

Hydraulic Rotary Rig

# SR-75



**soilmec**   
Drilling and Foundation Equipment

# SR-75 Hydraulic Rotary Rig

## LDP APPLICATIONS



### LDP - Large Diameter Piles - WCS version

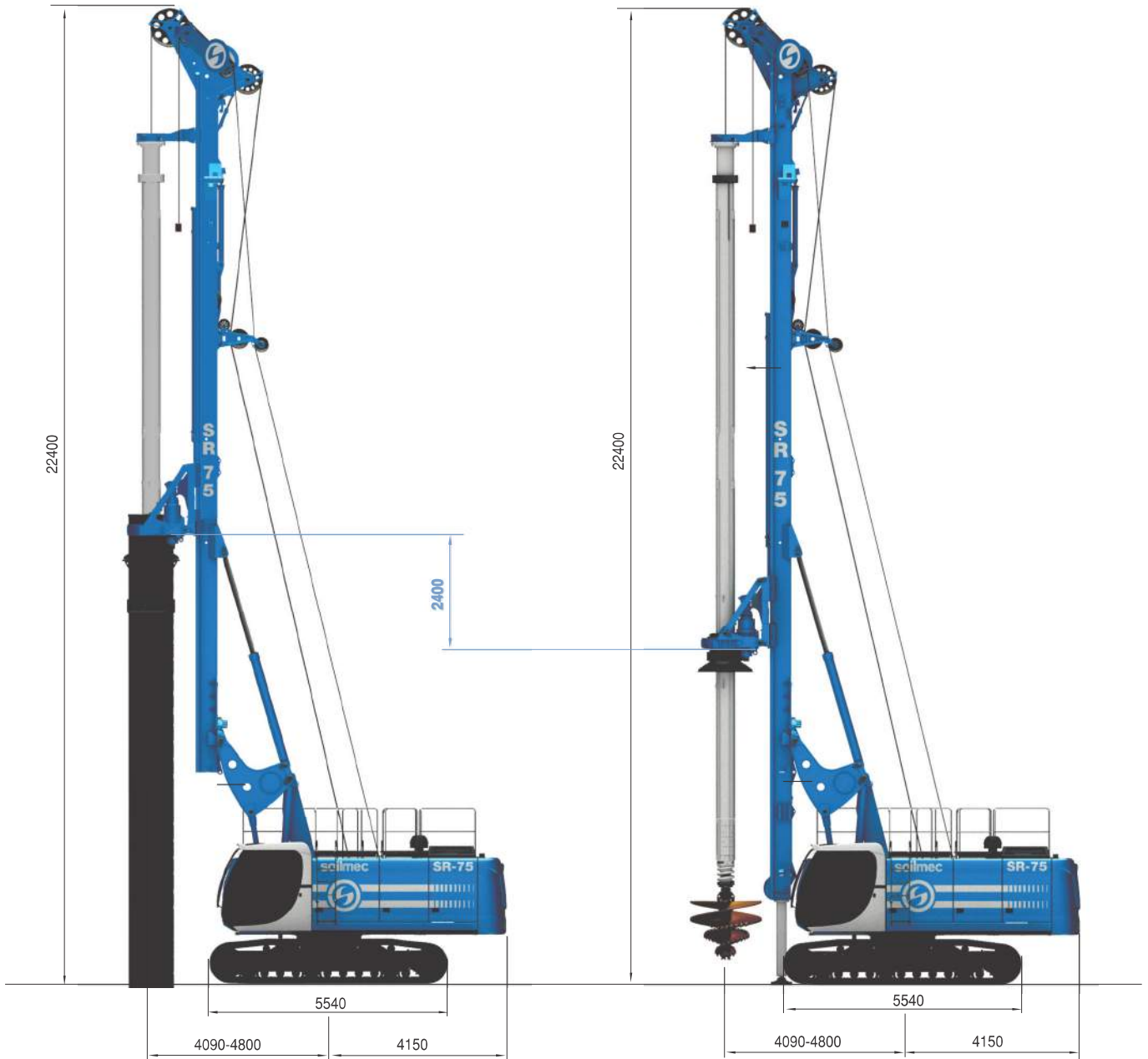
Operating weight c/w 4x10,5 kelly bar - WCS version	75700 kg	166889.7 lb
Max pile diameter-WCS version	1750 (2500)* mm	68.9 (98.43)* in
Max pile depth-friction kelly	77 m	252.62 ft
Max pile depth-locking kelly	62 m	203.4 ft

