

Hydraulic Microdrilling Rig

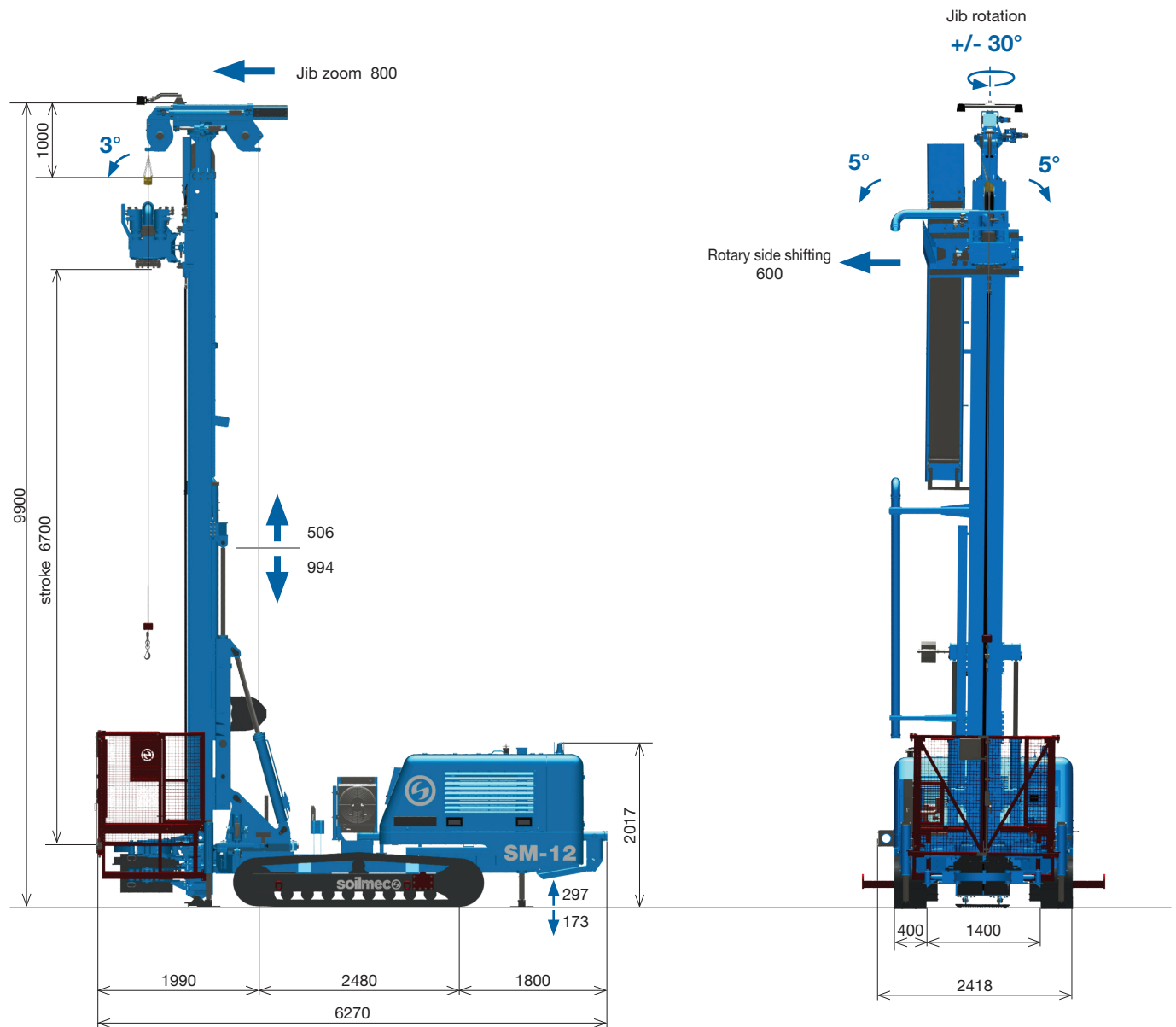
# SM-12



**soilmeco**   
Drilling and Foundation Equipment

# SM-12 Hydraulic Microdrilling Rig

## APPLICATIONS



Hoist & Feed system	Cylinder	
Feed stroke (in single head version)	7000 mm	276 in
Auger/Rod lenght (in single head version)	6 m	19.7 ft
Maximum hoist pull/feed force	140 / 78 kN	31473 / 17535 lbf

