

SR-20

HYDRAULIC ROTARY RIG



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HYDRAULIC DRILLING RIG

A new model

Several jobsites require equipment suitable to have short rig up time and easy to operate in narrow locations.

SOILMEC meets these requirements marketing the new SR-20, a solid machine completely self-erecting with high performances and minimum operating costs.

The main characteristics of SR-20 are the following:

- New powerful diesel engine: 156 HP.
- New powerful hydraulic pumps and new Load Sensing system.
- Higher torque on rotary table: 100 kNm.
- Higher drilling speed: 43 rpm.
- DRILLING MATE SYSTEM on 10" touch screen for monitoring and control of the operating parameters. Memo-block for acquisition of data and software for processing them on PC station. On request data transfer via GSM/GPRS with "calling on trouble" option.
- Self-erecting rig; Kelly bar does not need to be removed.
- No special road permits required.

Large diameter bored pile

Max pile depth	m	32 (with 4x9 kelly bar)
	m	40 (with 5x9 kelly bar)
Max nominal torque	kNm	100
Max drilling speed	rpm	43
Spin off speed	rpm	147
Main winch nominal line pull	kN	103
Auxiliary winch nominal line pull	kN	41
Engine	type	CUMMINS QSB5.9-30-T
Power	BHP	116 (156) @ 2200 rpm
Crowd system	kN	124 / 68
Operating weight	tons	27
Transport weight (c/w kelly bar)	tons	26

The nominal values are referred to 100% total efficiency.



DRILLING MATE SYSTEM

		line pull 2 nd layer	line pull 4 th layer
Max pile diameter	mm	750	750
Max pile depth (w/o auger cleaner)	m	10.5	15.3
Max nominal extraction force	kN	140	280
Transport weight	tons	24.3	26

Friction kelly bar – Ø 324 mm

elements no	length m	depth m	weight tonn	H height m
4x	8,0	28,5	2,7	4,3
4x	9,0	32,5	3,0	3,3

Mechanical locking kelly bar – Ø 324 mm

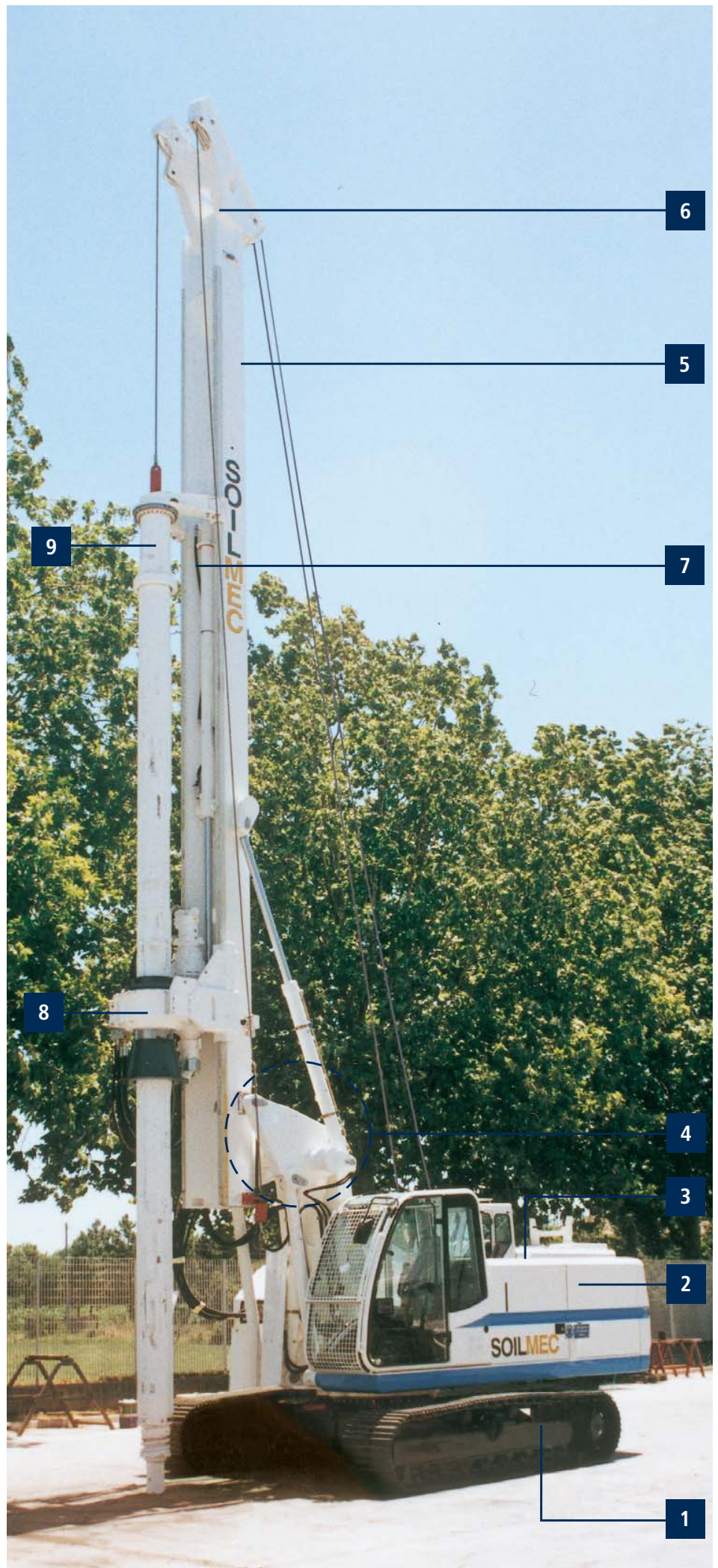
elements no	length m	depth m	weight tonn	H height m
4x	6,5	21,0	2,3	4,7
4x	9,0	32,5	3,0	3,3

