

# R-625

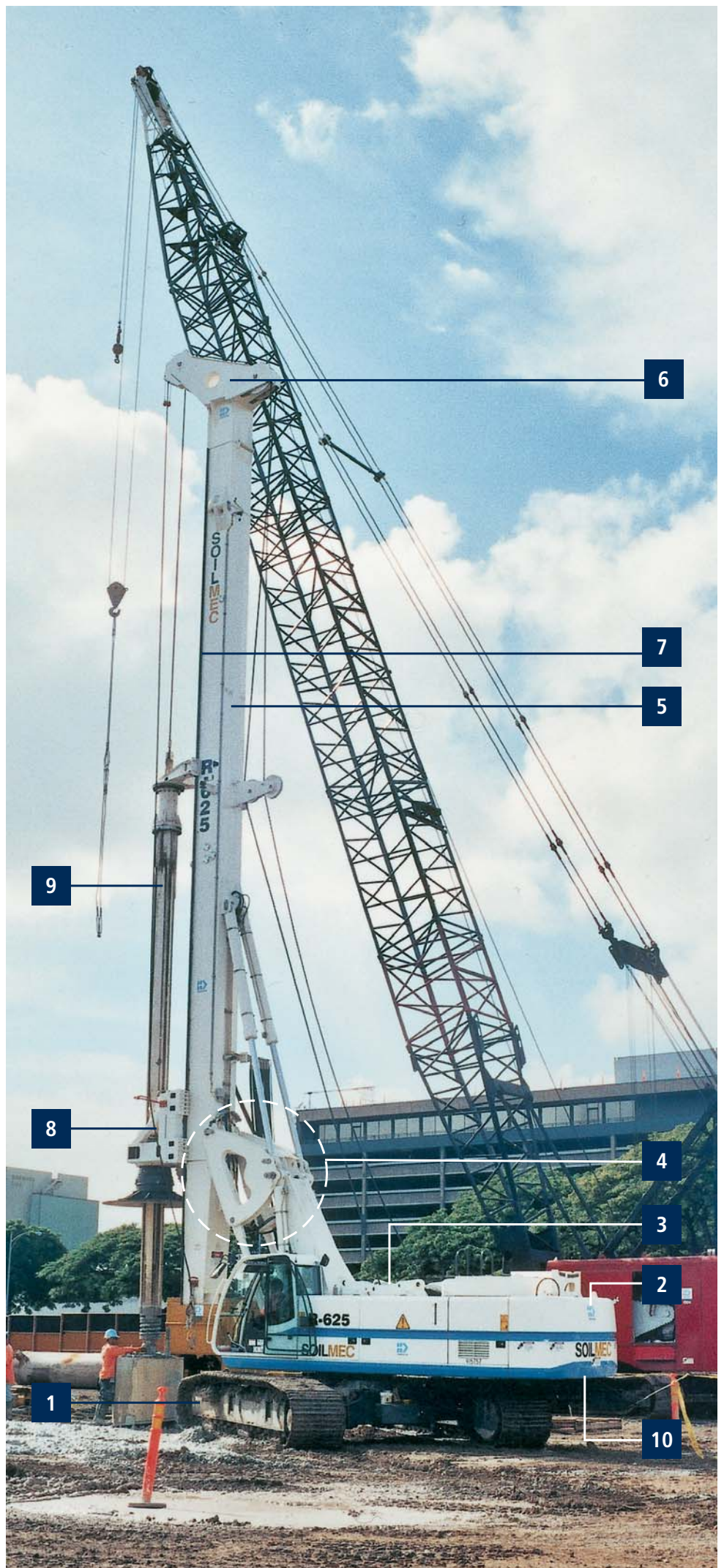
HYDRAULIC ROTARY RIG



# R-625

## MAIN FEATURES

- 1 - Undercarriage** with expandable tracks from 2980 to 4480 mm by means of hydraulic cylinders
- 2 - Turret** c/w DEUTZ TCD 2015 V06 Tier III diesel engine and sound proofed canopy, mounted on a 360° slew ring
- 3 - Winch** assembly
- 4 - Parallelogram system** allowing working radius adjustment always maintaining the mast in vertical position. C/w electronic device for automatic stop
- 5 - Self-erecting mast** composed by an intermediate element 13.5 m long and a top element with 1,5 m extension. The max torque can be applied all over the mast length
- 6 - Sheave cathead**
- 7 - Crowd system** by means of 6.5 m stroke hydraulic cylinder
- 8 - Rotary head** with variable displacement motors and one high spin off speed
- 9 - Telescopic kelly bar** with guide to mast, available with friction or mechanical locking type
- 10 - Self mounting type counterweight** by means of two hydraulic cylinders. It can be easily and quickly removed for transport purpose



# R-625

## HYDRAULIC ROTARY RIG

### A new model

The hydraulic drilling rig R-625 is mounted on SOILMEC base carrier and has been specially designed for suiting the following applications:

- **cased bore piles with casing driven directly through rotary head or optionally by casing oscillator powered by the base carrier itself;**
- **very deep bored piles stabilized by drilling fluid or dry hole;**
- **CFA pile by means of very long auger string (19,5 m + 6 m extension);**
- **CSP/CAP pile with double rotary;**
- **discrepiles and Soilmixing;**
- **reverse circulation;**
- **it can be converted to work with an hydraulic grab for diaphragm walls.**

The R-625 main features are the following:

- 70 ton class machine;
