

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

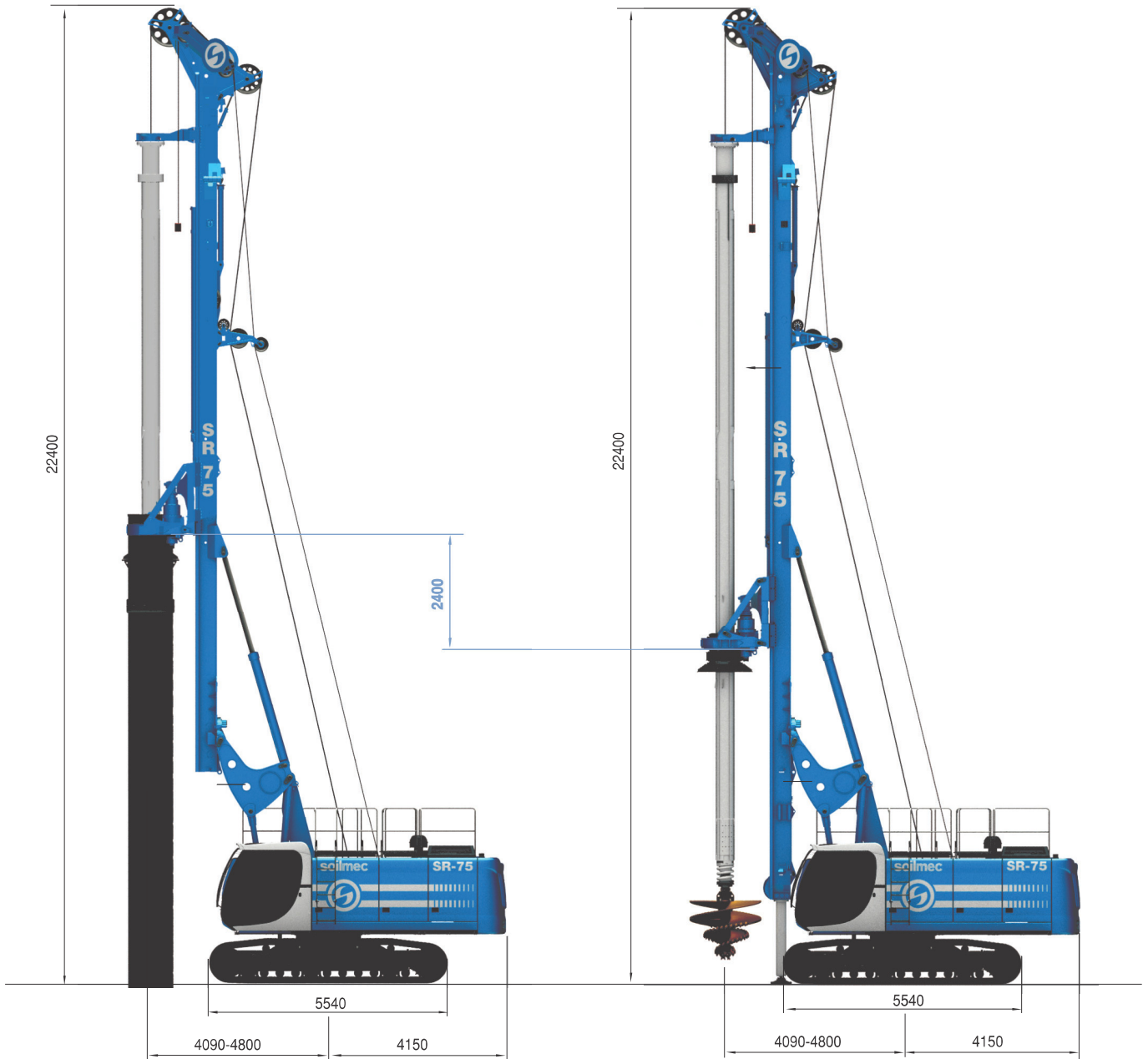
203.4 ft

\* 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

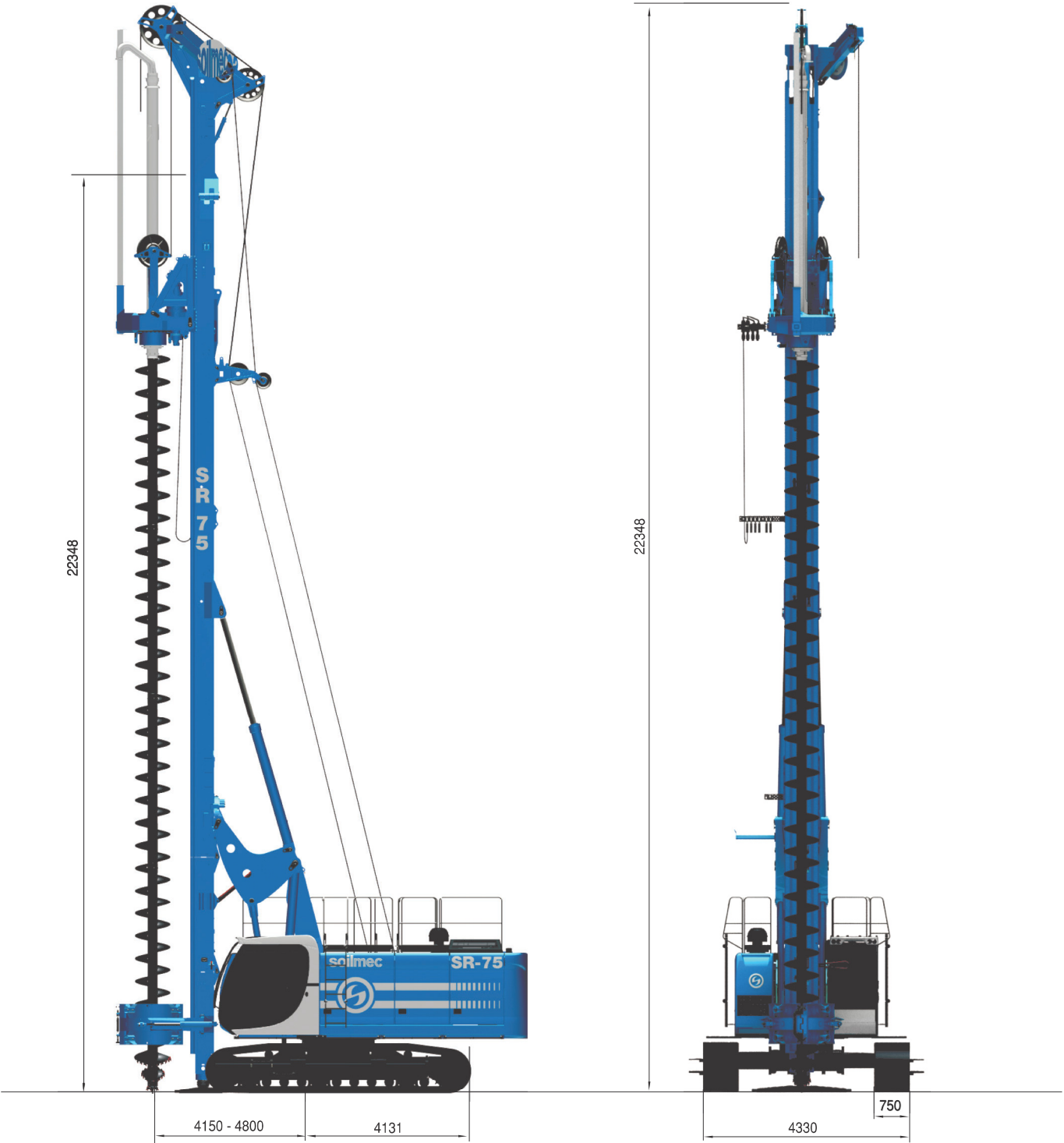
<b>Rotary drive</b>	<b>Single gear, spin-off type</b>	<i>Single gear, spin-off type</i>
Max torque	292 kNm	215368 lbf*ft
Speed of rotation (max)	25,1 rpm	27.2 rpm
Spin-off speed	130 rpm	130 rpm
<b>Rotary drive</b>	<b>Multi gear version</b>	<i>Multi gear version</i>
Max torque	293 kNm	216105 lbf*ft
Speed 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/length	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

