

Hydraulic Rotary Rig

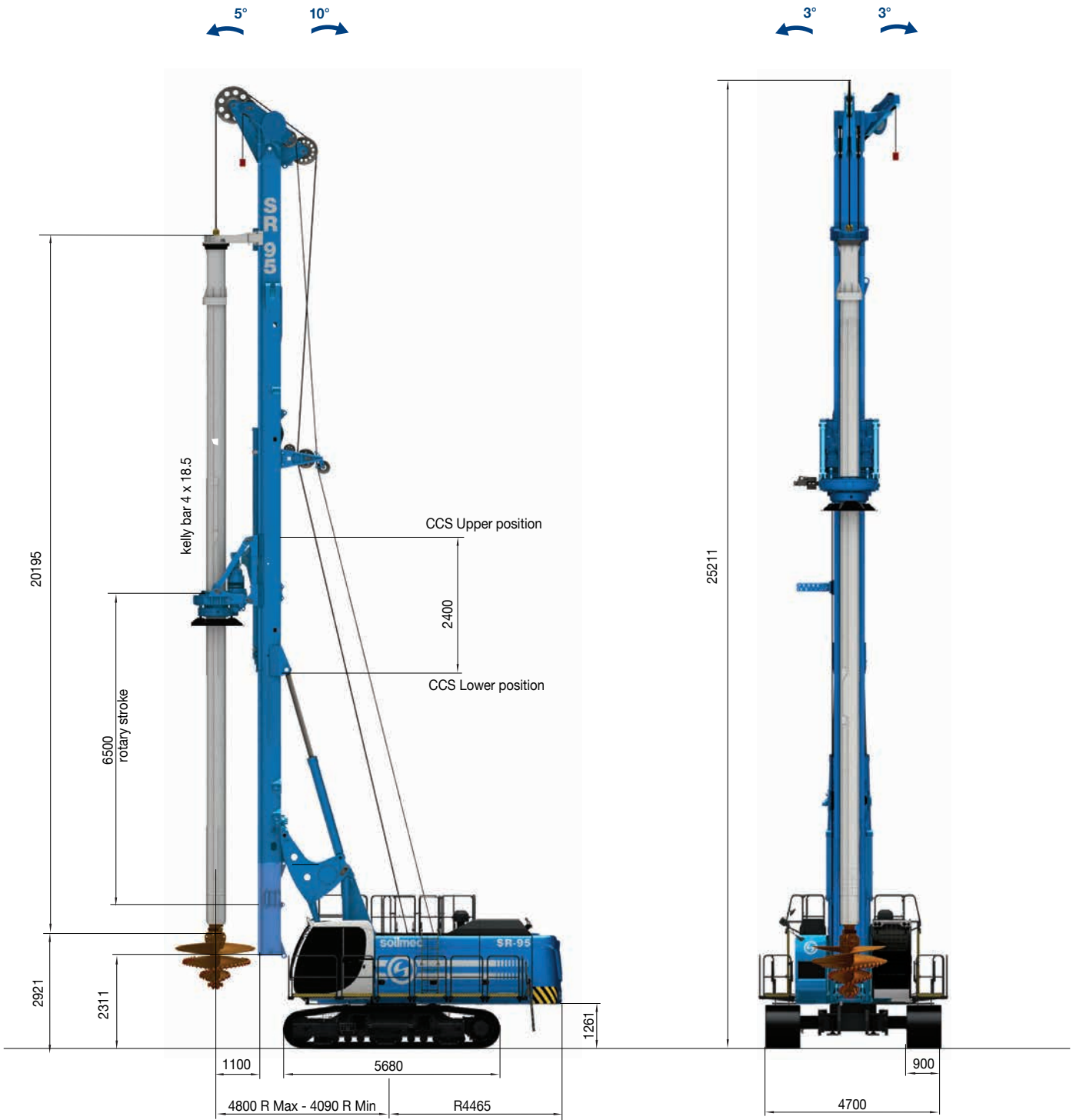
SR-95 HIT



soilmec 
Drilling and Foundation Equipment

SR-95 HIT Hydraulic Rotary Rig

LDP APPLICATIONS Cylinder Crowd System



LDP - Large Diameter Piles - CCS version

Operating weight w/o kelly	89900 kg	198196 lb
Max pile diameter	2100 (2500**) mm	83 (98**) in
Max pile diameter - special configuration*	3000 (3400**) mm	118 (134**) in
Max pile depth - friction kelly	89 m	292 ft
Max pile depth - locking kelly	70 m	229.66 ft
Max pile depth - locking and friction kelly - Special version with 3 m mast extension	81,4 - 101,7 m	267 - 334 ft

* lower mast section removed, tool below mast

** increased drilling axis package

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LDP APPLICATIONS - Winch Crowd System



