

Hydraulic Rotary Rig

# SR-60

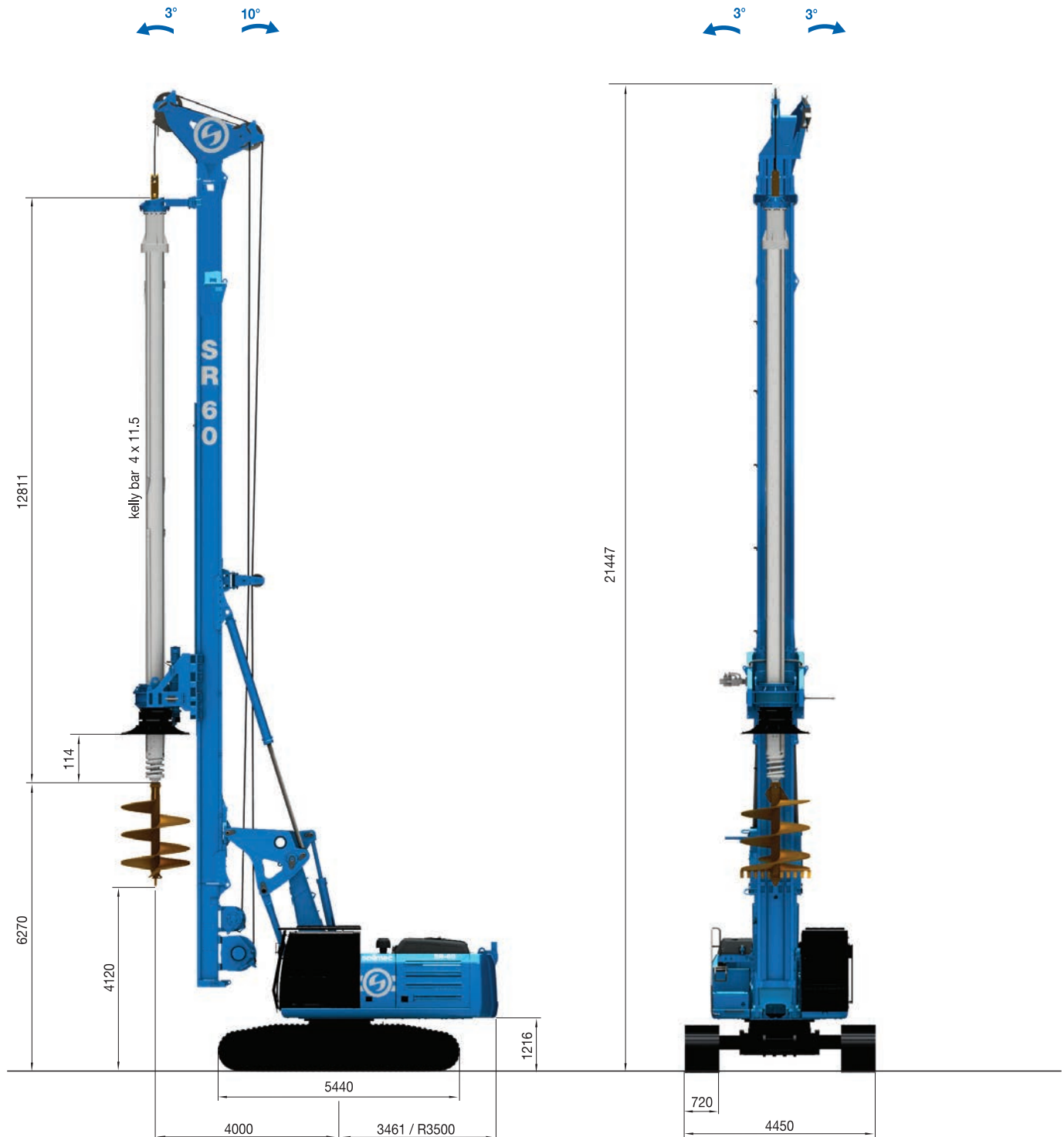
## EVO



**soilmec**   
Drilling and Foundation Equipment

# SR-60 EVO Hydraulic Rotary Rig

## LDP APPLICATIONS



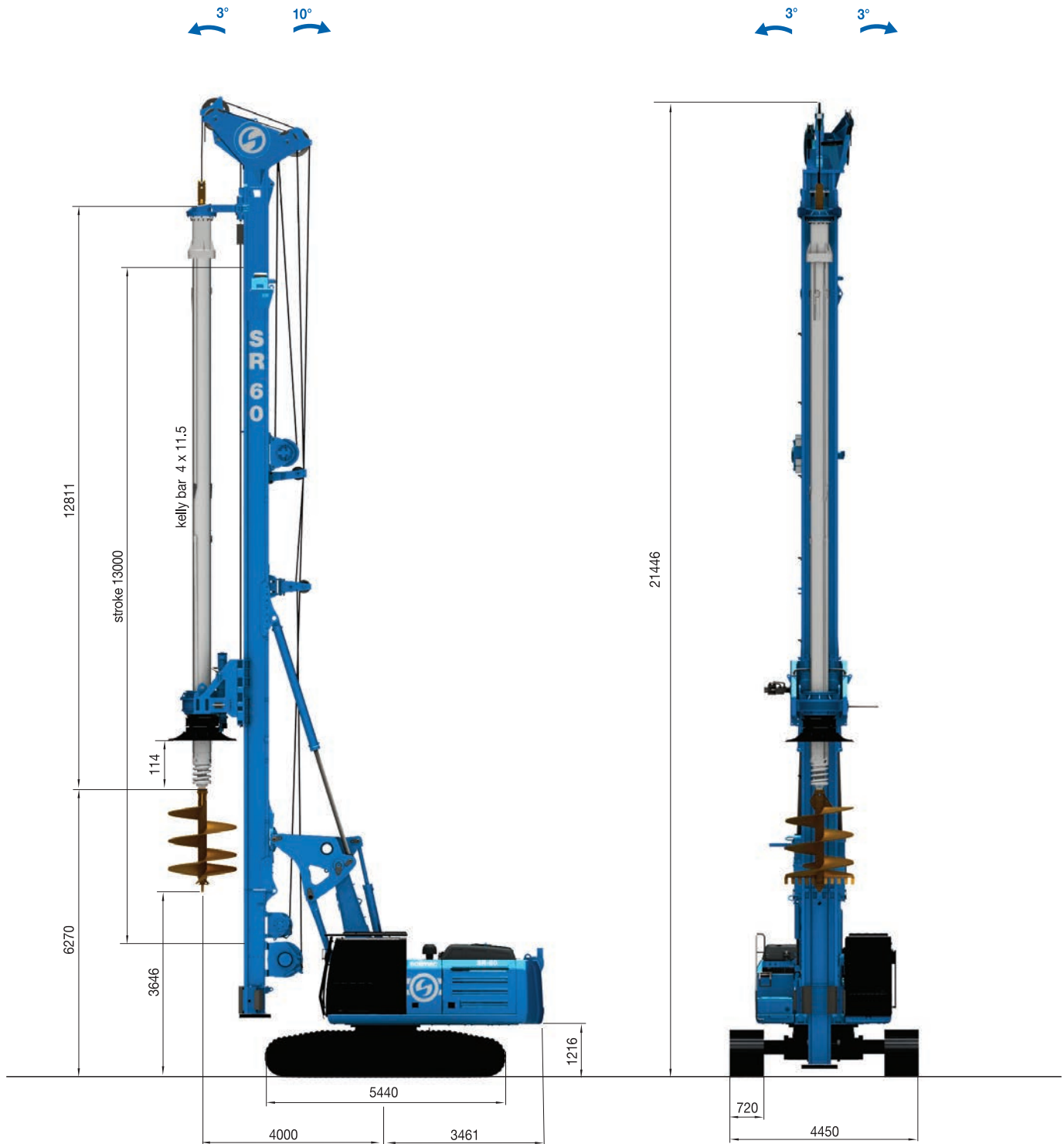
### LDP - Large Diameter Piles - CCS version

Operating weight c/w 4x13,5 kelly bar	66300 kg	146165 lb
Maximum pile diameter	1800 mm	71 in
Maximum pile depth - friction kelly *	71 m	233 ft
Maximum pile depth - locking kelly	58,5 m	192 ft

