

Hydraulic Rotary Rig

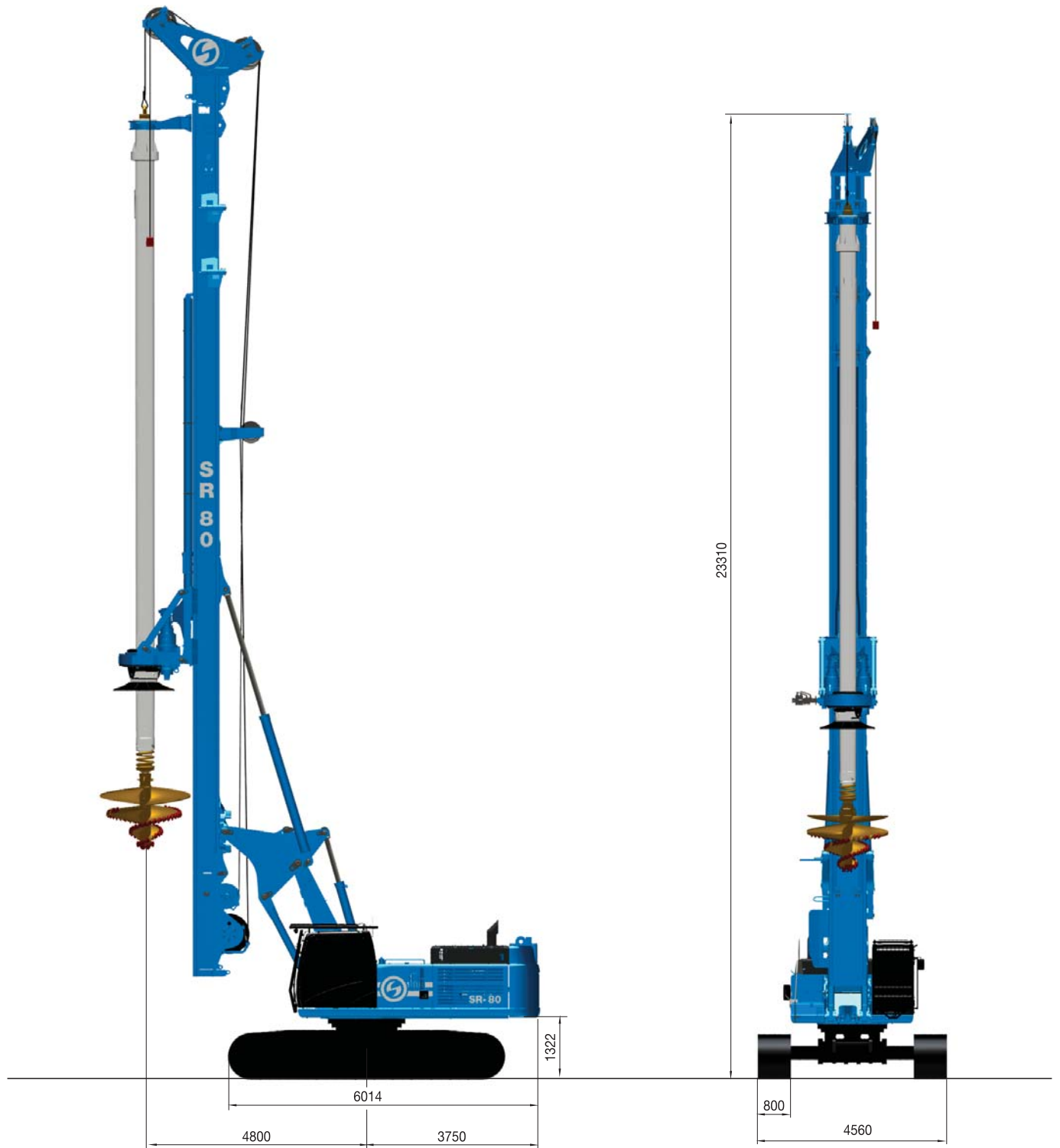
SR-80



soilmeco
Drilling and Foundation Equipment

SR-80 Hydraulic Rotary Rig

LDP APPLICATIONS

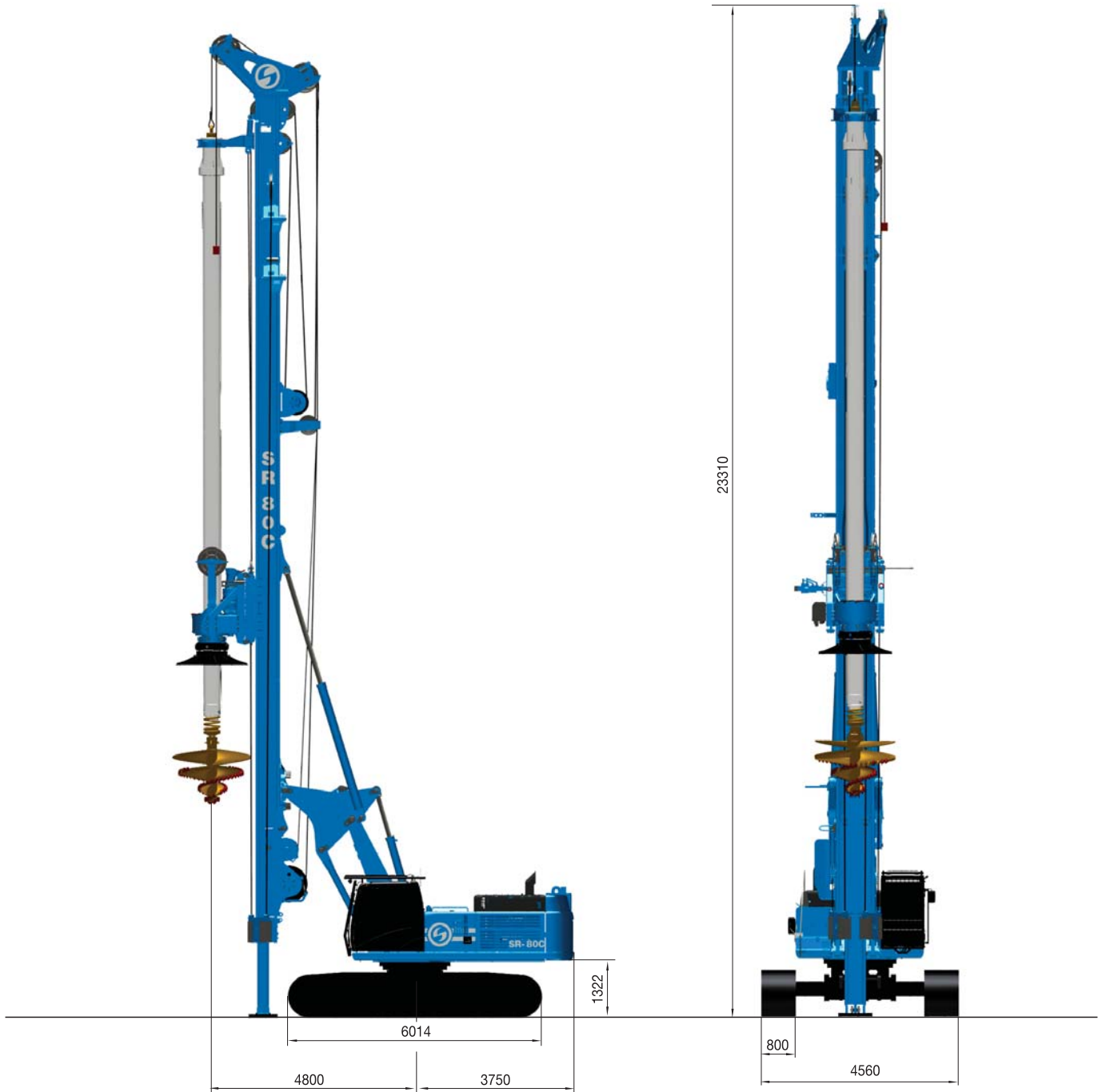


LDP - Large Diameter Piles - CCS version

Operating weight c/w 4x11,5 kelly bar	84500 kg	186289 lb
Maximum pile diameter	2000 mm	79 in
Maximum pile depth - friction kelly	77 m	253 ft
Maximum pile depth - locking kelly	62 m	203 ft

