

Hydraulic Rotary Rig

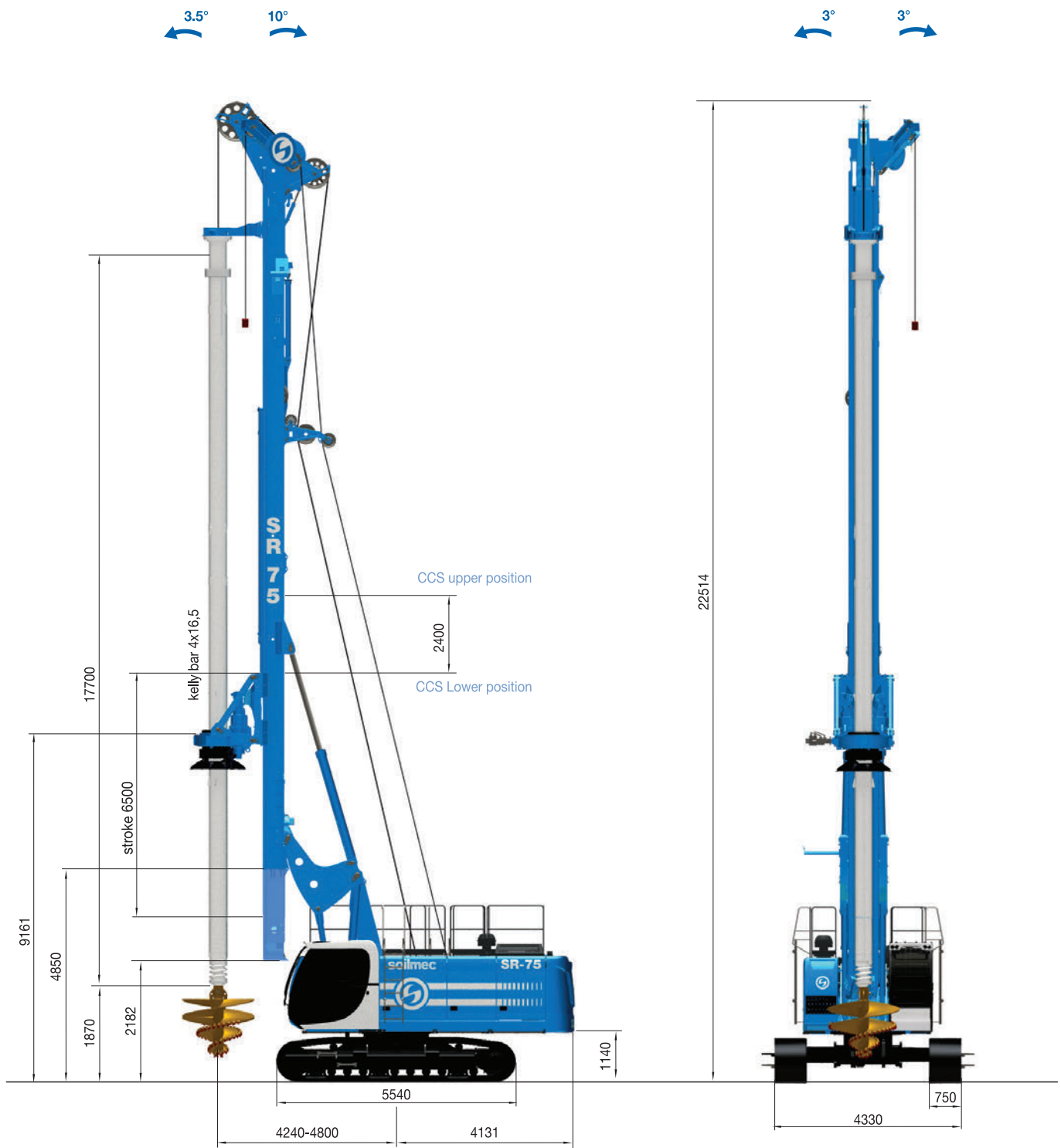
# SR-75

## ADV



# SR-75 ADV Hydraulic Rotary Rig

## LDP APPLICATIONS - Crowd System with Cylinder



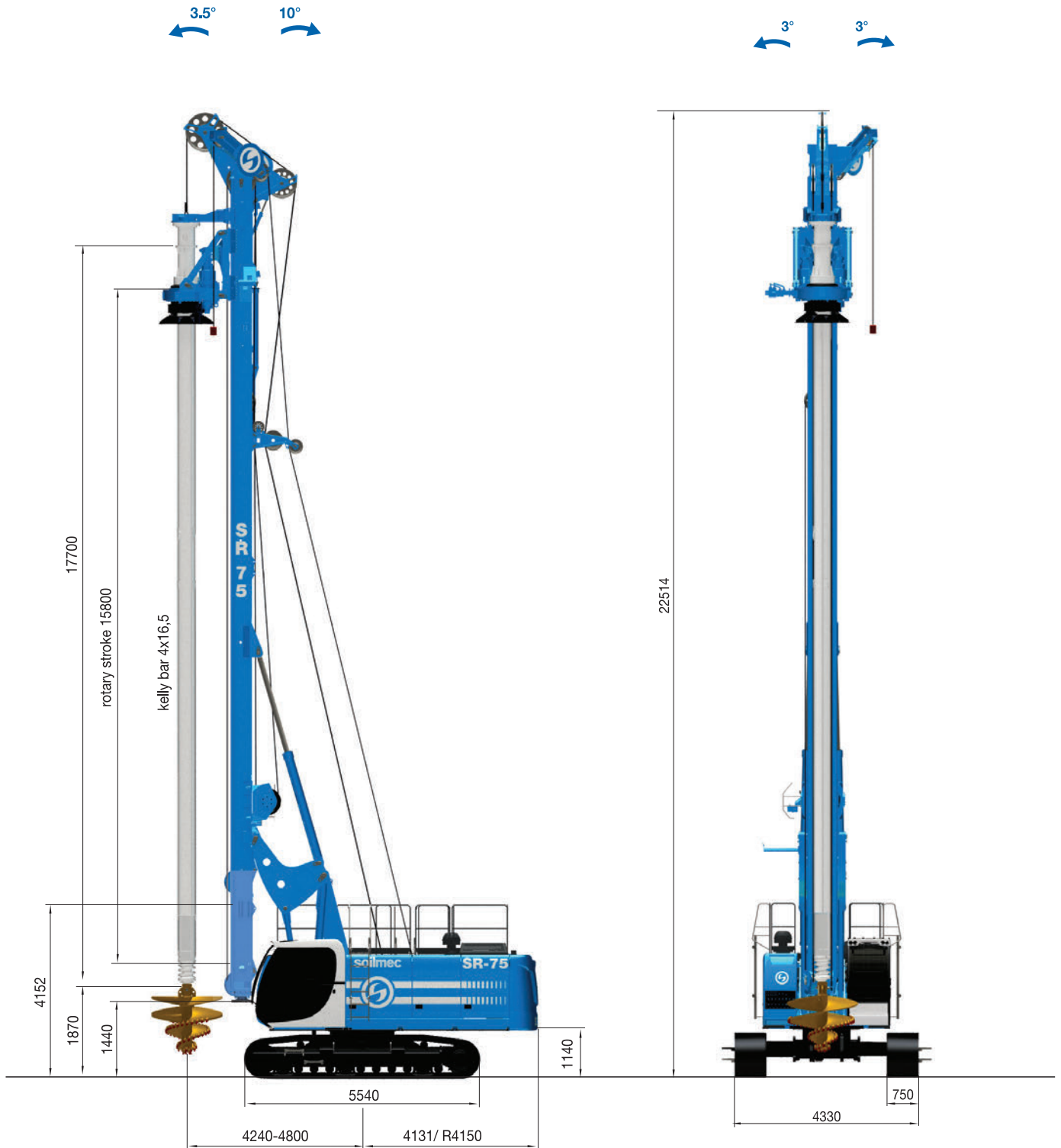
### LDP - Large Diameter Piles - CCS version

Operating weight w/o kelly	68300 kg	150576 lb
Max pile diameter	2000 (2500)* mm	78.3 (98.43)* in
Max pile depth - friction kelly	76 m	252.62 ft
Max pile depth - locking kelly	62,5 m	205 ft