\* Extra rope required for 5x15.5 kelly bar

# SR-60 EVO Hydraulic Rotary Rig

## LDP APPLICATIONS



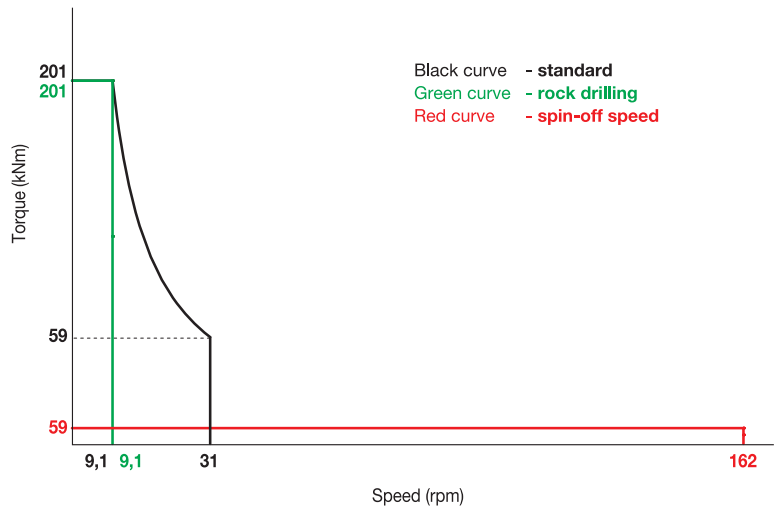
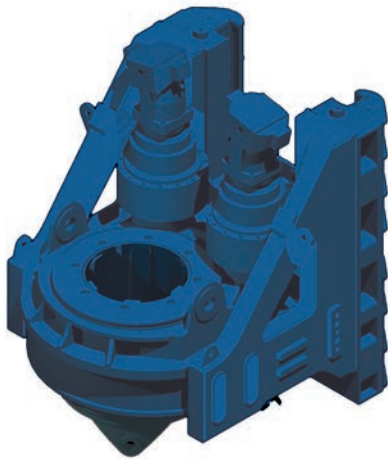
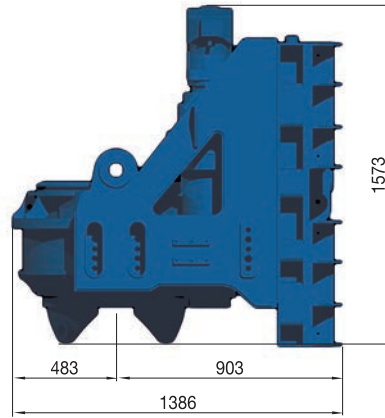
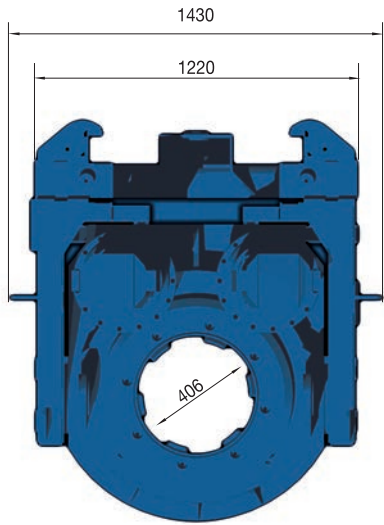
### LDP - Large Diameter Piles - WCS version

Operating weight c/w 4x13,5 kelly bar	67600 kg	149031 lb
Maximum pile diameter	1500 mm	59 in
Maximum pile depth - friction kelly*	71 m	233 ft
Maximum pile depth - locking kelly	58,5 m	192 ft

\* Extra rope required for 5x15.5 kelly bar

# SR-60 EVO Hydraulic Rotary Rig

## ROTARY HEAD



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

- Max torque*	<b>201 kNm</b>	147879 lb*ft
- Rated torque	<b>189 kNm</b>	139397 lb*ft
- Maximum drilling speed	<b>31 rpm</b>	31 rpm
- Spin-off speed	<b>162 rpm</b>	162 rpm
- Weight	<b>4600 kg</b>	10141 lb

