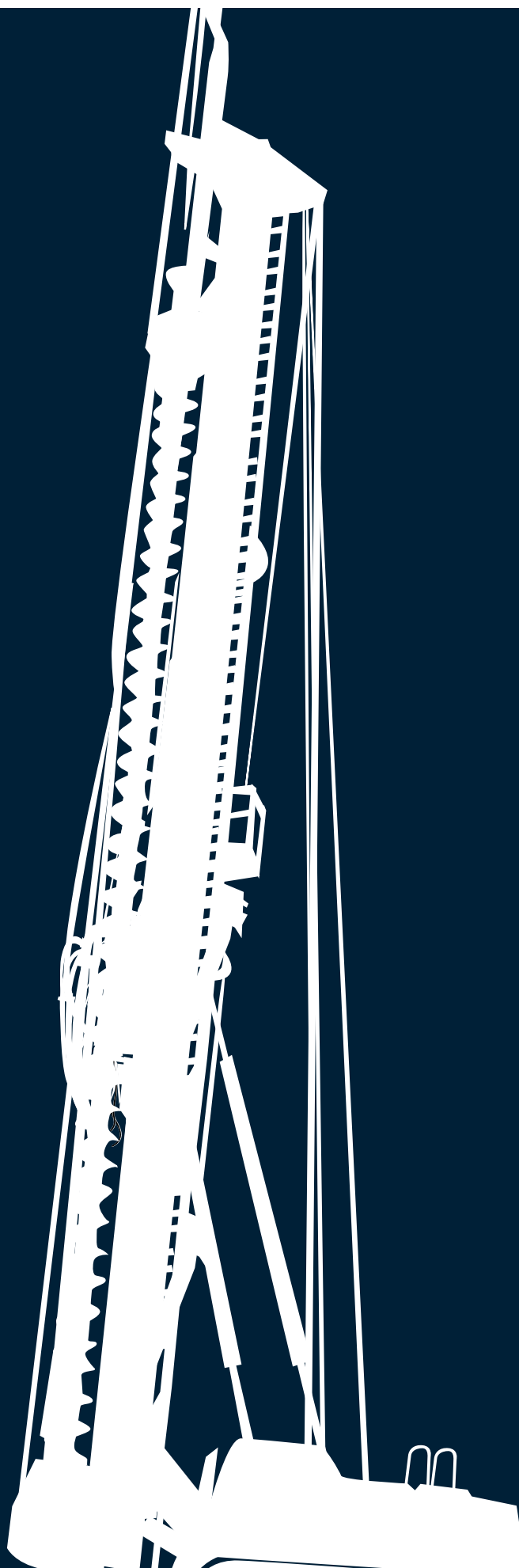


# SF-50

HYDRAULIC CFA ROTARY RIG



# 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 extraction 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 |

### Hydraulic pumps

|                      |        |     |
|----------------------|--------|-----|
| Main pump            | lt/min | 320 |
| Max working pressure | MPa    | 30  |

### Main winch

### Controlled Descent

|  |       |     |
|--|-------|-----|
| 1 <sup>st</sup> layer nominal line pull  | kN    | 102 |
| 1 <sup>st</sup> layer nominal rope speed | m/min | 67  |
| Rope diameter                            | mm    | 19  |

### Auxiliary winch

### Controlled Descent

|  |       |    |
|--|-------|----|
| 1 <sup>st</sup> layer nominal line pull  | kN    | 41 |
| 1 <sup>st</sup> layer nominal rope speed | m/min | 66 |
| Rope diameter                            | mm    | 16 |

### Rotary table

|                        |     |               |
|------------------------|-----|---------------|
| Nominal torque         | kNm | 90 @ 11,2 rpm |
| Maximum drilling speed | rpm | 41            |

### Weight and dimension

|                  |     |      |
|------------------|-----|------|
| Transport width  | mm  | 2550 |
| Transport height | mm  | 3255 |
| Operating weight | ton | 39   |
| Transport weight | ton | 32,5 |

### Undercarriage

|                           |     |      |
|---------------------------|-----|------|
| Overall length            | mm  | 4660 |
| Track shoe width          | mm  | 700  |
| Overall width (extended)  | mm  | 4000 |
| Overall width (retracted) | mm  | 2500 |
| Ground pressure           | MPa | 0,07 |