\* tool below mast

# SR-75 ADV Hydraulic Rotary Rig

## LDP APPLICATIONS - Crowd System with Winch



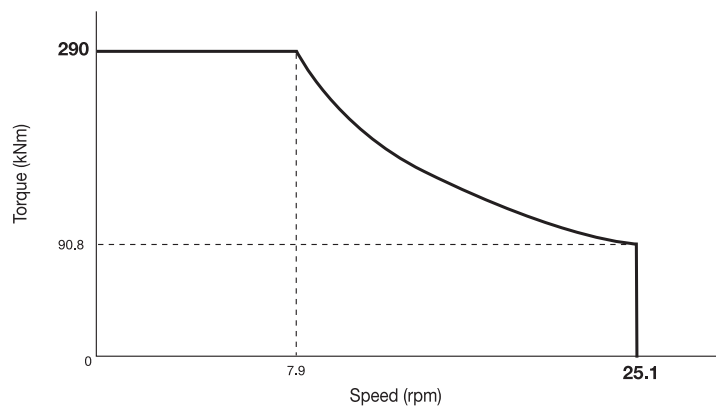
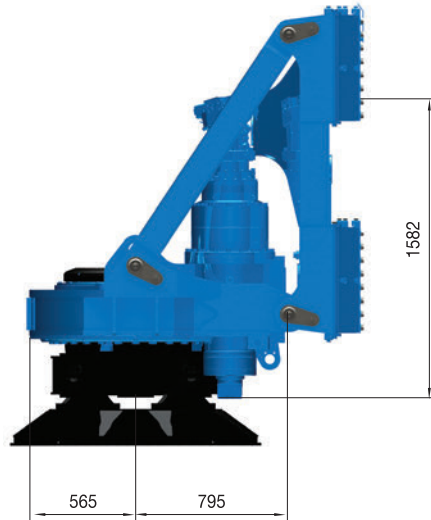
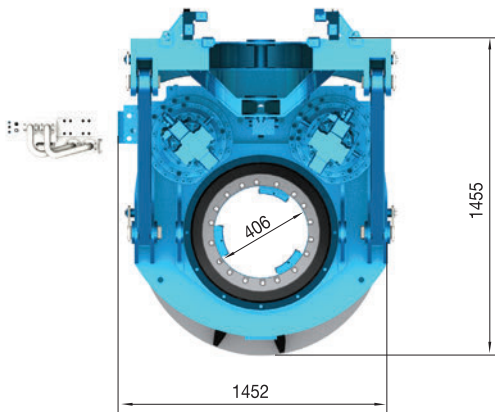
### LDP - Large Diameter Piles - WCS version

Operating weight w/o kelly	69700 kg	153662 lb
Max pile diameter	1750 (2500)* mm	68.9 (98.43)* in
Max pile depth - friction kelly	76 m	252.62 ft
Max pile depth - locking kelly	62,5 m	205 ft

