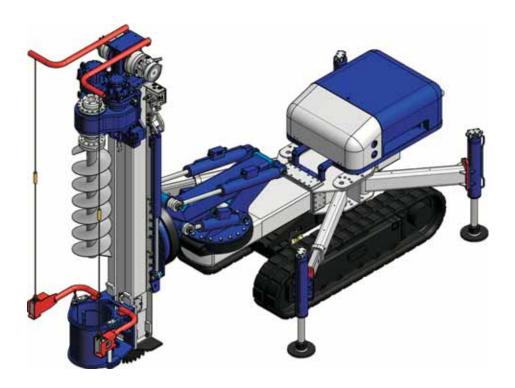
SM-3

Universal Jet Grouting Anchoring/Tie-Backs Soil Investigation Confined Pre Drilling CFA Tunneling





Hydraulic Microdrilling Rig





### Reliability

To date, SOILMEC have manufactured more than 1000 micropiling rigs work-ing all over the world.

The current SM-3 is the result of experience gained from previous models throughout the years.

### Safety

The SM-3 is designed in compliance with EN and ISO safety regulations to suit international market requirements.

- Manufactured, tested and certified, in order to secure full operator safety.
- The hydraulic control board, as well as remote control board, are designed for ease of operation ensuring driver comfort.
- The rig includes numerous safety devices preventing hazardous maneuvers.
- Wide driver's visibility ensures total operation safety.
- Easy and safe bonnet accessibility facilitates maintenance and inspection operations.
- Reduced environmental impact through low noise level and exhaust emissions; reduced fuel consumption

#### **Performance**

SM-3 is fitted with one of the most powerful engines of its machine category. The feed-hoist system is very efficient and is powered by a gear motor. A large range of high performance rotaries are available. Due to these features, the SM-3 is a multipurpose rig that suits a wide range of civil engineering work requirements.

- High standard components and advanced hydraulic circuit design have enabled increased rig performance, preserving its reliability, even under extreme conditions.
- Its smart and compact design allows fast rig assembly and ease of transport (even in a container).
- Minimum operating costs.

### Quality

The Soilmec manufacturing process is governed by the internal Quality Management System, which com-plies with ISO standards 9001:2000 and 14001:2004.

• Each micro drilling rig is subject to an extensive testing process prior to dispatch.

### **Running costs**

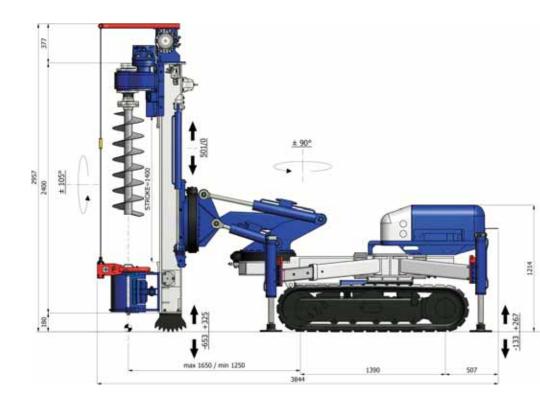
- The large, low speed rated Diesel engine, ensures limited fuel consumption and a long life span, offering substantial power availability to suit various drilling technologies.
- Low maintenance requirements due to the use of high quality components.
- Manufacturer constant support given through the SOILMEC after sales service. The fast responding reliable customer care, together with efficient spare parts delivery service, secure the continuous operation of the rig.

### The Soilmec advantage

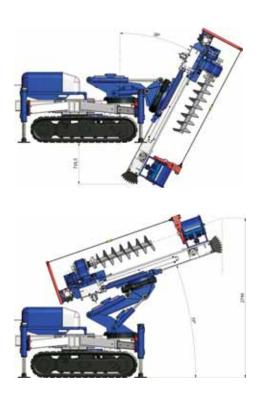
A real multi-purpose machine designed to offer the best drilling solution.

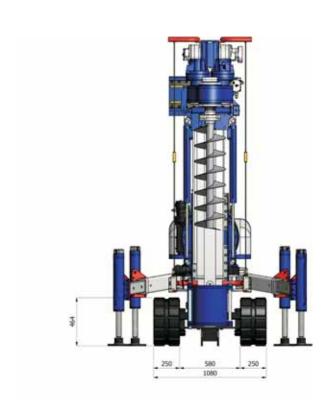
- Long life expectancy with a high residual value.
- Best price/performance ratio.
- Built with customer in mind.

