary head)	4,5 m	14.8 ft	4,5 / 6 / 9 m	14.8 / 19.7 / 29.5 ft				
Maximum hoist pull/feed force	100 / 50 kN	22481 / 11240 lbf	145 / 145 kN	32597 / 32597 lbf				
Rotary head range	HT 3700 V	HT 3700 V	HT 1400	HT 1400	R 1700	R 1700	HHD 2500	HHD 2500
Gear box type	Variable	Variable	Variable	Variable	Variable	Variable	Variable	Variable
Maximum torque	3700 daNm	27289 lbf*ft	1356 daNm	10001 lbf*ft	1739 daNm	12826 lbf*ft	2447 daNm	18048 lbf*ft
Maximum drilling speed	124 rpm	124 rpm	229 rpm	229 rpm	213 rpm	213 rpm	151 rpm	151 rpm

SM-17 TECHNICAL DATA SHEET

Operating weight (approx.)	18/19 ton	39683 - 41887 lbs
Undercarriage		
- Track shoe width	400 mm	15.7 in
- Wheel base (centre idler to centre sprocket)	2590 mm	101.9 in
- Overall length	3315 mm	130.2 in
- Overall width (not extendable crawler)	2500 mm	98 in
- Oscillating system	+/- 10°	+/- 10°
- Ground stabilizers	n° 2 fixed on rear	n° 2 fixed on rear
- Travelling speed	1,8 km/h	1.1 mph
Diesel Engine make and model	DEUTZ TCD 6.1	DEUTZ TCD 6.1
- Emission certification	UE 2004/26ce Stage IIIB - EPA nonroad Tier 4i	UE 2004/26ce Stage IIIB - EPA nonroad Tier 4i
- Power rating	160 kW @ 2000	214 HP @ 2000
- Fuel tank capacity	300 l	79 US gal
- Sound power level and sound pressure level	LwA 105 - LpA 81 dB(A)	LwA 105 - LpA 81 dB(A)
Hydraulic system		
- Main pumps: variable axial pumps	214 + 214	56.5 + 56.5 US gal/min
- Set pressure main pumps	32 MPa	4641 psi
- Auxiliary pumps: gear pumps	54 + 34 + 88 l/min	14.3 + 9 23.2 US gal/min
- Hydraulic oil tank capacity	525 l	138.7 US gal
Clamp & hydraulic joint breaker		
- Nominal size	up to 60 - 415	up to 2.4 - 16.3 in
- Maximum clamping force	266 kN	59798 lbf
- Maximum breaking torque	5060 daNm	37321 lbf*ft
Extractor device		
- Pull up extractor clamp force	150 kN	33721 lbf
- Pull up extractor clamp stroke	400 mm	15.7 in
Service winch		
- Type	controlled descent	controlled descent
- nominal 1st layer line pull	24 kN	5395 lbf
- 1st layer nominal rope speed	46 m/min	151 ft/min
- Rope diameter	10 mm	0.39 in
Rod carousel		
- N. of roads	6 - 10	6 - 10
- Rod diameter	140 - 114 mm	5.5 - 4.5 in
- Rod length	3000 mm	118.1 in
Jet Grouting		
- Operative weight in jet grouting version	19000 kg	41887 lb
- Rod diameter	90 ÷ 114 mm	3.5 ÷ 4.5 in
- Max treatment depth in single passage	20 m	787.4 in
- Drilling guide extensions	6 + 10 m	236.2 + 393.7 in