\* tool below mast

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## ROTARY TABLE

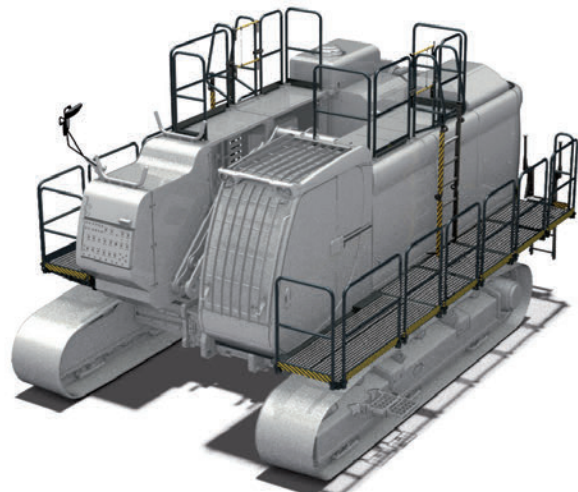


Rotary drive - RD250	Single gear version	Single gear version
- Max torque (intermittent)	<b>290 kNm</b>	213889 lbf·ft
- Rated torque	<b>249 kNm</b>	183650 lbf·ft
- Speed of rotation (max)	<b>25,1 rpm</b>	25.1 rpm
- Spin-off speed	<b>130 rpm</b>	130 rpm
- Rotary weight w/o cradle	<b>3900 kg</b>	8598 lb

# SR-75 ADV 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



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## TECHNICAL DATA SHEET

<b>CCS- Cylinder crowd system</b>		
- Crowd force pull (down/up)	201/281 kN	45187/63171 lbf
- Stroke	6500 mm	256 in
- Speed up	4,5/14,4 m/min	28/47 ft/min
- Speed down	4,5/14,4 m/min	28/47 ft/min
<b>WCS - Winch crowd system</b>		
- Crowd force pull (down/up)	408/408 kN	91720/91720 lbf
- Stroke	15800 mm	622 in
- Speed up	6,8/29 m/min	22/85 ft/min
- Speed down	6,8/29 m/min	22/85 ft/min
<b>Main winch</b>		
	<b>Control descent</b>	<i>Control descent</i>
- Line pull (1st layer)	246 kN	55302 lbf
- Rope diameter/lenght	30 mm	1.18 in
- Line speed (max.)	81 m/min	266 ft/min
<b>Auxiliary winch</b>		
	<b>Control descent</b>	<i>Control descent</i>
- Line pull (1st layer)	127 kN	28550.7 lbf
- Rope diameter	22 mm	0.87 in
- Line speed (max.)	70 m/min	230 ft/min
<b>Engine</b>		
	<b>CAT C13</b>	<i>CAT C13</i>
- Rated output	328 kW @ 1800 rpm	440 HP @ 1800 rpm
- Engine conforms to Exhaust emission Standard	<b>EU stage IV, US EPA Tier 4F</b>	<i>EU stage IV, US EPA Tier 4F</i>
- Diesel tank capacity	650 l	172 US gal
<b>Hydraulic system</b>		
- Flow rates (main circuits)	2x 304 l/min	2x 80.3 US gal/min
- Flow rates (auxiliary circuits)	93 + 63 + 57 l/min	20.5 + 14 + 12.5 US gal/min
- Hydraulic oil tank capacity	800 l	211 US gal
<b>Undercarriage</b>		
	<b>variable gauge, telescoping sides frames *</b>	<i>variable gauge, telescoping sides frames *</i>
- Overall width of crawlers retracted/extended	2830/4330 mm	111.4/170.5 in
- Width of triple grouser track shoes	750 mm	29.6 in
- Overall length of crawlers	5540 mm	218 in
- Traction force	495 kN	111280 lbf
- Travel speed	1,6 km/h	1 mph
<b>Mast inclination (Backward/ Forward/Lateral)</b>		
	<b>10° / 3.5° / 3°</b>	<i>10° / 3.5° / 3°</i>

