



Hydraulic Rotary Rig

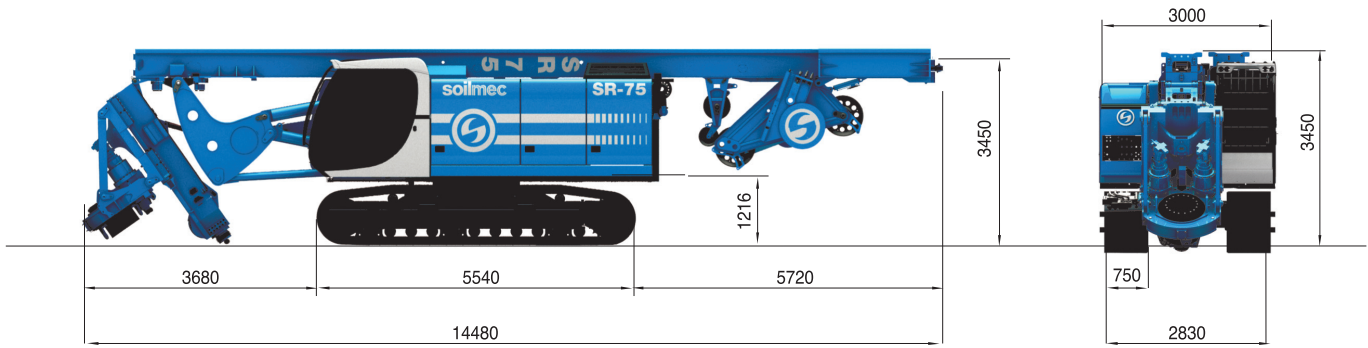
SR-75



soilmec 
Drilling and Foundation Equipment



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 CCS / WCS	52200 / 56200 kg	115081 / 123899 lb
Min transport weight CCS / WCS	49500 / 55450 kg	109128 / 122246 lb

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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	62,5 m	205 ft

