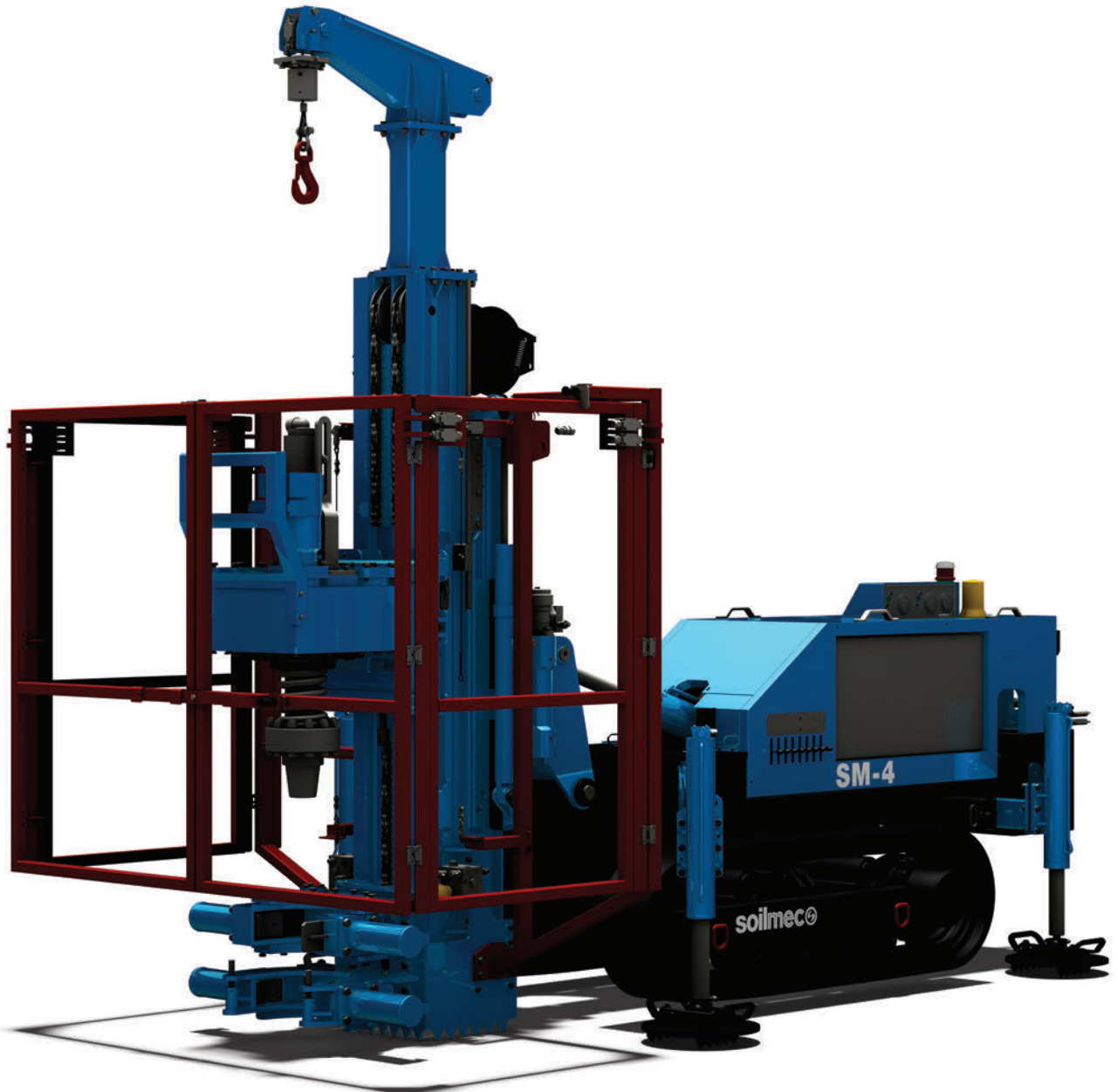


Hydraulic Microdrilling Rig

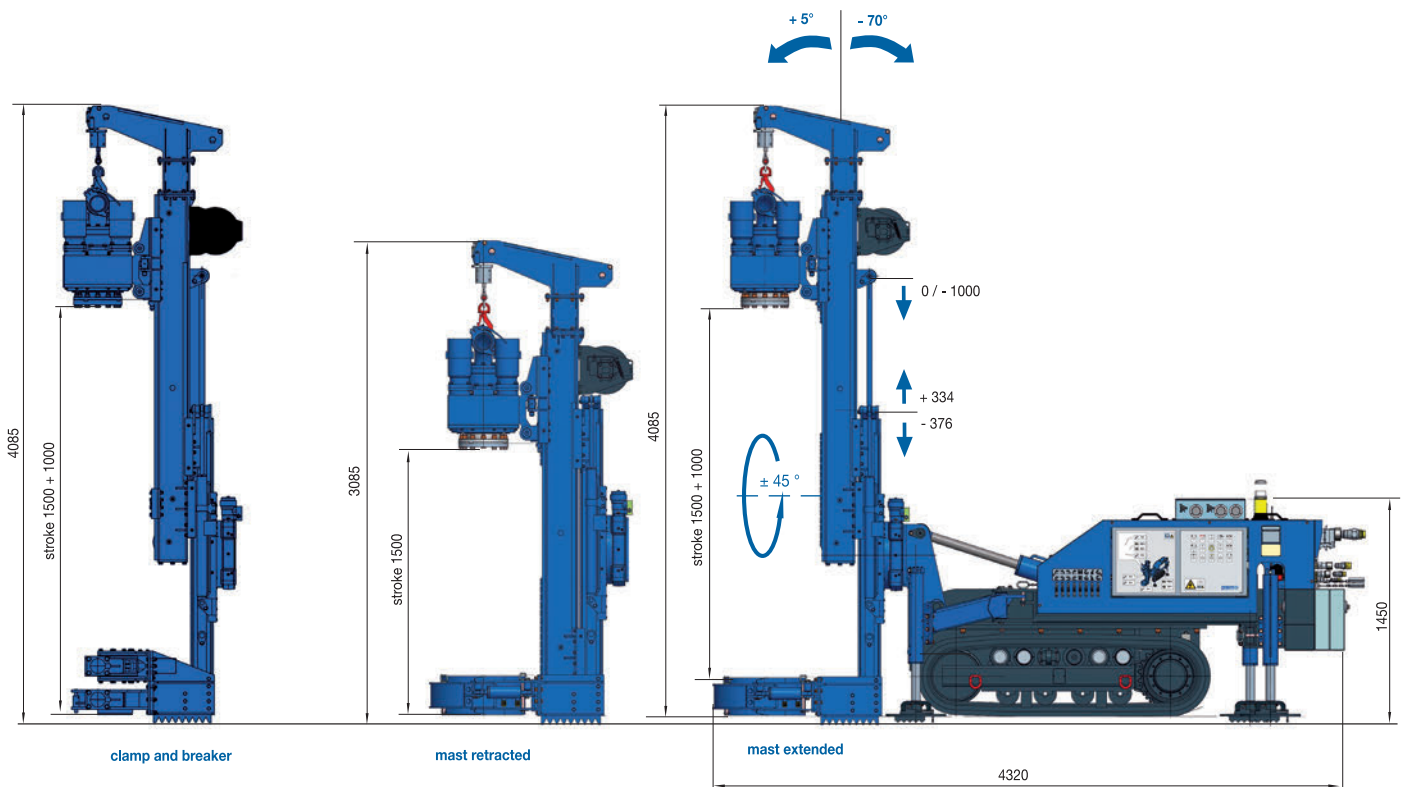
# SM-4



**soilmec**®  
Drilling and Foundation Equipment

# SM-4 Microdrilling Rig

## APPLICATIONS



### Hoist & Feed system

Feed type	Cylinder	Cylinder
Feed stroke	1500 + 1000 mm	59.1 + 39.4 in
Maximum hoist pull/feed force	70 / 46 kN	15736 / 10341 lbf
Maximum speed (fast/low operation)	21 / 7 m/min	69 / 23 ft/min

Rotary head	HT3400V	HT3400V
Gear box type	3 ratios	3 ratios
Maximum torque	3350 daNm	24708 lbf*ft
Maximum drilling speed	58 rpm	58 rpm
Inner passage	134 mm	5.3 in

