

Hydraulic Rotary Rig
SR-135
HIT

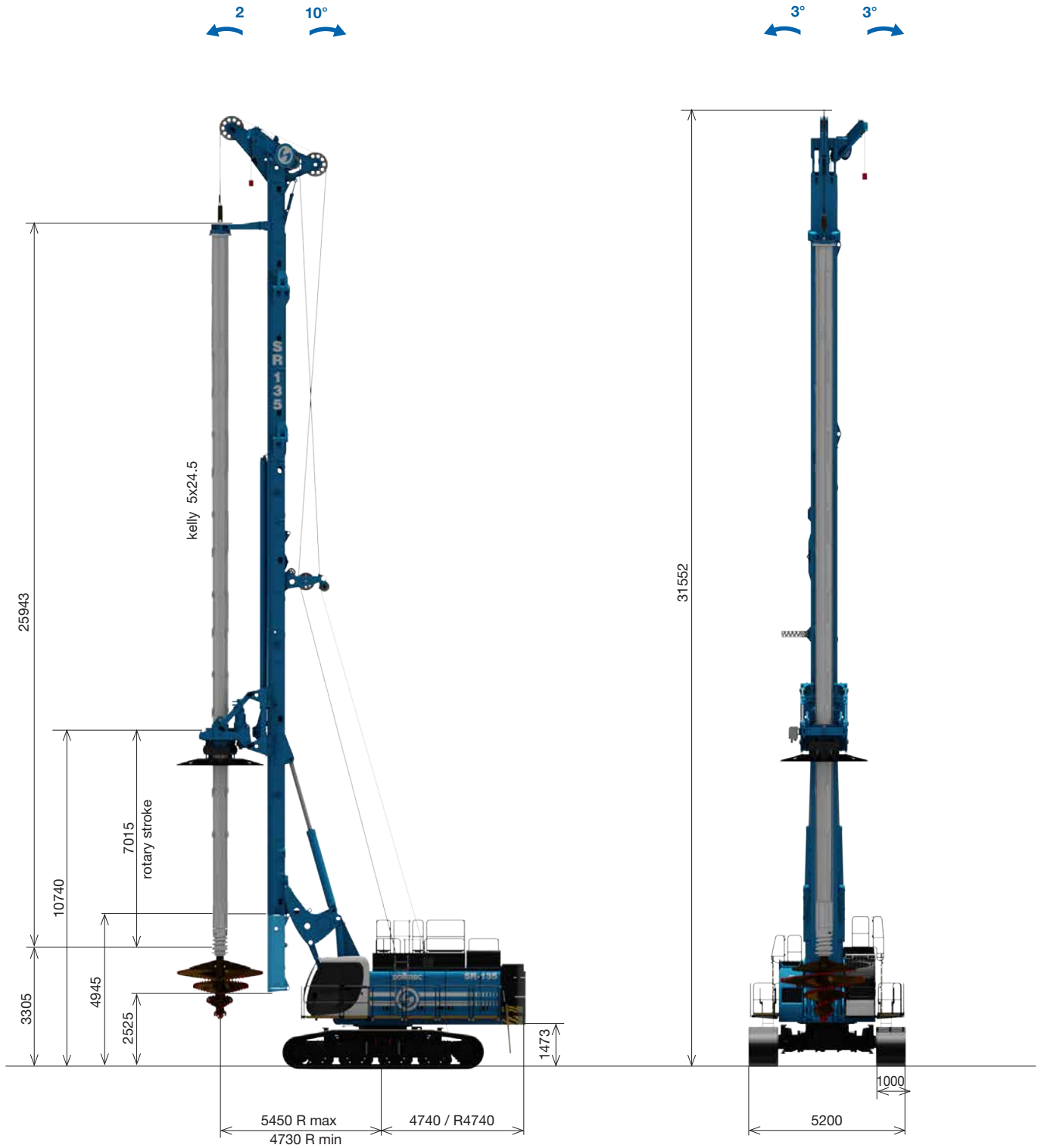
2017



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Drilling and Foundation Equipment

