

# SR-100

HYDRAULIC ROTARY RIG



# SR-100

## MAIN FEATURES

- 1 - **Undercarriage** with expandable tracks from 3500 to 5100 mm by means of hydraulic cylinders
- 2 - **Turret** c/w DEUTZ TCD 2015 V08 diesel engine and sound proofed canopy, mounted on a 360° slew ring
- 3 - **Winch** assembly fixed by 2 pins each winch, for easy removal
- 4 - **New design 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 15 m long and a top element with 2 m extension. The max torque can be applied all over the mast length
- 6 - **Sheave cathead** with lateral mounted service rope pulley
- 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. Two speed gear available (optional)
- 9 - **Telescopic kelly bar** with guide to mast, available with friction or mechanical locking type
- 10- **Self mounting type counterweight** by means of three hydraulic cylinders. It can be easily and quickly removed for transport purpose



NEW CABIN WITH DMS SYSTEM



# SR-100

## A new model

The hydraulic drilling rig SR-100 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.**

### The SR-100 main features are the following:

- 125 ton class machine;
- new powerful rotary achieving 452 kNm max torque;
- modern electronic instrumentation;
- min. transport weight: 65 ton (with counterweight crawler, rotary and kelly bar removed).

### Option features:

- two gear rotary table;
- crowd winch force monitoring;
- central lubrication;
- service winch free-fall option;
- line pull indicator for auxiliary winch;
- 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.

Large diameter bored pile		
Max pile diameter	mm	3000
Max cased diameter	mm	2500
Max pile depth	m	86
Max torque (35 MPa)	kNm	452
Max drilling speed	rpm	17.4
Spin off speed	rpm	72
Main winch line pull	kN	330
Auxiliary winch line pull	kN	140
Engine	type	DEUTZ TCD 2015 V08
Power	kW (BHP)	480 (643) @ 1900 rpm
Crowd system	kN	200 / 420
Crowd stroke	mm	6500
Main twin pumps	l/min	2 x 405
Operating weight (c/w kelly - w/o tools)	tons	125

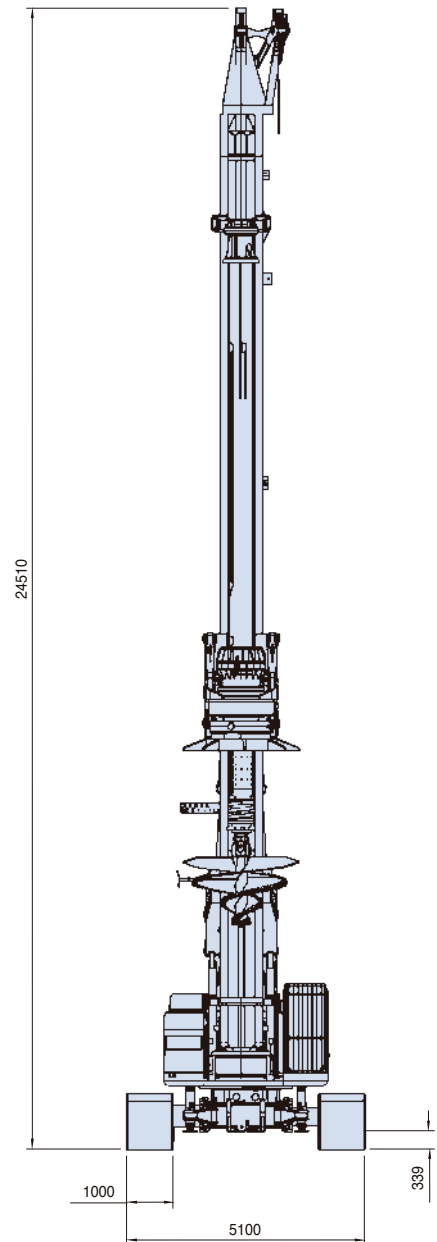
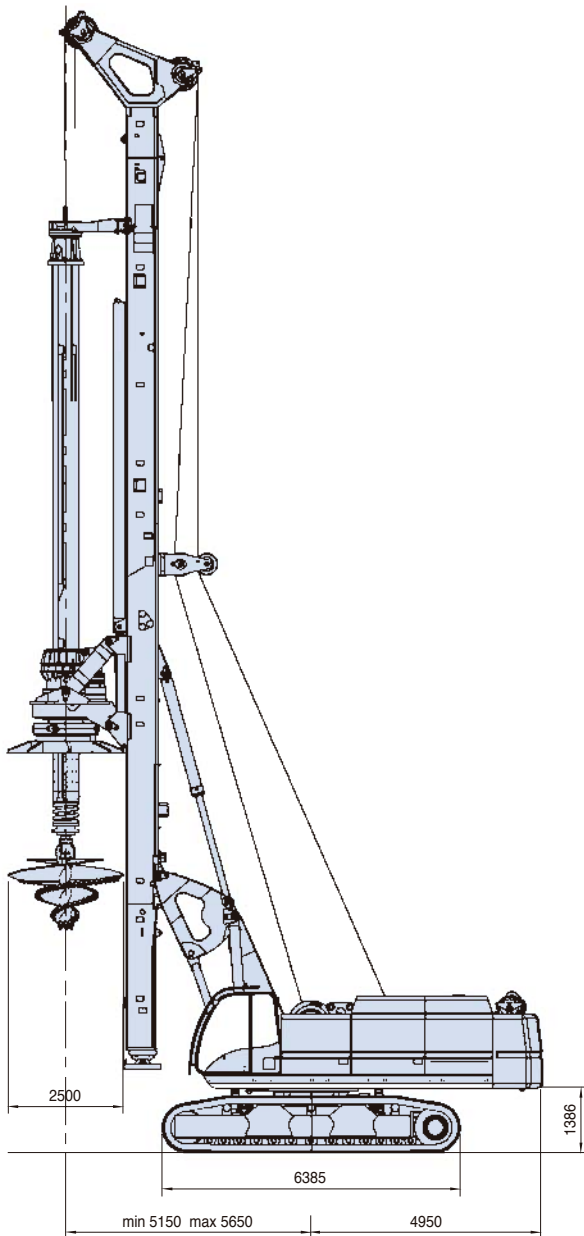
Nonroad diesel exhaust regulation compliance (EU-97/68/CE, U.S.A. - EPA; california - CARB)



