

Hydraulic Rotary Rig

SR-135

HIT



soilmec 
Drilling and Foundation Equipment

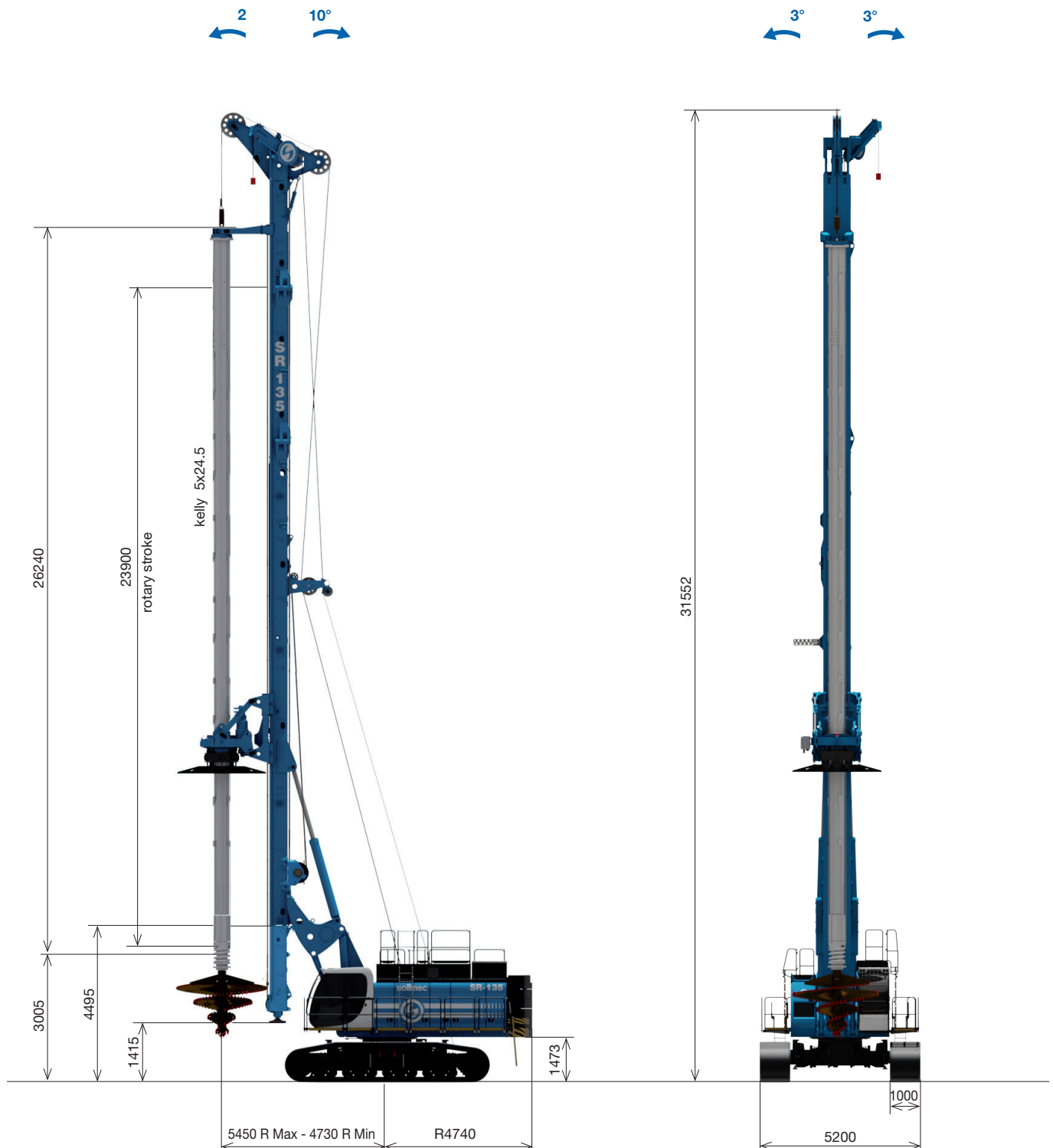
LDP APPLICATIONS - Cylinder crowd system



