

Hydraulic Rotary Rig

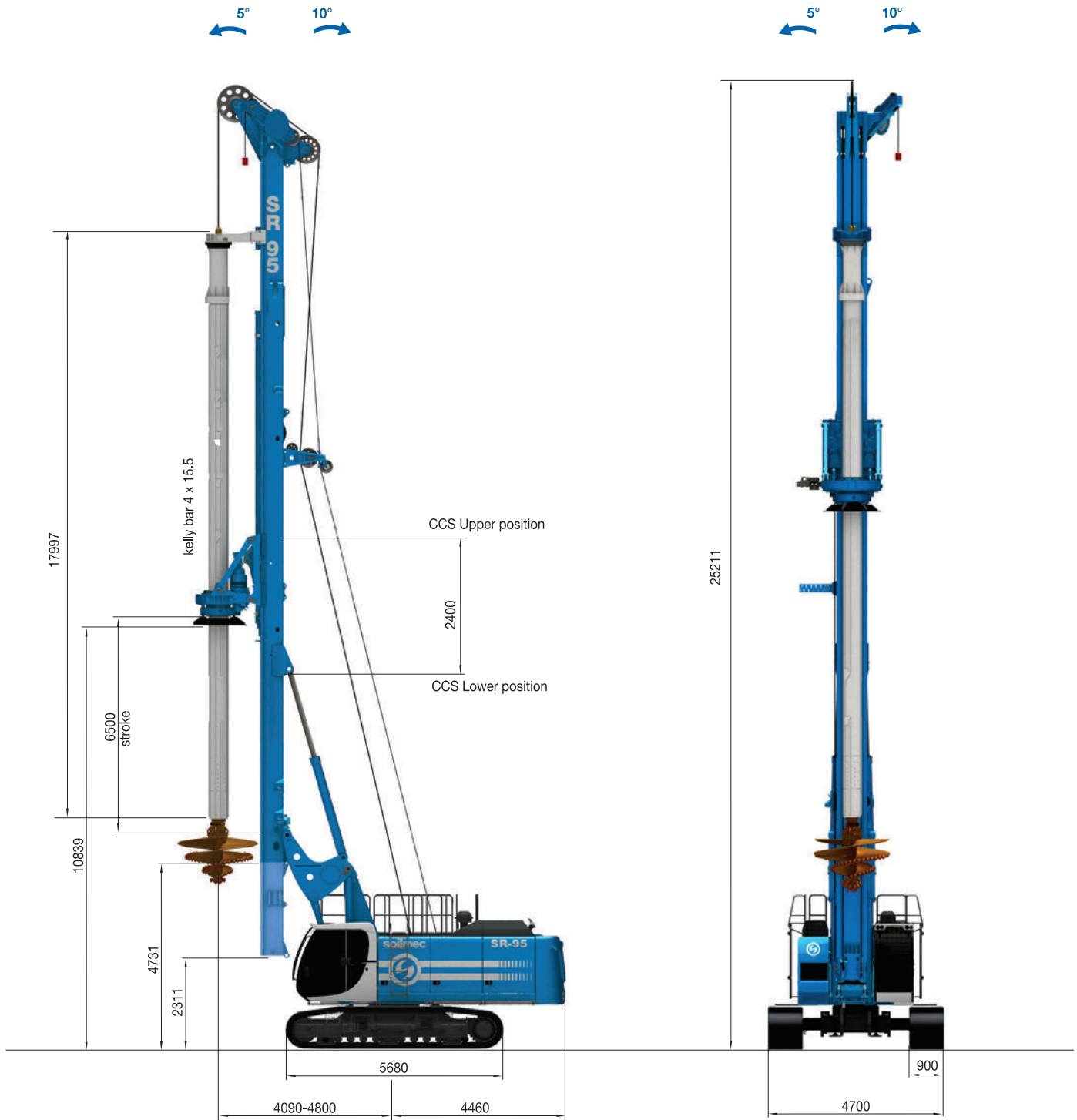
# SR-95 HIT



**soilmec**   
Drilling and Foundation Equipment

# SR-95 HIT Hydraulic Rotary Rig

## LDP APPLICATIONS Crowd cylinder



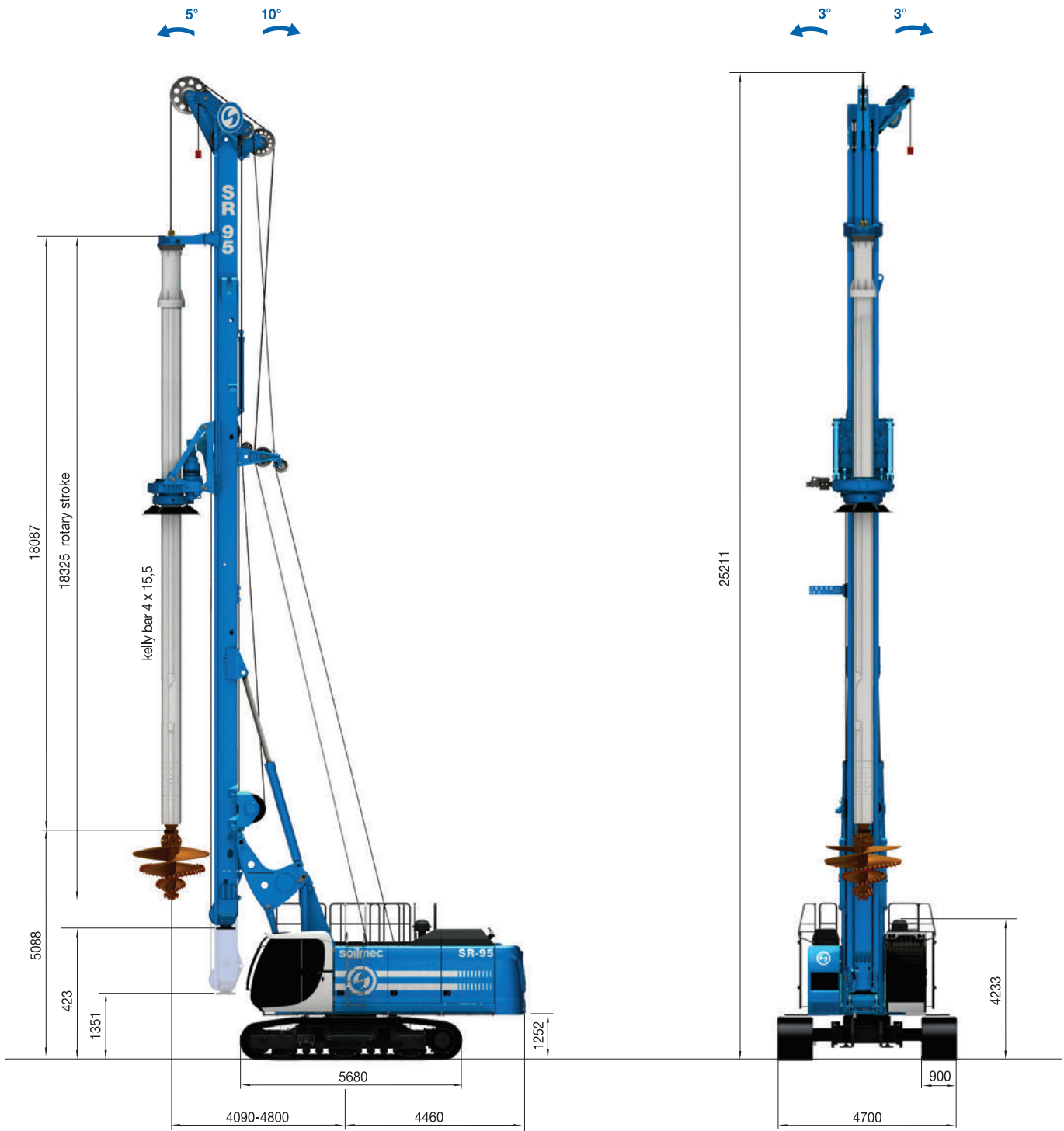
### LDP - Large Diameter Piles - CCS version

Operating weight w/o kelly	88750 kg	1956582 lb
Max pile diameter	2100 mm	83 in
Max pile diameter - special configuration*	3000 mm	118 in