Standard dimension of tool connection is 130x130 mm / H= kelly stub height from ground level

- 1 - **Undercarriage** class FL6 with expandable tracks from 2,5 to 3,4 m. by means of hydraulic cylinders.
- 2 - **Turret** c/w CUMMINS diesel engine and soundproofed canopy, mounted on a 360 degrees slew ring.
- 3 - **Winch assembly.**
- 4 - **Parallelogram system** allowing working radius adjustment always maintaining the mast in vertical position. Complete with electronic device for automatic stop.
- 5 - **Self-erecting mast** which can withstand the max torque over the whole length. Is composed by main mast plus separate sheave cathead kelly type or CFA type.
- 6 - **Cathead.**
- 7 - **Crowd system** by 3 m stroke hydraulic cylinder.
- 8 - **100 kNm torque rotary table** c/w two hydraulic motors and reducers.
- 9 - **Telescopic kelly bar** with guide. Available with friction or mechanical locking type.



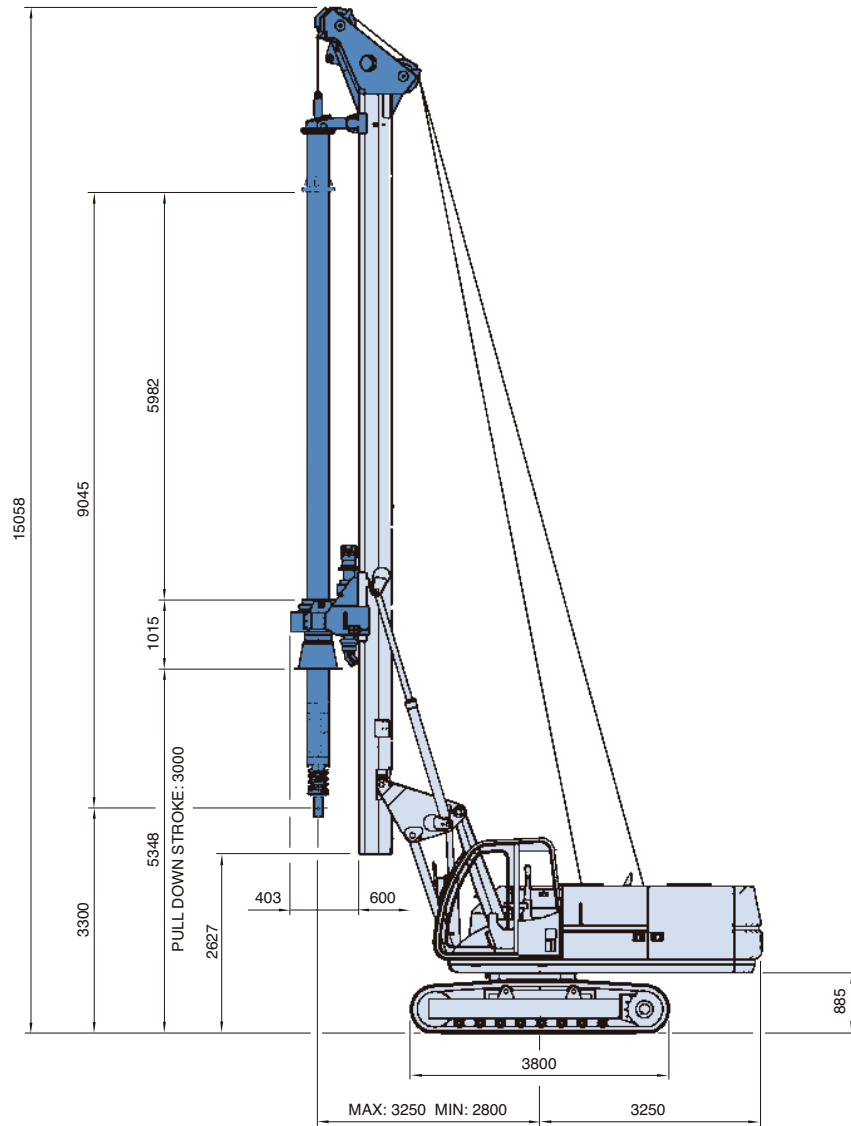
Touch screen monitor



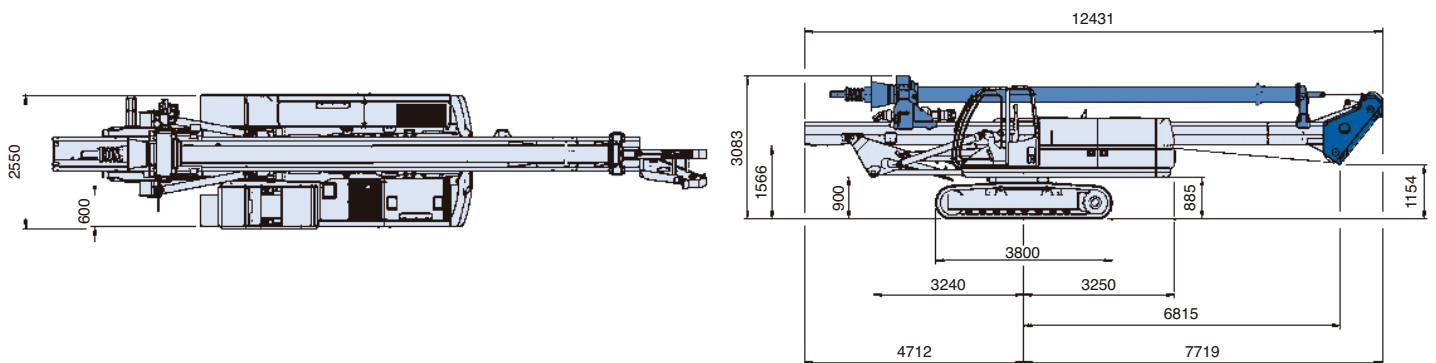
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LARGE DIAMETER BORED PILE