LDP - Large Diameter Piles - WCS version

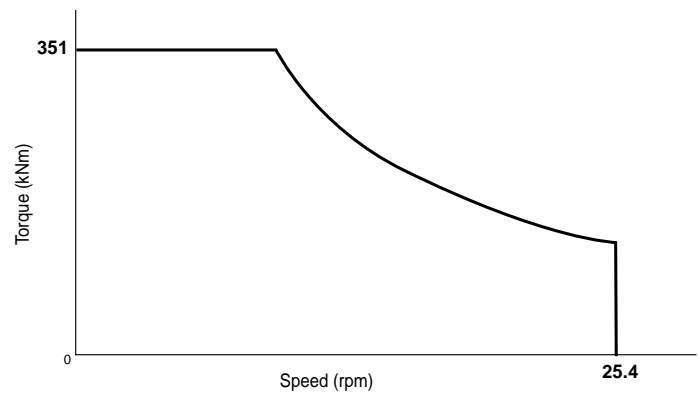
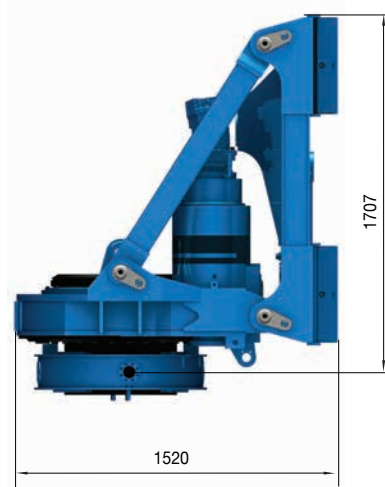
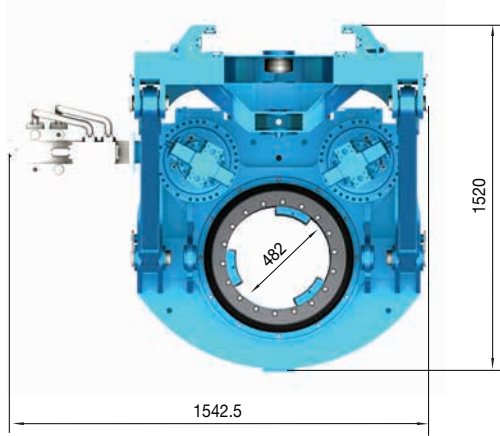
Operating weight w/o kelly	91900 kg	202605 lb
Max pile diameter	1900 (2300**) mm	75 (90**) in
Max pile diameter - special configuration*	3000 (3400**) mm	118 (134**) in
Max pile depth - friction kelly	89 m	292 ft
Max pile depth - locking kelly	70 m	229.66 ft
Max pile depth - locking and friction kelly - Special version with 3 m mast extension	81,4 - 101,7 m	267 - 334 ft

* lower mast section removed, tool below mast

** increased drilling axis package

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ROTARY TABLE



Rotary drive

- Max torque (intermittent)
- Rated torque
- Speed of rotation (max)
- Spin-off speed
- Weight w/o cradle, flange & cardan joint

