



# **SF-50**

### HYDRAULIC CFA ROTARY RIG

#### A new model

The **SF-50** drilling rig, is the evolution of the already existing equipment dedicated to Continuous Flight Auger drilling technique.

The upper structure of the SF-50 is mounted on SOILMEC base carrier and has been designed to perform:

- C.F.A. bored piles
- Down-The-Hole-Hammer (D.T.H.)

Its outstanding features are:

- completely self-erecting
- up-to-date instrumentation
- high reliability and safety in the job-site
- quick installation
- extendable tracks from 2.5 to 4.0 m
- easy manoeuvrability
- low transport costs
- high production
- reduced transport dimensions

| Drilling Performances            |    |           |
|----------------------------------|----|-----------|
| Max pile diameter                | mm | 900       |
| Max pile depth                   | m  | 25 (6+19) |
| Max pile depth (w/auger cleaner) | m  | 23.5      |
| Max extracion force              | kN | 510       |
| Pull-down winch force (optional) | kN | 40        |
| Auger cleaner max diameter       | mm | 900       |

| Diesel engine  |            |                          |
|--|------------|--------------------------|
| Make / Model   |            | CUMMINS QSB 6.7 Tier III |
| Rated Power  | kW (HP)    | 165 (220) @ 2200 rpm     |
|  | KVV (III ) | 103 (220) @ 2200 Ipili   |
| Hydraulic pumps  |            |                          |
| Main pump  | lt/min     | 320                      |
| Max working pressure   | MPa        | 30                       |
| Main winch   |            | Controlled Descent       |
| 1st layer nominal line pull  | kN         | 102                      |
| 1st layer nominal rope speed   | m/min      | 67                       |
| Rope diameter  | mm         | 19                       |
| Auxiliary winch  |            | Controlled Descent       |
| 1st layer nominal line pull  | kN         | 41                       |
| 1st layer nominal rope speed   | m/min      | 66                       |
| Rope diameter  | mm         | 16                       |
|  |            |                          |
| Rotary table   |            |                          |
| Rotary table Nominal torque  | kNm        | 90 @ 11,2 rpm            |
|  | kNm<br>rpm | 90 @ 11,2 rpm<br>41      |
| Nominal torque   |            |                          |
| Nominal torque<br>Maximum drilling speed                                   |            |                          |
| Nominal torque Maximum drilling speed Weight and dimension                 | rpm        | 41                       |
| Nominal torque Maximum drilling speed Weight and dimension Transport width | rpm        | 2550                     |

mm

mm

mm

mm

MPa

4660

700

4000

2500

0,07

### **Options features:**

- 360° turret rotation
- track shoes 900 mm wide
- pull-down winch (40 kN)
- two-axle electronic inclinometer in the cab
- electronic system to control the extraction pull; it is provided with visual and sound alarm in case of overloading
- ladder on mast
- 4" or 5" concrete pipework on the mast, supplied with insulation, upon request, for tropical climates
- auger cleaner (Ø 900 mm max.)
- VTH-1 vibrator power take off for cage driving.

#### Additional std. features

Overall width (extended)

Overall width (retracted)

Undercarriage

**Overall lenght** 

Track shoe width

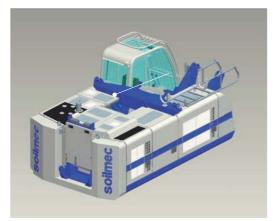
**Ground pressure** 

Folding and self-erecting mast

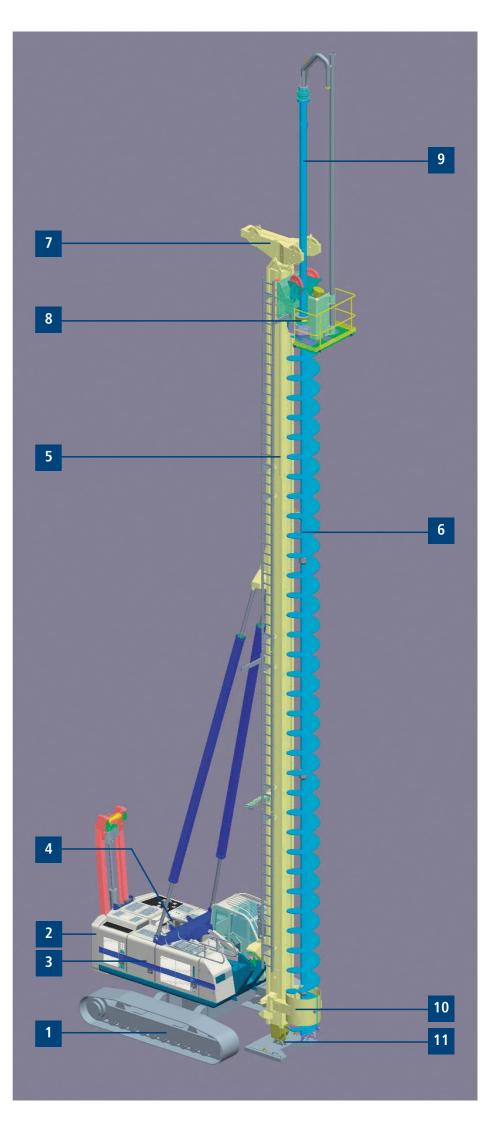
Grids for front cab protection

Air conditioning or heating system for the cab

- **1 Undercarriage** with extendable tracks.
- **2 Self lifting** counterweight.
- **3 Turret** of 360° slew rig c/w diesel engine soundproof canopy and power pack
- 4 Winch assembly
- **5 Self erecting mast** on which can be applied the max torque over the whole mast length
- 6 Continuous Flight Auger
- 7 Sheave cathead
- 8 Rotary head
- 9 Auger extension
- 10 Openable lower guide
- 11 Foot element