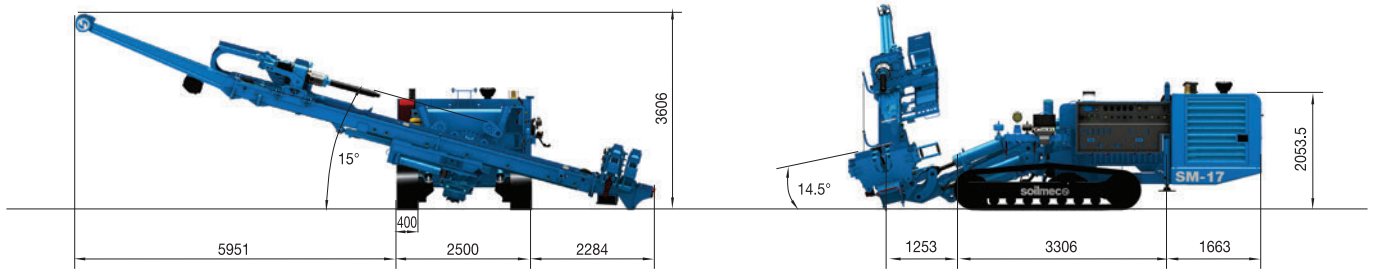
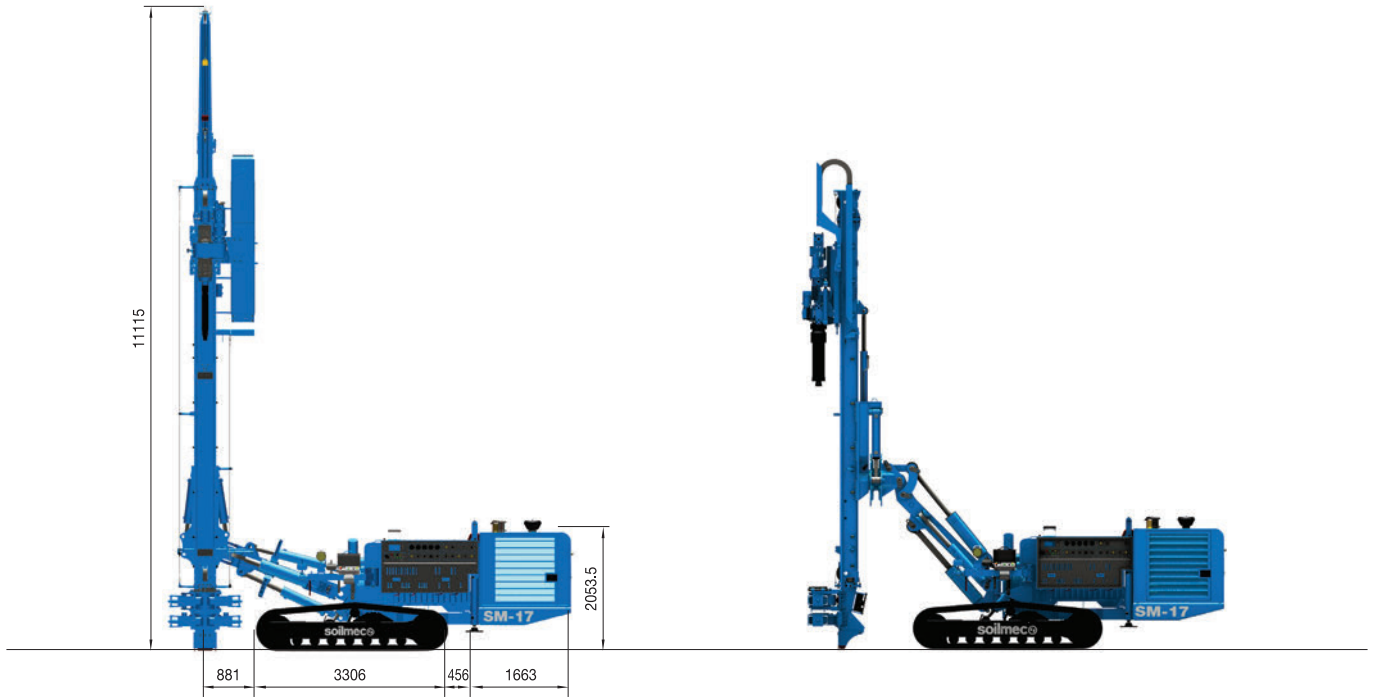
STANDARD EQUIPMENT