Single gear version

- 351 kNm
- 301 kNm
- 25,4 rpm
- 120 rpm
- 4570 kg

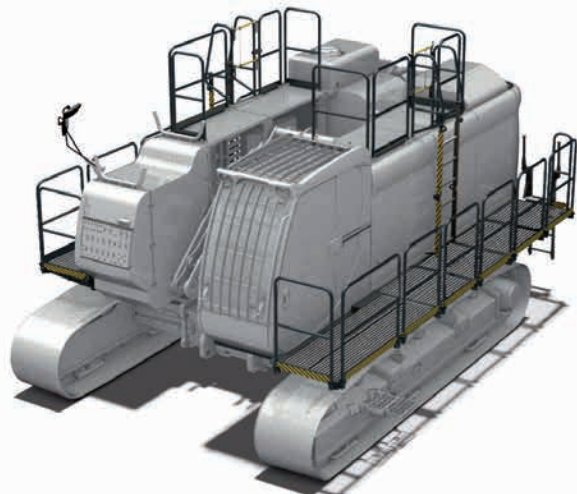
Single gear version

- 258880 lbf*ft
- 222006 lbf*ft
- 25.4 rpm
- 120 rpm
- 10075 lb

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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 tramming 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	6500 mm	256 in
- Crowd force pull (down/up)	280 / 365 kN	62945 / 82054 lbf
- Speed (down/up)	3,7 / 10,8 m/min	35.4 ft/min
- Fast speed (down/up)	3,5/11 m/min	11.5/36 ft/min
WCS - Winch crowd system		
- Stroke	18800 mm	740 in
- Crowd force pull (down/up)	484 / 484 kN	108800 / 108800 lbf
- Speed (down/up)	6 / 25 m/min	19.7 / 82 ft/min
- Fast speed (down/up)	6 / 25 m/min	19.7 / 82 ft/min
Main winch		
	controlled descent	<i>controlled descent</i>
- Line pull (1st layer)	320 kN	71939 lbf
- Rope diameter/lenght	32 mm	1.26 in
- Line speed (max.)	81 m/min	265 ft/min
Auxiliary winch		
	controlled descent	<i>controlled descent</i>
- Line pull (1st layer)	132 kN	29675 lbf
- Rope diameter	22 mm	0.87 in
- Line speed (max.)	70 m/min	230 ft/min
Engine		
	Cummins X15	<i>Cummins X15</i>
- Rated output ISO 3046-I	450 kW @ 1800 rpm	603 HP @ 1800 rpm
- Engine conforms to Exhaust emission Standard	EU stage V, US EPA Tier 4f	<i>EU stage V, US EPA Tier 4f</i>
- Diesel tank capacity	830 l	220 US gal
Hydraulic system		
- Flow rates (main circuits)	2x 444 l/min	2x 117.3 US gal/min
- Flow rates (auxiliary circuits)	140 + 105 + 26 l/min	37 + 28 + 7 US gal/min
- Hydraulic oil tank capacity	1050 l	277 US gal
Undercarriage		
