



Hydraulic Rotary Rig

# SR-40



# SR-40 Hydraulic Rotary Rig

## LDP APPLICATIONS

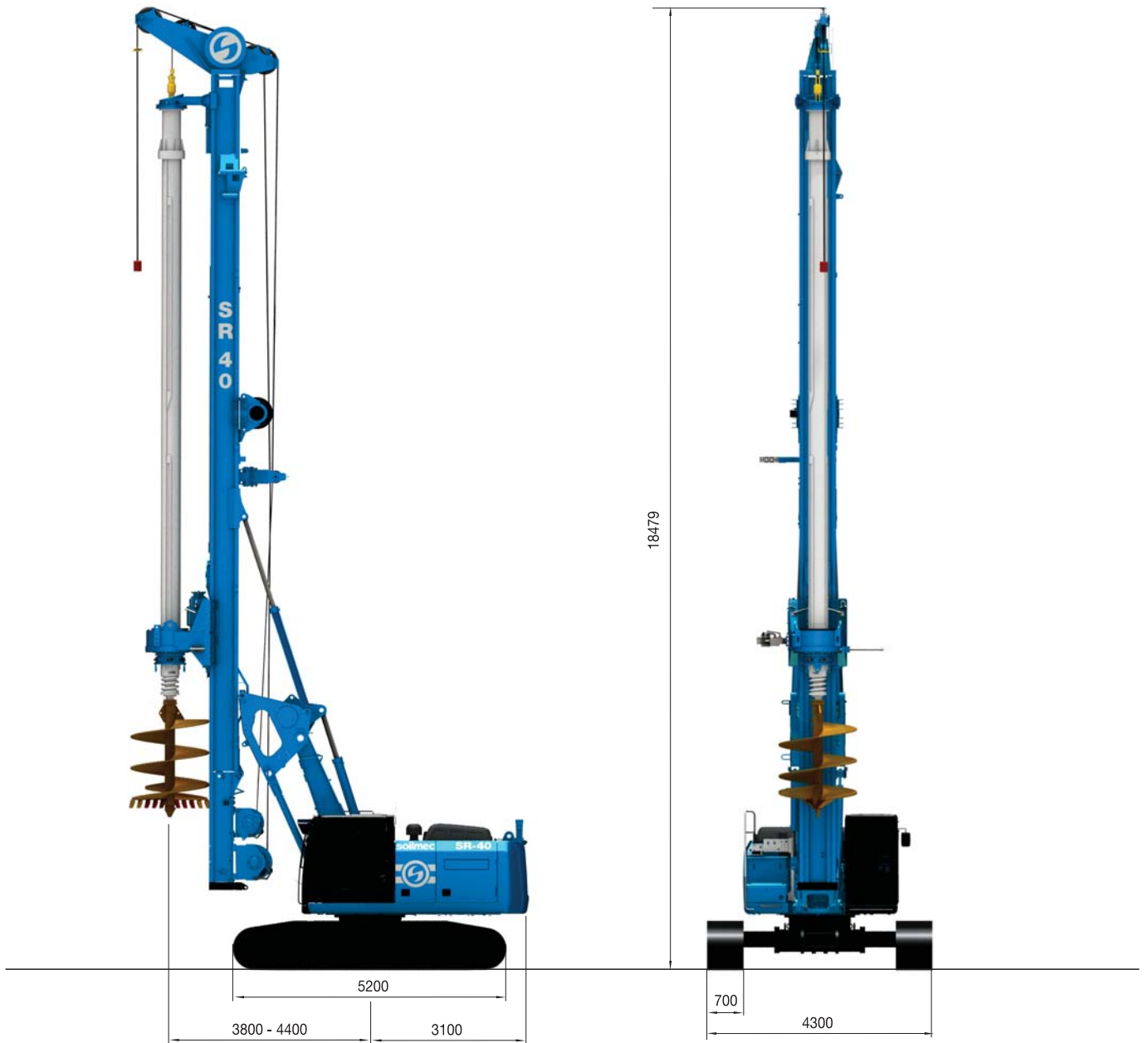


### LDP - Large Diameter Piles - CCS version

Operating weight c/w 4x10,5 kelly bar	50700 kg	111773 lb
Maximum pile diameter	1500 mm	59 in
Maximum pile depth - friction kelly	61 m	199 ft
Maximum pile depth - locking kelly	49 m	161 ft