* increased drilling axis package

SR-135 HIT Hydraulic Rotary Rig

LDP APPLICATIONS - Winch crowd system



LDP_Large Diameter Piles - WCS version

Operating weight w/o kelly bar	133000 kg	293215 lb
Max pile diameter along mast	2800 (3300*) mm	110 (130*) in
Max pile diameter w/o lower mast section, tool below mast	3500 (4000*) mm	138 (157*) in
Max pile depth - friction kelly	138,2 m	453 ft
Max pile depth - locking kelly	115,1 m	377 ft

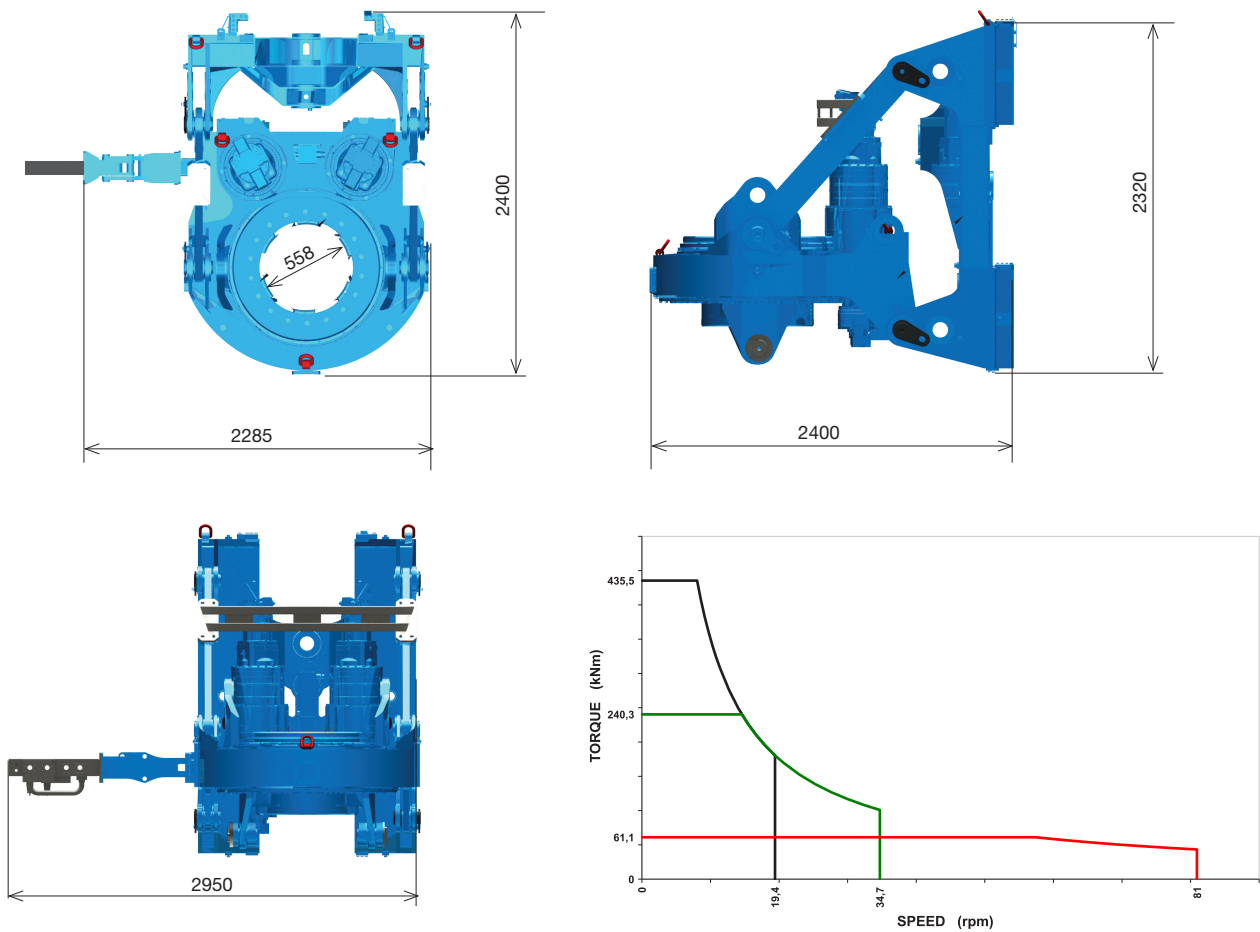
* increased drilling axis package

SR-135

HIT

Hydraulic Rotary Rig

ROTARY TABLE



Rotary drive	Multigear version	Multigear version
- Max torque	435 kNm	320834 lbf*ft
- 1 st gear rated torque	411 kNm	303133 lbf*ft
- Speed of rotation (1 st gear)	19,4 rpm	19.4 rpm
- Speed of rotation (3 rd gear)	81 rpm	81 rpm
- Weight (w/o cradle & casing flange)	2000 kg	15432 lb

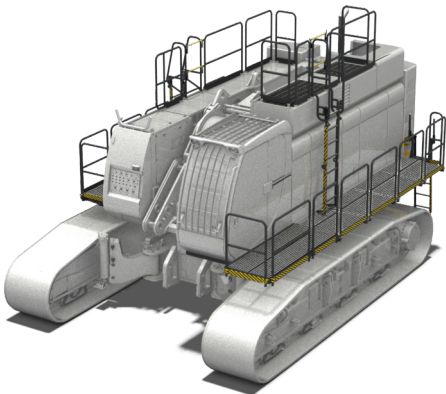
SR-135

HIT

Hydraulic Rotary Rig

Safety equipment compulsory for EC marking
 On request whenever EC marking is not needed

- Catwalks 900 mm (3 ft) wide
- Ladder and handrails for both access levels
- Acoustic alarm for rotation and translation
- Radio remote control for tramming on ramp
- Video-camera set with 5 cameras included
- Rearview mirrors
- Led lights
- Oil discharge conveying system
- Load cell for service winch



SR-135 HIT Hydraulic Rotary Rig

TECHNICAL DATA SHEET

CCS_Cylinder crowd system		
- Stroke	7650 mm	301 in
- Crowd force pull (down/up)	345 / 412 kN	77558 / 92620 lbf