- new powerful rotary achieving 240 kNm max torque;
- modern electronic instrumentation;
- min. transport weight: 50 ton (counterweight, rotary and kelly bar removed).

On board features:

- pre-arrangement for casing oscillator;
- 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.

Optionals:

- central lubrication;
- service winch free-fall option;
- line pull indicator for auxiliary winch;
- crowd winch force monitoring;
- automatic casing drive adapter;
- VIDEO SYSTEM screen and Nos. 3 external cameras to visualize the winches and the back side of the rig.

### Large diameter bored pile

Max pile diameter	mm	2500*
Max cased diameter	mm	2000
Max pile depth	m	77
Max torque	kNm	240
Max drilling speed	rpm	30
Spin off speed	rpm	140
Main winch line pull	kN	240 (opt. 200)
Auxiliary winch line pull	kN	140
Engine	type	DEUTZ TCD 2015 V06 Tier III
Power	kW (BHP)	300 (402) @ 2000 rpm
Crowd system	kN	264 / 201
Crowd stroke	mm	6500
Main twin pumps	l/min	2 x 280
Operating weight	tons	70 - 75

Nonroad diesel exhaust regulation compliance (EU-97/68/CE, U.S.A. - EPA; california - CARB)

### Continuous Flight Auger (CFA)

Max pile diameter	mm	1200
Max pile depth	m	25,5 (19,5+6)
Max extraction force	kN	732
Machine weight, approx	tons	70

### Cased Secant Piles (CSP/CAP)

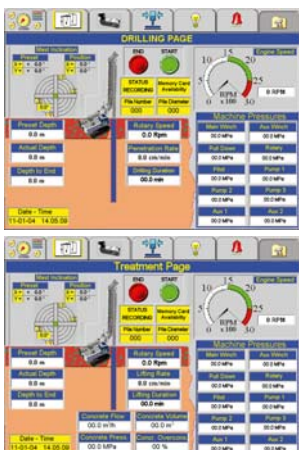
Max pile diameter	mm	800 (1000)
Max pile depth	m	21,5 (15 cased)
Casing pull up/down	kN	320
Second rotary	kNm	190
Max extraction force	kN	732
Max casing speed	rpm	18
Machine weight, approx	tons	75 - 78

### Reverse Circulation (RC)

Max pile diameter	mm	2000
Max pile depth	m	50
Max extraction force	kN	360
Machine weight, approx	tons	75

### Diaphragm Walls (BH)

Max section (excavation)	mm	3000x1000
Max wall depth	m	50
Max extraction force	kN	256
Machine weight, approx	tons	65 - 68