	variable gauge, telescoping removable sides	<i>variable gauge, telescoping removable sides</i>
- Overall width of crawlers retracted/extended	3200 / 4700 mm	126 / 185 in
- Width of triple grouser track shoes	900 mm	35 in
- Overall length of crawlers	5680 mm	224 in
- Traction force effective/nominal	668 kN	150172.4 lbf
- Travel speed	1,9 km/h	1.2 mph
Mast inclination (Backward/ Forward/Lateral)	10° / 5° / 3°	10° / 5° / 3°

STANDARD EQUIPMENT

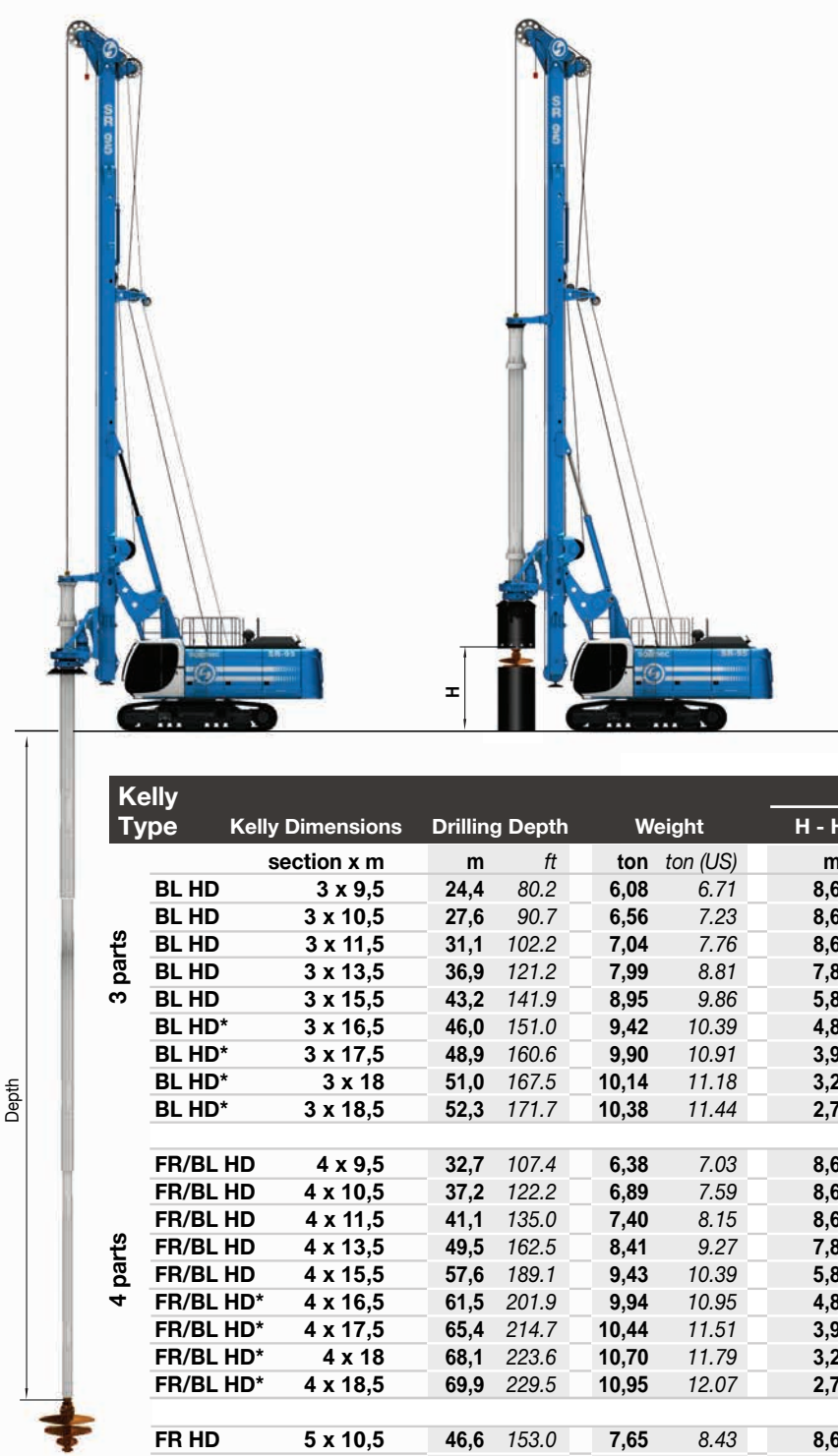
- Rotary table replaceable drive ribs
- Emergency mode of operation for engine
- Main and auxiliary winch controlled descent type with special grooving
- Hoist limit switch on main and service rope
- Service rope parking point
- GSM/GPRS/GPS modem kit
- DMS system electronic monitoring and visualization system
- Mast inclination measurement on X/Y axes (digital/analog display)
- Automatic vertical mast alignment
- Depth measuring device
- Rotary speed measuring device
- Removable 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 (403 kW - 540 Hp)
- Kit for disassembling undercarriage
- Additional Counterweight 5,7 ton(12566 lb)
- Fiberglass canopies
- Automatic greasing kit
- Lubrificator pump kit for rotary pads cradle
- Central lubrication system
- Flange for bucket opening
- Hydraulic prearrangement for casing oscillator
- Mast extension for LDP version special configuration
- Mast ladder kit
- Parachute safety kit
- Automatic hydraulic kit for upper mast folding
- Limit switch for rope winding and winches
- Double roller auger cleaner
- Star auger cleaner
- Prearrangement for VTH-1
- Color warning light
- Air compressor kit
- Increased drilling axis