\* Removable side frames undercarriage on demand

## 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
- 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

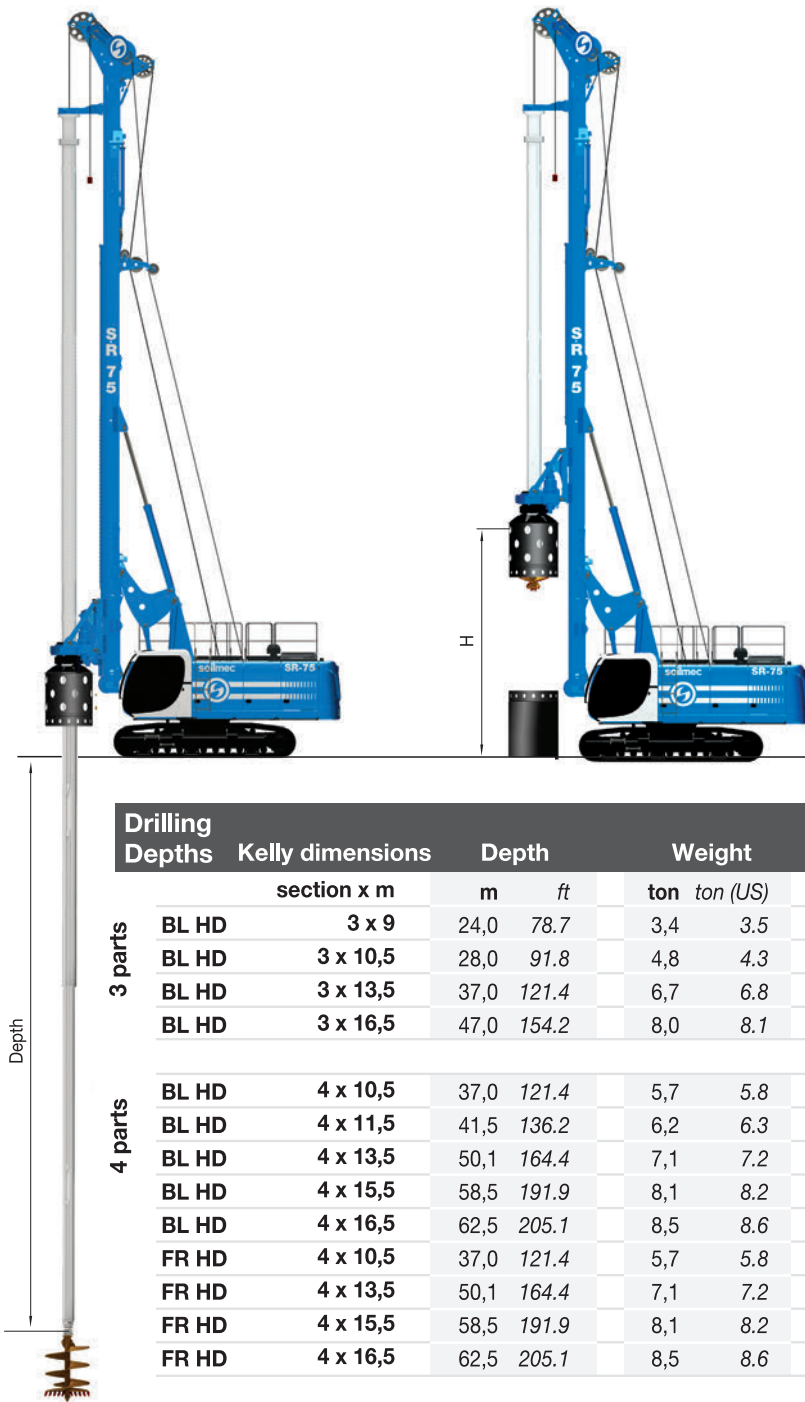
## OPTIONAL EQUIPMENT

- Diesel Engine with EU Stage III A - US EPA Tier 3 motorization
- Removable side frames undercarriage (900/4700/5680 mm; 3/15.4/18.6 ft)
- Kit for disassembling undercarriage
- Additional Counterweight 1,5 ton
- Fiberglass canopies
- Automatic greasing kit
- Lubrifier 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-75 ADV Hydraulic Rotary Rig