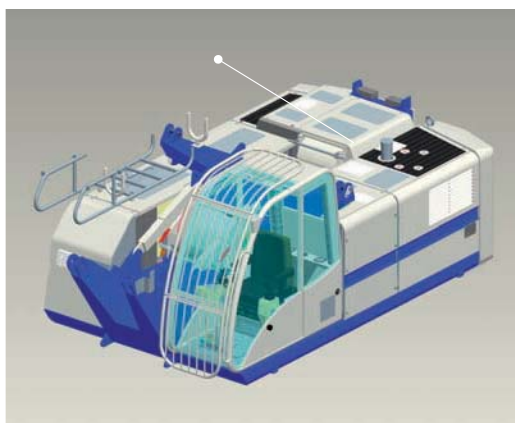
### Additional std. features

|  |
|--|
| Folding and self-erecting mast                 |
| Grids for front cab protection                 |
| Air conditioning or heating system for the cab |

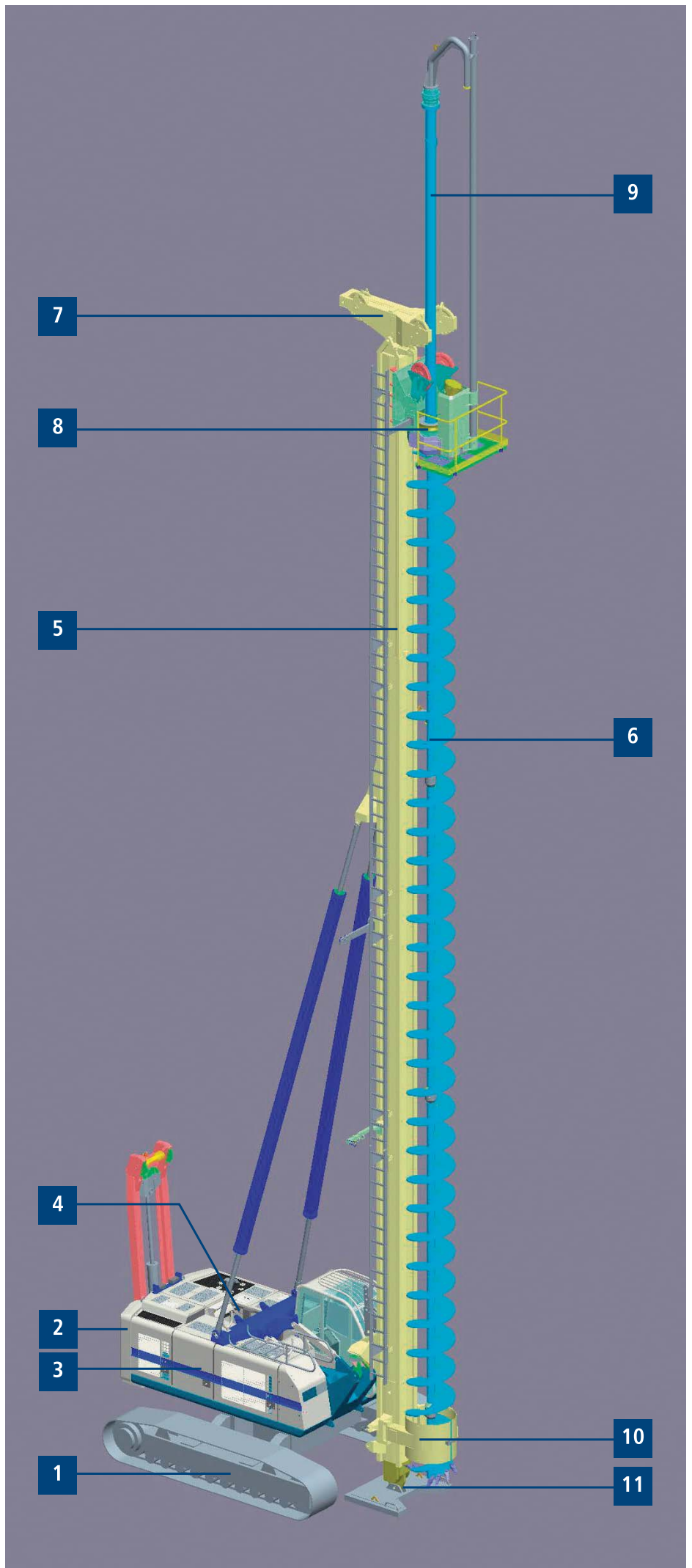
### Options features:

- 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.