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## LDP APPLICATIONS

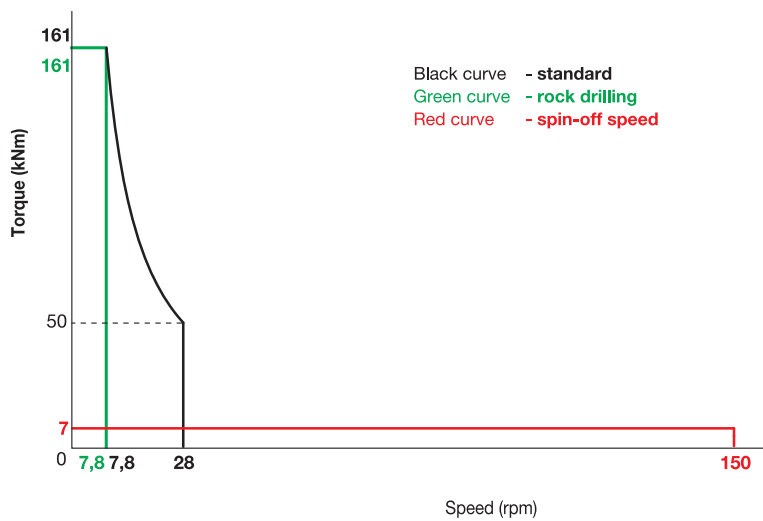
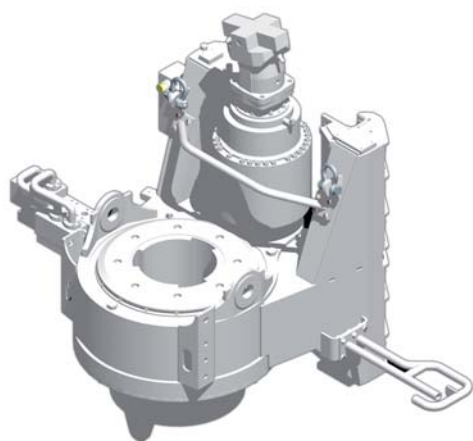
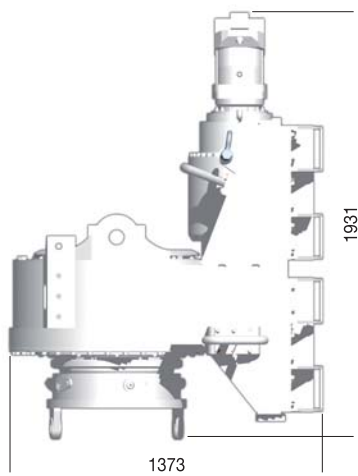
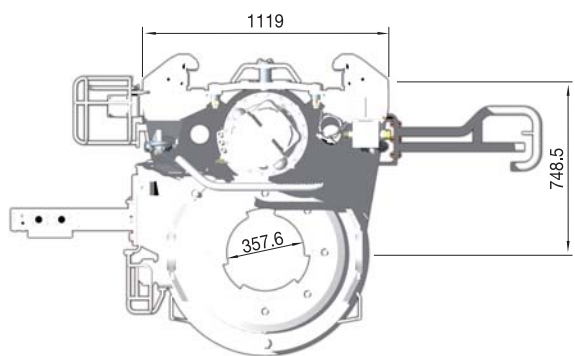


### LDP - Large Diameter Piles - WCS version

Operating weight c/w 4x10,5 kelly bar	51300 kg	113096 lb
Maximum pile diameter	1100 mm	43 in
Maximum pile depth - friction kelly	61 m	199 ft
Maximum pile depth - locking kelly	49 m	160 ft

# SR-40 Hydraulic Rotary Rig

## ROTARY HEAD



### Rotary Drive - Single gear, Spin off type

- Max torque*	161 kNm	119041 lbf*ft
- Rated torque**	148 kNm	108789 lbf*ft
- Maximum drilling speed	28 rpm	28 rpm
- Spinoff speed	130 rpm	130 rpm
- Inner passage w/o ribs	407 mm	16 in