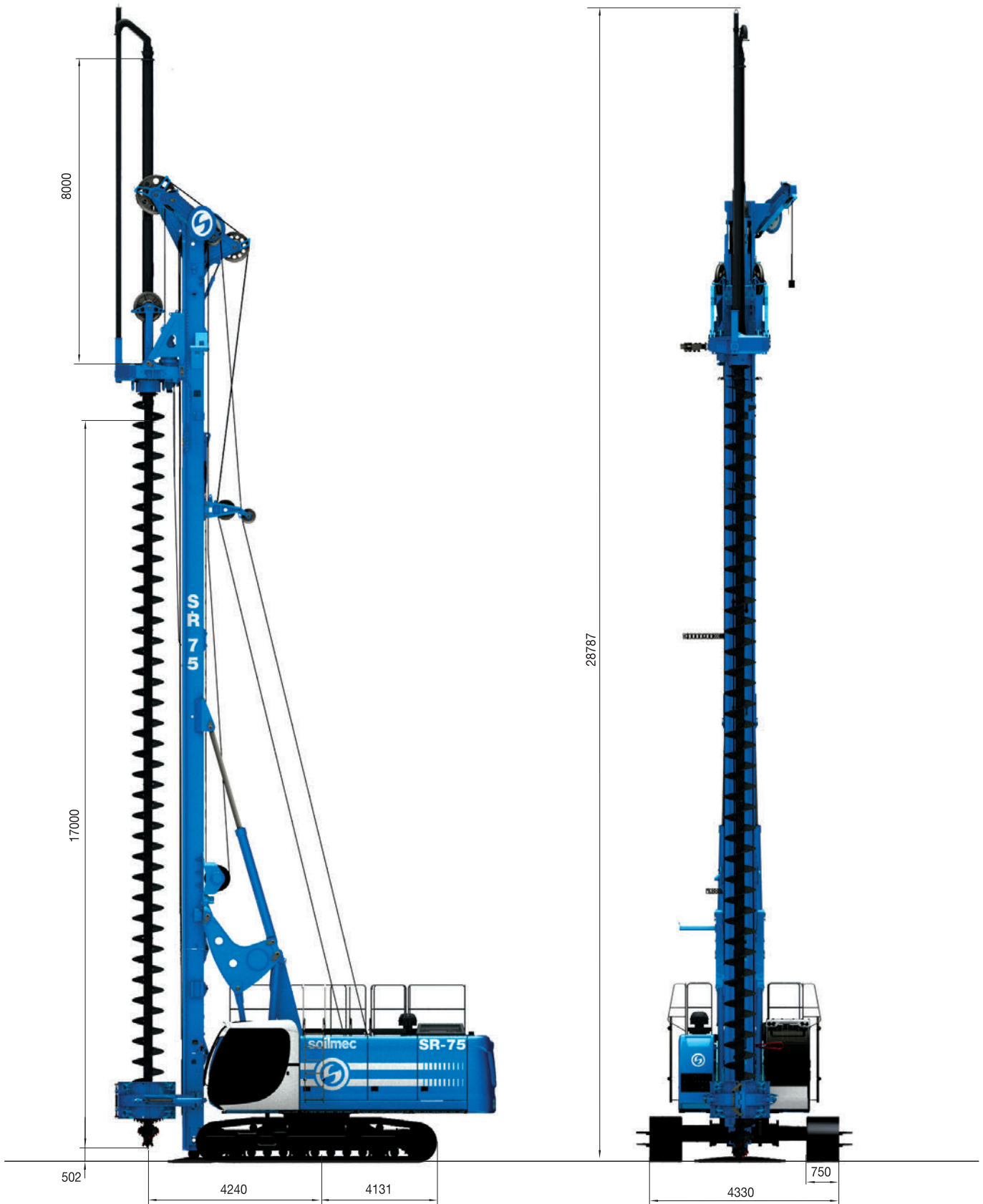
## KELLY DRILLING SYSTEM



Drilling Depths	Kelly dimensions section x m	Depth		Weight		CCS SYSTEM				WCS SYSTEM		
		m	ft	ton	ton (US)	H - low pos		H - high pos		H		
						m	ft	m	ft	m	ft	
3 parts	BL HD	3 x 9	24,0	78.7	3,4	3.5	8,5	27.9	10,3	33.8	10,3	33.8
	BL HD	3 x 10,5	28,0	91.8	4,8	4.3	8,5	27.9	8,9	29.2	8,9	29.2
	BL HD	3 x 13,5	37,0	121.4	6,7	6.8	4,7	15.4	4,7	15.4	4,7	15.4
	BL HD	3 x 16,5	47,0	154.2	8,0	8.1	1,8	5.9	1,8	5.9	1,8	5.9
4 parts	BL HD	4 x 10,5	37,0	121.4	5,7	5.8	8,5	27.9	8,9	29.2	8,9	29.2
	BL HD	4 x 11,5	41,5	136.2	6,2	6.3	6,7	22.0	6,7	22.0	6,7	22.0
	BL HD	4 x 13,5	50,1	164.4	7,1	7.2	4,7	15.4	4,7	15.4	4,7	15.4
	BL HD	4 x 15,5	58,5	191.9	8,1	8.2	2,7	8.9	2,7	8.9	2,7	8.9
	BL HD	4 x 16,5	62,5	205.1	8,5	8.6	1,8	5.9	1,8	5.9	1,8	5.9
	FR HD	4 x 10,5	37,0	121.4	5,7	5.8	8,5	27.9	8,9	29.2	8,9	29.2
	FR HD	4 x 13,5	50,1	164.4	7,1	7.2	4,7	15.4	4,7	15.4	4,7	15.4
	FR HD	4 x 15,5	58,5	191.9	8,1	8.2	2,7	8.9	2,7	8.9	2,7	8.9
5 parts	FR HD	5 x 11,5	51,5	169.0	8,4	8.5	7,0	23.0	7,0	23.0	7,0	23.0
	FR HD	5 x 13,5	62,0	203.4	9,7	9.9	4,5	14.8	4,5	14.8	4,5	14.8
	FR HD	5 x 14,5	67,5	221.5	10,3	10.5	3,5	11.5	3,5	11.5	3,5	11.5
	FR HD	5 x 16,5	76,0	249.4	11,6	11.8	1,5	4.9	1,5	4.9	1,5	4.9