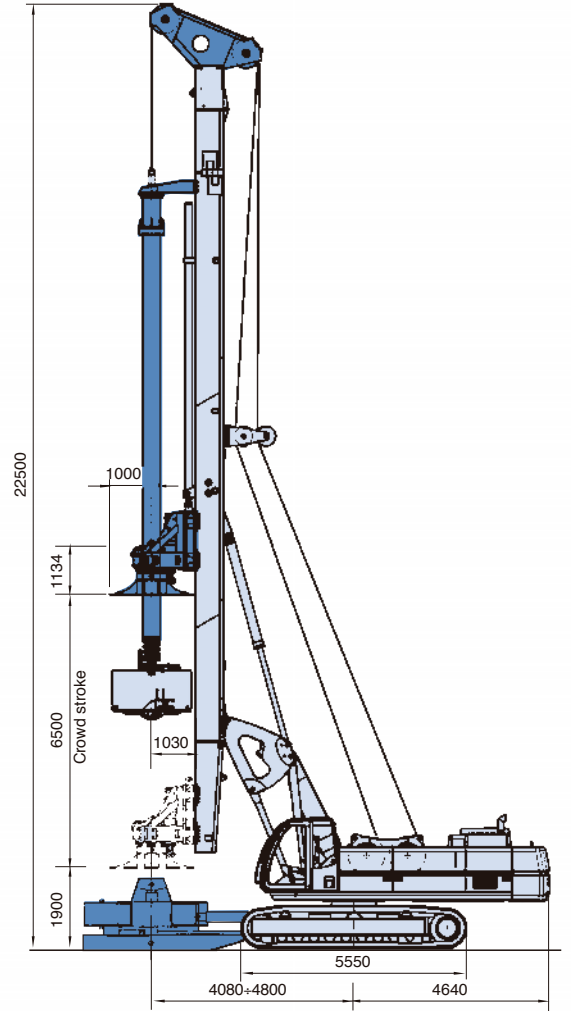
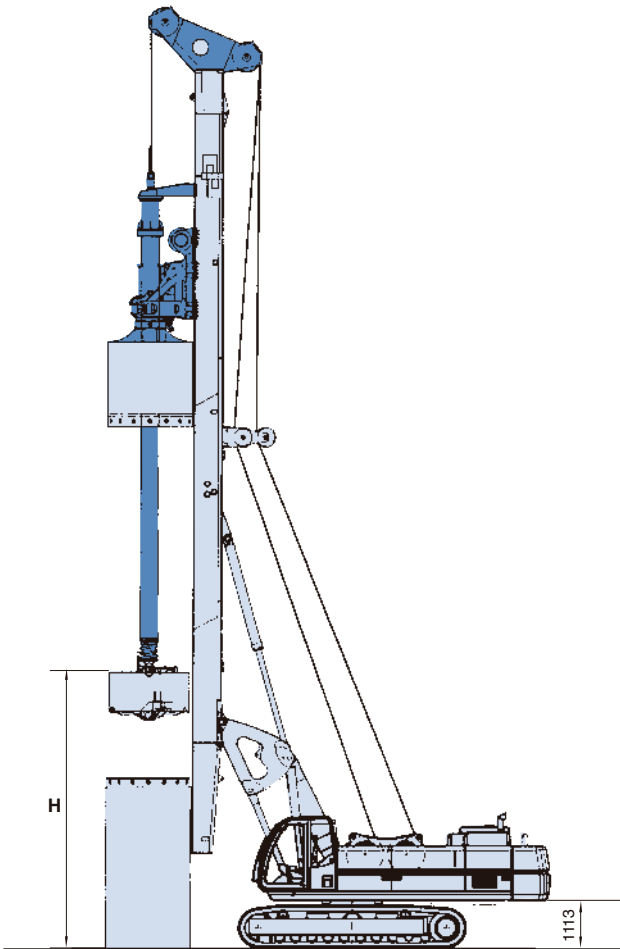
DRILLING MATE SYSTEM