Working Condition



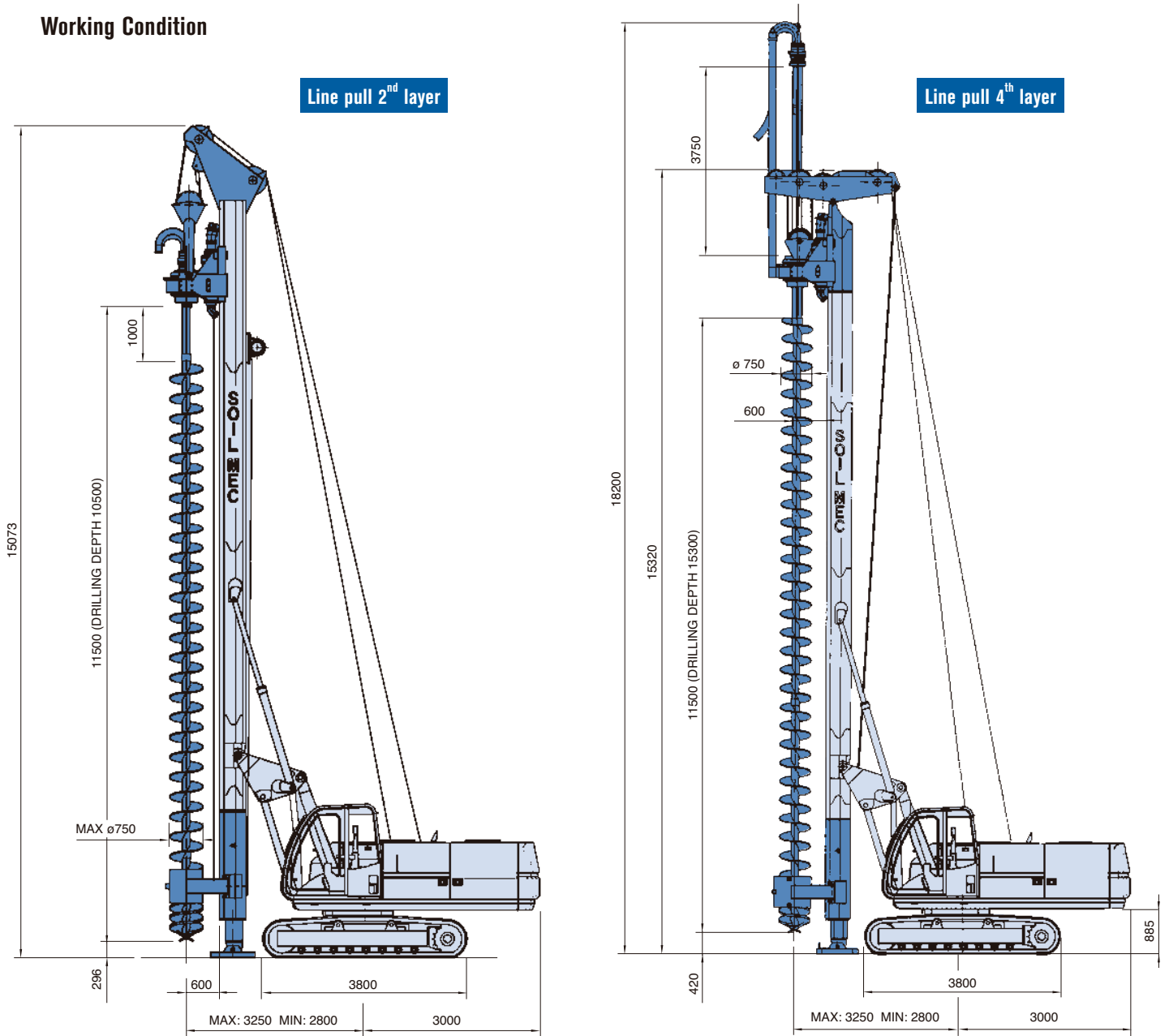
Transport Condition



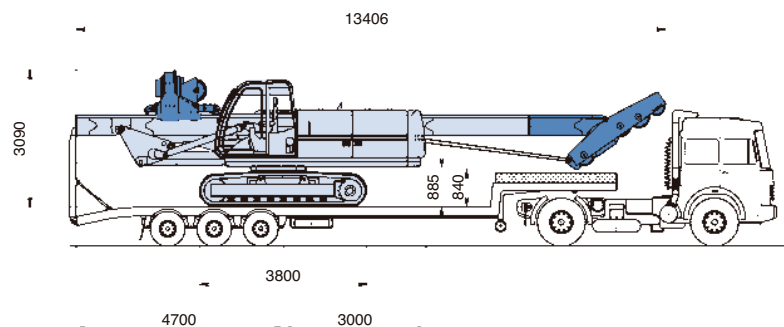
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CONTINUOUS FLIGHT AUGER

