

SF-120

HYDRAULIC CFA/CSP ROTARY RIG



soilmeco 
Drilling and Foundation Equipment

SF-120

HYDRAULIC ROTARY RIG

Self-erecting drilling rig **dedicated to large diameter CFA and CSP pile drilling.**

- A new rig to increase the production capacity in CFA classical technology by drastically reducing the time needed to rig up and rig down even for large piles over 1m diameter.
- A new rig to replace D.W. by cased secant piles executed with high production rate with secured vertical alignment through casing use.

Once more, after CM-48, SF-50 and SF-70, with the introduction of **the new SF-120**, SOILMEC extends the present limits of CFA application allowing the use of self-erecting rigs to very large diameter drilling. Infact the SF-120 combines huge drilling capacities, easy transport and self-erection. No service crane is necessary to mount the machine.

Even for big secant pile diameters as 1000 mm, the new rig is able to double or triple the daily production reached by conventional equipment.

Continuous Flight Auger (CFA)

Drilling Performances

Max pile diameter	mm	1200
Max pile depth	m	31
Max pile depth (w. roller type auger cleaner)	m	29
Max diameter (w. roller type auger cleaner)	mm	1200
Extraction force	kN	1160

Cased Secant Pile (CSP)

Engine

Model	DEUTZ TCD2015 V08			
Max power	kW (HP)	500 (670)		

Hydraulic pumps

Main pumps and service pumps	lt/min	2X300	90	44	16
Max working pressure	MPa	30	28	-	-

Rotary Table

Max torque	kNm	300
Maximum drilling speed	rpm	24,2

Rotary table for casing drilling

Max torque	kNm	440
Max drilling speed	rpm	6

Main winch

Model	SW290	
1st layer nominal line pull	kN	290
1st layer nominal rope speed	m/min	62
Rope diameter	mm	30

Service winch

Model	SW140	
1st layer nominal line pull	kN	140
1st layer nominal rope speed	m/min	62
Rope diameter	mm	26

Undercarriage

Overall length	mm	6300
Track shoe width	mm	900
Overall width (opened tracks)	mm	5000
Overall width (closed tracks)	mm	3400

Weights & Dimensions

Transport width	mm	3400
Transport height	mm	3890
Operating weight	mm	105
Transport weight	mm	76

- 1 - **Undercarriage** with expandable and removable tracks
- 2 - **Self-lifting** counterweight
- 3 - **Rotating** turret powered by DEUTZ TCD 2015 V08 diesel engine complete with soundproof canopy and power pack
- 4 - **Winch** assembly
- 5 - **Self-erecting mast** which is designed to allow the max. torque along its complete length
- 6 - **Continuous Flight Auger**
- 7 - **Sheave cathead**
- 8 - **Rotary head**
- 9 - **Auger extension**
- 10 - **Openable** lower guide
- 11 - **Foot element**
- 12 - **Rotary casing driver**