Max pile depth - friction kelly	89 - 106.5 m	292 - 349.4 ft
Max pile depth - locking kelly	70 m	229.66 ft
Max pile depth - Special version with 3 m mast extension	82 - 104 m	269 - 341 ft

\* lower mast section removed, tool below mast

# SR-95 HIT Hydraulic Rotary Rig

## LDP APPLICATIONS - Crowd System with Winch

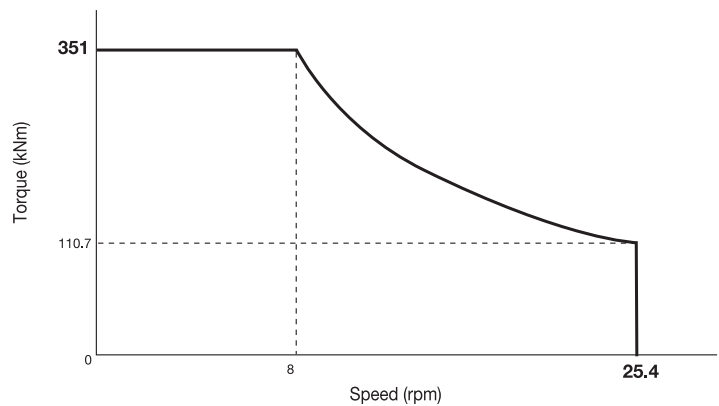
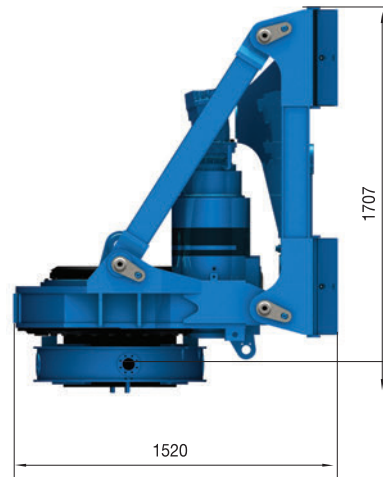
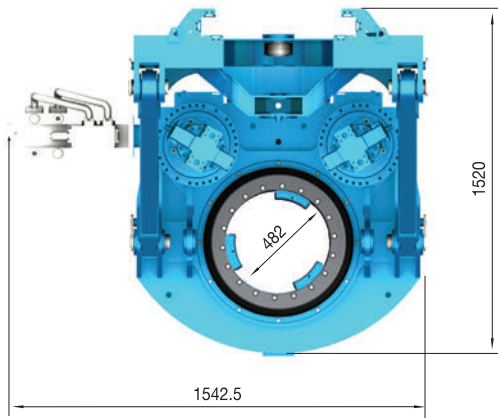