- Fast speed up/down	20 m/min	66 ft/min
- Slow speed up/down	5,5 m/min	18 ft/min
WCS_Winch crowd system		
- Stroke	23900 mm	941 in
- Crowd force pull (down/up)	540 / 540 kN	121395 / 121395 lbf
- Fast speed up/down	33 m/min	108 ft/min
- Slow speed up/down	8,6 m/min	28 ft/min
Engine		
	CAT C18 Acert	CAT C18 Acert
- Rated output	470 kW @ 1800 rpm	630 HP @ 1800 rpm
- Engine conforms to Exhaust emission Standard	EU stage V-US EPA Tier4f	EU stage V-US EPA Tier4f
- Diesel tank capacity	1048 l	277 US gal
Main winch		
	controlled descent	controlled descent
- Line pull (1st layer)	420 kN	94418 lbf
- Rope diameter	36 mm	1.4 in
- Line speed (max.)	73 m/min	240 ft/min
Auxiliary winch		
	controlled descent	controlled descent
- Line pull (1st layer)	132 kN	29674 lbf
- Rope diameter	22 mm	0.9 in
- Line speed (max.)	71 m/min	233 ft/min
Hydraulic system		
- Flow rates (main circuits)	2x 444 l/min	2x 117 US gal/min
- Third pump flow	140 l/min	37 US gal/min
- Hydraulic oil tank capacity	1175 l	310 US gal
Undercarriage		
	variable gauge, telescoping removable sides	variable gauge, telescoping removable sides
- Overall width with retracted crawlers	3500 mm	138 in
- Overall width with extended crawlers	5200 mm	205 in
- Width of triple grouser track shoes	1000 mm	39 in
- Overall length of crawlers	6684 mm	263 in
- Traction force effective/nominal	813 kN	182766 lbf
- Travel speed	1,6 km/h	1.0 mph
Mast inclination (Backward/ Forward/Lateral)		
	10°/2°/3°	10°/2°/3°