SR-135 HIT Hydraulic Rotary Rig

LDP APPLICATIONS - Cylinder crowd system

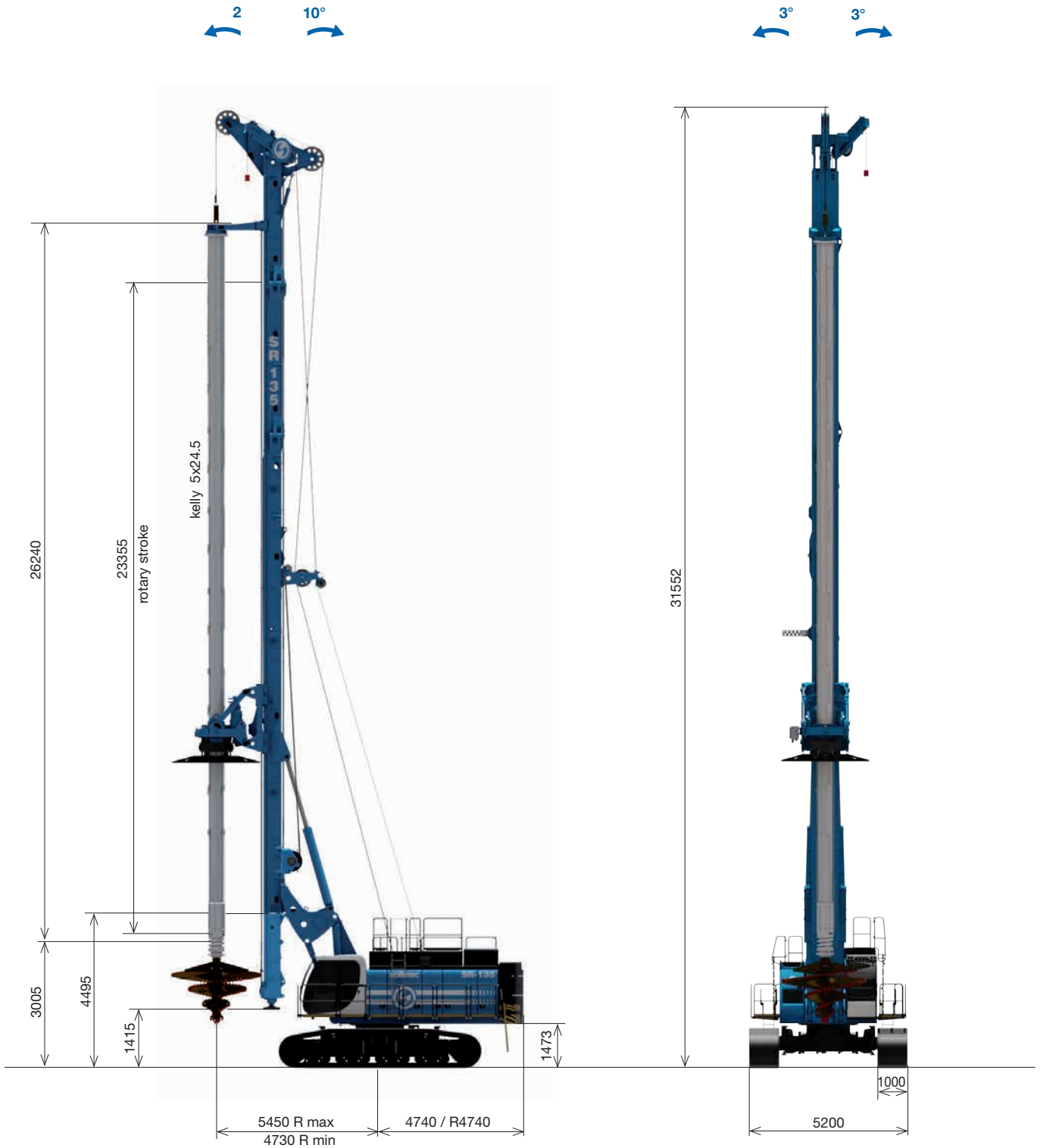


LDP_Large Diameter Piles - CCS version

Operating weight w/o kelly bar	130900 kg	288582 lb
Max pile diameter along mast	3000 mm	118 in
Max pile diameter w/o lower mast section, tool below mast	3500 mm	138 in
Max pile depth - friction kelly	120.4 m	395 ft
Max pile depth - locking kelly	115 m	377 ft

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LDP APPLICATIONS - Winch crowd system