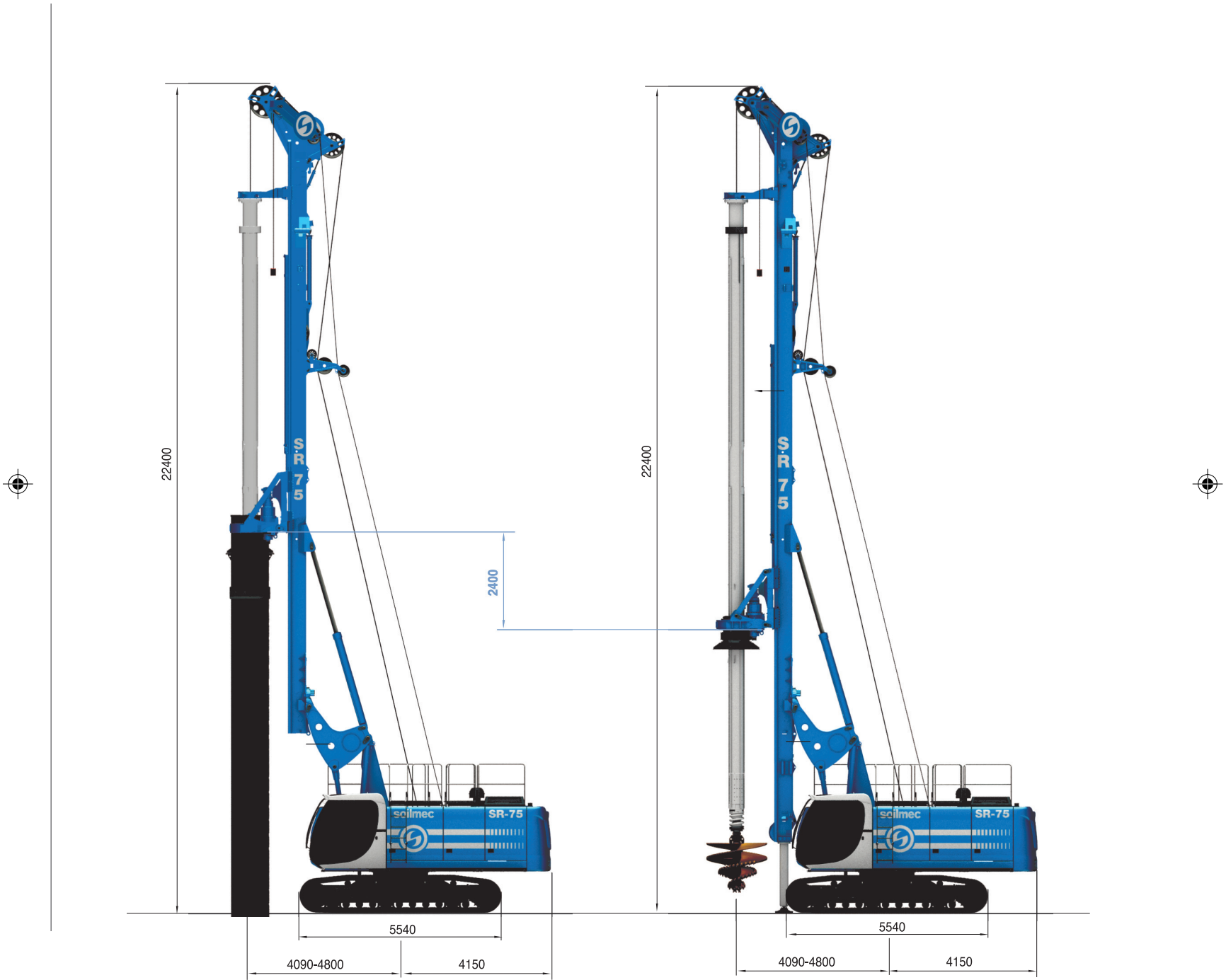
* tool below mast



SR-75 Hydraulic Rotary Rig

LDP APPLICATIONS

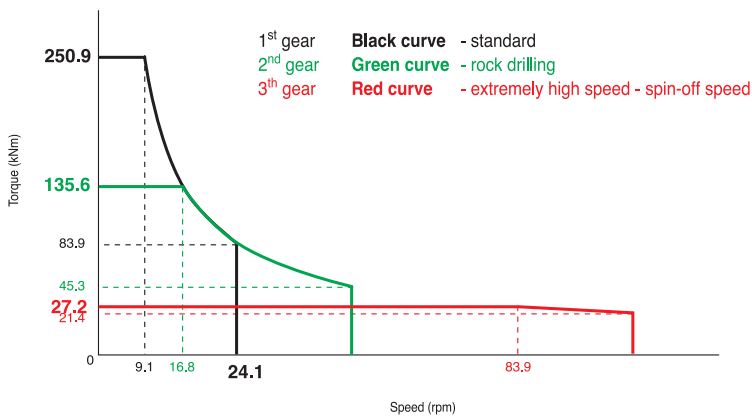
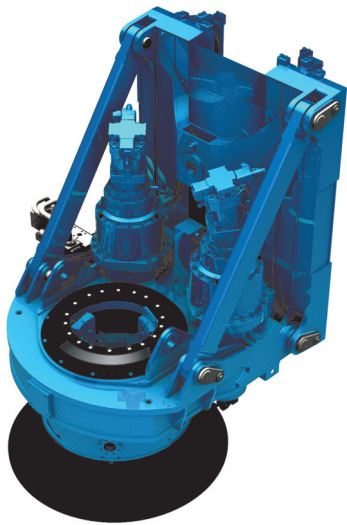
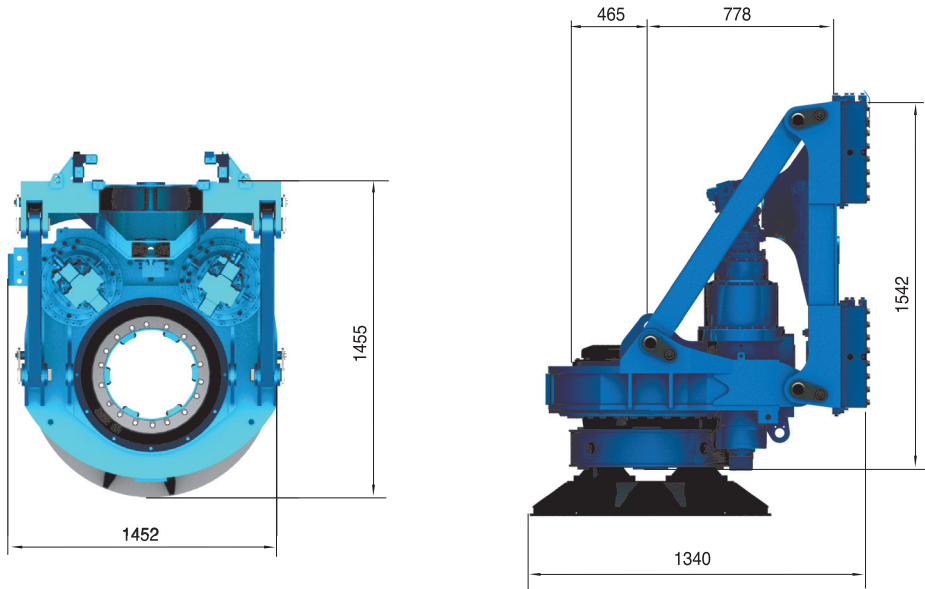
Crowd cylinder double positioning