## SR-75 ADV Hydraulic Rotary Rig

### CFA APPLICATIONS Quick conversion kit

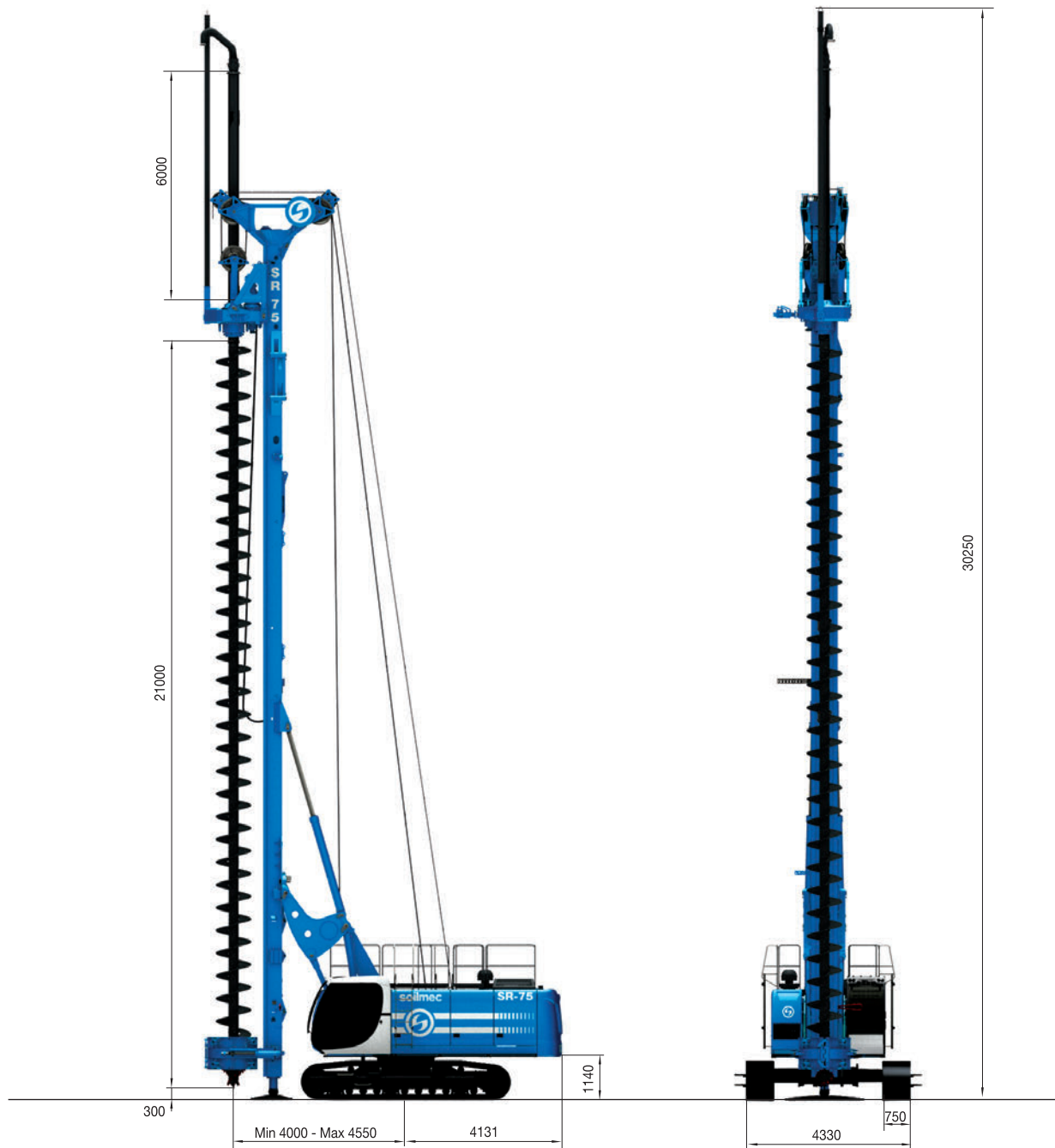


#### CFA - Continuous Flight Auger - Quick conversion kit

Operating weight w/o auger	71800 kg	158292 lb
Max pile diameter	1200 mm	203926 lb
Max pile depth with star auger cleaner c/w 8 m auger extension	23,4 m	76.7 ft
Max pile depth with double roller auger cleaner c/w 8 m auger extension	22 m	72 ft
Extraction force	800 kN	179847 lbf
Crowd force on auger	408 kN	91722 lbf

# SR-75 ADV Hydraulic Rotary Rig

CFA APPLICATIONS 4° line pull



## CFA - Continuous Flight Auger - 4° Line pull

Operating weight c/w auger extension, w/o auger, w/o auger cleaner	71200 kg	156969 lb
Max pile diameter	1200 mm	47 in
Max pile depth with star auger cleaner c/w 6 m auger extension	25,5 m	84 ft
Max pile depth with double roller auger cleaner c/w 6 m auger extension	24 m	79 ft
Extraction force	984 kN	221212 lbf
Crowd force on auger (opt.)	408 kN	91722 lbf

## SPECIAL VERSION

Operating weight c/w auger extension, w/o auger, w/o auger cleaner	71600 kg	157851 lb
Max pile diameter	1200 mm	47 in
Max pile depth with star auger cleaner c/w 6 m auger extension	27 - 29 m *	88.6 - 95 ft *
Max pile depth with double roller c/w 6 m auger extension	25,5 - 27,5 m *	83.6 - 90.2 ft *
Extraction force	787 kN	176925 lbf
Extraction force	408 kN	91722 lbf