\* Restricted, intermittent

# SR-60 EVO Hydraulic Rotary Rig

## TECHNICAL DATA SHEET

<b>CCS - Cylinder crowd system</b>		
- Cylinder stroke	5600 mm	220 in
- Crowd force pull (down/up)	154 / 280 kN	34620 / 62945 lbf
- Speed up	10,2 m/min	33.5 ft/min
- Speed down	5,7/12,7 m/min	18.7/41.7 ft/min
<b>WCS - Winch crowd system</b>		
- Winch stroke	13000 mm	512 in
- Crowd force pull (down/up)	220 / 260 kN	49457 / 58449 lbf
- Speed up	10 / 18 m/min	33 / 59 ft/min
- Speed down	10 / 18 m/min	33 / 59 ft/min
<b>Main winch</b>	<b>controlled descent</b>	<i>controlled descent</i>
- Line pull (1st layer)	210 kN	47209 lbf
- Rope diameter	26 mm	1 in
- Line speed (max.)	71 m/min	233 ft/min
<b>Auxiliary winch</b>	<b>controlled descent</b>	<i>controlled descent</i>
- Line pull (1st layer)	80 kN	17984 lbf
- Rope diameter	19 mm	0.75 in
- Line speed (max.)	76 m/min	249 ft/min
<b>Engine type</b>	<b>CAT C9.3 ACERT</b>	<i>CAT C9.3 ACERT</i>
- Rated output ISO 3046-I	235 kW @ 1800 rpm	315 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	620 l	164 US gal
<b>Hydraulic system</b>		
- Flow rates (main circuits)	2x 289 l/min	2x 76 US gal/min
- Flow rates (auxiliary circuits)	100 l/min	22 US gal/min
- Hydraulic oil tank capacity	320 l	85 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	3000/4450 mm	118/175 in
- Width of triple grouser track shoes	720 mm	28.3 in
- Overall length of crawlers	5440 mm	214 in
- Traction force	496 kN	111503 lbf
- Travel speed	2,3 km/h	1.4 mph
<b>Mast inclination - Backward/ Forward/Lateral</b>	<b>10° / 3° / 3°</b>	<i>10°/3°/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
- Videocamera set
- Rearview mirror

## OPTIONAL EQUIPMENT

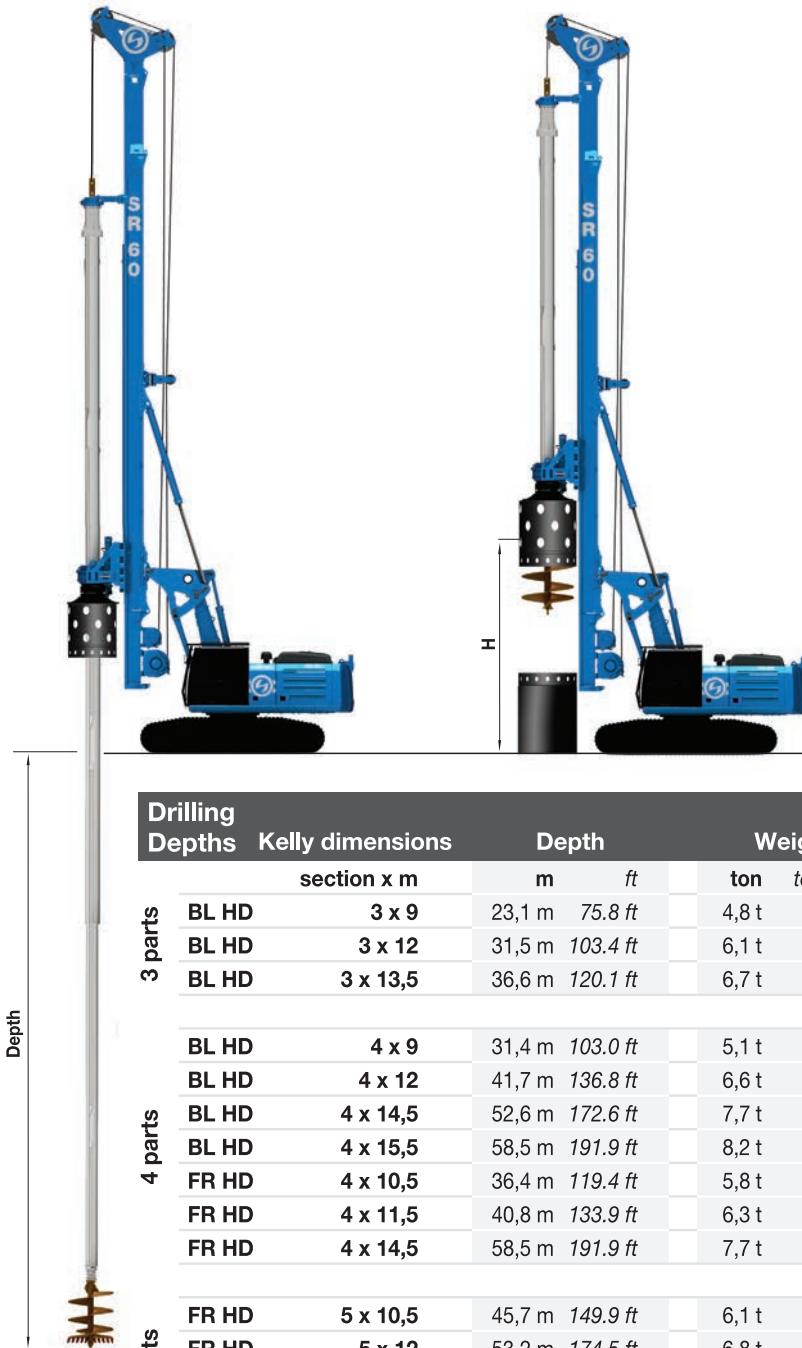
- DMS system electronic monitoring and visualization system
- Biodegradable oil
- Pressurized air conditioning system
- Freefall auxiliary winch
- Central lubrication system
- Swivel for auxiliary rope
- Extra rope length kit for 5x15,5 kelly bar
- Main winch load cell
- CFA version - additional crowd force on auger (90kN)
- EU stage IIIA, US EPA Tier 3 Diesel Engine