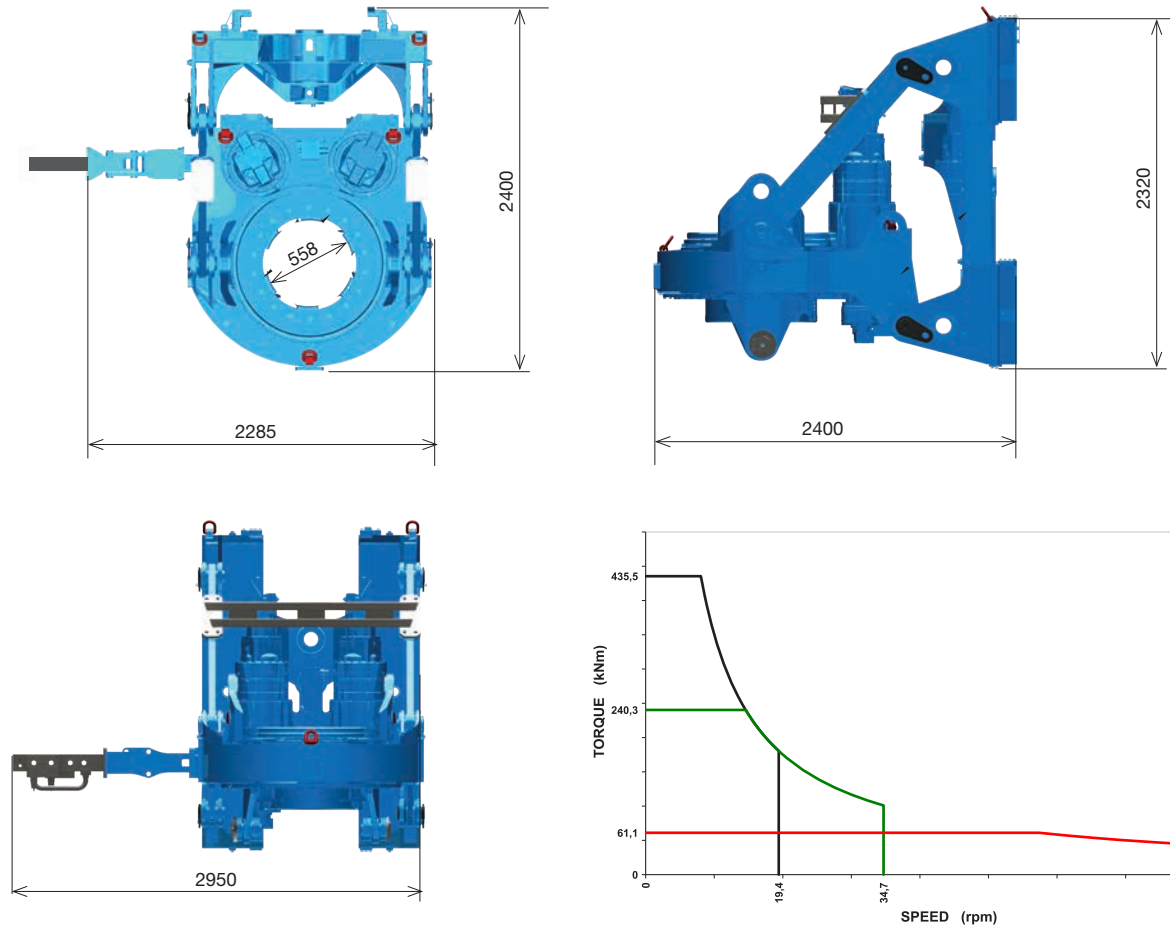
LDP_Large Diameter Piles - WCS version

Operating weight w/o kelly bar	133300 kg	293312 lb
Max pile diameter along mast	2800 mm	110 in
Max pile diameter w/o lower mast section, tool below mast	3300 (4000*) mm	130 (157*) in
Max pile depth - friction kelly	120,4 m	395 ft
Max pile depth - locking kelly	115 m	377 ft

* c/w special kit

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ROTARY TABLE

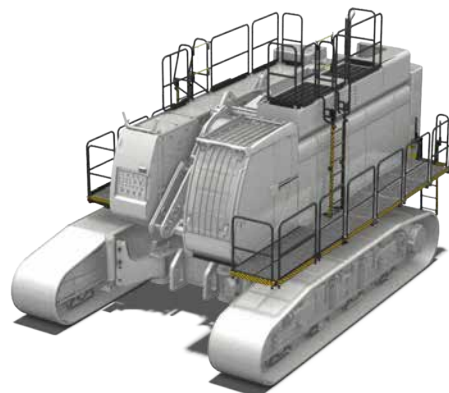


Rotary drive	Multigear version	Multigear version
- Max torque (intermittent)	435 kNm	320834 lbf·ft
- Rated torque	411 kNm	303133 lbf·ft
- Speed of rotation (1 st gear)	19,4 rpm	19.4 rpm
- Speed of rotation (3 rd gear)	81 rpm	81 rpm

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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 tramping on ramp
- Video-camera set with 5 cameras included
- Rearview mirrors
- Led lights
- Oil discharge conveying system
- Load cell for service winch



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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	24300 mm	957 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 IV-US EPA Tier4f	EU stage IV-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

