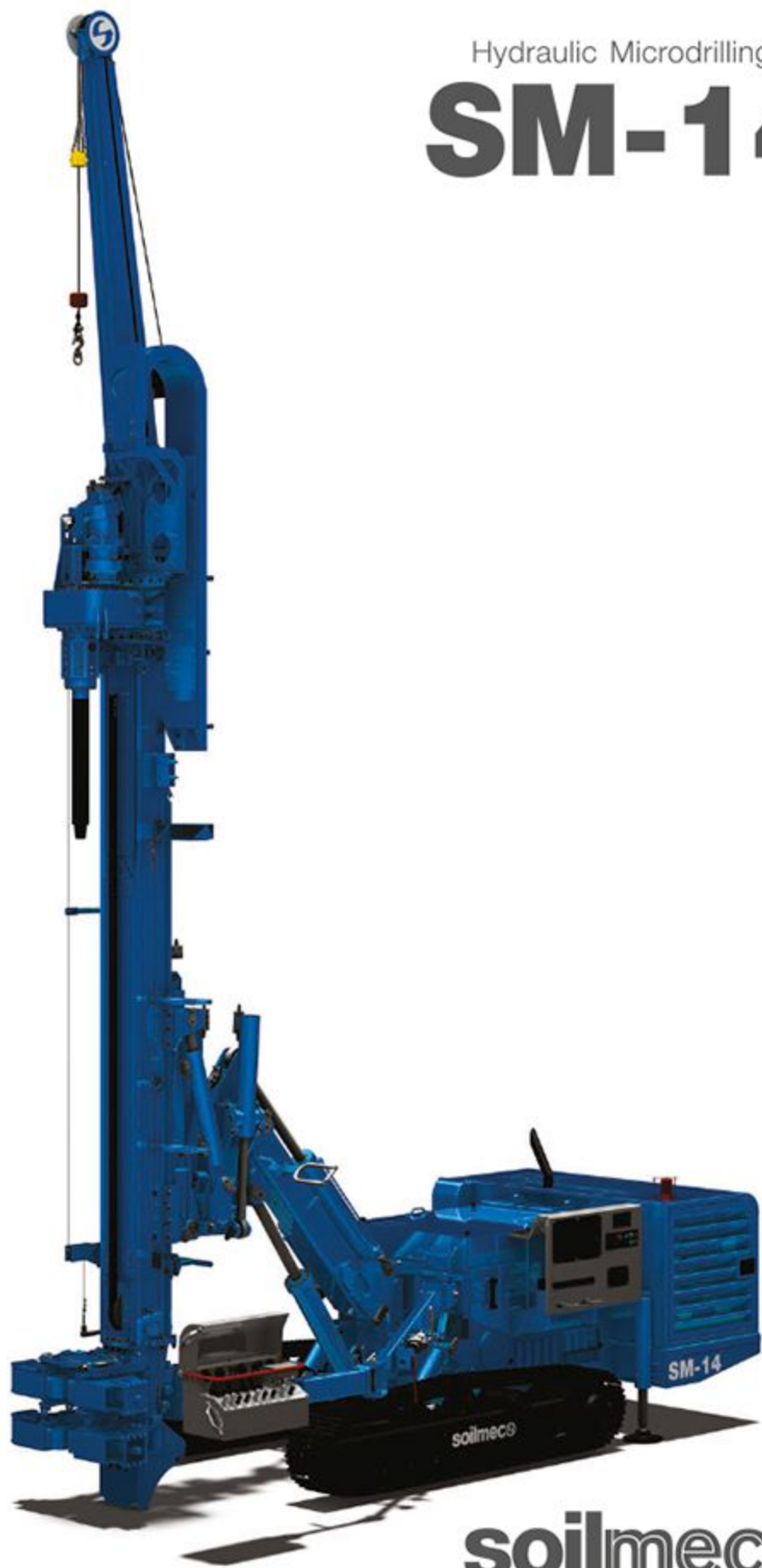


Hydraulic Microdrilling Rig

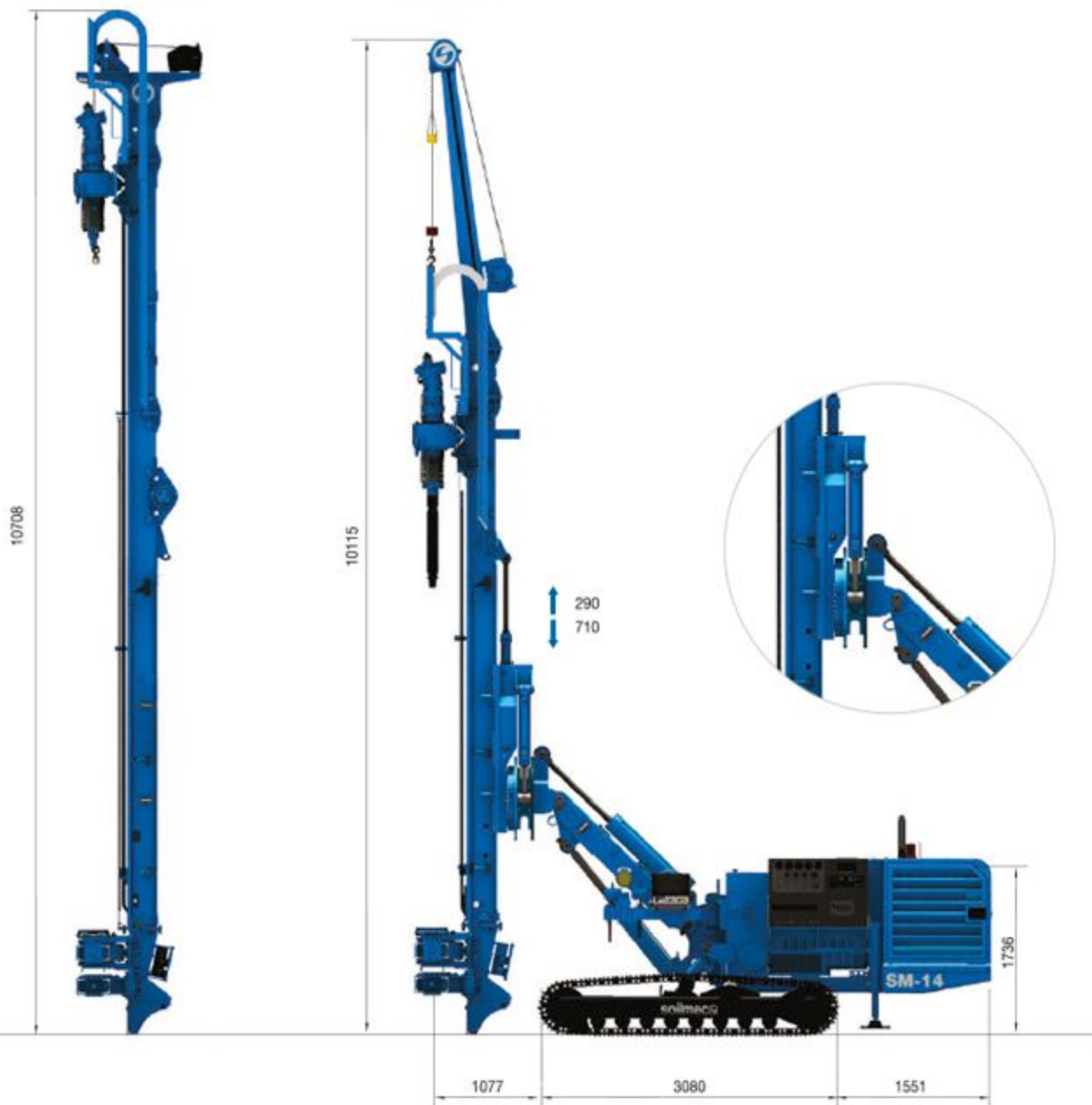
SM-14



soilmeco 
Drilling and Foundation Equipment

Stroke 7000 mm
by motoreducer

Stroke 4000 mm
by cylinder



| Hoist & Feed system | Cylinder | Cylinder | Motoreducer | Motoreducer |
|---------------------------------------|--------------|-------------------|----------------|-------------------|
| Feed stroke | 4000 mm | 157.5 in | 4350 - 7000 mm | 171.3 - 275.6 in |
| Rod length type (c/w one rotary head) | 3 m | 9.8 ft | 3 / 6 m | 9.8 / 19.7 ft |
| Maximum hoist pull/feed force | 89 / 45 kN | 20008 / 10116 lbf | 72 / 72 kN | 16186 / 16186 lbf |
| Maximum speed (fast/low operation) | 28 / 6 m/min | 92 / 20 ft/min | 29 / 5 m/min | 95 / 16 ft/min |