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KELLY DRILLING SYSTEM



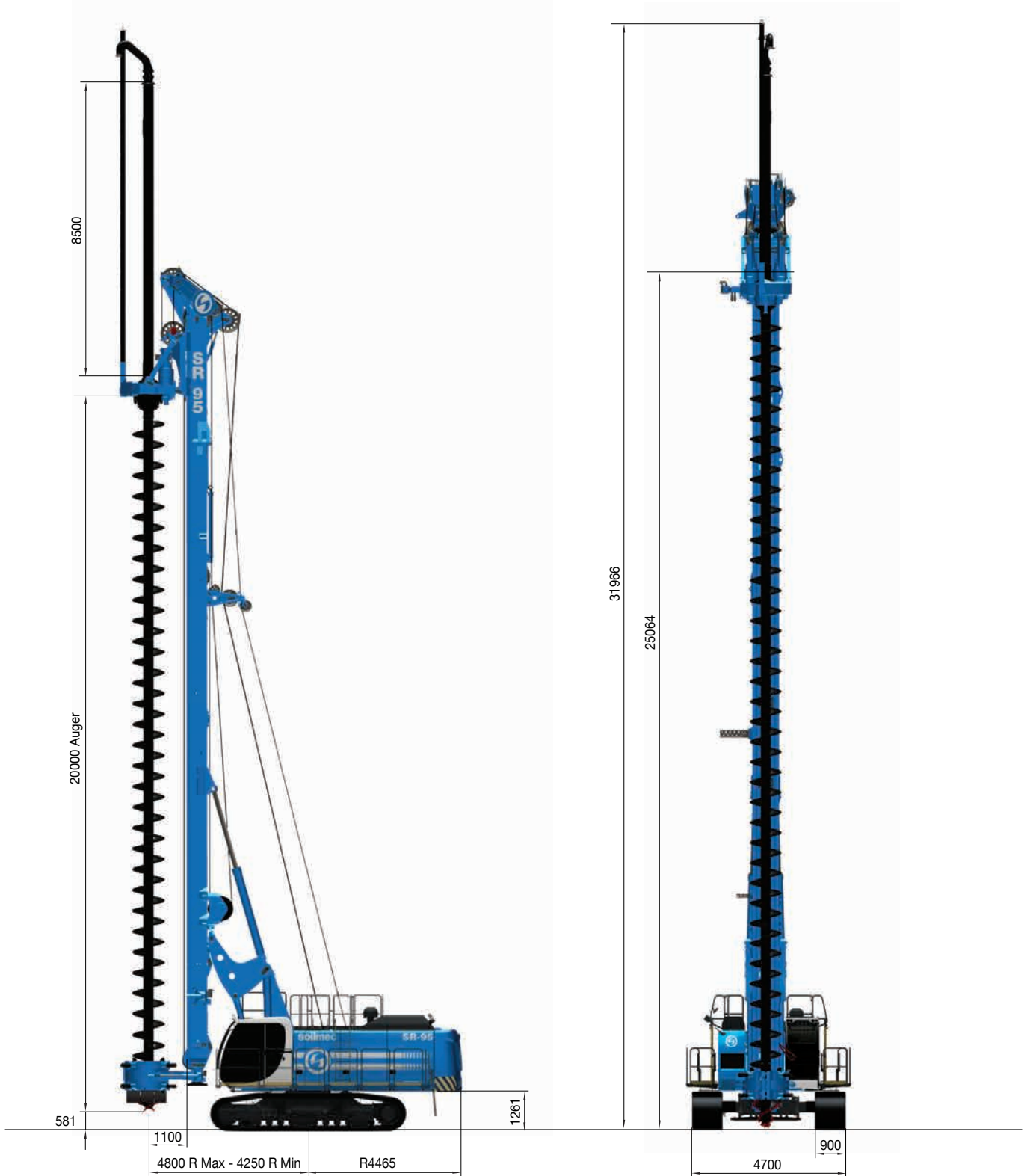
Kelly Type	Kelly Dimensions section x m	Drilling Depth		Weight		CCS SYSTEM				WCS SYSTEM		
		m	ft	ton	ton (US)	H - High pos.		H - Low pos.**		H		
						m	ft	m	ft	m	ft	
3 parts	BL HD	3 x 9,5	24,4	80.2	6,08	6.71	8,6	28.2	11,0	36.1	12,1	39.6
	BL HD	3 x 10,5	27,6	90.7	6,56	7.23	8,6	28.2	11,0	36.1	11,0	36.0
	BL HD	3 x 11,5	31,1	102.2	7,04	7.76	8,6	28.2	9,9	32.5	9,9	32.4
	BL HD	3 x 13,5	36,9	121.2	7,99	8.81	7,8	25.7	7,8	25.7	7,8	25.7
	BL HD	3 x 15,5	43,2	141.9	8,95	9.86	5,8	19.2	5,8	19.2	5,8	19.2
	BL HD*	3 x 16,5	46,0	151.0	9,42	10.39	4,8	15.9	-	-	4,8	15.9
	BL HD*	3 x 17,5	48,9	160.6	9,90	10.91	3,9	12.9	-	-	3,9	12.9
	BL HD*	3 x 18	51,0	167.5	10,14	11.18	3,2	10.4	-	-	3,2	10.4
	BL HD*	3 x 18,5	52,3	171.7	10,38	11.44	2,7	9.0	-	-	2,7	9.0
4 parts	FR/BL HD	4 x 9,5	32,7	107.4	6,38	7.03	8,6	28.2	11,0	36.1	12,1	39.6
	FR/BL HD	4 x 10,5	37,2	122.2	6,89	7.59	8,6	28.2	11,0	36.1	11,0	36.0
	FR/BL HD	4 x 11,5	41,1	135.0	7,40	8.15	8,6	28.2	9,9	32.5	9,9	32.4
	FR/BL HD	4 x 13,5	49,5	162.5	8,41	9.27	7,8	25.7	7,8	25.7	7,8	25.7
	FR/BL HD	4 x 15,5	57,6	189.1	9,43	10.39	5,8	19.2	5,8	19.2	5,8	19.2
	FR/BL HD*	4 x 16,5	61,5	201.9	9,94	10.95	4,8	15.9	-	-	4,8	15.9
	FR/BL HD*	4 x 17,5	65,4	214.7	10,44	11.51	3,9	12.9	-	-	3,9	12.9
	FR/BL HD*	4 x 18	68,1	223.6	10,70	11.79	3,2	10.4	-	-	3,2	10.4
	FR/BL HD*	4 x 18,5	69,9	229.5	10,95	12.07	2,7	9.0	-	-	2,7	9.0
5 parts*	FR HD	5 x 10,5	46,6	153.0	7,65	8.43	8,6	28.2	11,0	36.1	11,0	36.0
	FR HD	5 x 11,5	52,1	171.1	8,28	9.12	8,6	28.2	9,9	32.5	9,9	32.4
	FR HD	5 x 13,5	62,4	204.9	9,53	10.51	7,8	25.7	7,8	25.7	7,8	25.7
	FR HD	5 x 15,5	72,3	237.3	10,79	11.89	5,8	19.2	5,8	19.2	5,8	19.2
	FR HD*	5 x 16,5	77,0	252.8	11,42	12.59	4,8	15.9	-	-	4,8	15.9
	FR HD*	5 x 17,5	81,9	268.8	12,05	13.28	3,9	12.9	-	-	3,9	12.9
	FR HD*	5 x 18	85,3	280.0	12,36	13.62	3,2	10.4	-	-	3,2	10.4
	FR HD*	5 x 18,5	87,5	287.2	12,67	13.97	2,7	9.0	-	-	2,7	9.0
	FR HD*	5 x 19	88,9	291.7	12,98	14.30	2,6	8.5	-	-	2,6	8.5

* Not self mounting kelly bar w/o mast foot

** 2,4 m depth reduction

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CFA APPLICATIONS Quick Change



CFA - Continuous Flight Auger - Quick Change

Operating weight w/o auger	95200 kg	209878 lb
Max pile diameter	1200 mm	47 in
Max pile depth with star auger cleaner c/w 8,5 m auger extension	26,5 m	86.94 ft
Max pile depth with double roller auger cleaner c/w 8,5 m auger extension	25 m	81.94 ft
Extraction force	1000 kN	224808.9 lbf
Crowd force on auger	484 kN	108807.5 lbf

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CFA APPLICATIONS 4-lines pull