LDP - Large Diameter Piles - WCS version		
Operating weight c/w 4x10,5 kelly bar	90450 kg	199406 lb
Max pile diameter	1900 mm	75 in
Max pile diameter	3000 mm	118 in
Max pile depth - friction kelly	89 - 106.5 m	292 - 349.4 ft
Max pile depth - locking kelly	70 m	229.66 ft
Max pile depth - Special version with 3 m mast extension	82 - 104 m	269 - 341 ft

\* lower mast section removed, tool below mast

## SR-95 HIT Hydraulic Rotary Rig

### ROTARY TABLE



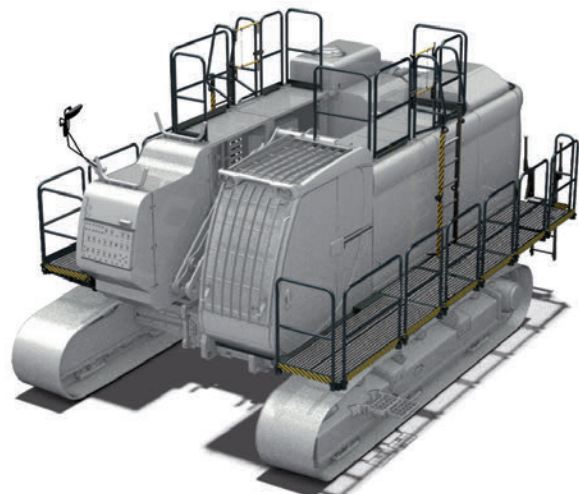
Rotary drive	Single gear version	Single gear version
- Max torque *	351 kNm	258880 lb <sup>ft</sup>
- Rated torque	301 kNm	222006 lb <sup>ft</sup>
- Speed of rotation (max)	25,4 rpm	25.4 rpm
- Spin-off speed	120 rpm	120 rpm
- Weight w/o cradle	6120 kg	13492 lb

\* restricted-intermittent

## SR-95 ADV Hydraulic Rotary Rig

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

- Catwalks 600/900 mm (2/3 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-95 HIT Hydraulic Rotary Rig

## TECHNICAL DATA SHEET

<b>CCS - Cylinder crowd system</b>		
- 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
<b>WCS - Winch crowd system</b>		
- 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
<b>Main winch</b>		
	controlled descent	controlled descent
- Line pull (1st layer)	320 kN	71939 lbf
- Rope diameter/length	32 mm	1.26 in
- Line speed (max.)	80 m/min	263 ft/min
<b>Auxiliary winch</b>		
	controlled descent	controlled descent
- Line pull (1st layer)	132 kN	29675 lbf
- Rope diameter	22 mm	0.87 in
- Line speed (max.)	70 m/min	230 ft/min
<b>Engine</b>		
	CAT C15 Acert	CAT C15 Acert
- Rated output ISO 3046-I	403 kW @ 1800 rpm	540 HP @ 1800 rpm
- Engine conforms to Exhaust emission Standard	EU stage IV, US EPA Tier 4f	EU stage IV, US EPA Tier 4f
- Diesel tank capacity	830 l	220 US gal
<b>Hydraulic system</b>		
- Flow rates (main circuits)	2x 444 l/min	2x 117.3 US gal/min
- Flow rates (auxiliary circuits)	140 + 105 + 63 l/min	37 + 28 + 16 US gal/min
- Hydraulic oil tank capacity	1050 l	277 US gal
<b>Undercarriage</b>		
	variable gauge, telescoping removable sides	variable gauge, telescoping removable sides
- 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
<b>Mast inclination</b> (Backward/ Forward/Lateral)	10 / 5 / 3°	10 / 5 / 3°