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LDP APPLICATIONS

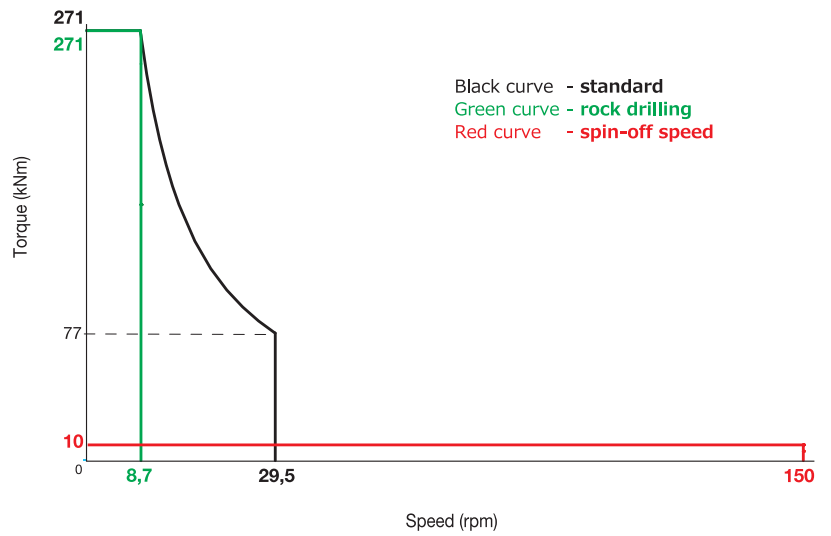
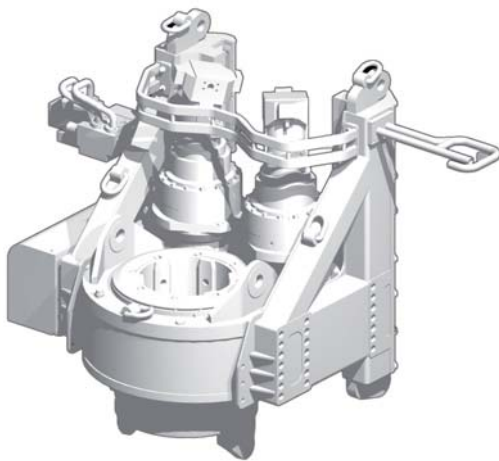
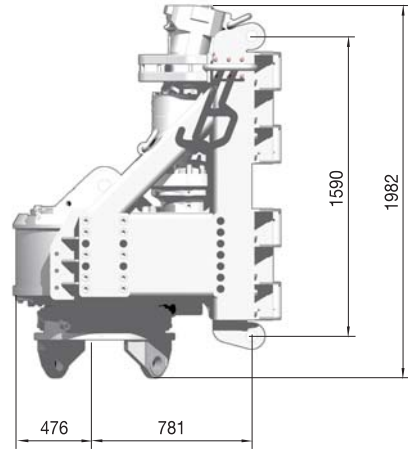
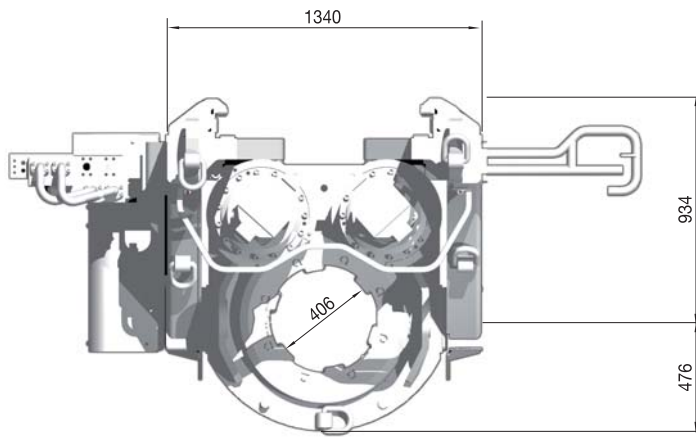