- 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**



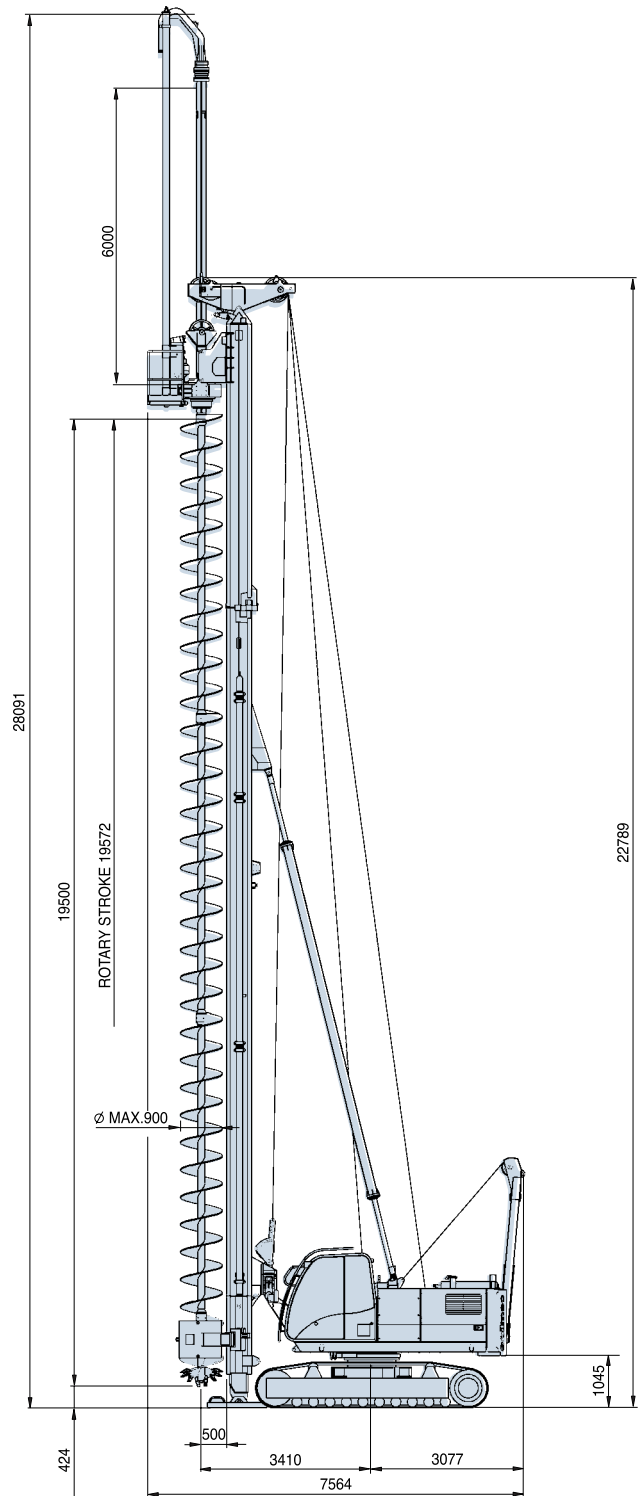
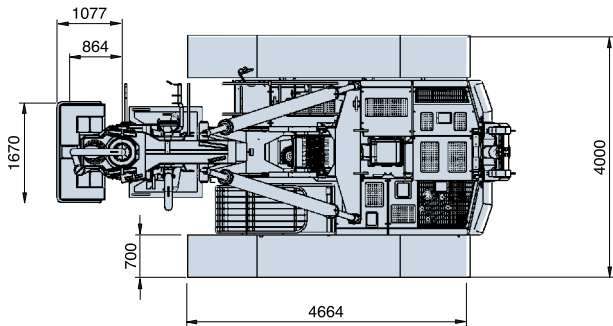
**NEW TURRET SOILMEC Details**