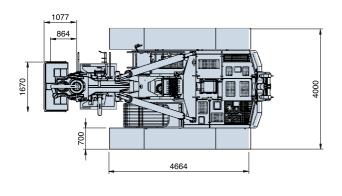


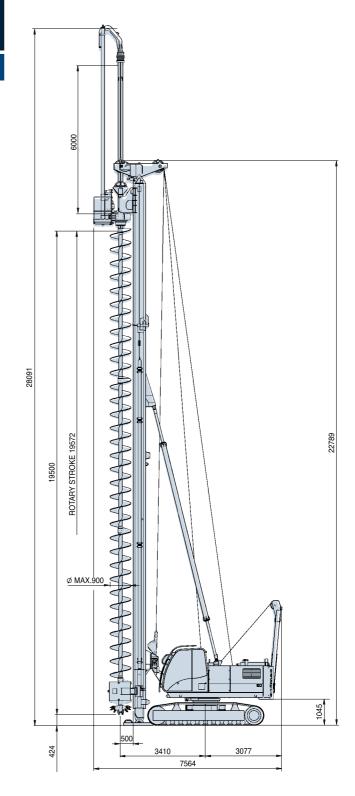


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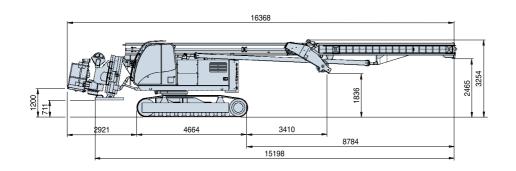
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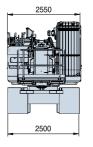
## **Working Condition**

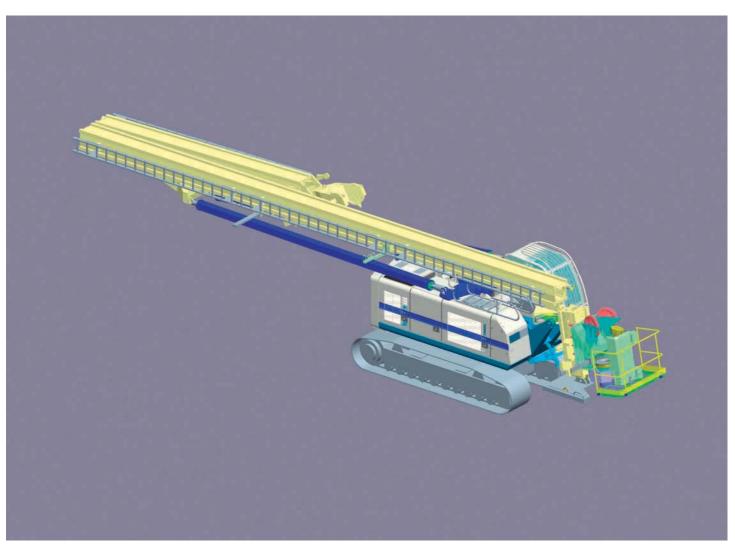


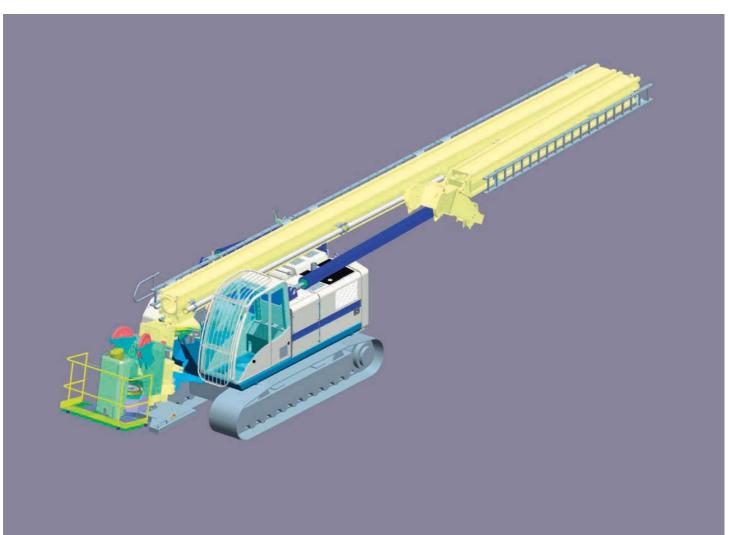


## Transport Condition









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

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SOILMEC FRANCE S.A.S. - France

SOILMEC INDIA - India

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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.





SOILMEC S.p.A.

Drilling and Foundation Equipment

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