Rotary head range	HR 13	HR 13	HT 1700	HT 1700	HT 3400	HT 3400
Maximum torque	1700 daNm	12538 lft*ft	1900 daNm	14014 lft*ft	4000 daNm	29502 lft*ft
Maximum rotation	150 rpm	150 rpm	116 rpm	116 rpm	58 rpm	58 rpm
Inner passage	2"	4"	4"	4"	4"	4"

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## TECHNICAL DATA SHEET

Operating weight (approx.)		15000 kg	33069 lb
Undercarriage			
- Track shoe width	400 mm		15.7 in
- Overall length	3062 mm		120.6 in
- Overall width (not extendable crawler)	2200 mm		86.6 in
- Travelling speed	1,50 km/h		0.93 mph
- Max climbing capacity (gradeability)	70% (35°)		70% (35°)
- Average ground pressure	0,057 MPa		7.8 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	
Diesel Engine			
- Make and model	Cummins QSB4.5	Cummins QSB4.5	
- Emission certification	Stage 3B - US EPA Tier 4i	Stage 3B - US EPA Tier 4i	
- Aspiration	supercharged after liquid cooled	supercharged after liquid cooler	
- Power rating	119 kW @ 2200 rpm	159 HP @ 2300 rpm	
- Fuel tank capacity	200 l	53 US gal	
- Sound power level and sound pressure level	LwA 110 - LpA 79 dB(A)	LwA 110 - LpA 79 dB(A)	
Hydraulic system			
- Main pumps: variable axial pumps	170 + 170 l/min	44.9 + 44.9 US gal/min	
- Auxiliary pumps: gear pumps	132 + 82 + 48 + 38 l/min	34.8 + 21.6 + 12.7 + 10 US gal/min	
- Hydraulic oil tank capacity	400 l	106 US gal	
Clamp & breaker			
- Nominal size	280 - 510 mm	11 - 20 in	
- Maximum clamping force	237 kN	53280 lbf	
- Maximum breaking torque	12700 daNm	93670 lbf*ft	
Auger guide			
- Nominal size	600 mm	24 in	
- Clamping force	237 kN	53280 lbf	

## STANDARD EQUIPMENT

- Fixed kinematic mechanism c/w tilting  $\pm 5^\circ$
- Sliding mast by cylinder: 1500 mm stroke
- Full radio remote control
- Air/water system and line lubrication for DTH
- Lighting system with 2 lights fitted on the top of the mast
- Load sensing Rexroth hydraulic system
- Heavy duty mast c/w crowd system by cylinder
- Rod casing reduction for clamps
- Service winch 3000 kg
- Tournable and extendable cathead
- Auxiliary winch (Hoist pull: 20 kN)