## STANDARD EQUIPMENT

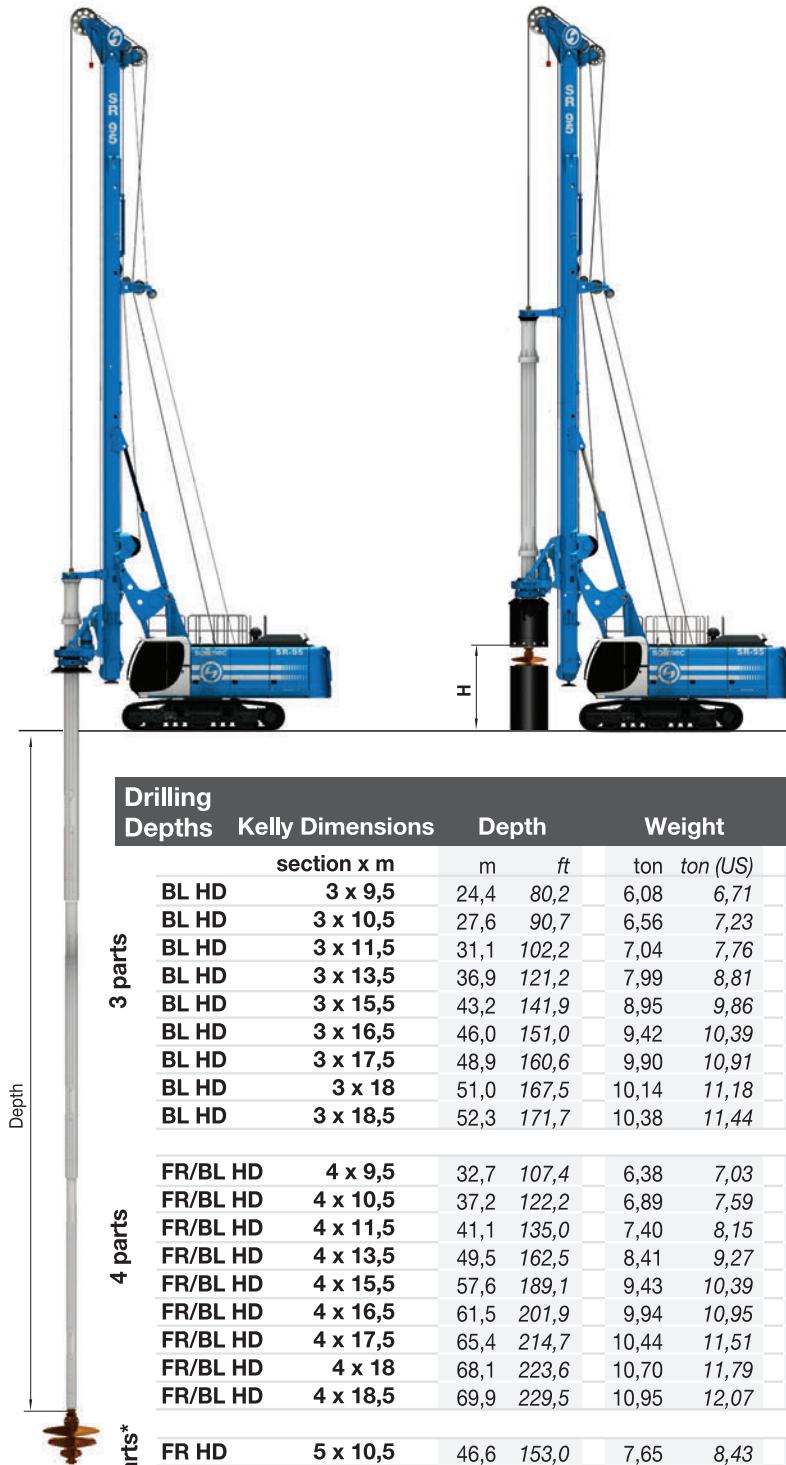
- Rotary table replaceable drive ribs
- Emergency mode of operation for engine
- Main and auxiliary winch controlled descent type with special grooving
- Hoist limit switch on main and service rope
- Swivel for main rope
- Service rope parking point
- GSM/GPRS/GPS modem kit
- DMS system electronic monitoring and visualization system
- Mast inclination measurement on X/Y axes (digital/analog display)
- Automatic vertical mast alignment
- Depth measuring device
- Rotary speed measuring device
- 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
- 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
- Additional Counterweight 5,7 ton
- Fiberglass canopies
- Automatic greasing kit
- Lubrification 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