LDP - Large Diameter Piles - WCS version

Operating weight c/w 4x11,5 kelly bar	87050 kg	191910 lb
Maximum pile diameter	1600 mm	63 in
Maximum pile depth - friction kelly	77 m	253 ft
Maximum pile depth - locking kelly	62 m	203 ft

SR-80 Hydraulic Rotary Rig

ROTARY HEAD



Rotary Drive - Single gear, Spin off type

- Max torque*	271 kNm	199655 lbf*ft
- Rated torque**	251 kNm	185420 lbf*ft
- Maximum drilling speed	29,5 rpm	30 rpm
- Spinoff speed	150 rpm	150 rpm
- Inner passage w/o ribs	458 mm	18 in

*Theoretical; **Theoretical, restricted, intermittent

SR-80 Hydraulic Rotary Rig

TECHNICAL DATA SHEET

CCS - Cylinder crowd system		
- Cylinder stroke	6500 mm	256 in
- Crowd force pull (down/up)	220 / 300 kN	49457 / 67442 lbf
- Speed up	9,4 m/min	31 ft/min
- Speed down	5 / 10,5 m/min	16 / 34 ft/min
WCS - Winch crowd system		
- Winch stroke	13000 mm	512 in
- Crowd force pull (down/up)	220 / 360 kN	49457 / 80930 lbf
- Speed up	8,6 m/min	28 ft/min
- Speed down	8,6 m/min	28 ft/min
Main winch	controlled descent	<i>controlled descent</i>
- Line pull (1st layer)	280 kN	62945 lbf
- Rope diameter	30 mm	1 in
- Line speed (max.)	91 m/min	299 ft/min
Auxiliary winch	controlled descent	<i>controlled descent</i>
- Line pull (1st layer)	100 kN	22481 lbf
- Rope diameter	19 mm	0.75 in
- Line speed (max.)	65 m/min	213 ft/min
Engine type	CAT C13 ACERT	<i>CAT C13 ACERT</i>
- Rated output ISO 3046-I	328 kW @ 1800 rpm	440 HP @ 1800 rpm
- Engine conforms to Exhaust emission Standard	EU stage IIIA, US EPA Tier 3	<i>EU stage IIIA, US EPA Tier 3</i>
- Aspiration	Turbocharged and charge air cooled	<i>Turbocharged and charge air cooled</i>
- Diesel tank capacity	720 l	190 US gal
Hydraulic system rated pressure	32,5 Mpa	<i>4786 psi</i>
- Flow rates (main circuits)	2x 360 l/min	<i>2x 95 US gal/min</i>
- Hydraulic oil tank capacity	550 l	<i>145 US gal</i>
Undercarriage	variable gauge, telescoping side frames	<i>variable gauge, telescoping side frames</i>
- Overall width of crawlers retracted/extended	3000 / 4560 mm	<i>118 / 180 in</i>
- Width of triple grouser track shoes	800 mm	<i>32 in</i>
- Overall length of crawlers	6014 mm	<i>237 in</i>
- Traction force	679 kN	<i>152643 lbf</i>
- Travel speed	2,0 km/h	<i>1.2 mph</i>
Mast inclination - Backward/ Forward/Lateral	10° / 4° / 3°	<i>10° / 4° / 3°</i>

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
- 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
- Crowd pressure setting
- Oscillator attachment brackets
- Emergency mode of operation for engine
- Engine diagnostic system
- Diagnostic panel for hydraulic functions
- Transport securing lugs on crawler units
- Access ladder on upper carriage
- On board lighting set
- On board tool set
- Electric refuelling pump
- High comfort operator's CAT cab (1000 mm width)
- Protective roof grate (FOPS compliant)
- Air conditioning system
- Radio and CD player