| Rotary head range | HD 1200V | HD 1200V | HT 1400V | HT 1400V | HTD 2500G | HTD 2500G |
|---------------------|-----------|-------------|-----------|--------------|-----------|--------------|
| Gear box type | Variable | Variable | Variable | Variable | 3 ratios | 3 ratios |
| Maximum torque | 1210 daNm | 8924 lbf*ft | 1360 daNm | 10031 lbf*ft | 2550 daNm | 18807 lbf*ft |
| Maximum rotation | 277 rpm | 277 rpm | 229 rpm | 229 rpm | 52 rpm | 52 rpm |
| Hollow shaft | 114 mm | 4.5 in | 114 mm | 4.5 in | - | - |
| Inner passage | 124 mm | 4.9 in | 124 mm | 4.9 in | 101,5 mm | 4 in |
| Maximum tools power | 70 kW | 94 HP | 65 kW | 87 HP | 70 kW | 94 HP |

| Undercarriage | | |
|--|---|---|
| - Track shoe width | 400 mm | 15.7 in |
| - Wheel base (centre idler to centre sprocket) | 2481 mm | 97.7 in |
| - Overall length | 3080 mm | 121.2 in |
| - Overall width (not extendable crawler) | 2300 mm | 90.6 in |
| - Travelling speed | 2,70 km/h | 1.68 mph |
| - Max climbing capacity (gradeability) | 60 % (30°) | 60 % (30°) |
| - Traction force | 123 kN | 27651 lbf |
| - Average ground pressure | 0,070 MPa | 10.2 psi |
| - Ground stabilizers | n° 2 fixed on rear | n° 2 fixed on rear |
| Diesel Engine | | |
| | CUMMINS QSB 4.5 | CUMMINS QSB 4.5 |
| - Emission certification | Stage IIIA - Tier 3 and Stage IIIB -Tier 4i | Stage IIIA - Tier 3 and Stage IIIB -Tier 4i |
| - Aspiration | turbocharged and charge air cooled | turbocharged and charge air cooled |
| - Power rating | 119 kW @ 2200 rpm | 159 HP @ 2200 rpm |
| - Fuel tank capacity | 200 l | 53 US gal |
| - Sound power level and sound pressure level | LwA 106 - LpA 79 dB(A) | LwA 106 - LpA 79 dB(A) |
| Electric motor (optional) | | |
| | SIEMENS 4 poles 50Hz 380 / 660 V | SIEMENS 4 poles 50Hz 380 / 660 V |
| - Power rating | 90 kW @ 1485 rpm | 121 HP @ 1485 rpm |
| Hydraulic system | | |
| - Main pumps: variable axial pumps | 156 + 156 l/min | 41.2 + 41.2 US gal/min |
| - Set pressure main pumps | 28 MPa | 4061 psi |
| - Auxiliary pumps: gear pumps | 20 l/min | 5.3 US gal/min |
| - Hydraulic oil tank capacity | 400 l | 106 US gal |
| Clamp & hydraulic joint breaker | | |
| - Nominal size | up to 50 - 415 mm | up to 2.0 - 16.3 in |
| - Maximum clamping force | 266 kN | 59798 lbf |
| - Maximum breaking torque | 5060 daNm | 37321 lbf·ft |
| - Pull-up extractor clamp force/stroke | 100 kN / 400 mm | 22481 lbf / 3.9 in |
| Service winch | | |
| | M5 - L2 - T5 | M5 - L2 - T5 |
| - Type | controlled descent | controlled descent |
| - 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 |
| - Rope capacity / Rope fitted | 46 / 40 m | 150.9 / 131.2 ft |
| Rod carousel | | |
| - N. of rods | 3 - 10 - 6 | 3 - 10 - 6 |
| - Rod diameter | 76 - 114 mm | 3.0 - 4.5 in |
| - Rod length | 3 m | 9.8 ft |
| - Maximum loaded rods weight | 200 / 600 kg | 441 / 1323 lb |