# SR-60 EVO Hydraulic Rotary Rig

## KELLY DRILLING SYSTEM

### Optional equipment:

- Hydraulic oscillator VRM 120 KL



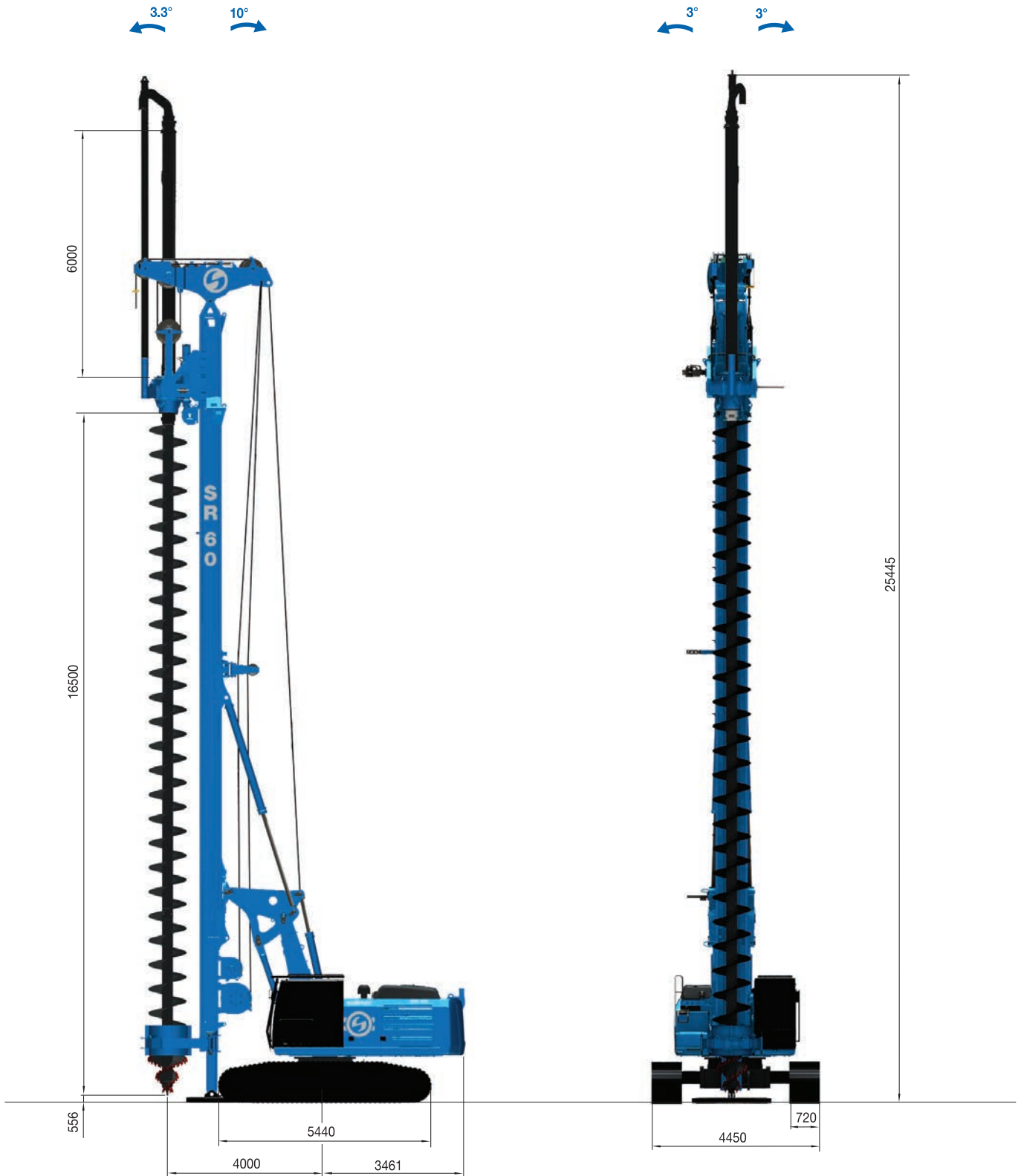
Drilling Depths	Kelly dimensions	Depth		Weight		CCS SYSTEM		WCS SYSTEM		
		section x m	m	ft	ton	ton (US)	H		H	
3 parts	BL HD	3 x 9	23,1 m	75.8 ft	4,8 t	4.9 ton	8,6 m	28.2 ft	9,6 m	31.5 ft
	BL HD	3 x 12	31,5 m	103.4 ft	6,1 t	6.2 ton	6,9 m	22.6 ft	6,9 m	22.6 ft
	BL HD	3 x 13,5	36,6 m	120.1 ft	6,7 t	6.8 ton	5,4 m	17.7 ft	5,4 m	17.7 ft
4 parts	BL HD	4 x 9	31,4 m	103.0 ft	5,1 t	5.2 ton	8,6 m	28.2 ft	9,4 m	30.8 ft
	BL HD	4 x 12	41,7 m	136.8 ft	6,6 t	6.7 ton	6,7 m	22.0 ft	6,7 m	22.0 ft