\*Theoretical; \*\*Theoretical, restricted, intermittent

# SR-40 Hydraulic Rotary Rig

## TECHNICAL DATA SHEET

<b>CCS - Cylinder crowd system</b>		
- Cylinder stroke	5100 mm	201 in
- Crowd force pull (down/up)	133 / 200 kN	29899 / 44961 lbf
- Speed up	13,3 m/min	44 ft/min
- Speed down	7 / 14,5 m/min	23 / 48 ft/min
<b>WCS - Winch crowd system</b>		
- Winch stroke	11000 mm	433 in
- Crowd force pull (down/up)	180 / 220 kN	40465 / 49457 lbf
- Speed up	12,1 m/min	40 ft/min
- Speed down	12,1 m/min	40 ft/min
<b>Main winch</b>	<b>controlled descent</b>	<i>controlled descent</i>
- Line pull (1st layer)	150 kN	33721 lbf
- Rope diameter	22 mm	1 in
- Line speed (max.)	91 m/min	299 ft/min
<b>Auxiliary winch</b>	<b>controlled descent</b>	<i>controlled descent</i>
- Line pull (1st layer)	64 kN	14388 lbf
- Rope diameter	18 mm	0.71 in
- Line speed (max.)	66 m/min	217 ft/min
<b>Engine type</b>	<b>CAT C7.1 ACERT</b>	<i>CAT C7.1 ACERT</i>
- Rated output ISO 3046-I	180 kW @ 1800 rpm	241 HP @ 1800 rpm
- Engine conforms to Exhaust emission Standard	<b>EU stage IIIB, US EPA Tier 4i</b>	<i>EU stage IIIB, US EPA Tier 4i</i>
- Aspiration	<b>Turbocharged and charge air cooled</b>	<i>Turbocharged and charge air cooled</i>
- Diesel tank capacity	520 l	137 US gal
<b>Hydraulic system rated pressure</b>	<b>32</b>	<i>4786 psi</i>
- Flow rates (main circuits)	2x 247 l/min	2x 65 US gal/min
- Hydraulic oil tank capacity	280 l	74 US gal
<b>Undercarriage</b>	<b>variable gauge, telescoping side frames</b>	<i>variable gauge, telescoping side frames</i>
- Overall width of crawlers retracted/extended	2900 / 4300 mm	114 / 169 in
- Width of triple grouser track shoes	700 mm	28 in
- Overall length of crawlers	5200 mm	205 in
- Traction force	358 kN	80480 lbf
- Travel speed	2,6 km/h	1.6 mph
<b>Mast inclination - Backward/ Forward/Lateral</b>	<b>10° / 4° / 3°</b>	<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
- Extra rope length kit 13 m kelly bar
- Main winch load cell
- CFA version - additional crowd force on auger (90kN)
- EU stage IIIA, US EPA Tier 3 Diesel Engine