STANDARD EQUIPMENT

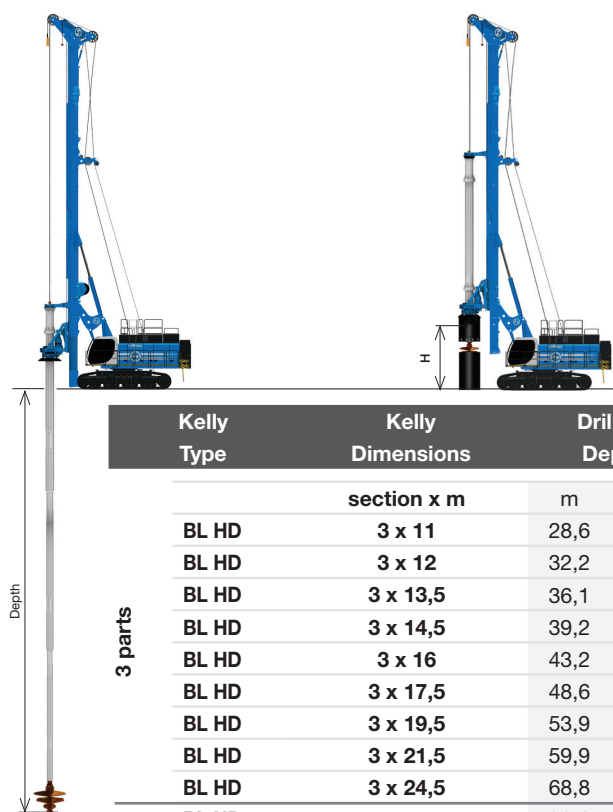
• Rotary table replaceable drive ribs • Emergency mode of operation for engine • Main and auxiliary winch controlled descent type with special grooving • Hoist limit switch on main and service rope • Service rope parking point • GSM/GPRS/GPS modem kit • DMS system electronic monitoring and visualization system • Mast inclination measurement on X/Y axes (digital/ analog display) • Automatic vertical mast alignment • Depth measuring device • Automatic greasing kit • Lubricator pump kit for rotary pads cradle	• Rotary speed measuring device • Rotary power control • Variably stackable counterweight • Removable undercarriage • Variable gauge undercarriage • Wider triple grouser track shoes • Transport securing lugs on crawler units • Oscillator attachment brackets • Lower foldable mast element • Cardan joint • Flange for casing driving • Kelly swivel • Kelly guide • On board lighting set • On board tool set	• Electric refuelling pump • High comfortable H-Cab 1050 mm (3,4 ft) wide • Protective roof grate (FOPS compliant) • Sliding door • Adjustable console with sliding support for DMS 12" touch screen • Engine and Diesel particulate diagnostic panel • Auto low idle system • Ergonomic seat with air suspension, fully-adjustable positioning and lumbar support • Heat and Air Conditioning control unit • Courtesy lights in the cab • Radio and CD player
--	---	--

OPTIONAL EQUIPMENT

• Diesel Engine with EU Stage III A - US EPA Tier 3 motorization • Kit for disassembling undercarriage • Fiberglass canopies • Swivel for auxiliary rope • Flange for bucket opening • Hydraulic prearrangement for casing oscillator • Mast extension for special configuration	• Mast ladder kit • Parachute safety kit • Automatic hydraulic kit for upper mast folding • Limit switch for rope winding and winches • Free fall service winch • Double roller auger cleaner • Prearrangement for VTH-1 • Single layer / multilayer main winch 470 kN (155658 lbf)	• Color warning light • Air compressor kit • Mast disassembled kit • Increased drilling axis kit • Main rope antislack kit • Water jet cleaner kit • Machine lifting kit • Led lighting kit
--	--	--