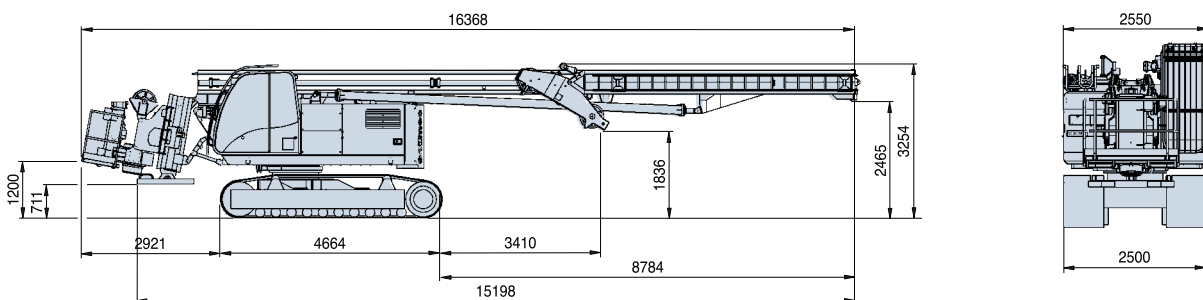
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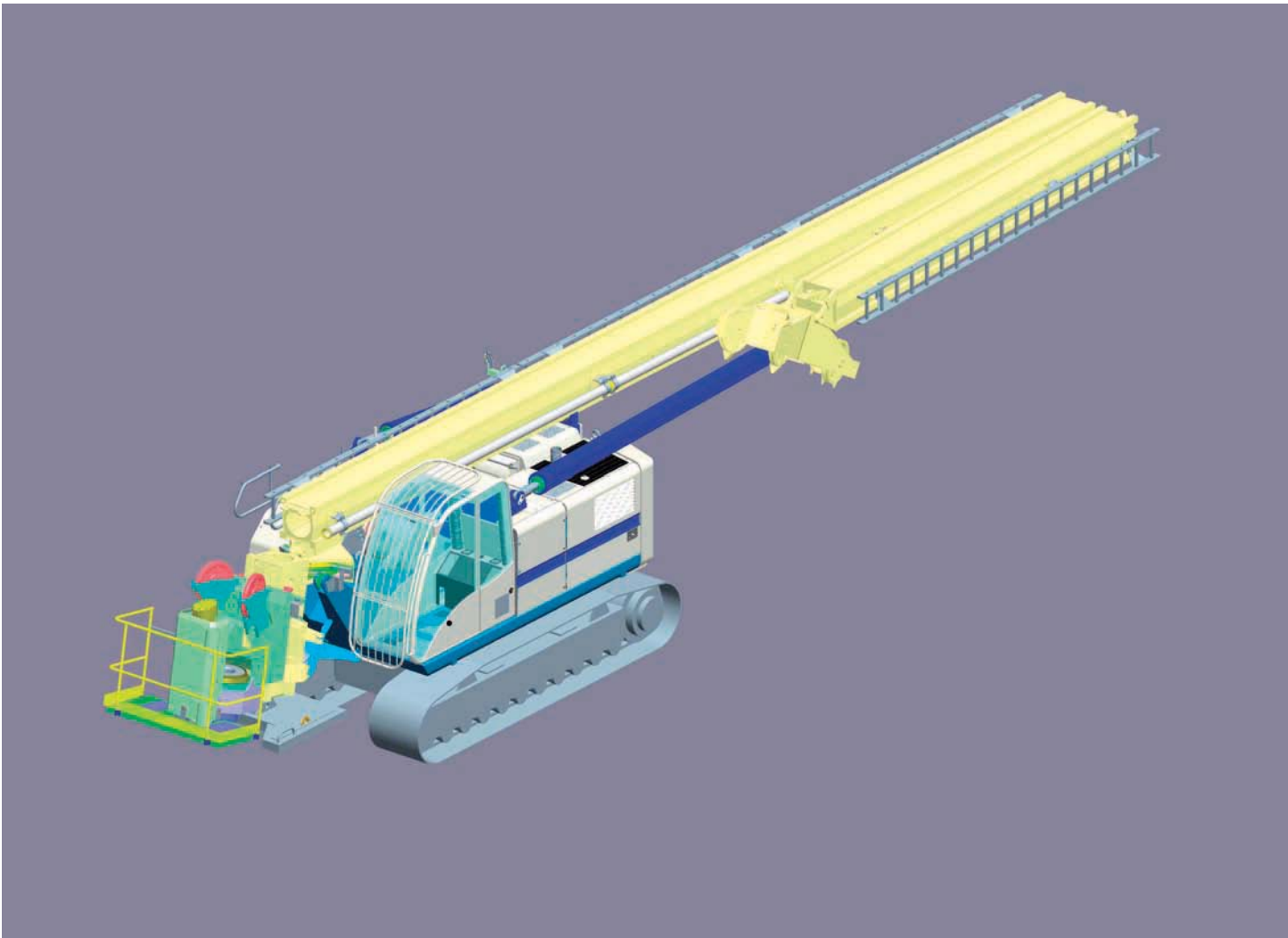
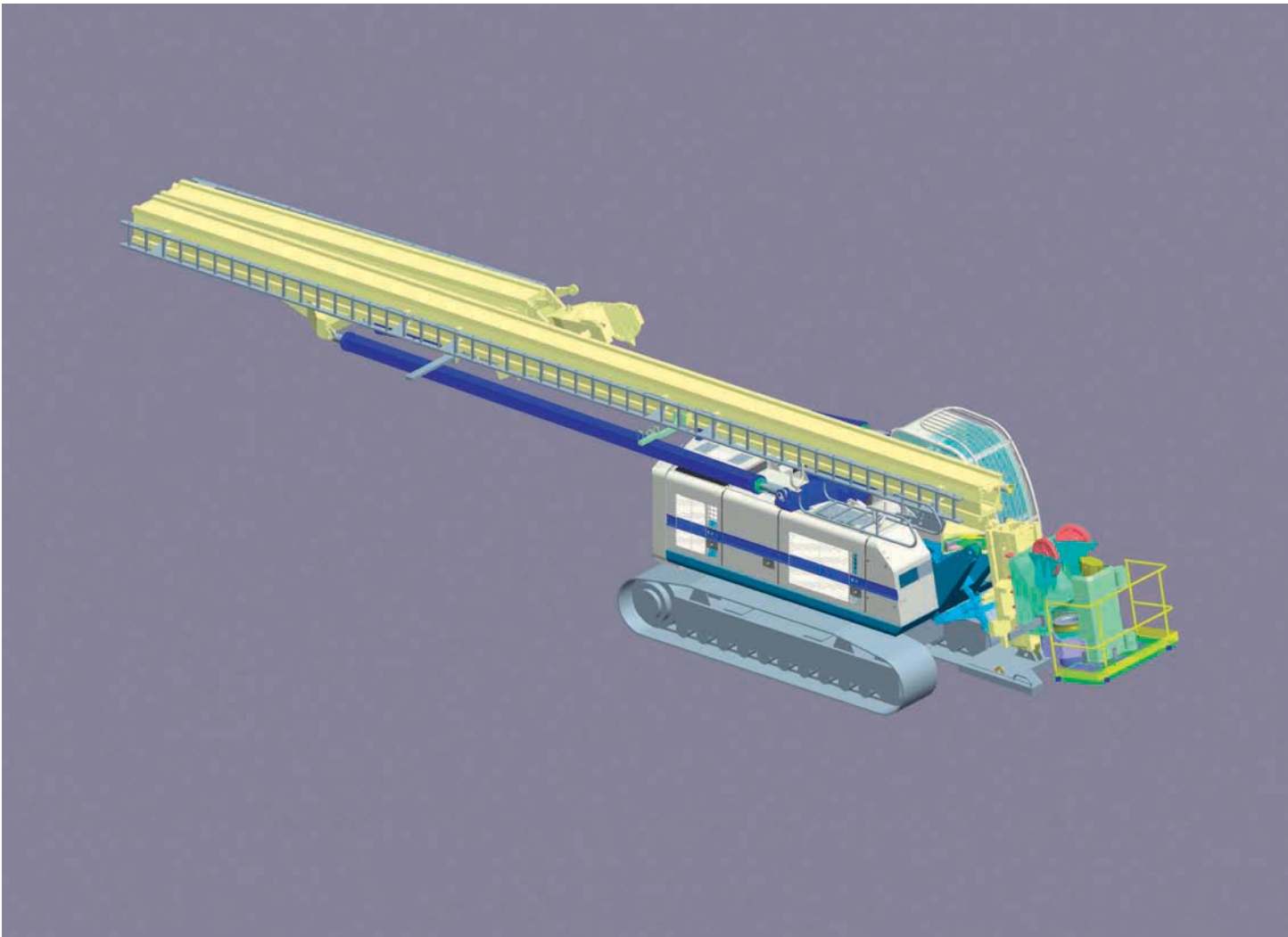
## HYDRAULIC CFA ROTARY RIG

### 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

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

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

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

**SOILMEC FRANCE S.A.S.** - France

**SOILMEC INDIA** - India

**SOILMEC S.P.A. - Moscow Repr. Office** - Russia

## 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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