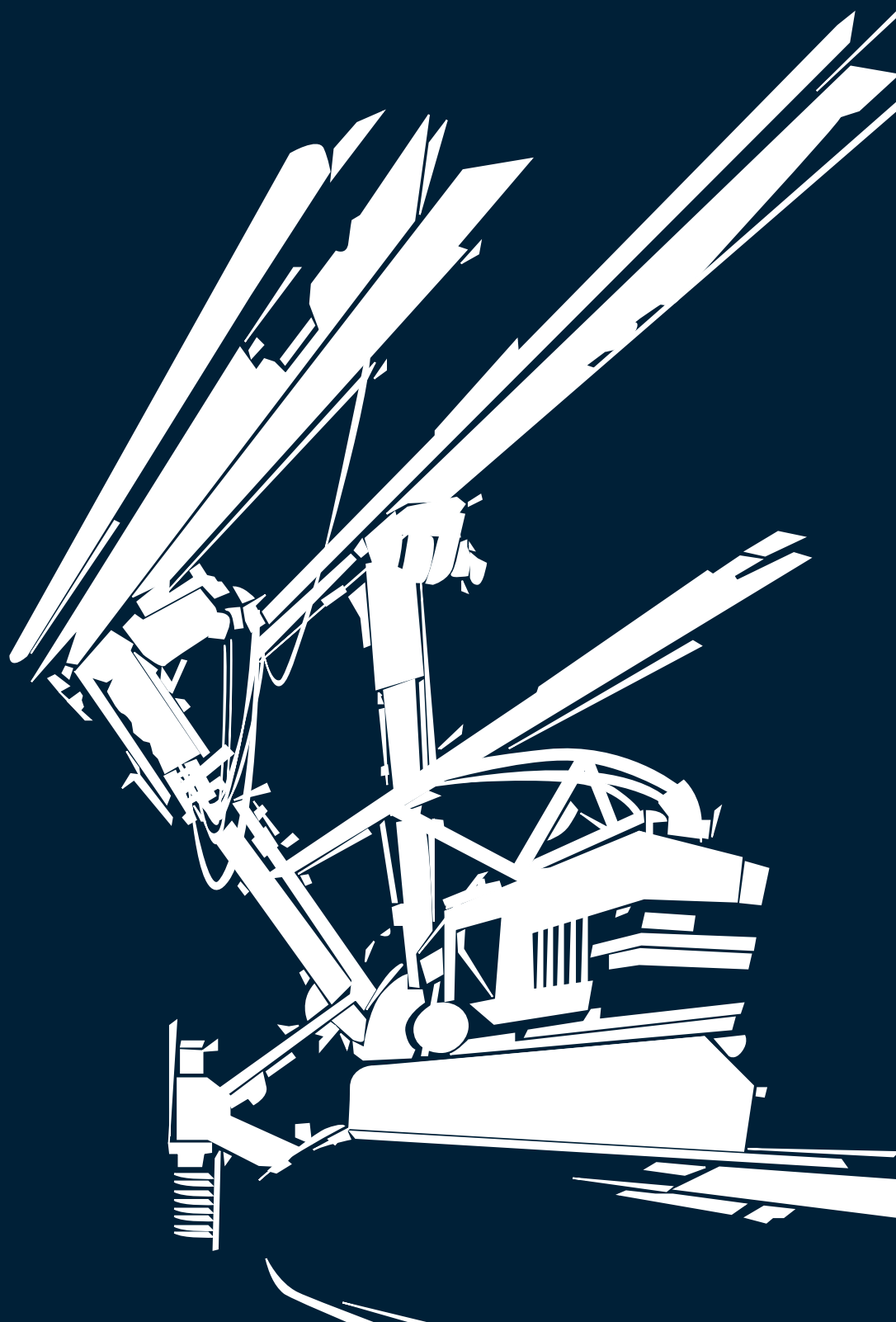


PST-60



PST-60

ROTARY EQUIPMENT FOR TUNNELLING

A new model

60 ton class machine the main features of Soilmec drilling machines is that there are 2 drilling guides, mounted and controlled independently of each other and supported by 2 telescoping rams, which are connected to the main frame by means of 2 slewing rings.