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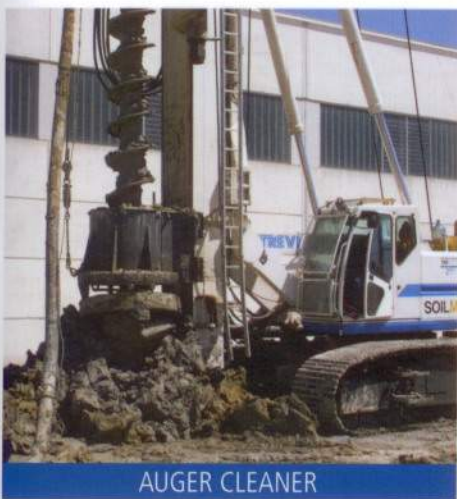
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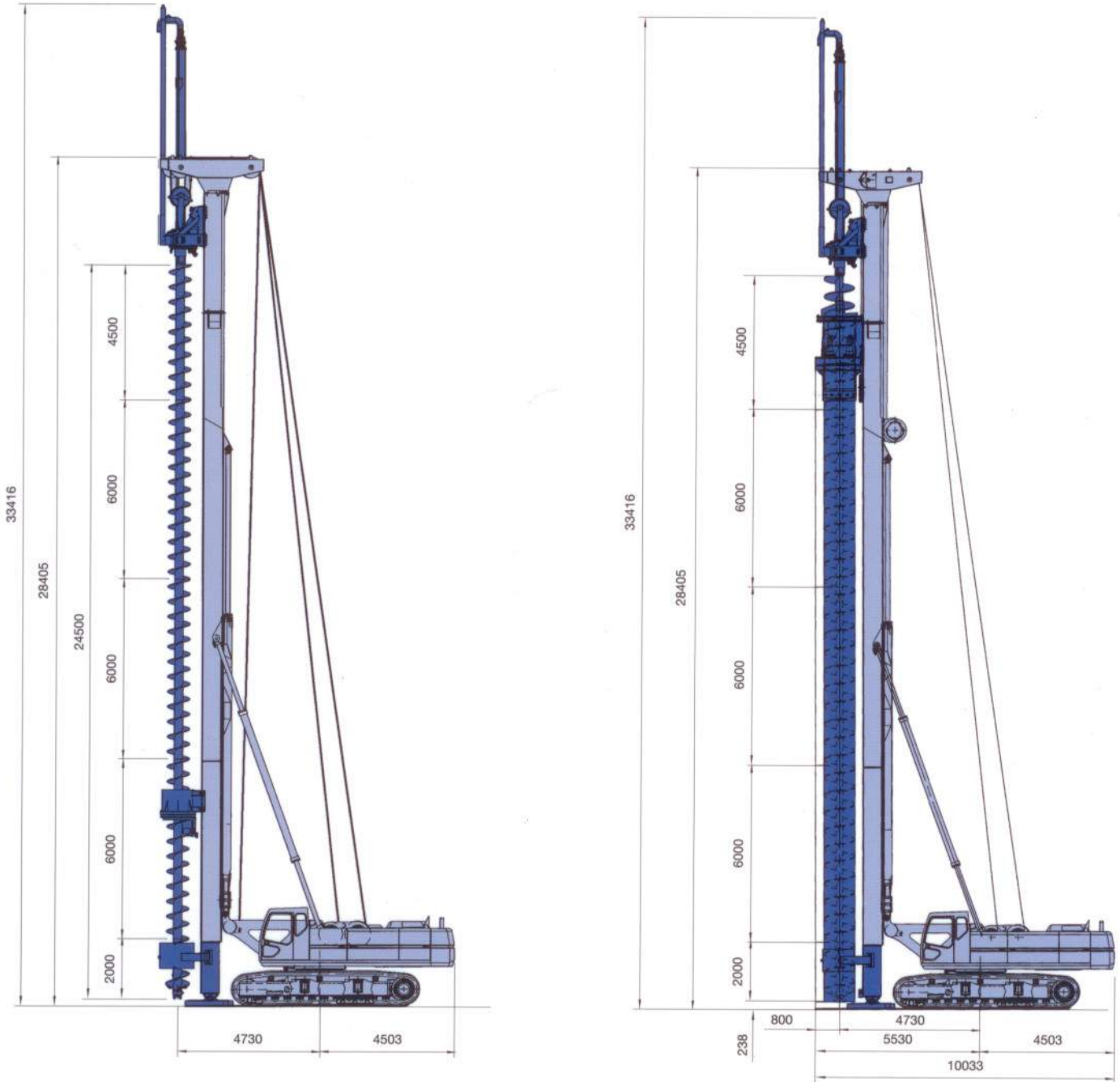


AUGER CLEANER

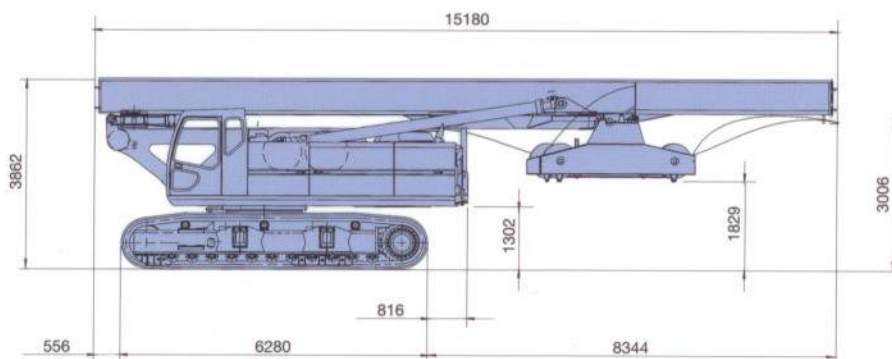
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Working Condition



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

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SOILMEC DEUTSCHLAND GmbH - Deutschland

SOILMEC NORTH AMERICA - Boston - USA

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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