CFA - Continuous Flight Auger - 4-lines pull

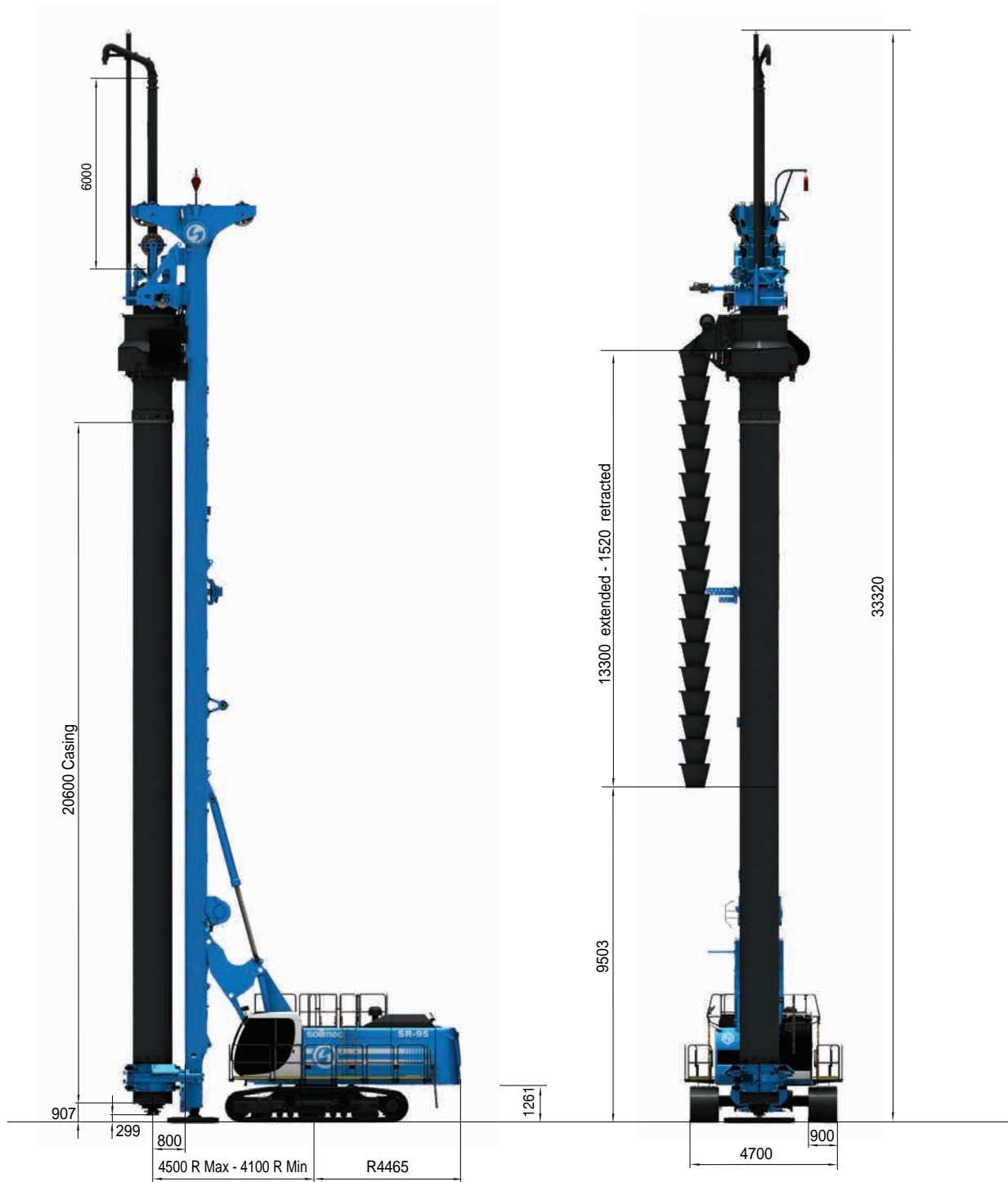
Operating weight c/w auger ext, w/o auger	94700 kg	208776 lb
Max pile diameter	1200 mm	47 in
Max pile depth with star auger cleaner c/w 6 m auger extension	30 m	98 ft
Max pile depth with double roller auger cleaner c/w 6 m auger extension	28,5 m	94 ft
Extraction force	1110 kN	249534 lbf
Crowd force on auger (optional)	100 / 484 kN	22481 / 108806 lbf

Special Version

Operating weight (c/w auger ext, w/o auger)	95300 kg	210098 lb
Max pile diameter	1200 mm	47 in
Max pile depth with star auger cleaner, with 6 m auger extension	32 m	105 ft
Max pile depth with double roller auger cleaner, with 6 m auger extension	30,5 m	100 ft
Extraction force	885 kN	198952 lbf
Crowd force on auger (optional)	100 / 484 kN	22481 / 108806 lbf

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CAP/CSP APPLICATIONS 4-lines pull