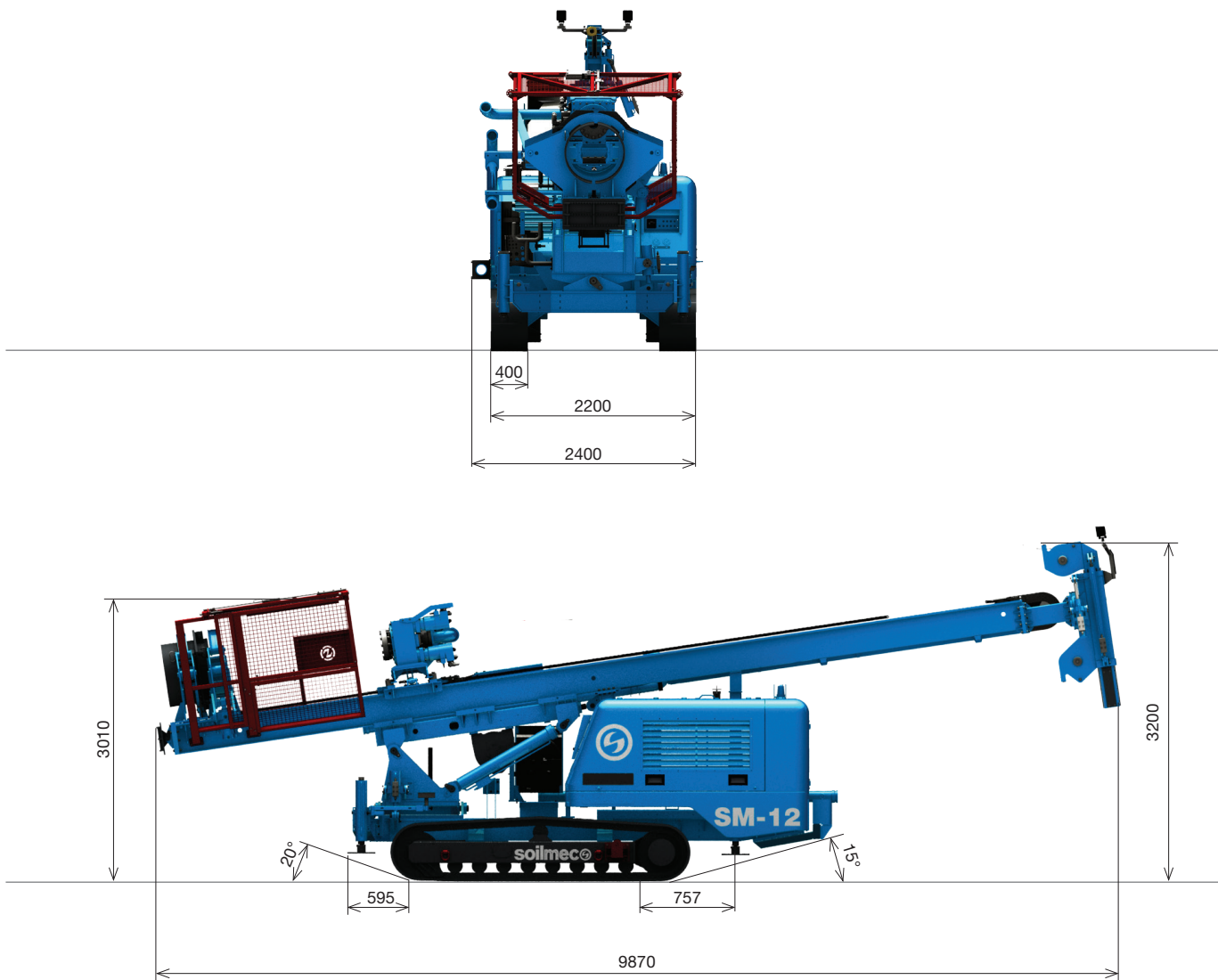
## OPTIONAL EQUIPMENT

- Auxiliary winch (hoist pull: 30kN)
- Foam pump (27 l/min@ 150 bar)
- Washing kit complete with hose re-winder
- New hydraulic control board for drilling operations, hydraulic control for movemen-
- ts and wired remote control for tracking
- Additional 3<sup>rd</sup> clamp
- Hydraulic controls
- Lifting kit
- Electric-Magnet clamp for loading rod/
- casing 3 m long
- Water/mud pump
- Double head version
- Top hammer Eurodrill/Krupp

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## TRANSPORT, DIMENSIONS AND WEIGHTS

All technical data are purely indicative and subject to change without notice



Transport configuration		
Lenght	9900 mm	390 in
Width	2200 (2400) mm	87 (94) in
Height	3200 mm	126 in
Weight approx.	15000 kg	33069 lb

( ) CFA version

Technical data sheet SM12-001 09/2016

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