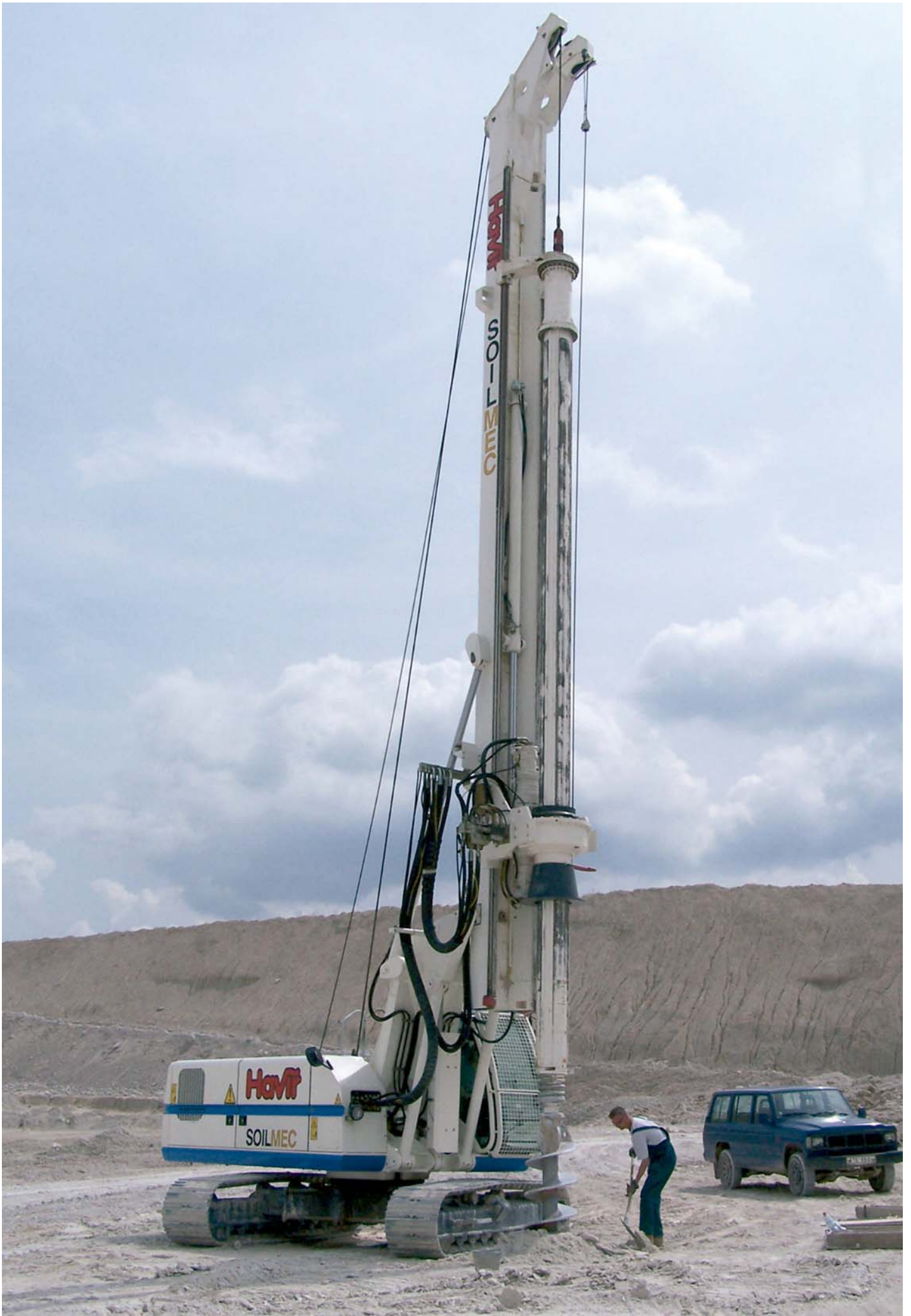
Working Condition



Transport Condition (line pull 4th layer)







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CERTIFIED QUALITY SYSTEM

In 1990 Soilmec was awarded with the certification of its Quality System complying with ISO 9001:2000 and ISO 14001:2004 standards.



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

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