\* tool below mast

# SR-75 Hydraulic Rotary Rig

## LDP APPLICATIONS

### Crowd cylinder double positioning



#### LDP - Large Diameter Piles - CCS version

Operating weight c/w 4x10,5 kelly bar - CCS version	74300 kg	163803 lb
Max pile diameter-CCS version	2000 (2500)* mm	78.3 (98.43)* in
Max pile depth-friction kelly	77 m	252.62 ft
Max pile depth-locking kelly	62 m	203.4 ft

\* tool below mast

# SR-75 TECHNICAL DATA SHEET

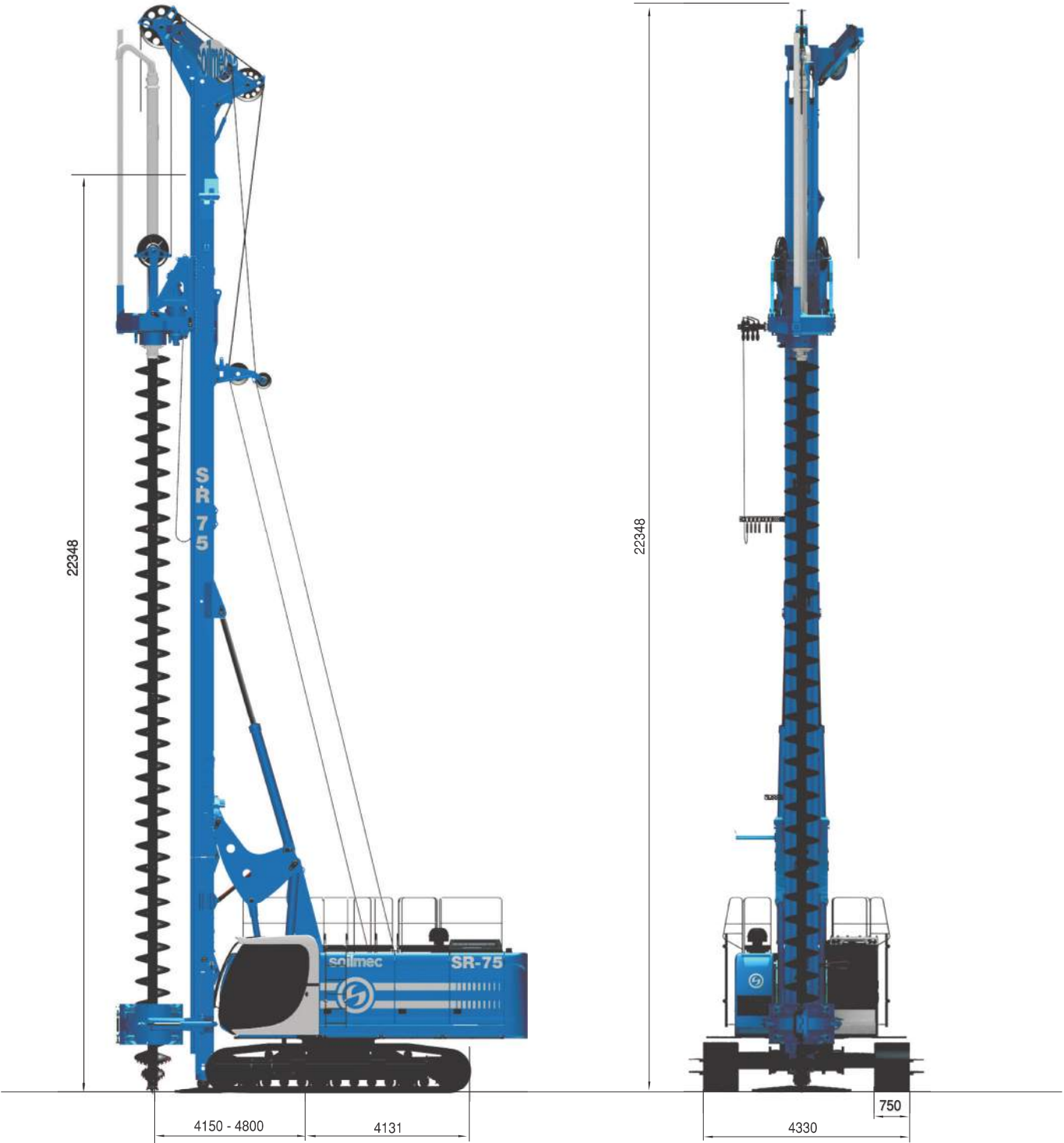
<b>Rotary drive</b>	<b>Single gear, spin-off type</b>	<i>Single gear, spin-off type</i>
Max torque	292 kNm	215368 lbf*ft
Speed of rotation (max)	25,1 rpm	27.2 rpm
Spin-off speed	130 rpm	130 rpm
<b>Rotary drive</b>	<b>Multi gear version</b>	<i>Multi gear version</i>
Max torque	293 kNm	216105 lbf*ft
Speed of rotation (max)	27,2 rpm	27.2 rpm
<b>Crowd system</b>	<b>Cylinder</b>	<i>Cylinder</i>
Crowd force pull (down/up)	201/281 kN	45187/63171 lbf
Stroke	6500 mm	256 in
Speed up	10 m/min	61.7 ft/min
Fast speed down	4,5/11,4 m/min	27.6/61.7 ft/min
<b>Crowd system</b>	<b>Winch</b>	<i>Winch</i>
Crowd force pull (down/up)	408/408 kN	91720/91720 lbf
Stroke	15800 mm	622 in
Speed up	18,8 m/min	35.4 ft/min
Fast speed down	8,4/18,8 m/min	11.5/35.4 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 ISO 3046-I	328 kW @ 1800 rpm	440 HP @ 1800 rpm
Engine conforms to Exhaust emission Standard	<b>EU stage III B, US EPA Tier 4i</b> and EU stage III A, US EPA Tier 3 available	<i>EU stage III B, US EPA Tier 4i</i> and EU stage III A, US EPA Tier 3 available
<b>Hydraulic system</b>		
Hydraulic pressure	30 Mpa	4851 psi
Flow rates (main circuits)	2x 304 l/min	2x 80.3 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</b> (Backward/ Forward/Lateral)	<b>10 /4 /3</b>	<i>10 /4 /3</i>