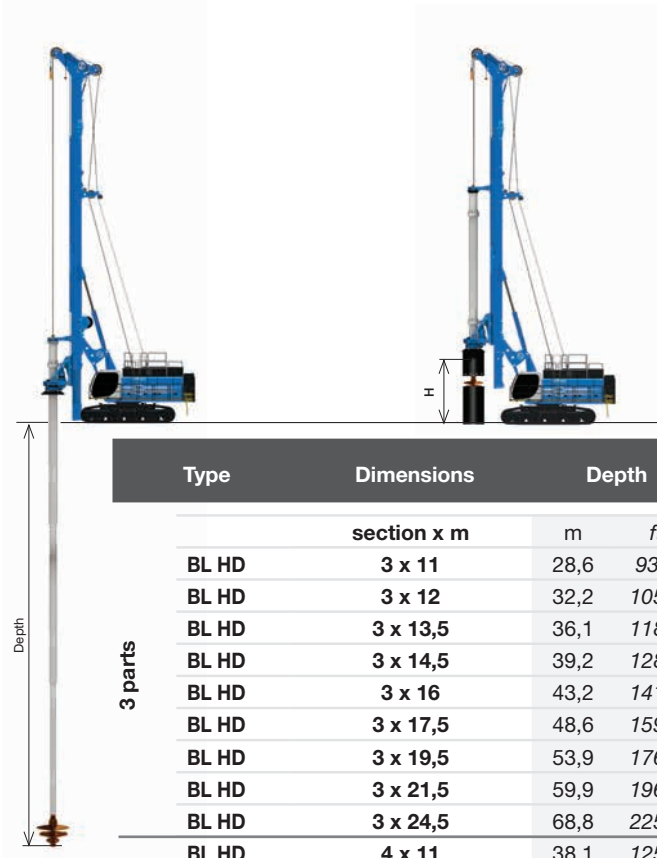
- Rotary table replaceable drive ribs
- Emergency mode of operation for engine
- Main and auxiliary winch controlled descent type with special grooving
- Hoist limit switch on main and service rope
- Swivel for main rope
- Service rope parking point
- GSM/GPRS/GPS modem kit
- DMS system electronic monitoring and visualization system
- Mast inclination measurement on X/Y axes (digital/ analog display)
- Automatic vertical mast alignment
- Depth measuring device
- 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
- 3 color warning light
- 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
- Automatic greasing kit
- Lubricator pump kit for rotary pads cradle
- Central lubrication system
- 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 main winch 470 kN (155658 lbf)

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KELLY DRILLING SYSTEM



	Type	Dimensions	Depth		Weight		CCS SYSTEM		WCS SYSTEM	
			m	ft	t	ton (US)	H		H	
		section x m					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	9,9	10.9	9,7	31.8	16,7	54.8
	FR/BL HD	5 x 12*	54,0	177.2	10,7	11.8	9,7	31.8	15,5	50.9
	FR/BL HD	5 x 13,5*	60,4	198.2	11,8	13.0	9,7	31.8	14,2	46.6
	FR/BL HD	5 x 14,5*	65,7	215.6	12,6	13.9	9,7	31.8	13,2	43.3
	FR/BL HD	5 x 16*	72,4	237.5	13,7	15.1	9,7	31.8	11,8	38.7
	FR/BL HD	5 x 17,5*	81,4	267.1	14,8	16.3	9,7	31.8	10,0	32.8
	FR/BL HD	5 x 19,5*	90,3	296.3	16,3	18.0	8,3	27.2	8,3	27.2
	FR/BL HD	5 x 21,5*	100,1	328.4	17,8	19.6	6,3	20.7	6,3	20.7
	FR/BL HD	5 x 24,5*	115,1	377.6	20,0	22.0	3,3	10.8	3,3	10.8
	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**	138,3	453.7	22,3	24.6	3,3	10.8	3,3	10.8

* Rotary head derated

** Main winch 470 kN required

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APPLICATIONS

CFA - Continuous Flight Auger - Quick conversion kit

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

CFA - Continuous Flight Auger - 4° Line 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	33,2 m	109 ft

CFA - Continuous Flight Auger - 4° Line 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

CAP/CSP - Cased Augered & Secant Piles - 4°Line 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