OPTIONAL EQUIPMENT

- DMS system electronic monitoring and visualization system
- Biodegradable oil
- Pressurized air conditioning system
- Freefall auxiliary winch
- Central lubrication system
- Swivel for auxiliary rope
- Videocamera set
- Main winch load cell
- CFA version - additional crowd force on auger (90kN)

SR-80 Hydraulic Rotary Rig

KELLY DRILLING SYSTEM

Optional equipment:

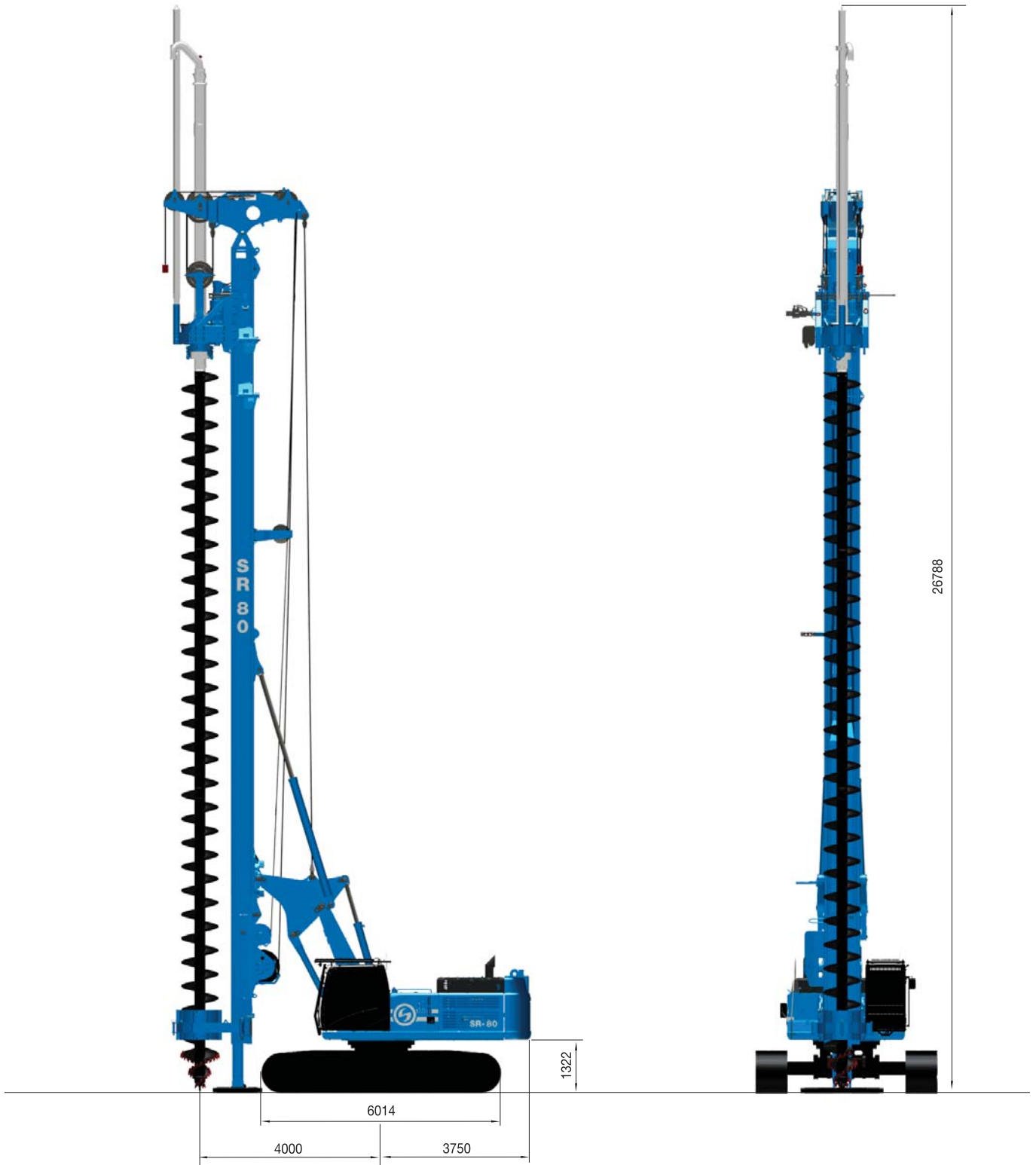
- Hydraulic oscillator
VRM 200 KL



Drilling Depths	Kelly dimensions	Depth		Weight		CCS SYSTEM		WCS SYSTEM		
		section x m	m	ft	ton	ton	H		H	
							m	ft	m	ft
3 parts	BL HD	3 x 9	23,4 m	76.8 ft	4,1 t	4.2 ton	8,3 m	27.2 ft	10,3 m	33.8 ft
	BL HD	3 x 11,5	30,8 m	101.1 ft	5,7 t	5.8 ton	7,8 m	25.6 ft	7,8 m	25.6 ft
	BL HD	3 x 15,5	42,9 m	140.8 ft	7,5 t	7.6 ton	3,9 m	12.8 ft	3,9 m	12.8 ft
4 parts	BL HD	4 x 7,5	24,2 m	79.4 ft	4,3 t	4.4 ton	8,3 m	27.2 ft	11,9 m	39.0 ft