- Oscillating undercarriage
- Diesel power pack: 160 kW
- Kinematic mechanism: articulated
- Heavy duty mast 4,8 m stroke
- Cradle with side shifting
- Rotary head: HT 1400 V
- Clamping range 50-315 mm
- Full radio remote control
- Service winch

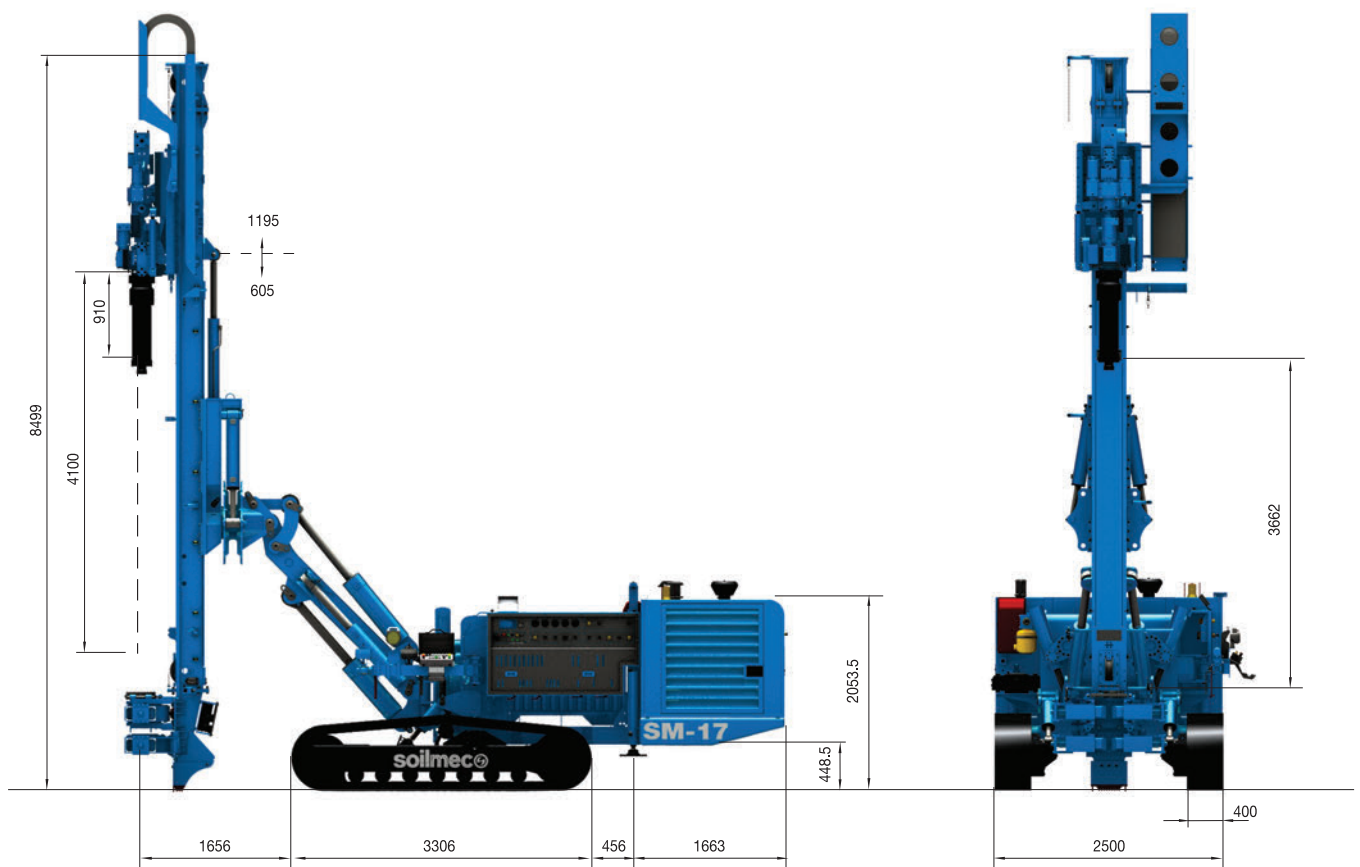
OPTIONAL EQUIPMENT

- Modular mast up to 9,8 m stroke
- Rotary head up to 3700 daNm
- Extractor device
- Rod loader n. 6x3 m (max diameter 140 mm) n. 10x3 m (max diameter 114 mm)
- Jet grouting kit: 20m
- Top hammer Soilmec / Eurodrill / Krupp
- Double rotary head
- Foam pump
- Water / mud pump

SM-17 MOVIMENTATIONS



