

# SM-405/5-8

HYDRAULIC DRILLING RIG



# SM-405/5-8

## HYDRAULIC DRILLING RIG

The hydraulic drilling rig model SM-405/5-8 has been developed on the experiences gained from SM-405. The rig is meant to be used in a specific field like tie-back, deep drilling and jet-grouting consolidation.

The main features of the SM-405/5-8 are:

- Mast. The mast has an overall length of 11085 mm and it is allowed rotary stroke of 8 m.
- Hoist and feed system. Sliding of rotary is driven through a rope driven by winch system for 90 kN hoist/feed force.
- Boom/mast connection. The swinging boom and the mast are connected by a slide, a counterslide and a turntable to assure better stiffness and stability during drilling.

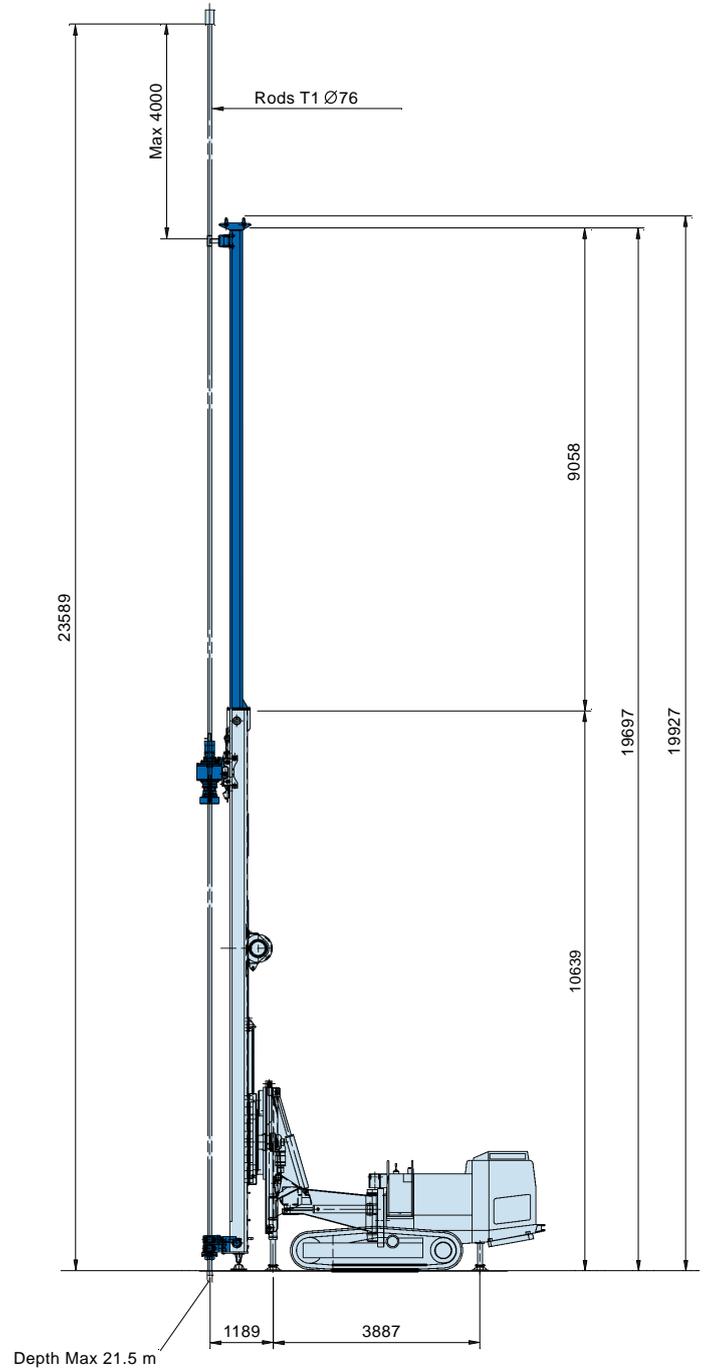
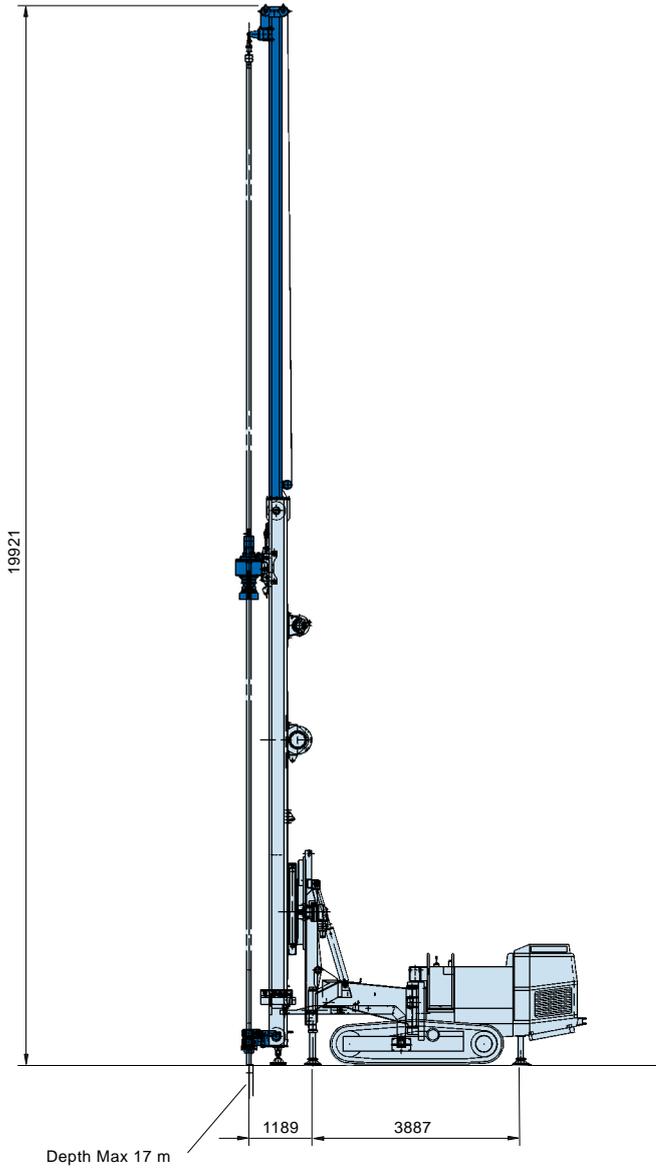
Deep consideration has to be given to Jet-Grouting version: The overall length of the mast including Jet-Grouting extension is nearly 20 m and it is possible to execute treatment with rods exceeding the mast extension of few meter.