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## KELLY DRILLING SYSTEM

### Optional equipment:

- Hydraulic oscillator  
VRM 120 KL

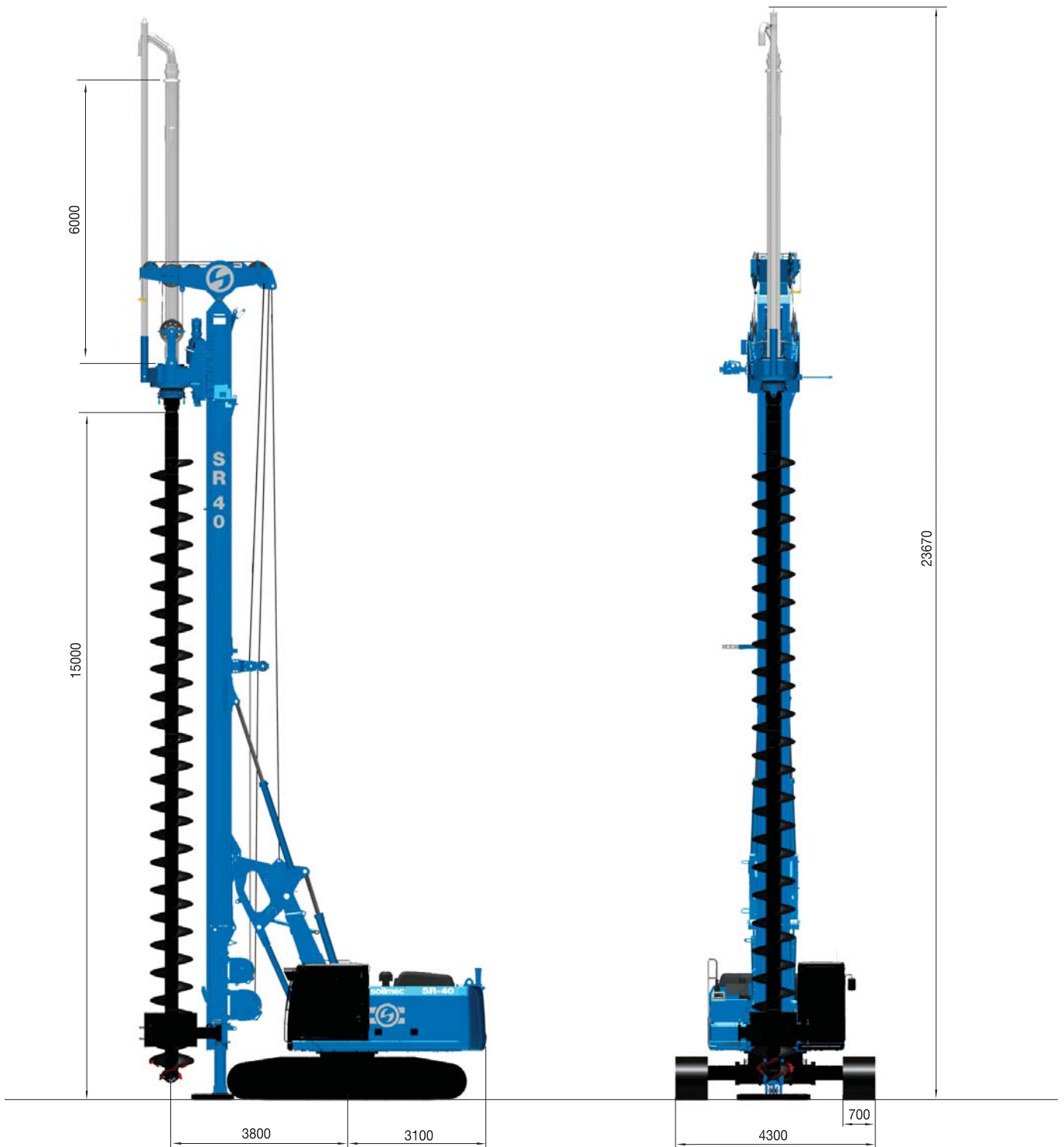


	Drilling Depths	Kelly dimensions	Depth		Weight		CCS SYSTEM		WCS SYSTEM		
			section x m	m	ft	ton	ton	H		H	
								m	ft	m	ft
3 parts	BL HD	3 x 8	21,0 m	68.9 ft	3,1 t	3.1 ton	7,8 m	25.6 ft	7,8 m	25.6 ft	
	BL HD	3 x 10,5	28,5 m	93.5 ft	3,8 t	3.9 ton	5,7 m	18.7 ft	5,7 m	18.7 ft	
	BL HD	3 x 12	33,1 m	108.6 ft	4,3 t	4.4 ton	4,3 m	14.1 ft	4,3 m	14.1 ft	
4 parts	BL HD	4 x 6	18,5 m	60.7 ft	2,5 t	2.5 ton	10,0 m	32.8 ft	10,0 m	32.8 ft	
	BL HD	4 x 9	31,6 m	103.7 ft	3,4 t	3.5 ton	6,5 m	21.3 ft	6,5 m	21.3 ft	
	BL HD	4 x 12	44,5 m	146.0 ft	4,3 t	4.4 ton	3,4 m	11.2 ft	3,4 m	11.2 ft	
	BL HD	4 x 13	48,8 m	160.1 ft	4,6 t	4.7 ton	2,9 m	9.5 ft	2,9 m	9.5 ft	
	FR HD	4 x 6	18,5 m	60.7 ft	2,5 t	2.5 ton	10,0 m	32.8 ft	10,0 m	32.8 ft	
	FR HD	4 x 8	28,6 m	93.8 ft	3,1 t	3.1 ton	7,4 m	24.3 ft	7,4 m	24.3 ft	
	FR HD	4 x 11	38,5 m	126.3 ft	4,0 t	4.1 ton	5,1 m	16.7 ft	5,1 m	16.7 ft	
5 parts	FR HD	5 x 9,5	42,0 m	137.8 ft	4,3 t	4.4 ton	6,3 m	20.7 ft	6,3 m	20.7 ft	
	FR HD	5 x 12	54,5 m	178.8 ft	5,2 t	5.3 ton	3,9 m	12.8 ft	3,9 m	12.8 ft	
	FR HD	5 x 13	61,0 m	200.1 ft	5,5 t	5.6 ton	2,7 m	8.9 ft	2,7 m	8.9 ft	

Drilling Diameters	CYLINDER		WINCH	
Uncased	1500 mm	59.1 in	1100 mm	43.3 in
Cased	1300 mm	51.2 in	1100 mm	43.3 in