## STANDARD EQUIPMENT

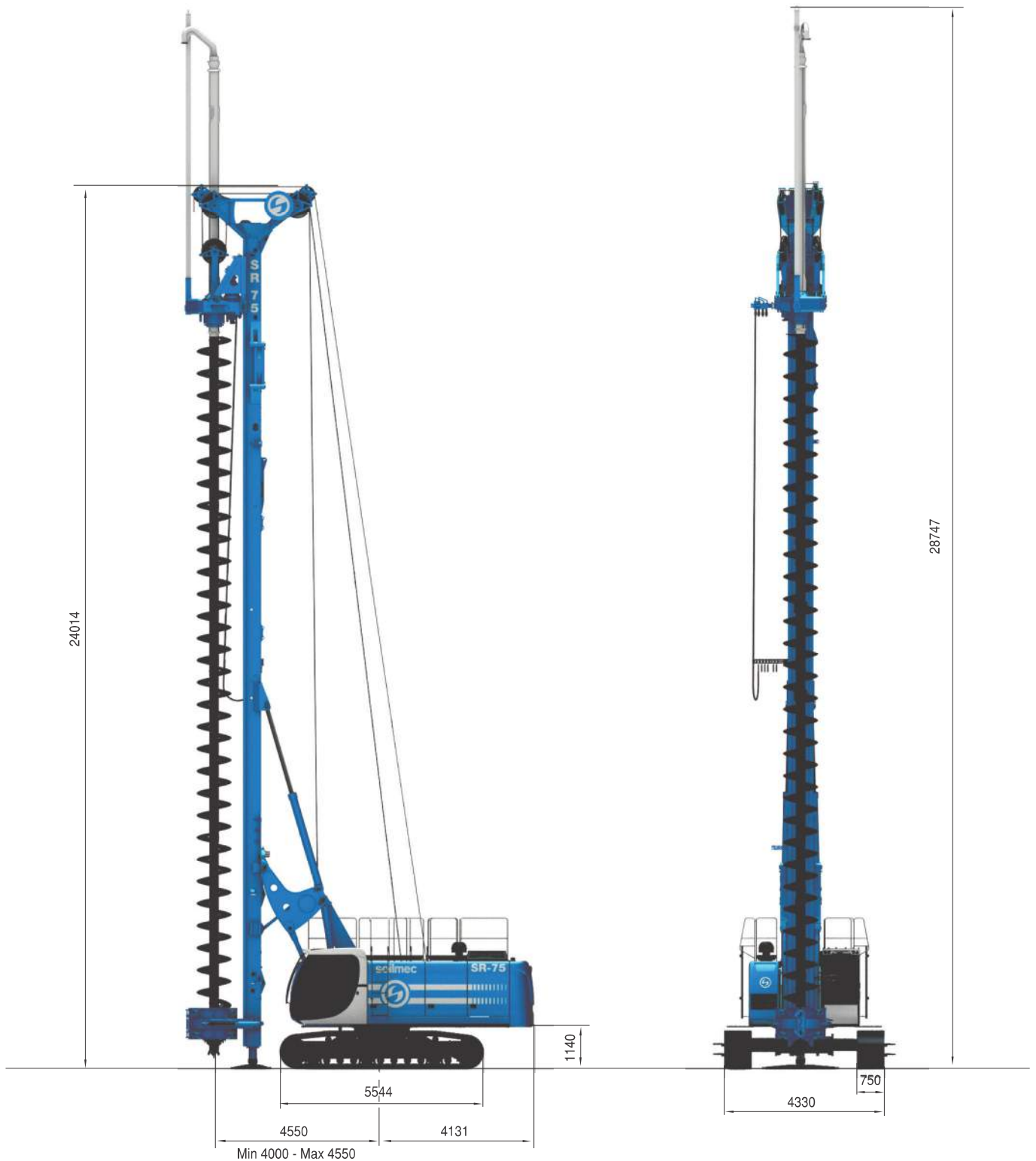
¥ Main and auxiliary winch controlled descent type with special grooving	¥ Depth measuring device on main winch	¥ On board lighting set
¥ Hoist limit switch on main rope	¥ Speed measuring device on rotary	¥ On board tool set
¥ Swivel for main rope	¥ Oscillator attachment brackets	¥ Electric refuelling pump
¥ Service rope parking point	¥ Central lubrication system	¥ High comfort operator's cab
¥ DMS system electronic monitoring and visualization system	¥ Emergency mode of operation for engine	¥ Protective roof grate (FOPS compliant)
¥ Mast inclination measurement on X/Y axes (digital/analog display)	¥ Engine diagnostic system	¥ Air conditioning system
¥ Automatic vertical mast alignment	¥ Diagnostic panel for hydraulic functions	¥ Radio and CD player
	¥ Removable counterweight	¥ Cat walks
	¥ Transport securing lugs on crawler units	¥ GSM-GPRS-GPS modem
	¥ Access ladder on upper carriage and guardrails	