The main frame of the rig is of crawler type complete with 4 outriggers and sliding frame for positioning slew rings at different heights and levels to meet the requirements of the tunnel to be excavated. The mast is equipped with an hydraulic telescoping foot pad which can be placed against the excavating face. This allows the use of rope operated crowd system/pull back to be applied to drill string. Once the mast has been positioned as required, the consolidation treatment can be completed. Connected to the slew rings are the supports for the mast. This configuration allows drilling to be carried out through 180°.

Thanks to special double counterslide, the machine can reach a consolidation height of 10700 mm.

The following drilling techniques can be applied using the PST-60:

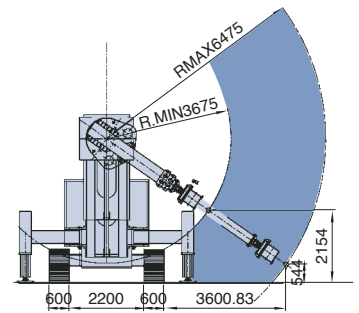
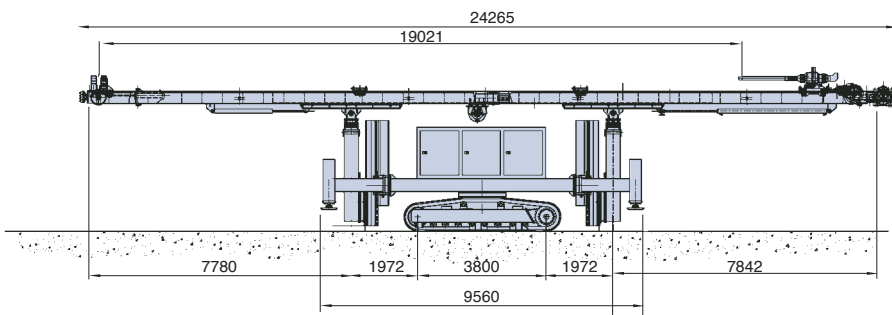
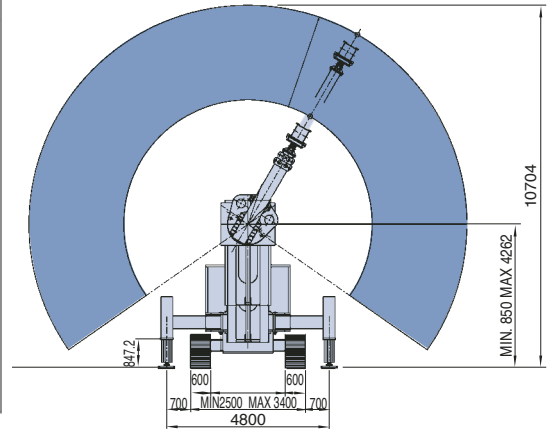
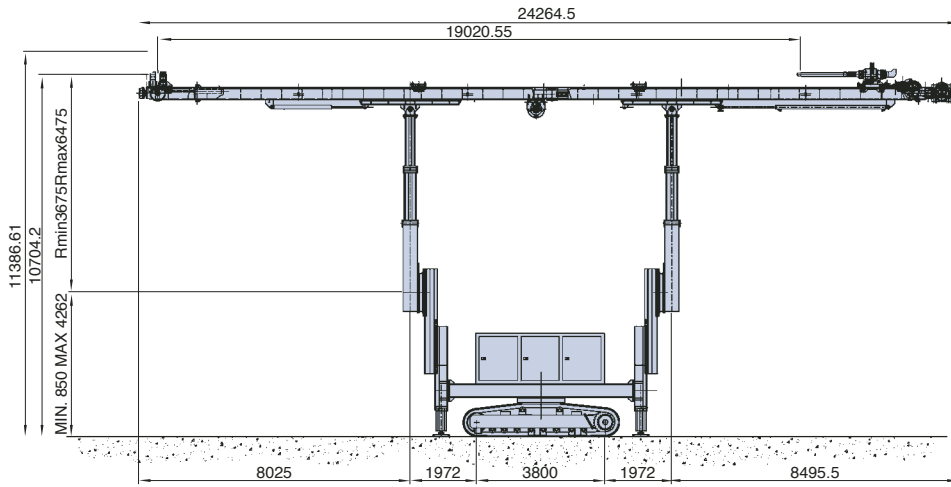
- Rotation (with or without casing)
- Rotopercussion by means of Top Hammer (with or without casing)
- Rotopercussion by means of Down the Hole Hammer (with Tubex, simmetrix superjews system)