# SM-4 Microdrilling Rig

## TECHNICAL DATA SHEET

<b>Operating weight separated power pack (approx.)</b>		
	3700 kg	8157 lb
<b>Undercarriage</b>		
	Fixed gauge	Fixed gauge
- Track shoe width	250 mm	9.8 in
- Overall length	1971 mm	77.6 in
- Overall width	1180 mm	46.5 in
<b>Diesel Engine</b>		
- Make and model	DEUTZ - TCD 4.1 L04 4V Tier 4i	DEUTZ - TCD 4.1 L04 4V Tier 4i
- Power rating	115 kW @ 2000 rpm	154 HP @ 2000 rpm
- Sound power level and sound pressure level	LwA 104 - LpA 85 dB(A)	LwA 104 - LpA 85 dB(A)
- Fuel tank capacity	200 l	44 US gal

<b>Operating weight base machine (approx.)</b>		
	6100 kg	13448 lb
<b>Undercarriage</b>		
	Variable gauge	Variable gauge
- Track shoe width	220 mm	8.7 in
- Overall length	1952 mm	76.9 in
- Overall width (ext/retr)	1200 / 740 mm	47.2 / 29.1 in
- Travelling speed	3,33 km/h	2.07 mph
- Ground stabilizers	n° 2 rotatable on front + n° 2 extendable on rear	n° 2 rotatable on front + n° 2 extendable on rear
<b>Hydraulic system</b>		
- Main pumps: variable axial pumps	200 l/min	53 US gal/min
- Set pressure main pumps	30 MPa	4351 psi
- Auxiliary pumps: gear pumps	86 + 32 l/min	22.7 + 8.5 US gal/min
- Hydraulic oil tank capacity	403 l	106 US gal
<b>Clamp &amp; Breaker</b>		
- Nominal size	50 - 320 mm *	2.0 - 12.6 in *
- Maximum clamping force	141 kN	31698 lbf
- Maximum breaking torque	4000 daNm	29502 lbf*ft
<b>Guide for CFA</b>		
- Max diameter auger	600 mm	23.62 in
- Max diameter casing	610 mm	24 in
<b>Service winch</b>		
- 1st layer line pull (nominal/effective)	20 kN	4496 lbf
- 1st layer nominal rope speed	43 m/min	141 ft/min
- Rope diameter	8 mm	0.31 in

\* up to 510 mm

## STANDARD EQUIPMENT

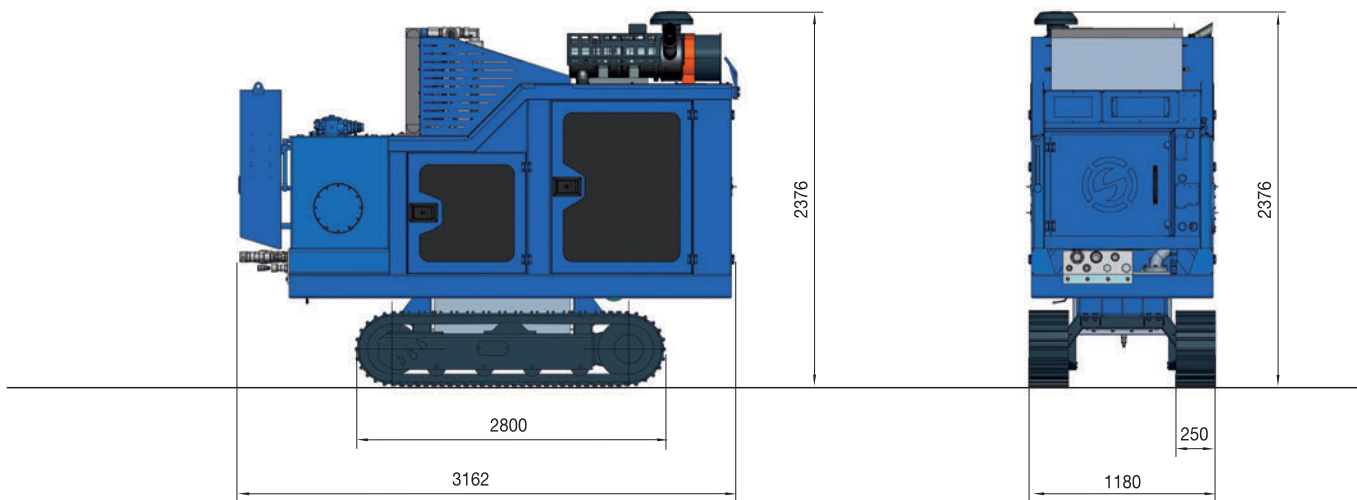
- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>• Extendable undercarriage</li> <li>• Telescopic drill mast</li> <li>• Prearrangement for mud pump</li> </ul> | <ul style="list-style-type: none"> <li>• Pneumatic inline DTH lubricator</li> <li>• Cable remote for tramming</li> <li>• Load Sensing hydraulic system</li> </ul> | <ul style="list-style-type: none"> <li>• Full radio remote control for all operation</li> <li>• Hydraulic control for kinematism</li> </ul> |
|--|---|---|