STANDARD EQUIPMENT

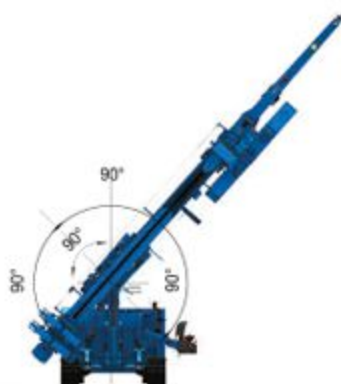
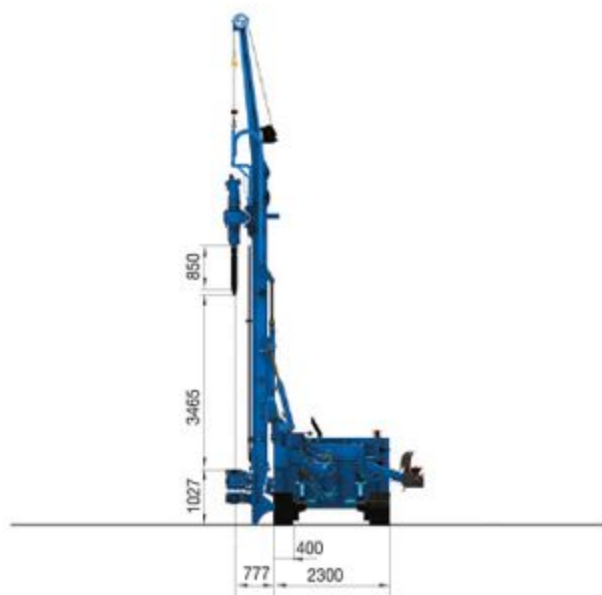
- Crawler undercarriage with $\pm 10^\circ$ tilting gauge
- Diesel Engine Cummins
- Rotary head HD1200V type complete with floating system
- Drill mast with cylinder crowd system for 4000 mm stroke
- Clamp and breaker 50-315 mm
- Drilling controls by means of assembled panel
- Counter side c/w 2 cylinders for 4x90° sectors
- Hydraulic control board for drilling
- Radio remote control for tracking and positioning
- Service winch with jib extension

OPTIONAL EQUIPMENT

- Electr. engine (90 kW / 121 BHP @ 1485 rpm)
- Modular mast for 4 m or 7 m stroke complete with motored reducer crowd system
- Wide range of rotary head up to 2500 daNm
- Rod carousel up to 10 rods
- Hydraulic lifting crane: 400 kg @ 6m
- Full radio remote control
- Foam pump
- Mud / water pump
- Clamp and breaker up to 60-415mm
- Slew ring on the mast
- Double rotary
- Jet grouting kit for T1/T1S and T2 type
- CFA kit for special technologies
- Top hammer
- Articulated new joint 90° (without pins removal)

SM-14 Hydraulic Microdrilling Rig

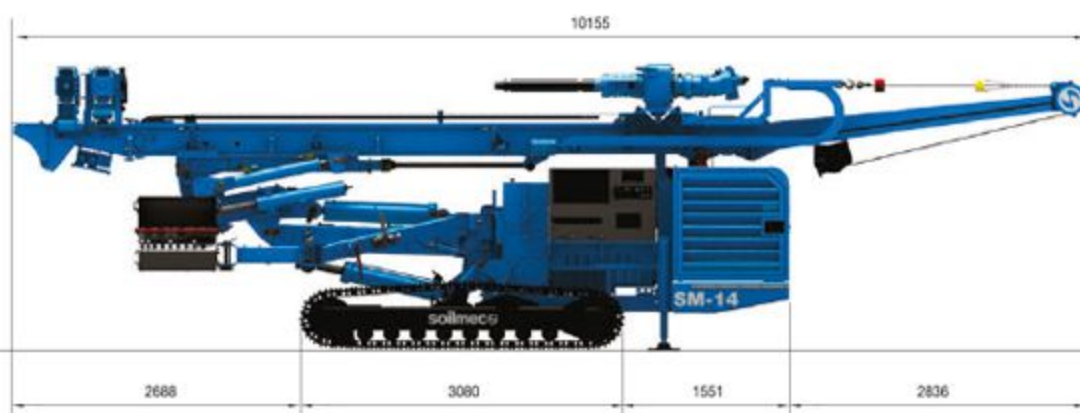
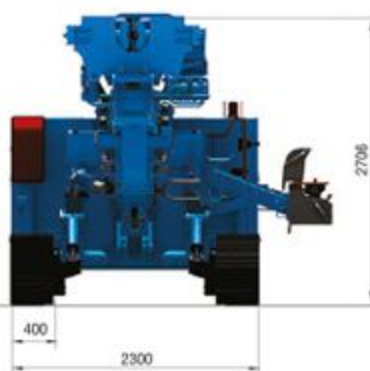
MOVIMENTATIONS





JET GROUTING VERSION

| | | |
|---|------------------|------------------|
| Operating weight in jetting version | 15000 / 15100 kg | 33069 / 33290 lb |
| Rod diameter | 90 - 114 mm | 3.5 - 4.5 in |
| Max treatment depth in a single passage | 18 m | 59 ft |
| Drillguide extensions | 4,6 + 10 m | 13.1 + 32.8 ft |



Transport

| | | |
|---|----------------|----------------|
| Transport width | 2300 mm | 91 in |
| Transport height | 2750 mm | 108.3 in |
| Transport length stroke 4000/ stroke 7000 | 10155/10424 mm | 400/410.4 in |
| Transport weight stroke 4000/ stroke 7000 | 14300/14600 kg | 31526/32187 lb |

* Containerizable

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