# SR-95 HIT Hydraulic Rotary Rig

## KELLY DRILLING SYSTEM

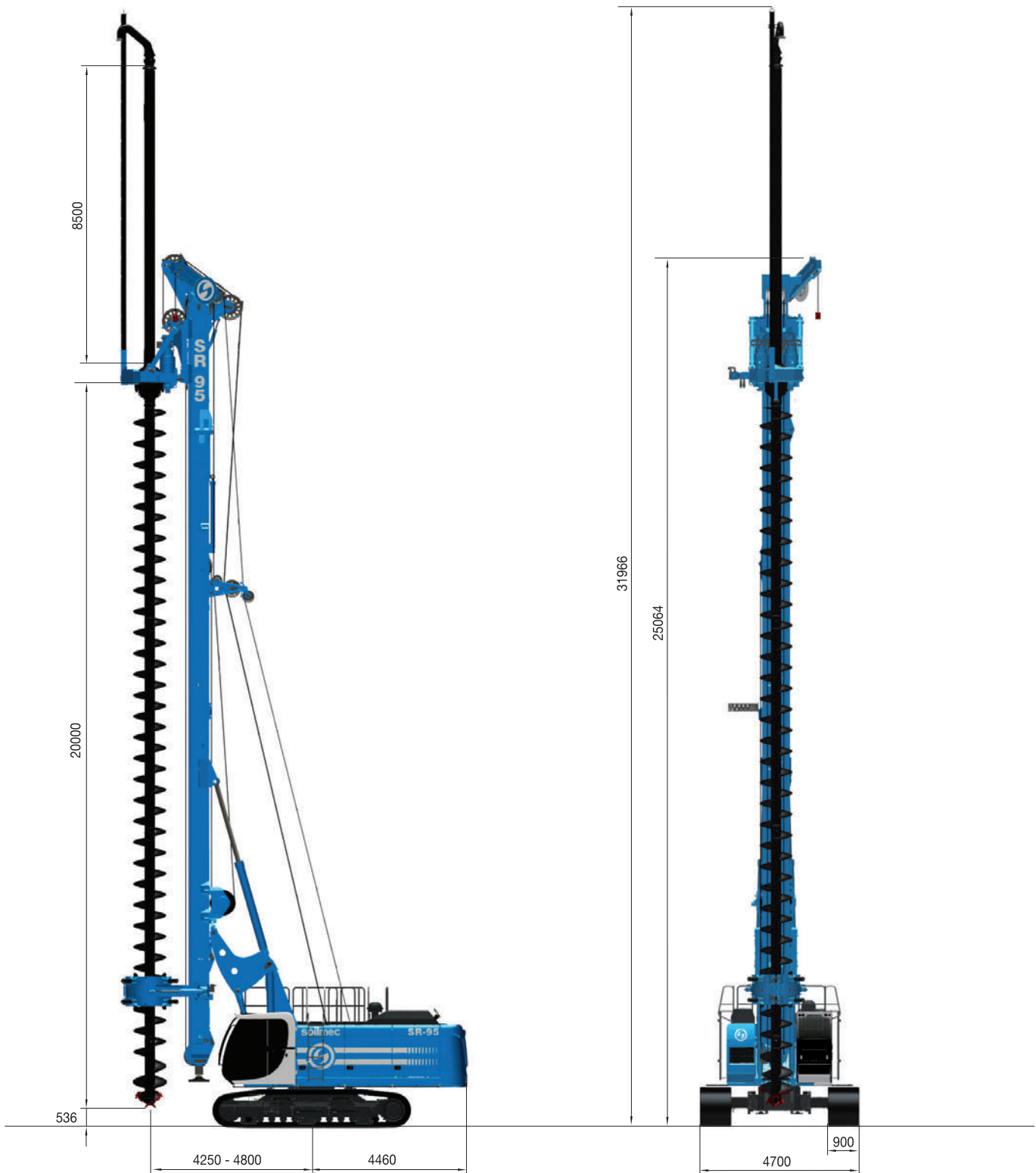


Drilling Depths	Kelly Dimensions	Depth		Weight		CCS SYSTEM				WCS SYSTEM		
						H - High pos.		H - Low pos.**		H		
	section x m	m	ft	ton	ton (US)	m	ft	m	ft	m	ft	
3 parts	BL HD	3 x 9,5	24,4	80,2	6,08	6,71	8,6	28,2	11,0	36,1	12,1	39,6
	BL HD	3 x 10,5	27,6	90,7	6,56	7,23	8,6	28,2	11,0	36,1	11,0	36,0
	BL 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	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	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	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	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	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	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	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	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	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	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	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	2,7	9,0
6 parts	FR HD	6 x 10,5	55,9	183,4	7,8	7,9	8,59	28,2	10,0	32,8	10,0	32,8
	FR HD *	6 x 19,0	107,0	351,1	13,3	13,5	2,37	7,8	2,37	7,8	2,37	7,8