	BL HD	4 x 14,5	52,6 m	172.6 ft	7,7 t	7.8 ton	4,3 m	14.1 ft	4,3 m	14.1 ft
	BL HD	4 x 15,5	58,5 m	191.9 ft	8,2 t	8.3 ton	-	-	3,3 m	10.8 ft
	FR HD	4 x 10,5	36,4 m	119.4 ft	5,8 t	5.9 ton	8,3 m	27.2 ft	8,3 m	27.2 ft
	FR HD	4 x 11,5	40,8 m	133.9 ft	6,3 t	6.4 ton	6,9 m	22.6 ft	6,9 m	22.6 ft
	FR HD	4 x 14,5	58,5 m	191.9 ft	7,7 t	7.9 ton	4,3 m	14.1 ft	4,3 m	14.1 ft
5 parts	FR HD	5 x 10,5	45,7 m	149.9 ft	6,1 t	6.2 ton	8,4 m	27.6 ft	8,4 m	27.6 ft
	FR HD	5 x 12	53,2 m	174.5 ft	6,8 t	6.9 ton	6,7 m	22.0 ft	6,7 m	22.0 ft
	FR HD	5 x 14	62,5 m	205.1 ft	7,8 t	7.9 ton	4,9 m	16.1 ft	4,9 m	16.1 ft
	FR HD	5 x 15,5	71,0 m	233.0 ft	8,5 t	8.6 ton	-	-	3,3 m	10.8 ft