Diesel engine		Cummins QSB 5.9-30-TAA	
Rated power	kW	129 @ 2200 rpm	
Installed power	kW	140 @ 1900 rpm	
Crawler undercarriage			
Lenght	mm	3225	
Width	mm	2450	
Pads width	mm	500	
Propel speed	km/h	2.5	
Average ground pressure	MPa	0.08	
Max traction force	kN	132	
Rotary head			
Max torque (31,5 MPa)	daN.m	1695	1088
Max nominal torque (28 MPa)	daN.m	1507 @ 38 rpm	967 @ 60 rpm
Speed max	rpm	546	357
Feed stroke	mm	8000	8000
Max feed force	kN	90	90
Max hoist pull	kN	90	90
Max operating speed	m/min	36	36
Service winch			
Max line pull (on 1 <sup>st</sup> layer)	kN	39	
Max rope speed (on 3 <sup>rd</sup> layer)	m/min	69	
Rope diameter	mm	12	
Rope capacity	m	63	
Clamp & hydraulic joint breaker			
Nominal size	mm	60 - 225	60 - 315
Max clamping force (setting)	kN	159	159
Max breaking torque (setting)	daN.m	3830	4980
Mass			
Standard configuration	kg	21000	

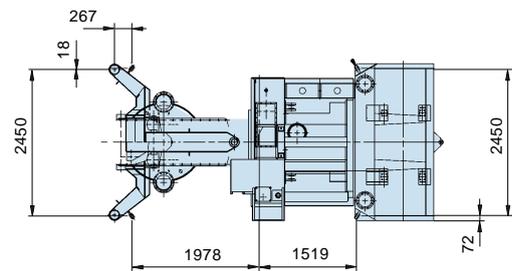
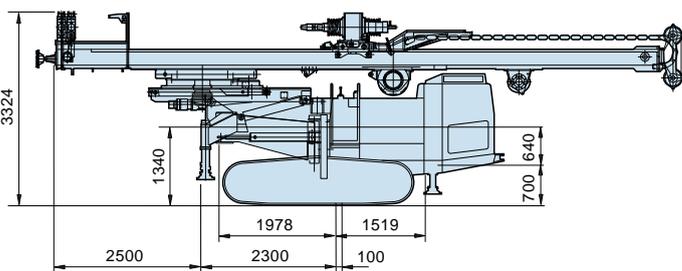
Nominal calculated technical rating.

# SM-405/5-8

## HYDRAULIC DRILLING RIG



## Transport Condition







SOILMEC distributes machinery and structures all over the world, supported by SOILMEC subsidiary companies and representative offices as:

**SOILMEC LTD** - U.K.

**SOILMEC MISR S.A.E. Co.** - Egypt

**SOILMEC (H.K.) Limited** - Hong Kong

**SOILMEC JAPAN CO LTD** - Japan

**SOILMEC S.P.A. - Beijing Repr. Office** - P.R. China

**SOILMEC FAR EAST PTE.LTD** - Singapore

**SOILMEC EMIRATES** - U.A.E.

**SOILMEC GULF** - U.A.E.

## CERTIFIED QUALITY SYSTEM

In 1990 Soilmec was awarded with the certification of its Quality System complying with ISO 9001/UNI 29001 standards.



**SOILMEC S.p.A.**

**Drilling and Foundation Equipment**

5819, via Dismano

47023 Cesena (FC) - Italy

tel. +39-0547-319111

fax +39-0547-318548

[http:// www.soilmec.it](http://www.soilmec.it)

e-mail: [soilmec@soilmec.it](mailto:soilmec@soilmec.it)