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	62,5 m	205 ft
* tool below mast		



SR-75 Hydraulic Rotary Rig
ROTARY TABLE



Rotary drive - RD250	Single gear version	Single gear version
- Max torque (theoretical, restricted, intermittent)	290 kNm	213889 lbf*ft
- Rated torque (theoretical)	249 kNm	183650 lbf*ft
- Speed of rotation (max)	25,1 rpm	25.1 rpm
- Spin-off speed	130 rpm	130 rpm
- Weight c/w cradle	5050 kg	11133 lb
Rotary drive - RD250G	Multigear version	Multigear version
- Max torque (theoretical, restricted, intermittent)	293 kNm	216102 lbf*ft
- Rated torque (theoretical)	251 kNm	185125 lbf*ft
- Speed of rotation (max)	27,2 rpm	27.2 rpm
- Spin-off speed	106 rpm	106 rpm
- Weight c/w cradle	5120 kg	11288 lb



SR-75 TECHNICAL DATA SHEET

Crowd system	Cylinder	Cylinder
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
Crowd system	Winch	Winch
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
Main winch	Control descent	Control descent
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
Auxiliary winch	Control descent	Control descent
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
Engine	CAT C13	CAT C13
Rated output ISO 3046-I	328 kW @ 1800 rpm	440 HP @ 1800 rpm
Engine conforms to Exhaust emission Standard	EU stage III B, US EPA Tier 4i and EU stage III A, US EPA Tier 3 available	EU stage III B, US EPA Tier 4i and EU stage III A, US EPA Tier 3 available
Diesel tank capacity	650 l	172 US gal
Hydraulic system		
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
Undercarriage	variable gauge, telescoping sides frames	variable gauge, telescoping sides frames
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
Mast inclination (Backward/ Forward/Lateral)	10°/4°/3°	10°/4°/3°

STANDARD EQUIPMENT

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

• Biodegradable oil • Freefall auxiliary winch • Swivel for auxiliary rope	• Videocamera set • Wider triple grouser track shoes (900 mm) • VTH-1 vibrator	• Main winch load cell
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SR-75 Hydraulic Rotary Rig
KELLY DRILLING SYSTEM



Drilling Depths	Kelly dimensions section x m	Depth m ft		Weight ton ton		CCS SYSTEM				WCS SYSTEM	
						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	29,5	96,8	4,2	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
5 parts	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
	FR 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 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