# SR-40 Hydraulic Rotary Rig

CFA APPLICATIONS 4° line pull

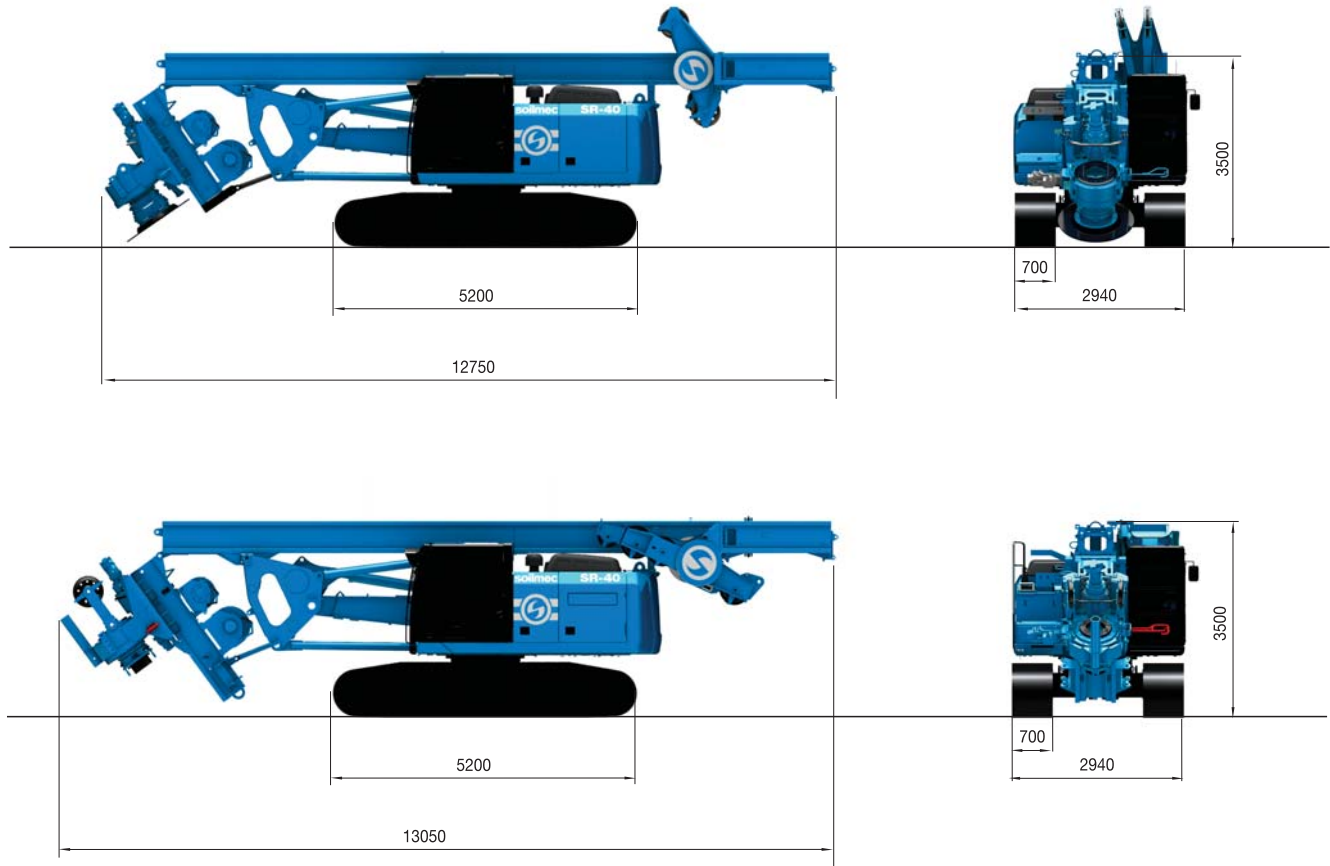


## CFA - Continuous Flight Auger - 4° linepull

Operating weight (w/o auger)	48600 kg	107144 lb
Max pile diameter	750 / 1000 mm	30 / 39 in
Maximum pile depth (c/w 6 m auger extension; w/o auger cleaner)	20 m	66 ft
Maximum pile depth (c/w 6 m auger extension and auger cleaner)	18,5 m	61 ft
Extraction force	520 kN	116899 lbf

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## TRANSPORT, DIMENSIONS AND WEIGHTS



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

SR40-002 04/2014  
Technical data sheet

Transport configuration		
<b>Width</b>	<b>2940 mm</b>	<b>116 in</b>
<b>Height</b>	<b>3500 mm</b>	<b>138 in</b>
<b>Length - LDP version</b>	<b>12750 mm</b>	<b>502 in</b>
<b>Length - CFA version</b>	<b>13050 mm</b>	<b>514 in</b>
<b>Weight - LDP version (c/w casing flange)</b>	<b>46500 kg</b>	<b>102514 lb</b>
<b>Weight - CFA version</b>	<b>47200 kg</b>	<b>104057 lb</b>
<b>Minimum transport weight (w/o rotary &amp; counterweight)</b>	<b>35400 kg</b>	<b>78043 lb</b>

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