\* Rotary head derated

\*\* 2,4 m depth reduction

## SR-95 HIT Hydraulic Rotary Rig CFA APPLICATIONS Quick conversion kit

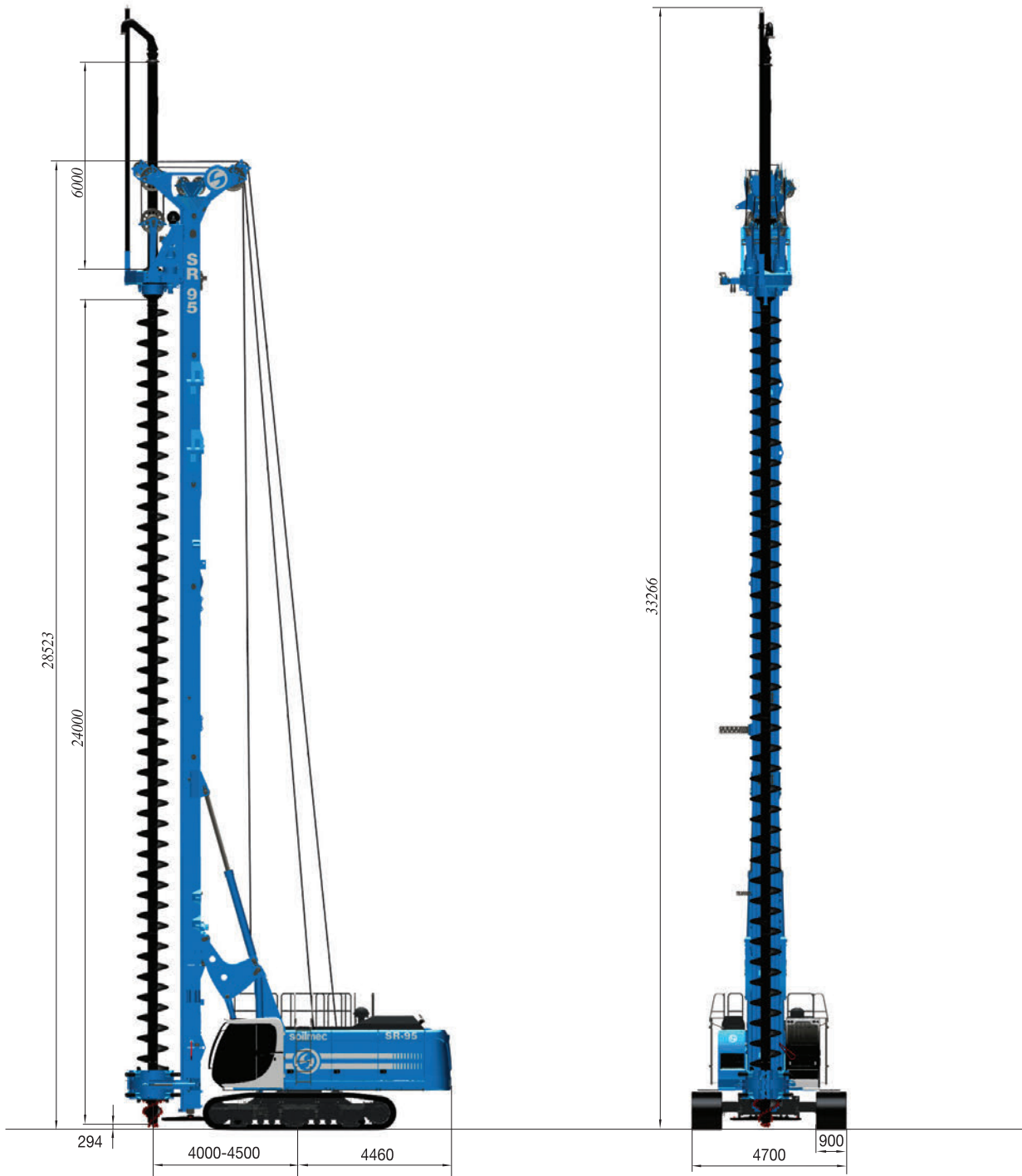


### CFA - Continuous Flight Auger - Quick conversion kit

Operating weight w/o auger	93350 kg	205799 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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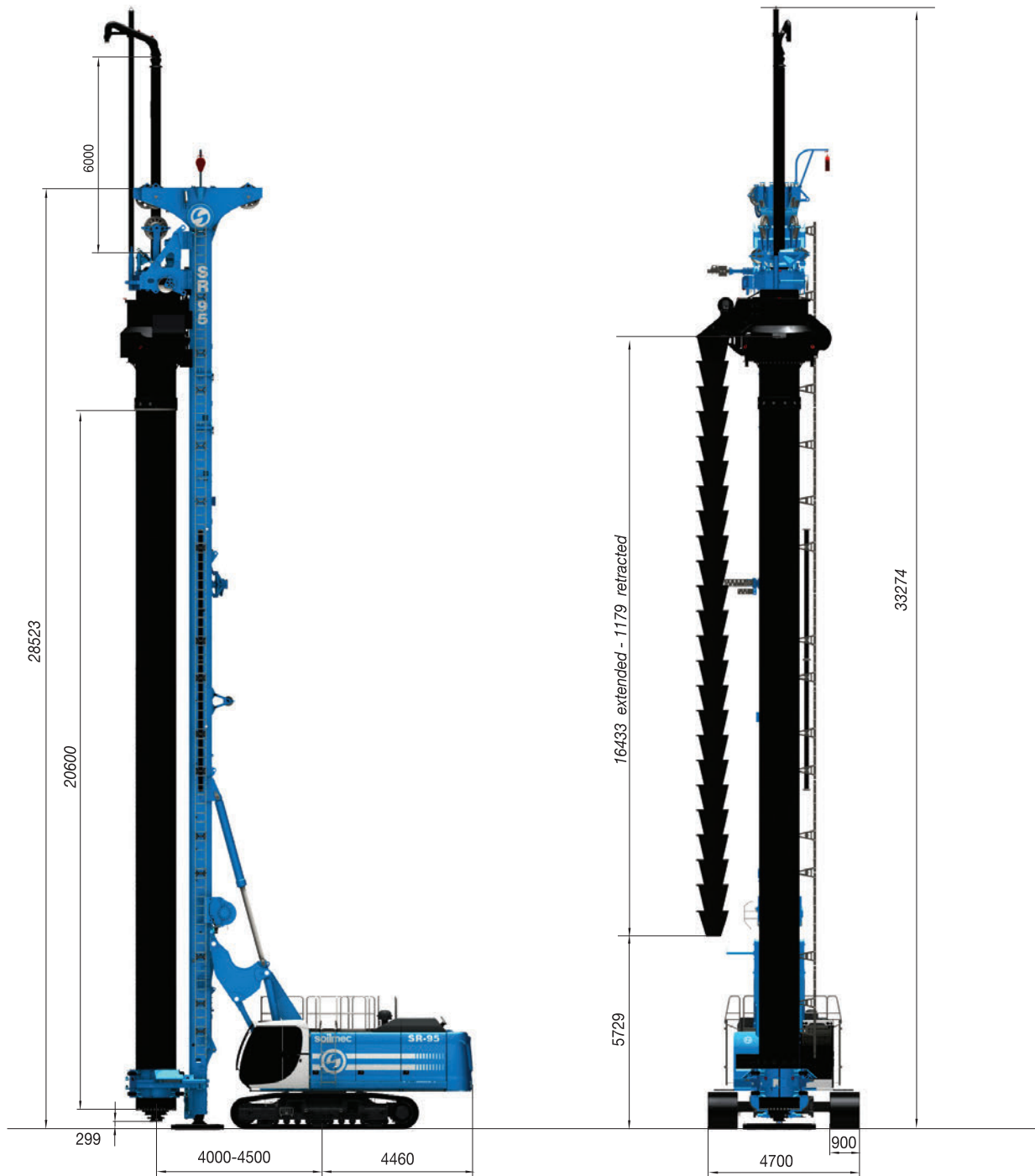
## CFA APPLICATIONS 4° line pull



CFA - Continuous Flight Auger - 4° linepull		
Operating weight c/w auger ext, w/o auger	94150 kg	207563 lb
Max pile diameter	1200 mm	47.24 in
Max pile depth with star auger cleaner c/w 6 m auger extension	30 m	98.42 ft
Max pile depth with double roller auger cleaner c/w 6 m auger extension	28,5 m	93.50 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)	94700 kg	208776 lb
Max pile diameter	1200 mm	47.24 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