DP - Displacement Piles - Quick conversion kit

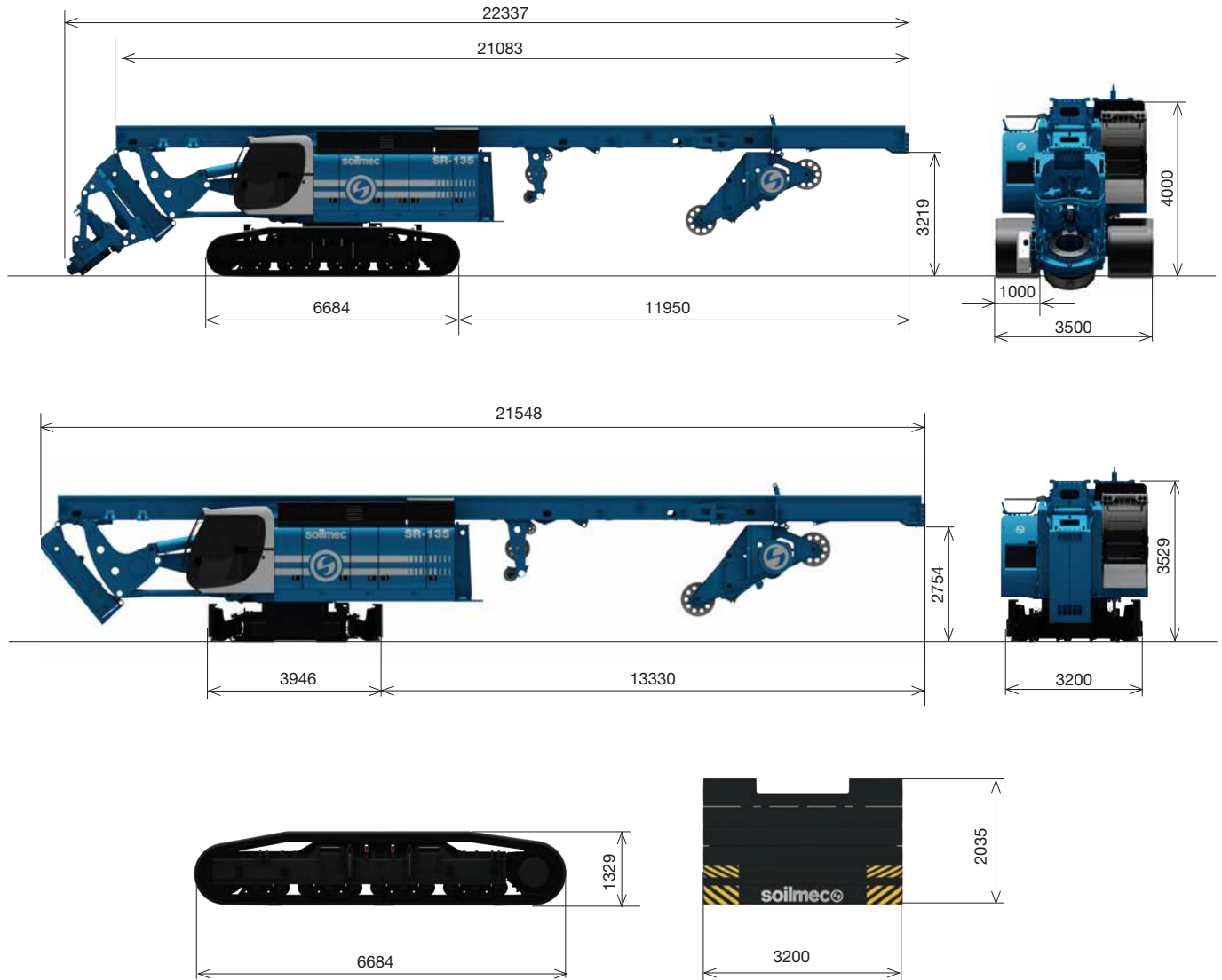
Max DP pile diameter	800 mm	31,50 in
Max TCT pile diameter	1000 mm	39,37 in
Max pile depth with 8,5 m string extension	31,5 m	103 ft
Max depth c/w lattice boom mast extension	39 m	127,95 ft

TJ - Turbojet® - Quick conversion kit

Max treatment diameter	1500 (2000 special) mm	59 (79 special) 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

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TRANSPORT, DIMENSIONS & WEIGHTS



Transport configuration

- Transport width with/without crawlers	3500 mm	<i>137,80 in</i>
- Transport length CCS version without rotary	21548 mm	<i>849 in</i>
- Transport height	4000 mm	<i>157,48 in</i>
- Counterweight (single elements 1,4/4/4,4 t)	23000 / 26000 kg	<i>50706 / 57320 lb</i>
- Side frames weight	26600 kg	<i>58643 lb</i>
- CCS Version - Transport weight std - min	102100 / 46900 kg	<i>225090 / 103396 lb</i>
- WCS Version - Transport weight std - min	100200 / 46900 kg	<i>220901 / 103396 lb</i>

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