\* With/without bottom mast section

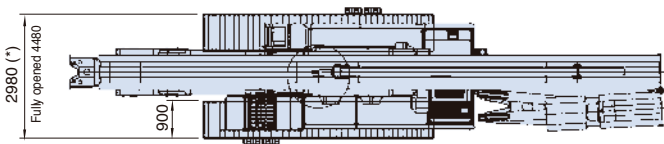
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## LARGE DIAMETER BORED PILE

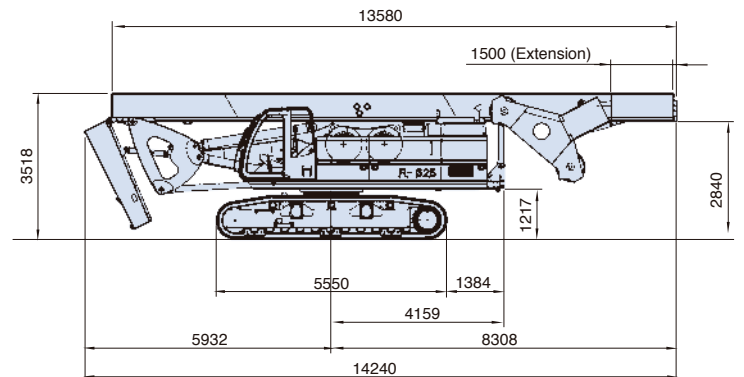
### Working Condition



### Transport Condition



(\*) 2500 mm with 700 mm wide shoes and optional undercarriage



### Weights

Without counterweight, rotary, kelly bar

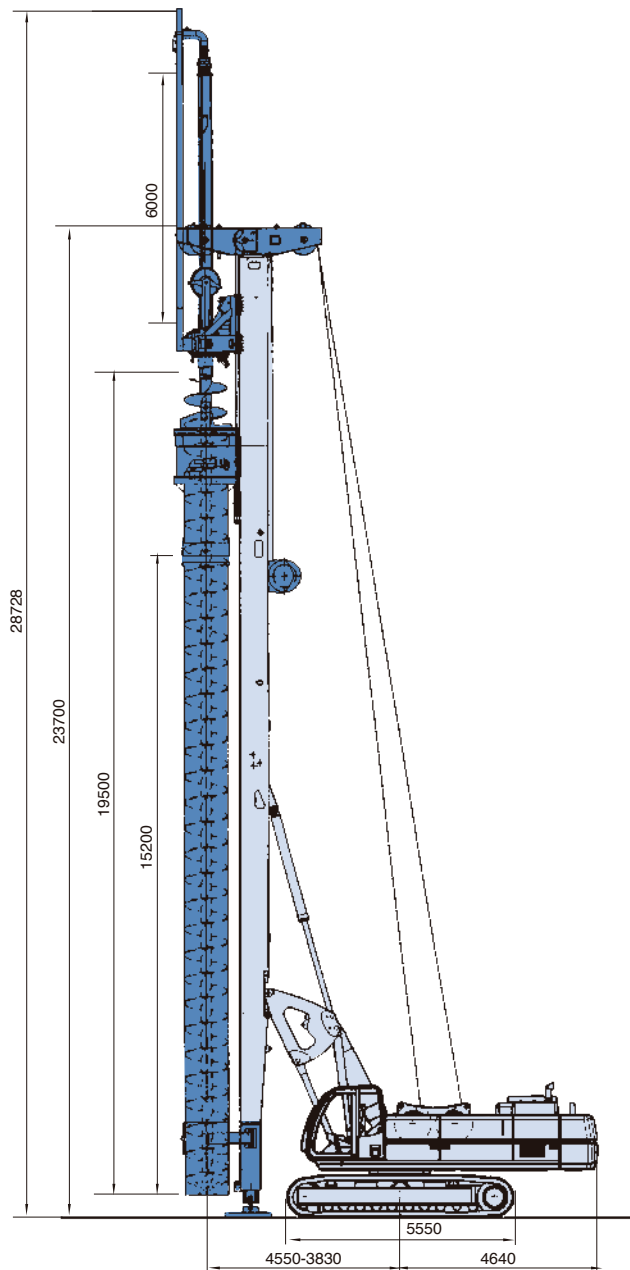