## SR-95 HIT Hydraulic Rotary Rig CAP/CSP APPLICATIONS 4° line pull



### CAP/CSP - Cased Augered & Secant Piles - 4° linepull

Operating weight *	110300 kg	243170 lb
Max pile diameter	1000 mm	39.37 in
Max pile depth c/w 6 m auger extension	27,3 m	90.88 ft
Max pile depth with auger cleaner c/w 6 m auger extension	26,5 m	86.94 ft
Max cased depth (w, w/o auger cleaner)	20 / 20,8 m	65.6 / 68.2 ft
Lower rotary max torque (intermittent) / Lower rotary rated torque	335 / 287 kNm	247083 / 211680 lbf*ft
Max speed	11,2 rpm	11.2 rpm
Casing pull up/down	816 / 484 kN	183444 lbf
Upper rotary max torque / Rated torque	351 / 301 kNm	35792 / 30693 lbf*ft
Upper rotary speed of rotation	25,4 rpm	25.4 rpm
Auger pull up/down	1110 / 332 kN	249534 / 74635 lbf

\* A special undercarriage is needed

# SR-95 HIT Hydraulic Rotary Rig

DP / TCT APPLICATIONS Quick conversion kit



### DP / TCT - Displacement Piles - Quick conversion kit

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	25,5 m	84 ft
Lattice mast extension	15,8 m	52 ft
Max depth c/w lattice boom mast extension	33 m	108.27 ft