SR-135 HIT Hydraulic Rotary Rig

KELLY DRILLING SYSTEM



	Kelly Type	Kelly Dimensions	Drilling Depth		Weight		CCS SYSTEM		WCS SYSTEM	
							H		H	
		section x m	m	ft	t	ton (US)	m	ft	m	ft
3 parts	BL HD	3 x 11	28,6	93.8	7,8	8.6	9,7	31.8	16,7	54.8
	BL HD	3 x 12	32,2	105.6	8,4	9.3	9,7	31.8	15,5	50.9
	BL HD	3 x 13,5	36,1	118.4	9,2	10.1	9,7	31.8	14,2	46.6
	BL HD	3 x 14,5	39,2	128.6	9,8	10.8	9,7	31.8	13,2	43.3
	BL HD	3 x 16	43,2	141.7	10,6	11.7	9,7	31.8	11,8	38.7
	BL HD	3 x 17,5	48,6	159.4	11,4	12.6	9,7	31.8	10,0	32.8
	BL HD	3 x 19,5	53,9	176.8	12,5	13.8	8,3	27.2	8,3	27.2
	BL HD	3 x 21,5	59,9	196.5	13,6	15.0	6,3	20.7	6,3	20.7
	BL HD	3 x 24,5	68,8	225.7	15,3	16.9	3,3	10.8	3,3	10.8
4 parts	BL HD	4 x 11	38,1	125.0	9,2	10.1	9,7	31.8	16,7	54.8
	BL HD	4 x 12	43,3	142.1	9,8	10.8	9,7	31.8	15,5	50.9
	BL HD	4 x 13,5	48,0	157.5	10,8	11.9	9,7	31.8	14,2	46.6
	BL HD	4 x 14,5	52,5	172.2	11,5	12.7	9,7	31.8	13,2	43.3
	BL HD	4 x 16	57,9	190.0	12,4	13.7	9,7	31.8	11,8	38.7
	BL HD	4 x 17,5	65,0	213.3	13,4	14.8	9,7	31.8	10,0	32.8
	BL HD	4 x 19,5	72,1	236.5	14,7	16.2	8,3	27.2	8,3	27.2
	BL HD	4 x 21,5	80,1	262.8	16,0	17.6	6,3	20.7	6,3	20.7
	BL HD	4 x 24,5	92,0	301.8	17,9	19.7	3,3	10.8	3,3	10.8
5 parts	FR/BL HD	5 x 11	48,1	157.8	10,5	11.6	9,7	31.8	16,7	54.8
	FR/BL HD	5 x 12	54,0	177.2	11,3	12.5	9,7	31.8	15,5	50.9
	FR/BL HD	5 x 13,5	60,4	198.2	12,5	13.8	9,7	31.8	14,2	46.6
	FR/BL HD	5 x 14,5	65,7	215.6	13,3	14.7	9,7	31.8	13,2	43.3
	FR/BL HD	5 x 16	72,4	237.5	14,5	16.0	9,7	31.8	11,8	38.7
	FR/BL HD	5 x 17,5	81,4	267.1	15,7	17.3	9,7	31.8	10,0	32.8
	FR/BL HD	5 x 19,5	90,3	296.3	17,3	19.1	8,3	27.2	8,3	27.2
	FR/BL HD	5 x 21,5	100,1	328.4	18,9	20.8	6,3	20.7	6,3	20.7
	FR/BL HD	5 x 24,5	115,1	377.6	21,3	23.5	3,3	10.8	3,3	10.8
6 parts	FR HD	6 x 16*	87,6	287.4	15,2	16.8	9,7	31.8	11,8	38.7
	FR HD	6 x 17,5*	97,9	321.2	16,5	18.2	9,7	31.8	10,0	32.8
	FR HD	6 x 19*	105,4	345.8	17,7	19.5	8,8	28.9	8,8	28.9
	FR HD	6 x 19,5*	108,5	356.0	18,1	20.0	8,3	27.2	8,3	27.2
	FR HD	6 x 21,5* **	120,5	395.3	19,8	21.8	6,3	20.7	6,3	20.7
	FR HD	6 x 24,5* **	138,2	453.7	22,3	24.6	3,3	10.8	3,3	10.8

* Rotary head derated

** Main winch 470 kN required

Reduced drilling depth by 2,4 m (7.8 ft) w/o lower mast section or CCS in high position. With Kelly c/w stub 200x200.