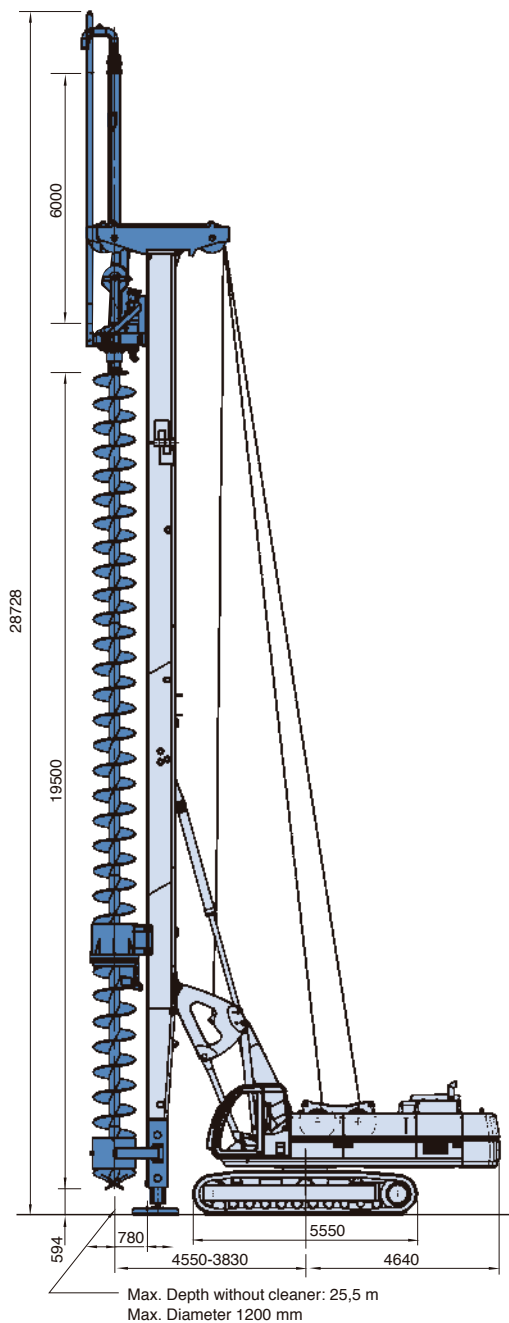
50 ton



# R-625

CFA-CSP/CAP

## Working Condition



## Kelly Bars

### Mechanical locking kelly bar – Ø 406 mm

elements n°	length m	depth m	weight ton	H height m
4x	10,5	37,0	5,8	9,2
4x	11,5	41,0	6,3	8,1
4x	13,5	50,0	7,2	6,0
4x	15,5	58,0	8,2	3,9
4x	16,5	62,0	8,7	2,9

Standard dimension of tool connection is 150x150 mm  
H= kelly stub height from ground level