Drilling Diameters	CYLINDER		WINCH	
Uncased	1800 mm	70.9 in	1500 mm	59.1 in
Cased	1500 mm	59.1 in	1500 mm	59.1 in



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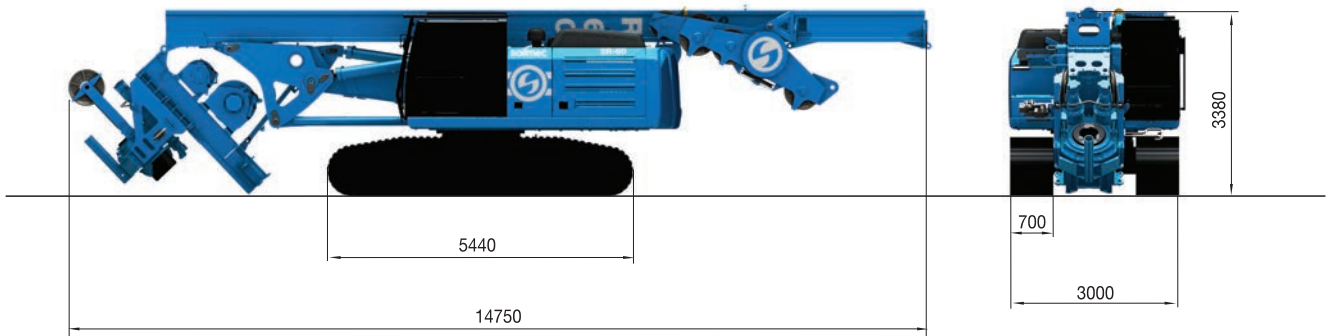
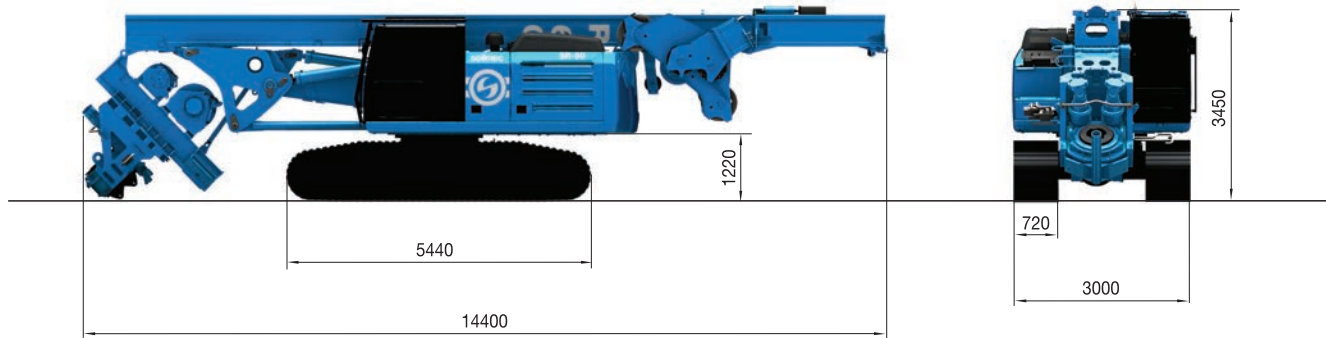
CFA APPLICATIONS 4° line pull



CFA - Continuous Flight Auger - 4° linepull		
Operating weight w/o auger	62200 kg	137126 lb
Maximum pile diameter	1000 mm	39 in
Maximum pile depth c/w 6 m auger extension; w/o auger cleaner	22 m	72 ft
Maximum pile depth c/w 6 m auger extension and auger cleaner	20,5 m	67 ft
Extraction force	560 kN	125891 lbf
Crowd force on auger (opt.)	90 kN	20233 lbf

# SR-60 EVO Hydraulic Rotary Rig

## TRANSPORT, DIMENSIONS AND WEIGHTS



Transport configuration		
Width	3000 mm	118 in
Length	14400 mm	567 in
Height	3450 mm	136 in
Weight - LDP version	58000 kg	127867 lb
Minimum transport weight w/o rotary, counterweight	44850 kg	98876 lb
Weight - CFA version	59800 kg	131835 lb

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

Technical data sheet SR60-003 02/2015

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