## OPTIONAL EQUIPMENT

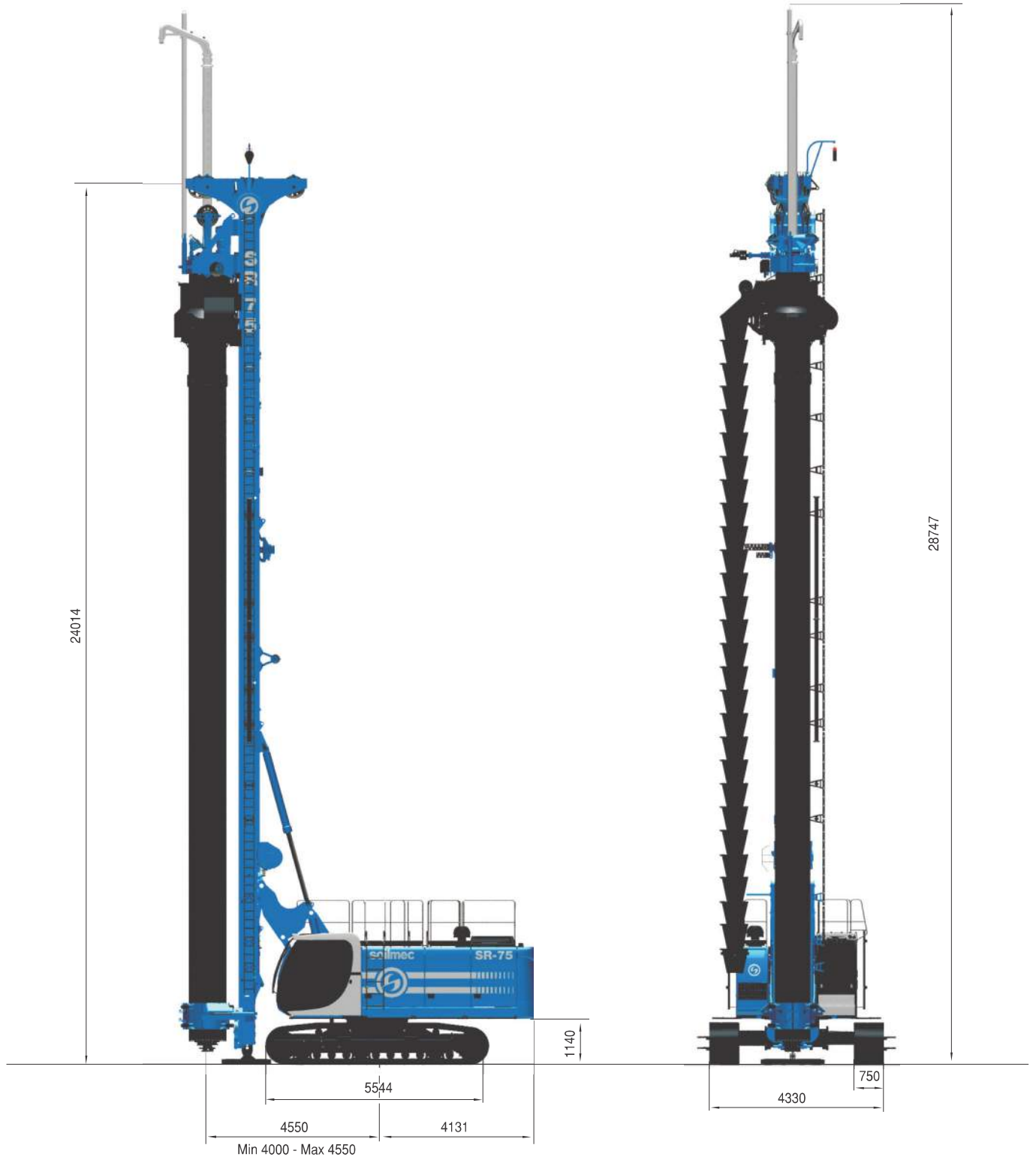
¥ Biodegradable oil	¥ Videocamera set	¥ Main winch load cell
¥ Freefall auxiliary winch	¥ Wider triple grouser track shoes (900 mm)	
¥ Swivel for auxiliary rope	¥ VTH-1 vibrator	



<b>CFA - Continuous Flight Auger - Quick conversion kit</b>		
Max pile diameter	1200 mm	203926 lb
Max pile depth	23,4 m	76.7 ft
Max pile depth with auger cleaner	22 m	72 ft
Extraction force	800 kN	179847 lbf
Crowd force on auger (optional)	408 kN	91722 lbf