Drilling depth with tool 1500 mm (4.9 ft) long

SR-135 HIT Hydraulic Rotary Rig

APPLICATIONS

CFA - Continuous Flight Auger - Quick Change

Max pile diameter	1200 mm	47,24 in
Max pile depth with star auger cleaner and with 8,5 m auger extension	32,7 m	107 ft
Max pile depth with auger cleaner, with 8,5 m auger extension	31 m	102 ft
Extraction force	888 kN	199627 lbf

CFA - Continuous Flight Auger - 4 Lines pull

Max pile diameter	1200 mm	47,24 in
Max pile depth with star auger cleaner and with 8,5 m auger extension	34,5 m	113 ft
Max pile depth with auger cleaner, with 8,5 m auger extension	32,7 m	107 ft
Extraction force	1296 kN	291347 lbf

CFA - Continuous Flight Auger - 4 Lines pull - Special version

Max pile diameter	1200 mm	47,24 in
Max pile depth with star auger cleaner and with 8,5 m auger extension	38,5 m	126 ft
Max pile depth with auger cleaner, with 8,5 m auger extension	37,2 m	122 ft
Extraction force	984 kN	221208 lbf

CAP/CSP - Cased Augered & Secant Piles - 4 Lines pull

Max pile diameter	1200 mm	47,24 in
Max pile depth without auger cleaner, with 6 m auger extension	28,6 m	94 ft
Max pile depth with auger cleaner, with 6 m auger extension	28 m	92 ft
Max cased depth c/w - w/o auger cleaner	21,8/22,4 m	72/73 ft

CAP/CSP - Cased Augered & Secant Piles - Quick Change

Max pile diameter	800 mm	32 in
Max pile depth without auger cleaner, with 6 m auger extension	29,7 m	97 ft
Max pile depth with auger cleaner, with 6 m auger extension	29,1 m	95 ft
Max cased depth c/w - w/o auger cleaner	20,4/21 m	67/69 ft

CAP/CSP - Cased Augered & Secant Piles - 4 Lines pull - Special Version

Max pile diameter	900 mm	35 in
Max pile depth without auger cleaner, with 6 m auger extension	32,6 m	107 ft
Max pile depth with auger cleaner, with 6 m auger extension	32 m	105 ft
Max cased depth c/w - w/o auger cleaner	25,8/26,4 m	85/87 ft