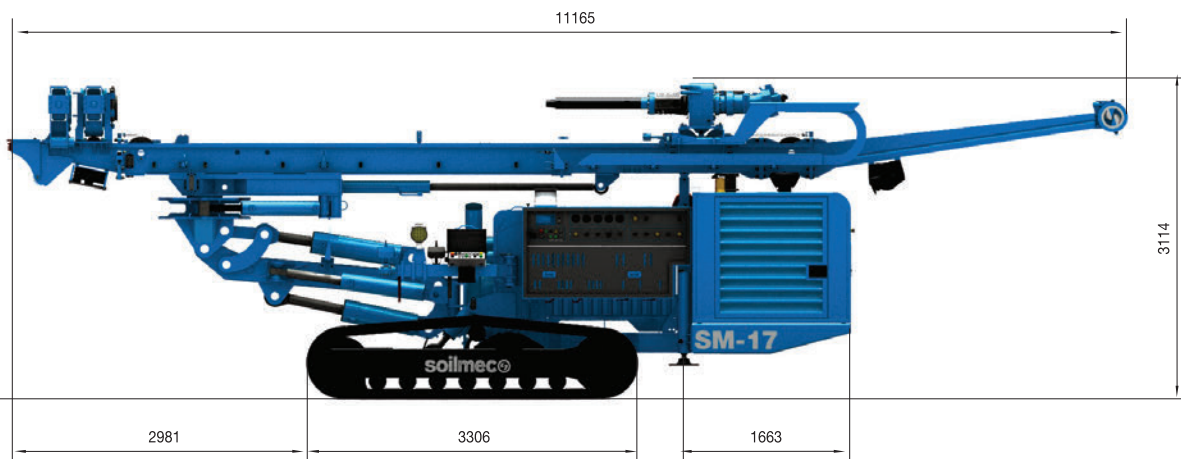
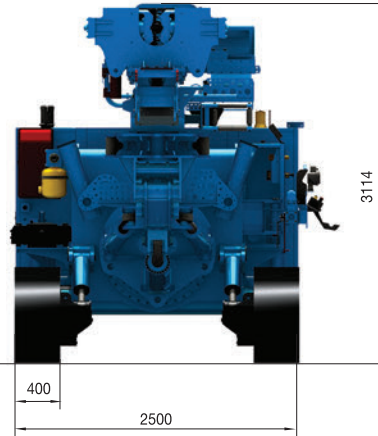
SM-17 DOUBLE ROTARY



Double head HT 3700 & HT 1400		
Max torque for casing	3660 daNm	86995 lbf*ft
Max drilling speed for casing	124 rpm	124 rpm
Max torque for rods	1360 daNm	10030 lbf*ft
Max drilling speed for casing	229 rpm	229 rpm
Rod / casing length	3000 mm	118.1 in

SM-17 Hydraulic Microdrilling Rig

TRANSPORT, DIMENSIONS AND WEIGHTS



Transport configuration		
Width	2500 mm	98,4 in
Length with stroke 4800 mm	11165 mm	439.56 in
Weight	18 - 19 ton	39683 - 41887 lbs

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