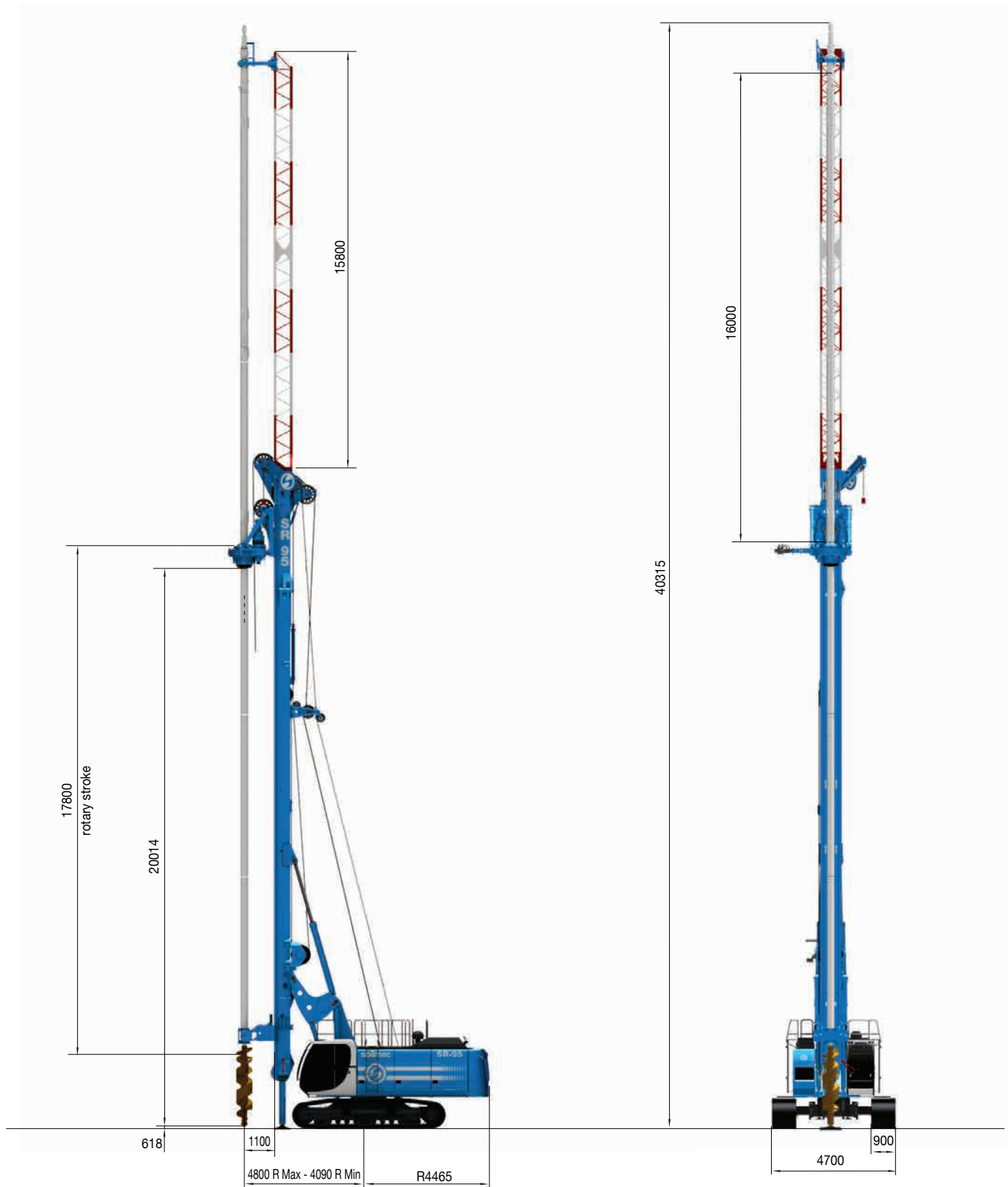
CAP/CSP - Cased Augered & Secant Piles - 4-lines pull

Operating weight	108800 kg	239860 lb
Max pile diameter	800 / 1000* mm	31.5 / 39* in
Max pile depth c/w 6 m auger extension	26,5 m	87 ft
Max cased depth	19,9 m	65 ft
Auger rotary max torque (intermittent)	250 kNm	184387 lb*ft
Auger Max speed	25,4 rpm	25.4 rpm
Auger pull up/down	1110 / 332 kN	249534 / 74635 lb
Casing rotary max torque	252 kNm	185863 lb*ft
Casing rotary speed of rotation	5 rpm	5 rpm
Casing pull up/down	816 / 484 kN	183444 / 188807 lb

* A special undercarriage is needed

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DP / TCT APPLICATIONS Quick Change



DP / TCT - Displacement Piles - Quick Change

Max DP pile diameter	600 mm	24 in
Max TCT pile diameter	800 mm	31.50 in
Max pile depth c/w 8,5 m auger extension w/o lattice mast extension	25,5 m	84 ft
Lattice mast extension	8,4 / 15,8 m	27.6 / 52 ft
Max depth c/w 16 m auger extension and lattice mast extension 15,8 m	33 m	108.27 ft

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TJ / SOIL MIXING APPLICATIONS Quick Change