## OPTIONAL EQUIPMENT

- |  |  |  |
|--|--|--|
| <ul style="list-style-type: none"> <li>• Separated Electric power pack (110 kW)</li> <li>• Wide range of rotary heads</li> <li>• Power pack on crawler track or on skid</li> </ul> | <ul style="list-style-type: none"> <li>• Triplex pump for Foam</li> <li>• CFA kit</li> <li>• Top hammer kit</li> </ul> | <ul style="list-style-type: none"> <li>• Jet grouting kit</li> <li>• Integrated foam pump</li> </ul> |
|--|--|--|

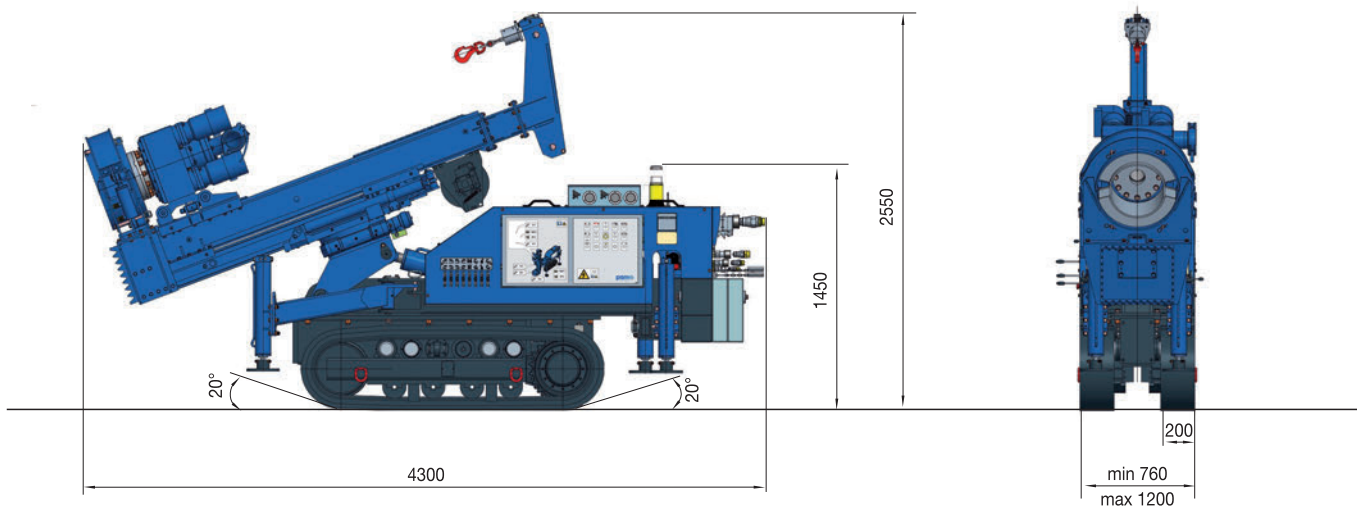
# SM-4 Microdrilling Rig

## TRANSPORT, DIMENSIONS AND WEIGHTS



### Power pack

<b>Length</b>	<b>3162 mm</b>	<b>124.5 in</b>
<b>Width</b>	<b>1180 mm</b>	<b>44.45 in</b>
<b>Height</b>	<b>2376 mm</b>	<b>93.54 in</b>
<b>Weight</b>	<b>3700 kg</b>	<b>8157 lb</b>



### Base machine

<b>Length</b>	<b>4300 mm</b>	<b>100.4 in</b>
<b>Width</b>	<b>760 mm</b>	<b>29.9 in</b>
<b>Height</b>	<b>2550 mm</b>	<b>78.7 in</b>
<b>Weight</b>	<b>6100 kg</b>	<b>13448 lb</b>

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