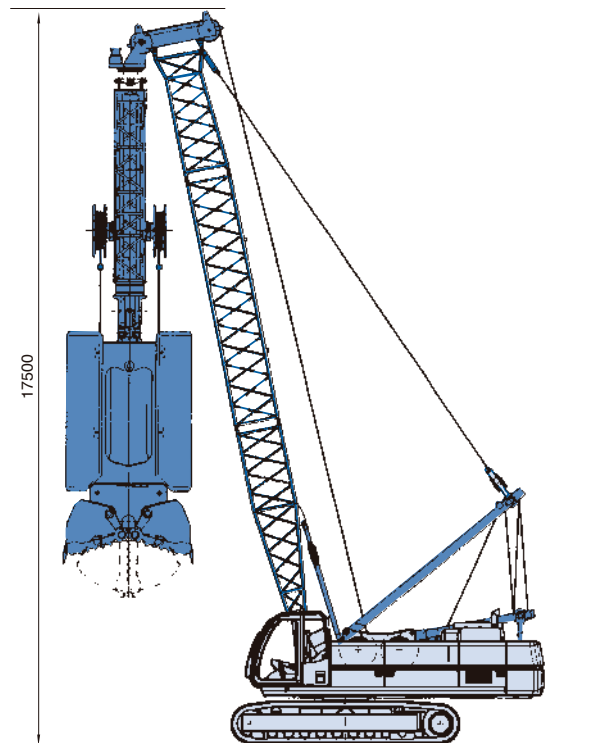
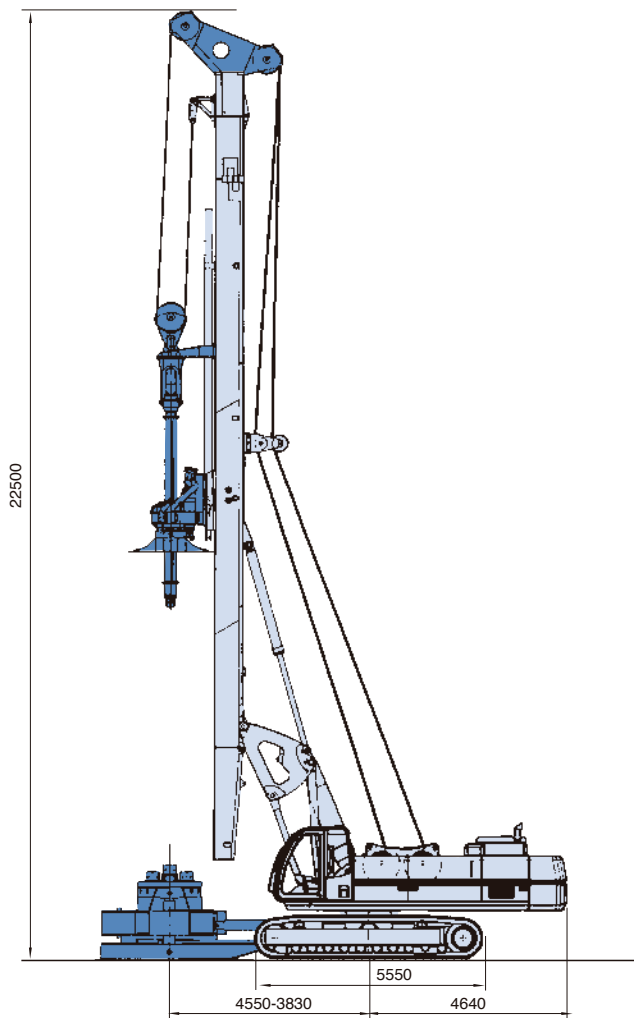
### Friction kelly bar – Ø 406 mm

elements n°	length m	depth m	weight ton	H height m
4x	10,5	37,0	5,7	9,2
4x	11,5	41,0	6,2	8,1
4x	13,5	50,0	7,1	6,0
4x	15,5	58,0	8,0	3,9
4x	16,5	62,0	8,5	2,9
5x	10,5	46,0	5,5	9,2
5x	11,5	51,5	6,0	8,1
5x	13,5	62,0	6,9	6,0
5x	15,5	72,0	7,9	3,9
5x	16,5	77,0	8,4	2,9

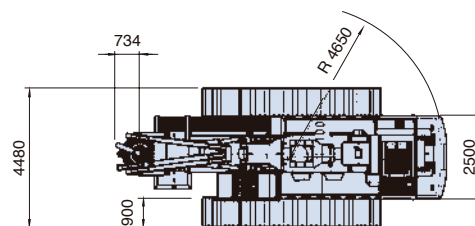
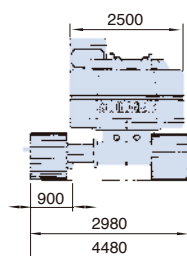
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## DIAPHRAGM WALL

### Working Condition



## General Dimensions



### CFA Version





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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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