\* c/w 8 m auger



## SR-75 ADV Hydraulic Rotary Rig

### CAP/CSP APPLICATIONS 4° line pull

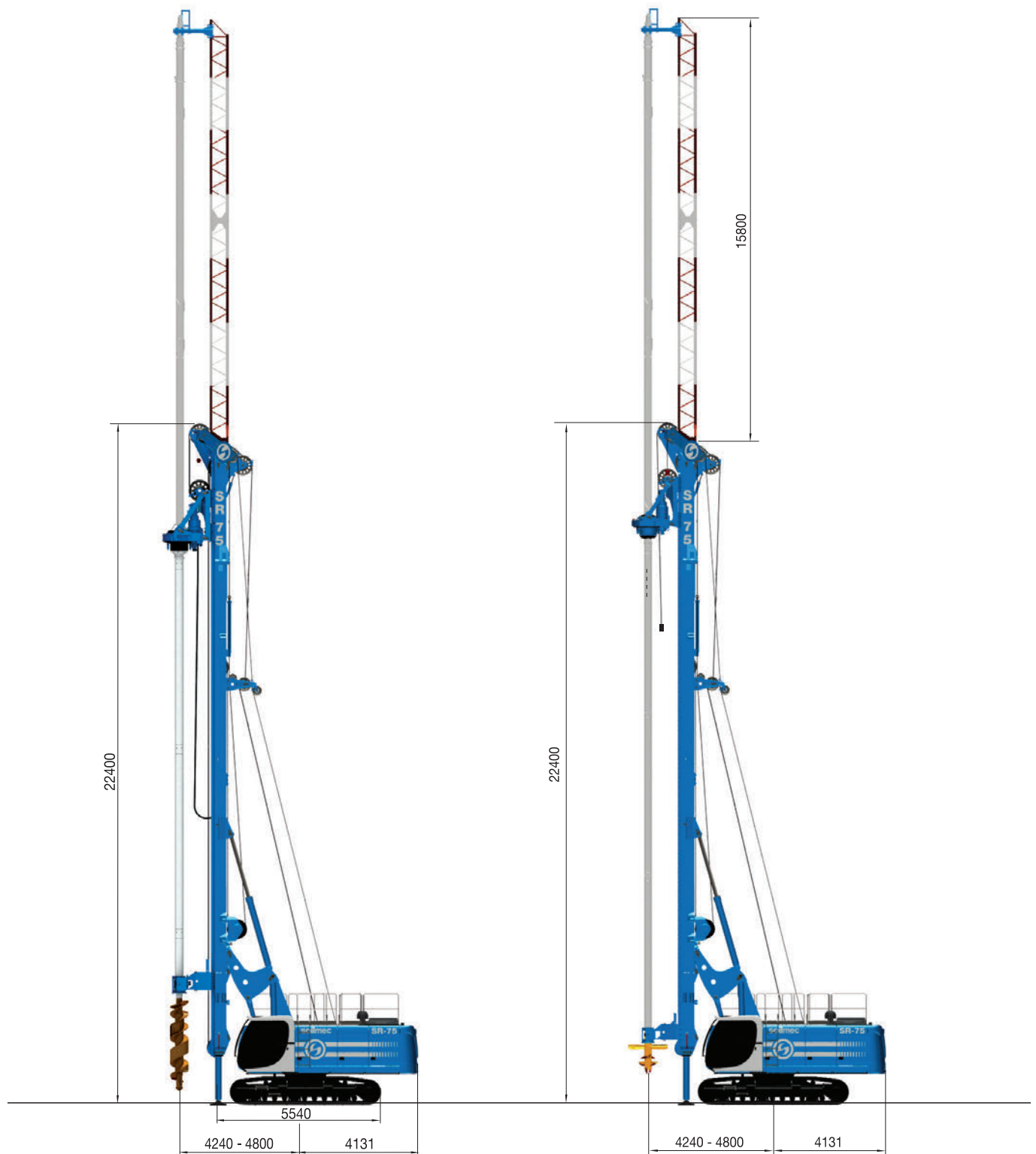


#### CAP/CSP - Cased Augered & Secant Piles - 4° Line pull

Operating weight w/o auger, w/o casing, c/w special undercarriage	84500 kg	186290 lb
Max pile diameter	800 mm	31.5 in
Max pile depth c/w 6 m auger extension	24.5 m	80.3 ft
Max pile depth with auger cleaner c/w 6 m auger extension	23.5 m	77 ft
Max cased depth c/w - w/o auger cleaner	17.4 / 18.4 m	57 / 60.4 ft
Lower rotary max torque	268 kNm	197667 lbf·ft
Lower rotary rated torque	230 kNm	169636 lbf·ft
Lower rotary speed of rotation (max)	13 rpm	13 rpm
Casing pull up/down	408 kN	108807.5 lbf
Upper rotary max torque	290 kNm	213889 lbf·ft
Upper rotary rated torque	249 kNm	183650 lbf·ft
Upper rotary speed of rotation (max)	25 rpm	25 rpm
Auger pull up force	787 kN	176925 lbf

# SR-75 ADV Hydraulic Rotary Rig

## DP / TJ APPLICATIONS



### DP - Displacement Piles

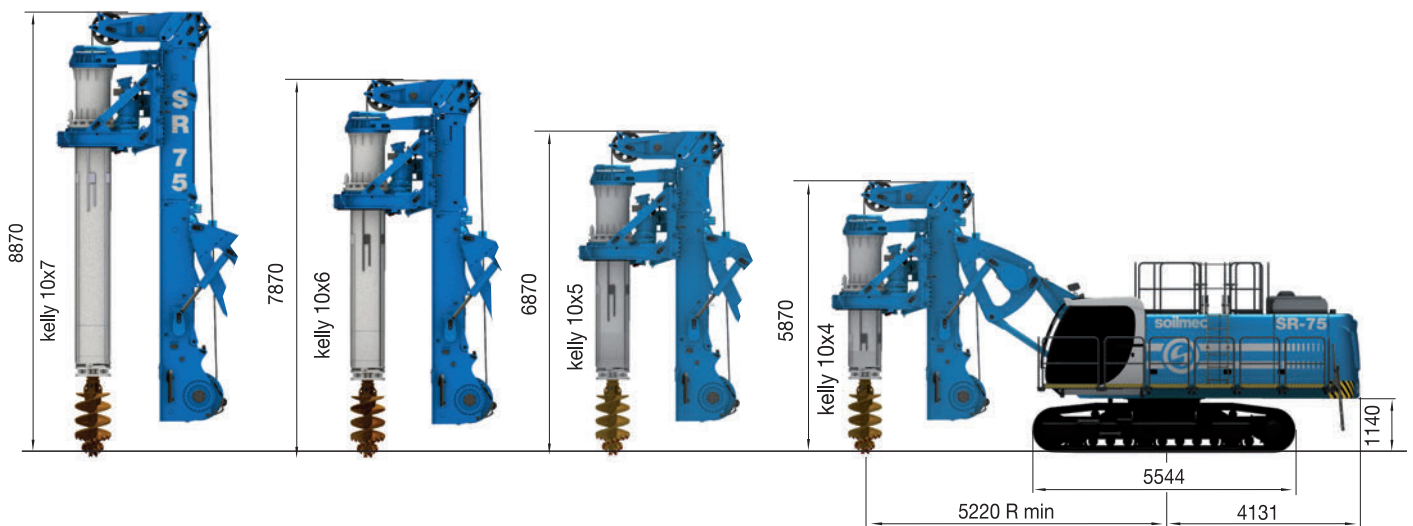
<b>Max drilling diameter DP / TCT</b>	600 / 800 mm	23.62 / 31.50 in
<b>Max pile depth c/w 8 m sleeve extension</b>	22,7 m	74.4 ft
<b>Lattice mast extension</b>	15,8 m	52 ft
<b>Max pile depth c/w mast extension</b>	30,7 m	101 ft

### TJ - Turbojet®

<b>Max treatment diameter</b>	1500 mm	59.06 in
<b>Max treatment depth c/w 6 m sleeve extension</b>	20,7 m	68 ft
<b>Lattice mast extension</b>	15,8 m	52 ft
<b>Max depth with boom mast extension</b>	30,7 m	101 ft