* Non self-mountable kelly bar
** Rathole dedicated kelly bar





SR-75 CFA APPLICATIONS

Quick conversion kit

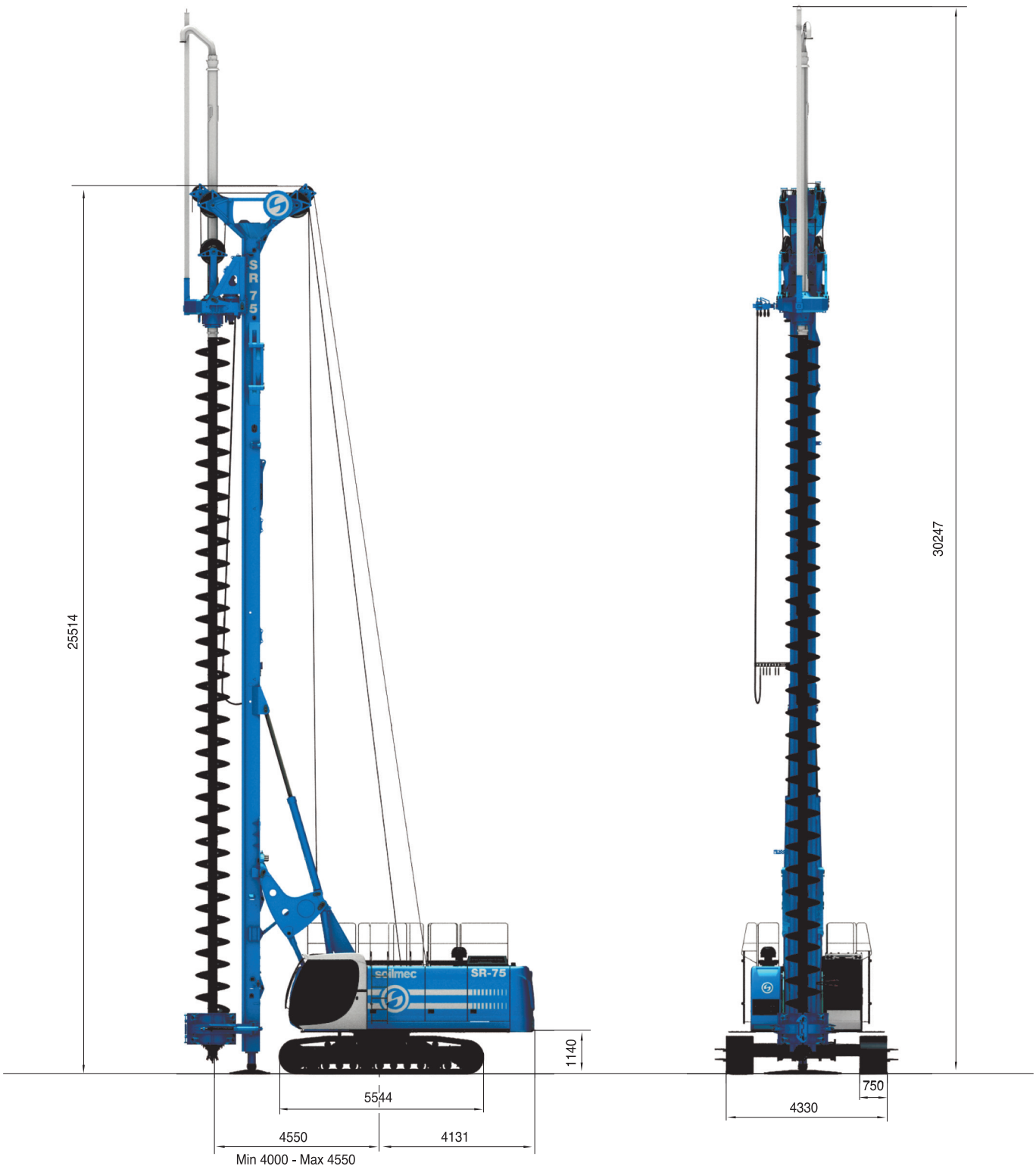


CFA - Continuous Flight Auger - Quick conversion kit		
Max pile diameter	1200 mm	203926 lb
Max pile depth	23,4 m	76.7 ft
Max pile depth with auger cleaner	22 m	72 ft
Extraction force	800 kN	179847 lbf
Crowd force on auger (optional)	408 kN	91722 lbf



SR-75 CFA APPLICATIONS

4° Line pull



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 (64 + 19.68)ft
Max pile depth with auger cleaner	24 (18 + 6) m	78.74 (59 + 19.68)ft
Max pile depth c/w mast extension (optional kit)	27 m	89 ft
Extraction force	984 kN	221212 lbf
Extraction force on auger (opt.)	100 kN	108807.5 lbf



SR-75 CAP/CSP APPLICATIONS

4° Line pull



CAP/CSP_Cased Augered & Secant Piles - 4° Line pull		
Max pile diameter	1000 mm	39.37 in
Max pile depth	23 (17 + 6) m	75.5 (55.77 + 19.8) ft
Max pile depth with auger cleaner	22 (16 + 6) m	72.2 (52.49 + 19.8) ft
Max cased depth c/w - w/o auger cleaner	16 / 17 m	52.49 / 55.77 ft
Casing max torque (theoretical, restricted, intermittent)	293 kNm	216102 lbf*ft
Casing rated torque (theoretical)	249 kNm	183650 lbf*ft
Casing speed of rotation (max)	11 rpm	11 rpm
Casing pull up/down	408 kN	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	15,8 m	52 ft
Max pile depth c/w mast extension	30,7 m	101 ft



SR-75 TJ APPLICATIONS



TJ - Turbojet®		
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	15,8 m	52 ft
Max depth with boom mast extension	30,7 m	101 ft