CFA_Continuous Flight Auger - 4; Line pull		
Operating weight (c/w auger ext, w/o auger)	71400 kg	157408 lb
Max pile diameter	1200 mm	47.24 in
Max pile depth	25,5 (19,5 + 6) m	83.66 (63.98 + 19.68) ft
Max pile depth with auger cleaner	24 (18 + 6) m	78.74 (59.06 + 19.68) ft
Extraction force	984 kN	221208 lbf
Extraction force on auger (opt.)	100 kN	22481 lbf



CAP/CSP_Cased Augered & Secant Piles - 4j Line pull		
Max pile diameter	1000 mm	39.37 in
Max pile depth	23,0 (17 + 6) m	75.5 (55.77 + 19.8) ft
Max pile depth with auger cleaner	22,0 (16 + 6) m	72.2 (52.49 + 19.68) ft
Max cased depth c/w - w/o auger cleaner	16 / 17 m	52.49 / 55.77 ft
Casing max torque (theoretical, restricted, intermittent)	292 kNm	215365 lb*ft
Casing speed of rotation (max)	11 rpm	11 rpm
Casing pull up/down	408	108807.5 lbf

# SR-75 DP APPLICATIONS



DP - Displacement Piles		
Max drilling diameter DP / TCT	600 / 800 mm	23.62 / 31.50 in
Max pile depth c/w 8 m sleeve extension	23,0 m	75.5 ft
Mast extension length available	15,515 m	51 ft
Max pile depth c/w mast extension	30,5 m	98.4 ft



# SR-75 TJ APPLICATIONS

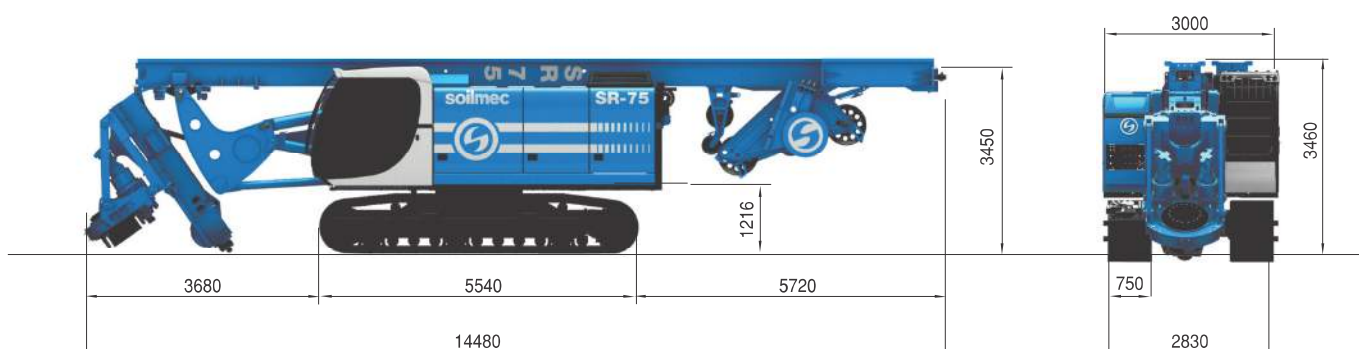


TJ - Turbojet <sup>®</sup>		
Max treatment diameter	1500 mm	59.06 in
Bauma version, max treatment depth c/w 8 m sleeve extension	23 m	75.5 ft
Mast boom extension length	15,515 m	51 ft
Max depth with boom mast extension	30.5 m	98.4 ft

# SR-75 Hydraulic Rotary Rig

## TRANSPORT, DIMENSIONS AND WEIGHTS

All technical data are purely indicative and subject to change without notice



Transport configuration		
Transport width	3000 mm	118.2 in
Transport Height	3450 mm	135.8 in
Transport length	14480 mm	570 in
Transport weight <b>CCS / WCS</b>	52200 / 58200 kg	115081 / 123899 lb
Min transport weight <b>CCS / WCS</b>	49500 / 55450 kg	109128 / 122246 lb

Technical data sheet SR75-001 2/2014

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