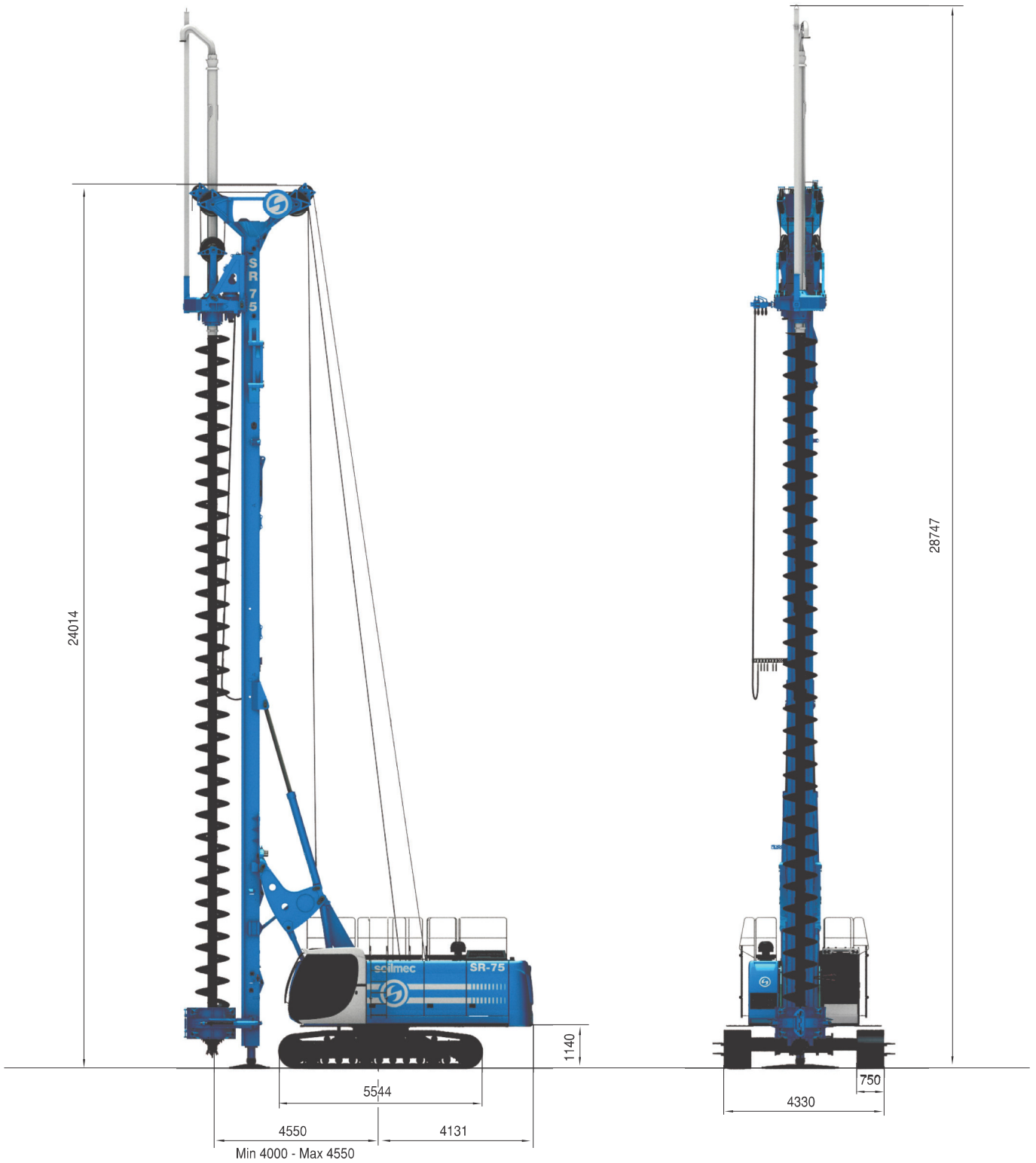
¥ Main and auxiliary winch controlled descent type with special grooving	¥ Depth measuring device on main winch	¥ On board lighting set
¥ Hoist limit switch on main rope	¥ Speed measuring device on rotary	¥ On board tool set
¥ Swivel for main rope	¥ Oscillator attachment brackets	¥ Electric refuelling 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