# SR-95 HIT Hydraulic Rotary Rig

TJ / SOIL MIXING APPLICATIONS Quick conversion kit

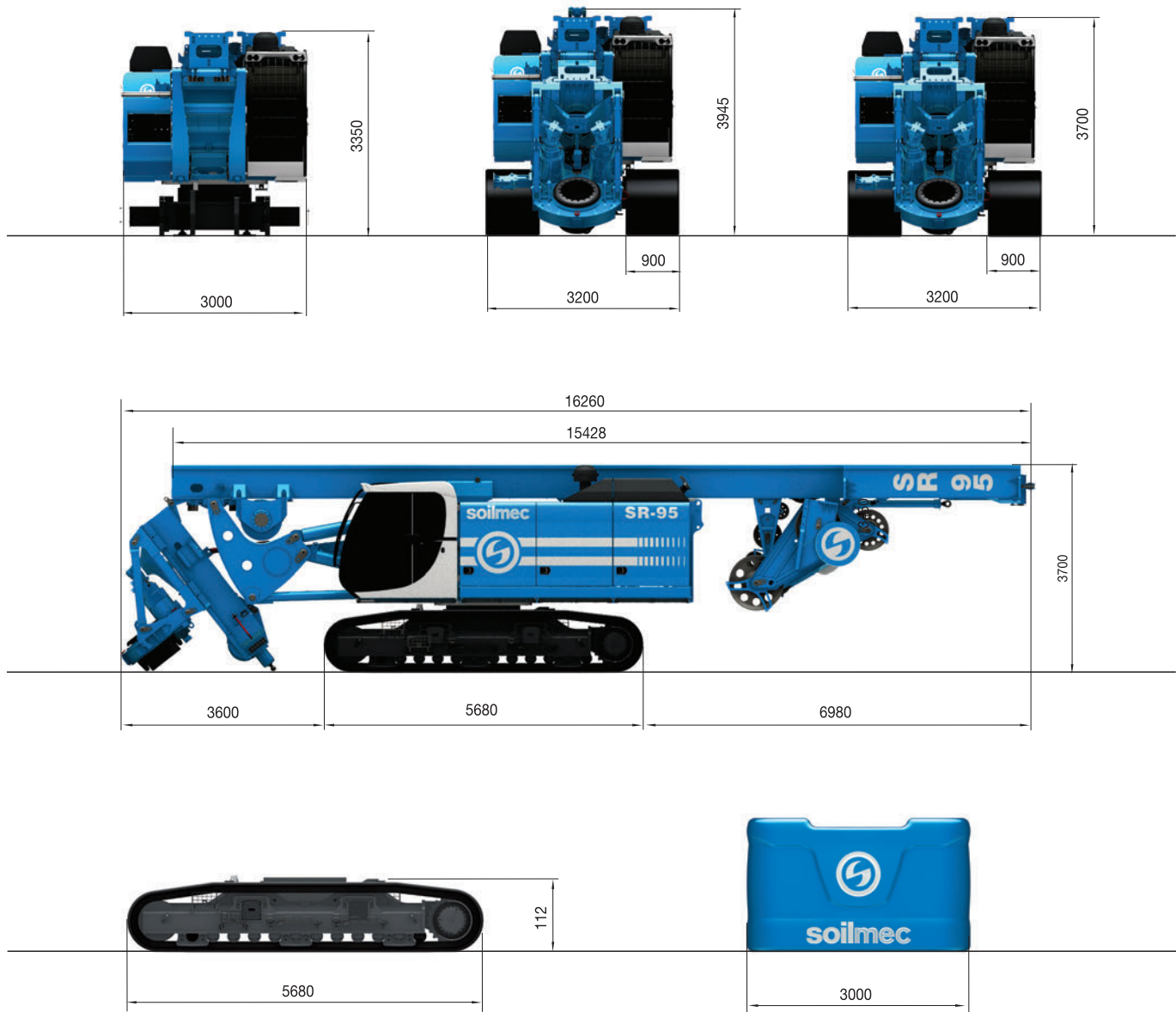


## TJ - Turbojet® - Quick conversion kit

<b>Max treatment diameter</b>	<b>1500 mm</b>	<b>59 in</b>
<b>Max pile depth c/w 8,5 m auger extension</b>	<b>25,5 m</b>	<b>84 ft</b>
<b>Lattice mast extension</b>	<b>15,8 m</b>	<b>52 ft</b>
<b>Max depth c/w lattice boom mast extension</b>	<b>33 m</b>	<b>108.27 ft</b>

# SR-95 HIT Hydraulic Rotary Rig

## TRANSPORT, DIMENSIONS AND WEIGHTS



**Weight** 15200 (7600 + 7600) kg 33510 (16755 + 16755) lb  
**Thickness** 900 mm 35 in

**Weight** 15000 (11500 + 3500) kg 33069 (25353 + 7716) lb  
**Thickness** 765 mm 30 in

Transport configuration		
<b>Width c/w</b> - w/o crawlers	3200 - 3000 mm	126 - 118 in
<b>Length</b> w/o rotary	15920 mm	627 in
<b>Weight CCS version</b> c/w rotary, w/o counterweight - w/o rotary, counterweight, crawlers	64850 - 45850 kg	142969 - 101082 lb
<b>Weight WSC version</b> c/w rotary, w/o counterweight - w/o rotary, counterweight, crawlers	69550 - 53600 kg	153331 - 118168 lb

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