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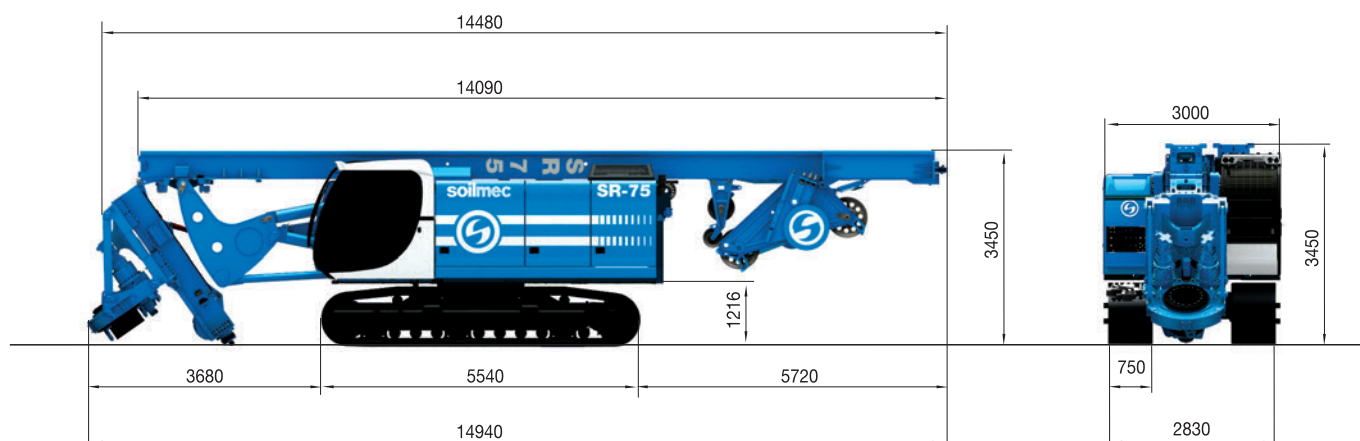
## LHR APPLICATIONS



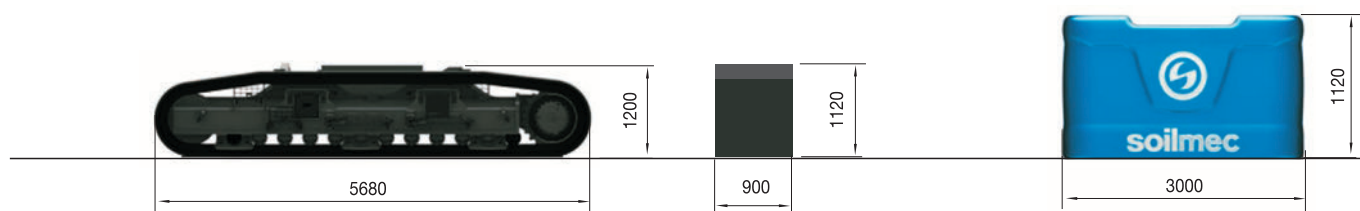
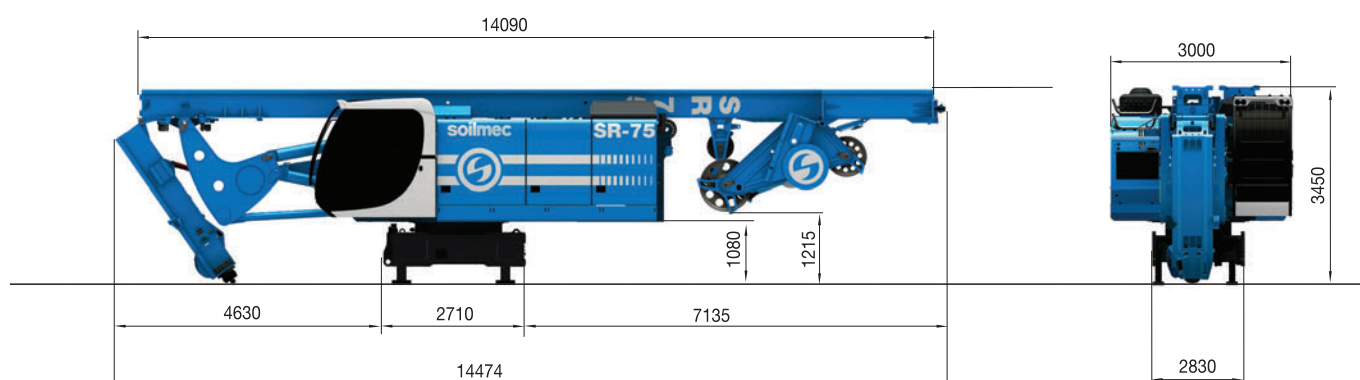
LHR_Low Head Room		
Min. Operating weight	77230 ÷ 66860 kg	170263 ÷ 147401 lb
Min. operating height	5,9 ÷ 8,9 m	19 ÷ 29 ft
Max pile diameter	2500 mm	98.43 in
Max pile depth	60 m	197 ft
Crowd system stroke	2440 ÷ 5440 m	96 ÷ 214 in
Crowd system force (down/ up)	230 / 230 kN	51705 / 51705 lbf

# SR-75 ADV Hydraulic Rotary Rig

## TRANSPORT, DIMENSIONS AND WEIGHTS



Transport configuration		
Transport width	3000 mm	118.11 in
Transport length	14480 mm	571.640 in
Transport height	3450 mm	135.83 in
CCS Version - Transport weight std - min	52200 / 49500 kg	115080 / 109128 lb
WCS Version - Transport weight std - min	56200 / 55450 kg	123899 / 122245 lb



Transport configuration with removable side frames		
Transport weight w/o side frames; counterweight and rotary	41200 kg	90830 lb
Counterweight	9000 kg	19842 lb
Side frames weight	2x8000 kg	2x17637 lb

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