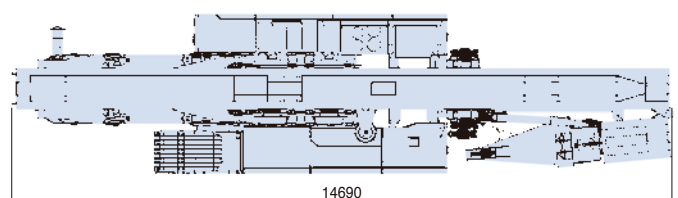
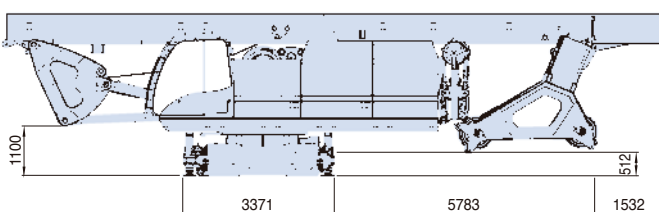
# SR-100

## LARGE DIAMETER BORED PILES

### Working Condition



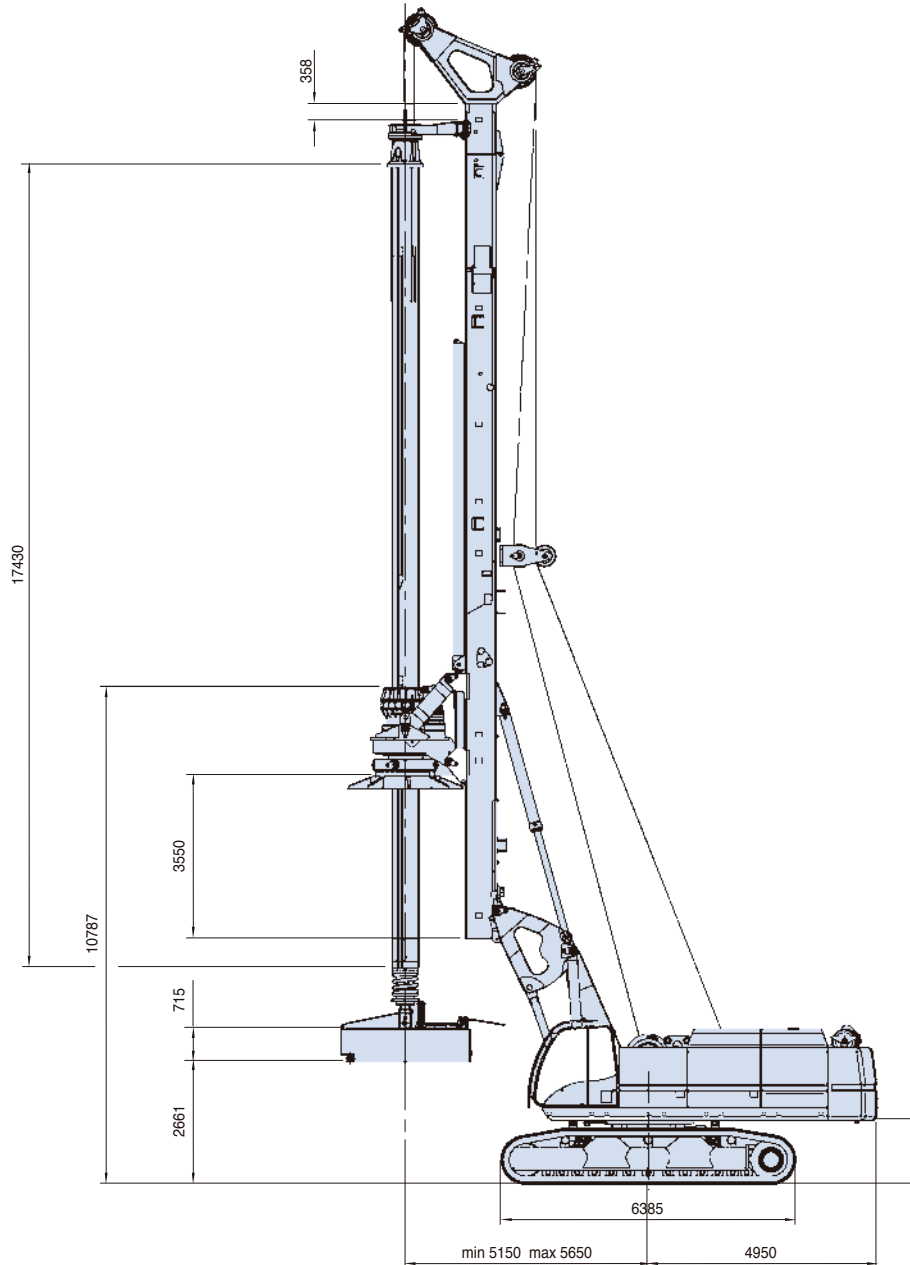
### Transport Condition



# SR-100

## LARGE DIAMETER BORED PILES

### 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	7,2	6,0
4x	15,5	58,0	8,2	3,9
4x	16,5	62,0	8,7	2,9

#### 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

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

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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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