	BL HD	4 x 11,5	40,9 m	134.2 ft	6,2 t	6.3 ton	7,7 m	25.3 ft	7,7 m	25.3 ft
	BL HD	4 x 13,5	49,3 m	161.8 ft	7,1 t	7.2 ton	5,7 m	18.7 ft	5,7 m	18.7 ft
	BL HD	4 x 16,5	62,0 m	203.4 ft	8,5 t	8.6 ton	2,5 m	8.2 ft	2,5 m	8.2 ft
	FR HD	4 x 10,5	37,0 m	121.4 ft	5,7 t	5.8 ton	8,3 m	27.2 ft	8,8 m	28.9 ft
	FR HD	4 x 13,5	49,3 m	161.8 ft	7,1 t	7.2 ton	5,7 m	18.7 ft	5,7 m	18.7 ft
	FR HD	4 x 15,5	57,8 m	189.6 ft	8,1 t	8.2 ton	3,6 m	11.8 ft	3,6 m	11.8 ft
5 parts	FR HD	5 x 11,5	51,5 m	169.0 ft	6,6 t	6.7 ton	7,8 m	25.6 ft	7,8 m	25.6 ft
	FR HD	5 x 13,5	61,9 m	203.1 ft	7,6 t	7.7 ton	5,8 m	19.0 ft	5,8 m	19.0 ft
	FR HD	5 x 15,5	72,8 m	238.9 ft	8,5 t	8.6 ton	3,6 m	11.8 ft	3,6 m	11.8 ft
	FR HD	5 x 16,5	77,4 m	253.9 ft	9,0 t	9.1 ton	2,7 m	8.9 ft	2,7 m	8.9 ft

Drilling Diameters	CYLINDER		WINCH	
Uncased	2000 mm	78.8 in	1600 mm	63 in
Cased	1800 mm	70.9 in	1600 mm	63 in

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CFA APPLICATIONS 4° line pull