Crawler undercarriage		
Track shoe width	mm	600
Wheel base	mm	3710
Overall length	mm	4510
Overall width (not extendable crawler)	mm	-
Retracted crawler width (extendable crawler)	mm	2500
Extended crawler width (extendable crawler)	mm	3700
Hydraulic stabilizers (retracted-extended)	mm	2500 - 4800
Travelling speed	km/h	1.5
Average ground pressure	MPa	0.12
Turret		
Crawler undercarriage rotation degree	deg	360
Type of boom		slew ring
		Min Max
Radius of consolidation treatment at 0°: min/max	mm	3675 6475
Radius of consolidation treatment at 5°: min/max	mm	3675 7147
Dimensions: width x height at 0°	mm	10700
Max drilling angle		20°
Height from working level of slew ring rotation axis	mm	850 - 4262
Diesel engine		
Diesel Engine make and model		DEUTZ TCD 2012 L06
Diesel Engine power rating (SAE J1995)	kW (BHp)	135 (181) @ 1900 rpm
Fuel tank capacity		300
Electric motor		
Number of motor		1
Make and model		SIEMENS 4 POLS 50 HZ 380V
Rated power	kW (CV)	110 (150)
Hydraulic system		
Main pumps: variable displacement axial pumps	l/min	250
Set pressure main pumps	MPa	28
Auxiliary pumps: gear pumps	l/min	90 + 30 x 2
Set pressure auxiliary pumps	MPa	25
Hydraulic oil tank capacity	l	600
Standard rotary head		
Gear box ratios		2
Max. nominal torque (25 MPa)	daNm	1560 @ 59 rpm
Maximum drilling speed	rpm	300
Double rotary head		
Gear box ratios		2
Max. nominal torque (31.5 MPa)	daNm	1350 @ 56 rpm (140 rpm max)
Hoist & feed system		
Feed type		Winch type
Feed stroke	mm	19.000 (24.000 optional kit)
Maximum hoist pull	kN	70
Maximum feed force	kN	70
Maximum speed	m/min	26
Clamp & hydraulic joint breaker		
Nominal size	mm	60-250
Maximum clamping force (28 MPa)	kN	159
Maximum breaking torque	daNm	3830
Extractors stroke	mm	600
Rod Carousel		
Rod diameters	mm	114 - 90
Rod length x n° of rods	mm	18000 x n° 1
Service platform		
Weight @ number of people	kg	300 - n°1
Top Hammer		
Type and model		Krupp HB40A Krupp HB50A
Foam pump		
Delivery flow @ max pressure	l/min @ bar	30 l/min @ 40 bar
Mass		
Total weight	kg	60 - 65 ton

(*) All technical data are purely indicative and subject to change without notice. Nominal value is referred to total efficiency 100%.

PST-60

ROTARY EQUIPMENT FOR TUNNELLING



SOILMEC distributes machinery and structures all over the world, supported by SOILMEC subsidiary companies and representative offices as:

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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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