DP - Displacement Piles - Quick Change

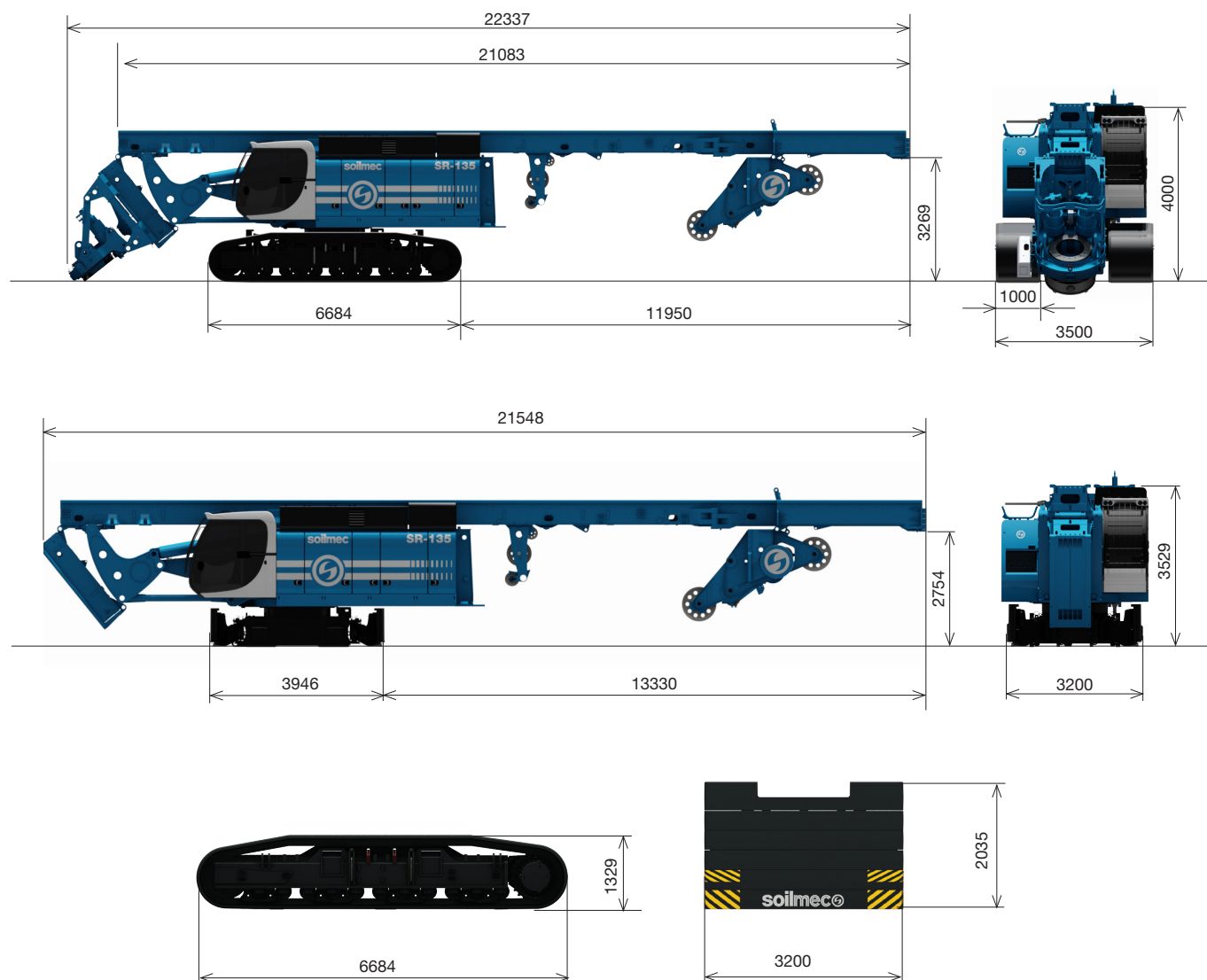
Max DP pile diameter	800 mm	31,50 in
Max TCT pile diameter	1000 mm	39,37 in
Max pile depth with 8,5 m string extension	31,5 m	103 ft
Max depth c/w lattice boom mast extension	39 m	127,95 ft

TJ - Turbojet® - Quick Change

Max treatment diameter	1500 mm	59 in
Max pile depth with 6 m string extension	29 m	95 ft
Max pile depth c/w lattice boom mast extension	39 m	128 ft

SR-135 HIT Hydraulic Rotary Rig

TRANSPORT, DIMENSIONS & WEIGHTS



Transport configuration

- Transport width with/without crawlers	3500 mm	137,80 in
- Transport length CCS version without rotary	21550 mm	849 in
- Transport height	4000 mm	157,48 in
- Counterweight (single elements 1,4/4/4,4 t)	23000 / 26000 kg	50706 / 57320 lb
- Side frames weight	26600 kg	58643 lb
- CCS Version - Transport weight std - min	93800 / 49400 kg	206791 / 108907 lb
- WCS Version - Transport weight std - min	100200 / 49400 kg	220901 / 108907 lb

This brochure has been edited and distributed by SOILMEC Spa. The present document cancels and override any previous ones. This brochure shall not be distributed, reproduced or exhibited without SOILMEC Spa. authorization in accordance with to SOILMEC web site disclaimer condition.

SOILMEC Spa distributes machinery and structures all over the world, supported by SOILMEC Spa subsidiary companies and dealers. The complete Soilmec network list is available on the web site www.soilmec.it

www.soilmec.it

soilmec
Drilling and Foundation Equipment