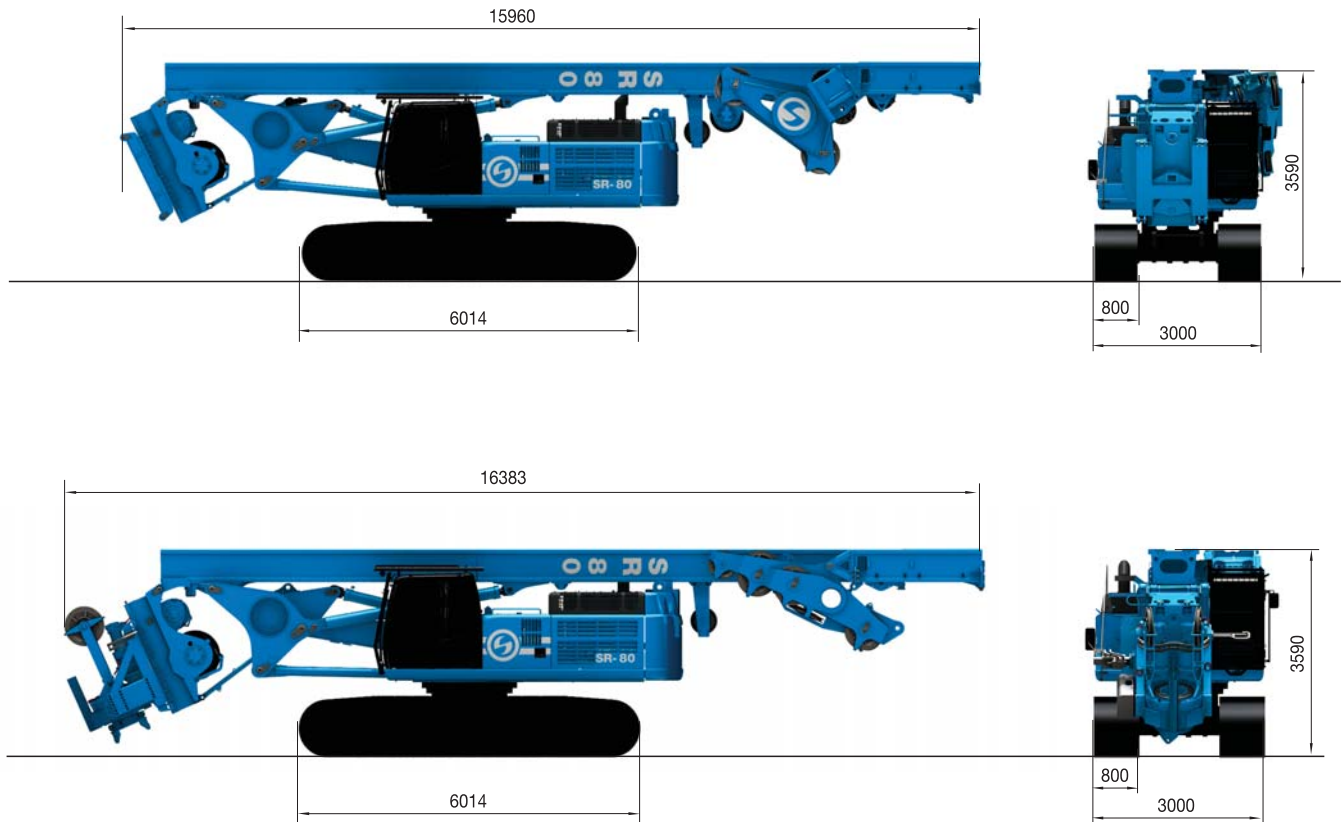


CFA - Continuous Flight Auger - 4° linepull

Operating weight (w/o auger)	79400 kg	175045 lb
Max pile diameter	1200 mm	47 in
Maximum pile depth (c/w 6 m auger extension; w/o auger cleaner)	23,7 m	78 ft
Maximum pile depth (c/w 6 m auger extension and auger cleaner)	22,2 m	73 ft
Extraction force	800 kN	179844 lbf

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TRANSPORT, DIMENSIONS AND WEIGHTS



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

Technical data sheet SR80-002 04/2014

Transport configuration		
Width	3000 mm	118 in
Height	3590 mm	141 in
Length - LDP version - w/o rotary	15530 mm	611 in
Length - CFA version - w/o rotary	15200 mm	598 in
Weight - LDP version	71800 kg	158290 lb
Minimum transport weight - w/o rotary, counterweight	59400 kg	130953 lb
Weight - CFA version	70300 kg	154983 lb

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