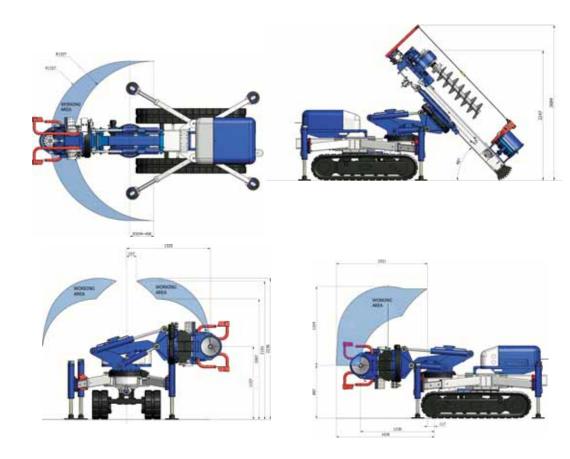
# **APPLICATIONS**



# **MOVIMENTATIONS**







### **TECHNICAL DATA SHEET**

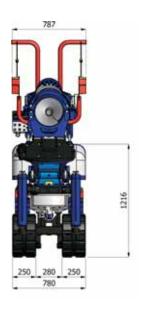
Separated electrical Engine			
- Engine make and model		ABB/Siemens	ABB/Siemens
- Diesel engine power rating		75 kW @ 1450 rpm	101 HP @ 1450 rpm
- Sound power level & Sound pre	essure level	LwA 105 - LwA 74 dB(A)	LwA 105 - LwA 74 dB(A)
Hydraulic system			
- Main pumps: variable axial pum	nps	290 l/min	77 US gal
- Set pressure main pumps		26 MPa	3771 psi
- Auxillary pumps: gear pumps		76 + 22 l/min	6 US gal
- Hydraulic oil tank capacity		320 I	85 US gal
Undercarriage main body			
- Type		fixed gauge	fixed gauge
- Track shoe width		250 mm	10 in
- Wheel base (centre idle to centre sprocket)		1390 mm	55 in
- Overall length		1840 mm	72 in
- Overall width (ext./retr.)		1080 / 780 mm	43 / 31 in
- Travelling speed		3,3 km/h	2.1 mph
- Ground stabilizer	n° 2 fixed or	n front + n° 2 fixed on rear	n° 2 fixed on front + n° 2 fixed on rear
Operating weight		range: 3500 - 3600 kg	7716 - 7937 lb
Hoist & Feed system			
- Feed type		two gear motors	two gear motors
- Feed stroke		range: 1400 - 2400 mm	55 - 94 in
- Max hoist pull		40 kN	8992 lbf
- Max feed force		40 kN	8992 lbf
- Max speed (fast/low operation)		38 / 18 m/min	125 / 59 ft/min
Service winch (optional)			
- 1st layer line pull		6,5 / 6 kN	1461 / 1349 lbf
- 1st layer nominal rope speed		42 m/min	138 ft/min
- Rope diameter		6 mm	0.24 in
Clamp & guide			
- Nominal size		300 mm	12 in
- Maximum clamping force		127 kN	28551 lbf
Special rotary head			
- Max torque		1400 daNm @ 45 rpm	10326 lbf*ft @ 45 rpm
- Max speed		100 rpm	434 rpm

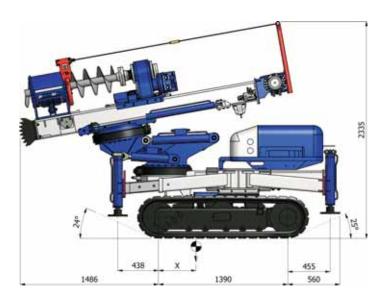
### Standard equipment

- 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

#### Optional equipment

- Separated Diesel power pack (85 kW)
- Service winch
- Double slewing ring
- Wide range of feed stroke
- Wide range of rotary heads
- Power pack on skid or wheel or truck
- Triplex pump for Foam
- CFA kit
- Top hammer kit





Transport width	780 mm	31 in
Transport height	2000 mm	79 in
Transport length	2900 mm	114 in
Transport weight	3500 kg (+1500 kg)	7716 lb (3307 lb)

SOILMEC distributes machinery and structures all over the world, supported by SOILMEC subsidiary companies and dealers.

The complete Soilmec network list is available on the webpage www.soilmec.it