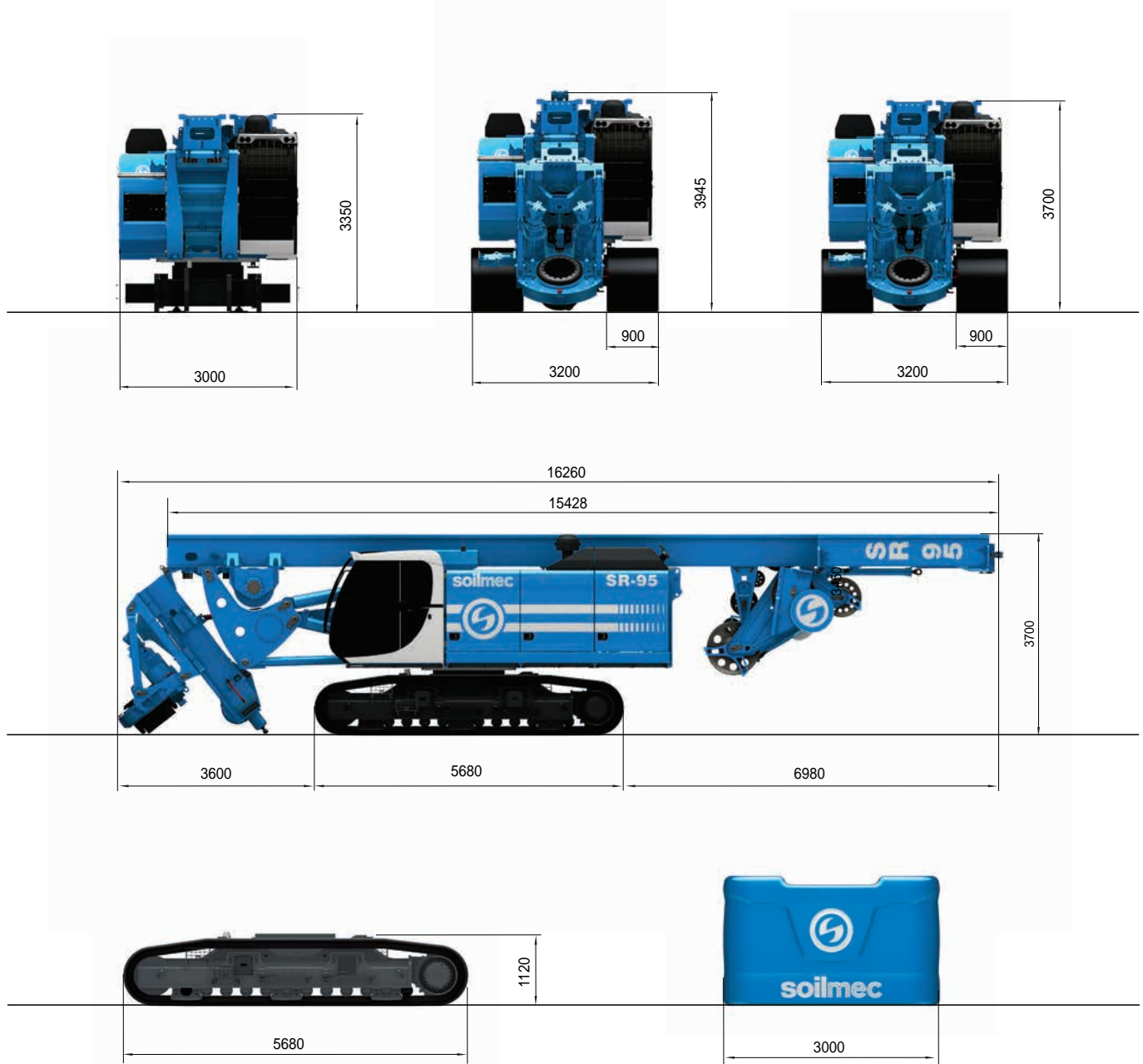


TJ - Turbojet® - Quick Change

Max treatment diameter	1500 mm	59 in
Max pile depth c/w 6 m auger extension w/o lattice mast extension	23 m	75 ft
Lattice mast extension	8,4 / 15,8 m	27.6 / 52 ft
Max depth c/w 16 m auger extension and lattice mast extension 15,8 m	33 m	108.27 ft

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TRANSPORT, DIMENSIONS AND WEIGHTS



Weight 16000 (8000 + 8000) kg 35274 (17637 + 17637) lb
Thickness 900 mm 35 in

Weight 15100 (11600 + 3500) kg 33289 (25574 + 7716) lb
Thickness 765 mm 30 in

Transport configuration		
Width c/w - w/o crawlers	3200 - 3000 mm	126 - 118 in
Length w/o rotary	15920 mm	627 in
Weight CCS version c/w rotary, w/o counterweight - w/o rotary, counterweight, crawlers	71200 - 48900 kg	156969 - 107806 lb
Weight WSC version c/w rotary, w/o counterweight - w/o rotary, counterweight, crawlers	74600 - 54000 kg	164465 - 119049 lb

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