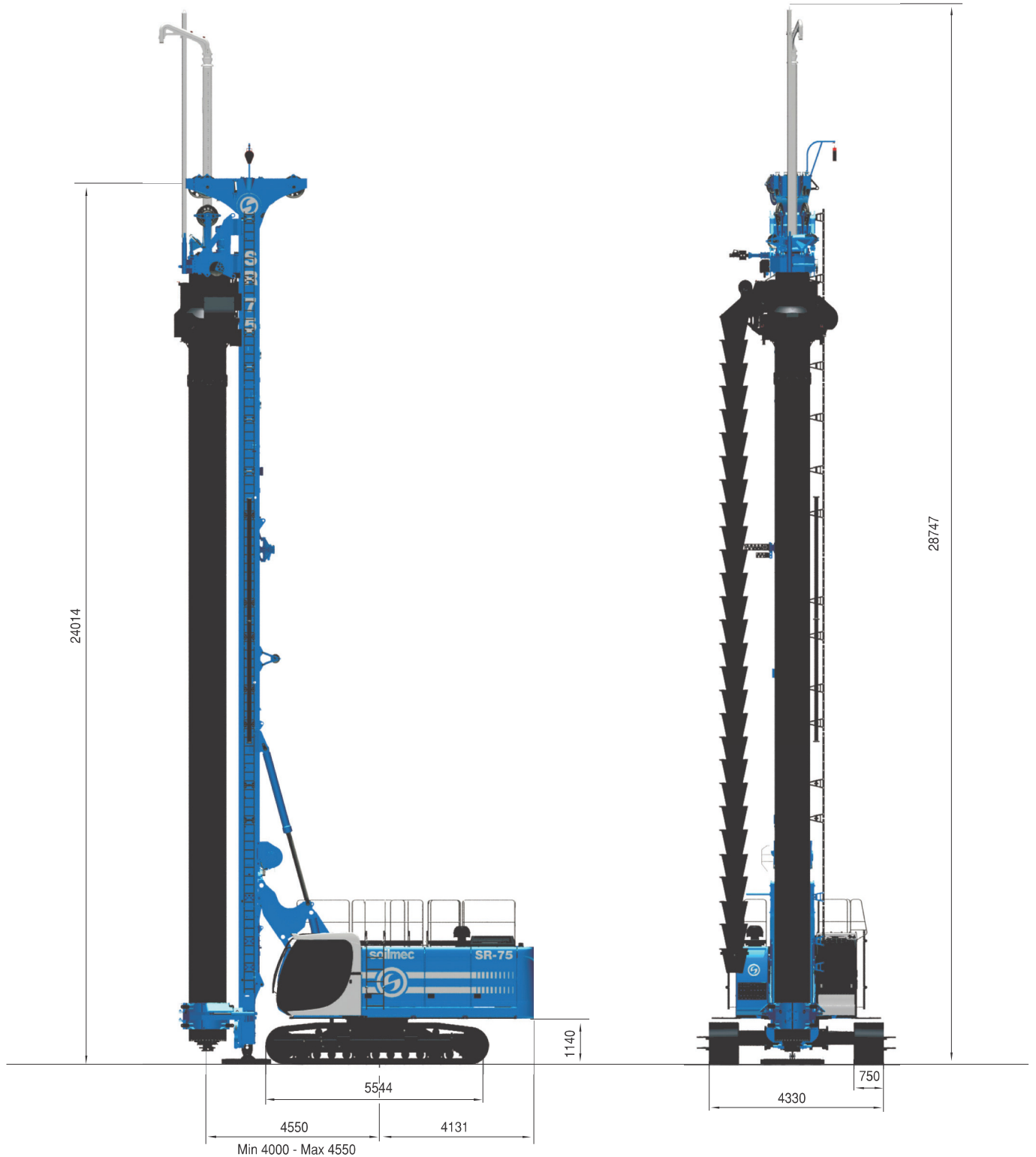
¥ Biodegradable oil	¥ Videocamera set	¥ Main winch load cell
¥ Freefall auxiliary winch	¥ Wider triple grouser track shoes (900 mm)	
¥ Swivel for auxiliary rope	¥ VTH-1 vibrator	



<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



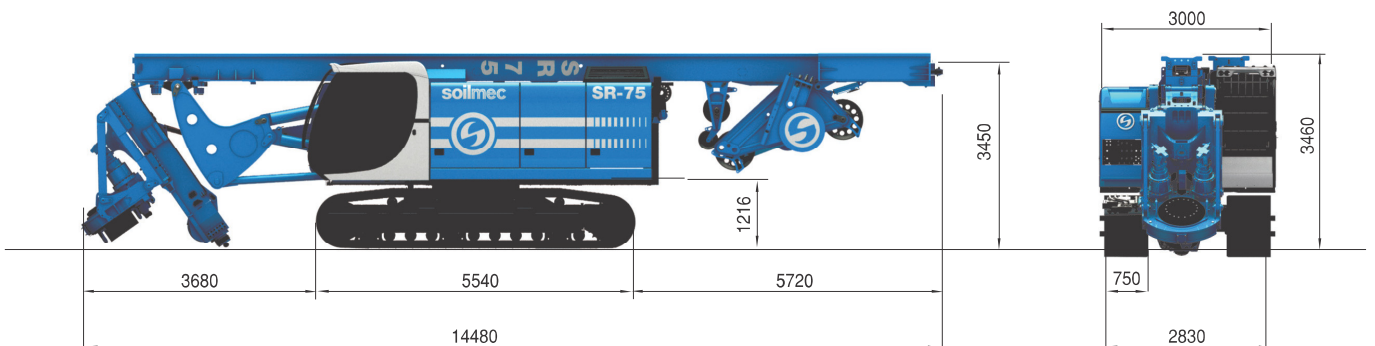
# SR-75 TJ APPLICATIONS



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



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

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