



Hydraulic Rotary Rig

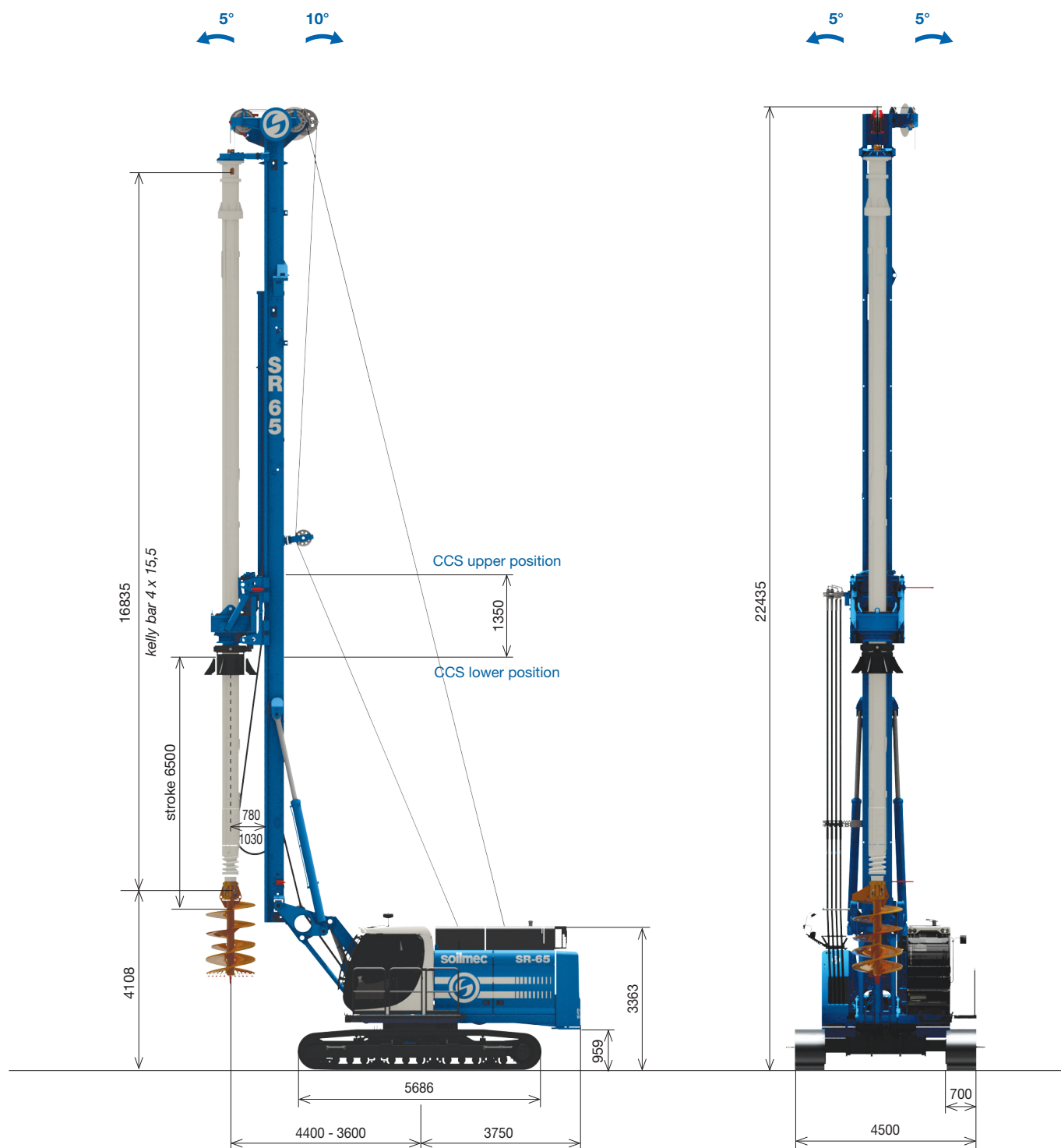
SR-65 EVO



soilmeco
Drilling and Foundation Equipment

SR-65 EVO Hydraulic Rotary Rig

LDP APPLICATIONS - Cylinder Crowd System



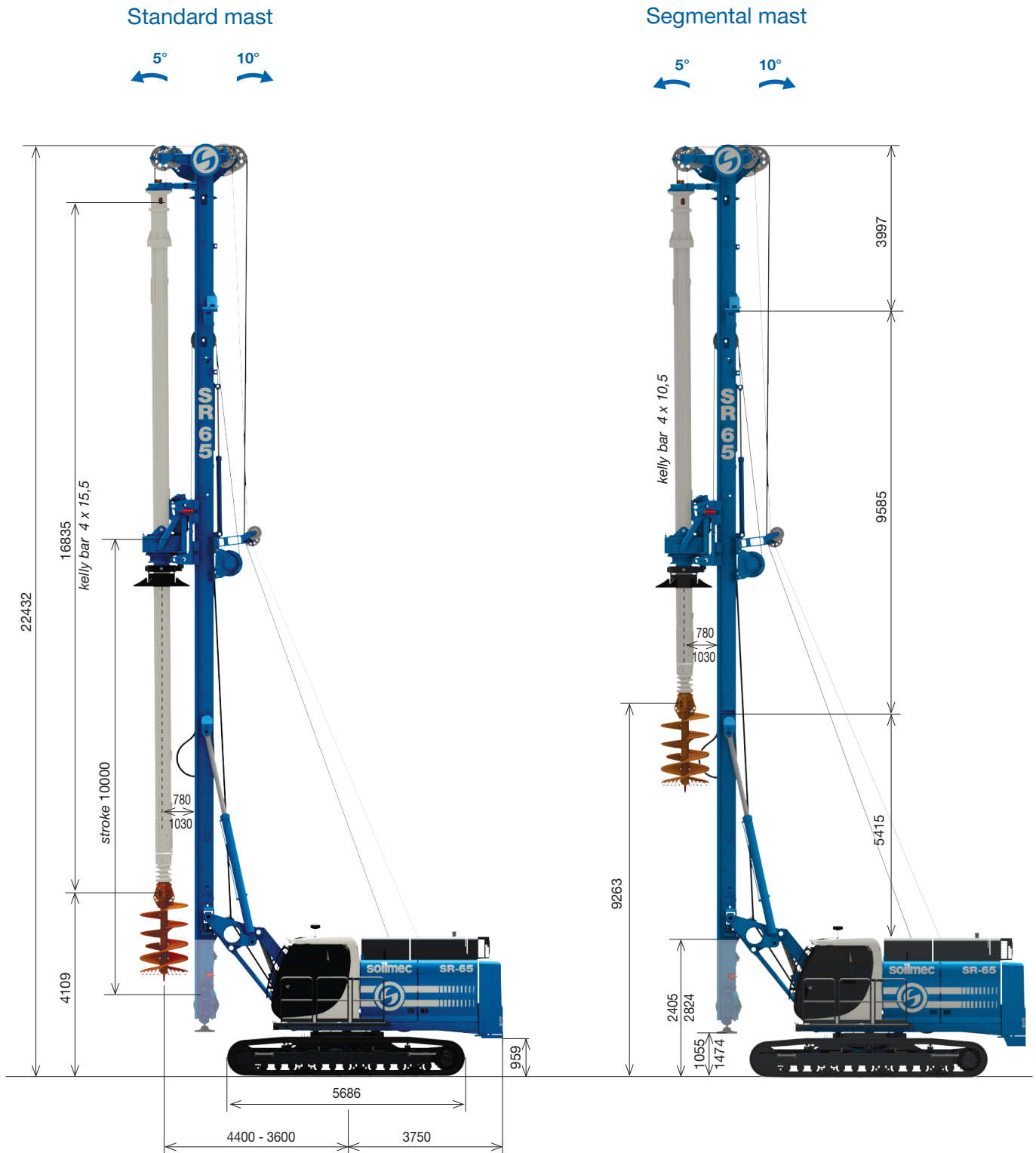
LDP - Large Diameter Piles - CCS version

Operating weight w/o kelly bar*	56200 kg	123900 lb
Max pile diameter along mast	1500 mm	59 in
Max pile diameter c/w increased drilling axis along mast	2000 mm	79 in
Max pile diameter w/o lower mast section, tool below mast	3000 mm	118 in
Max pile depth-friction kelly	77,9 m	256 ft
Max pile depth-locking kelly	62,5 m	205 ft

* For T4F version. For T3 version weight reduced by 500 kg (1102 lb) / For segmental mast version weight increased by 870 kg (1918 lb)

SR-65 EVO Hydraulic Rotary Rig

LDP APPLICATIONS - Winch Crowd System



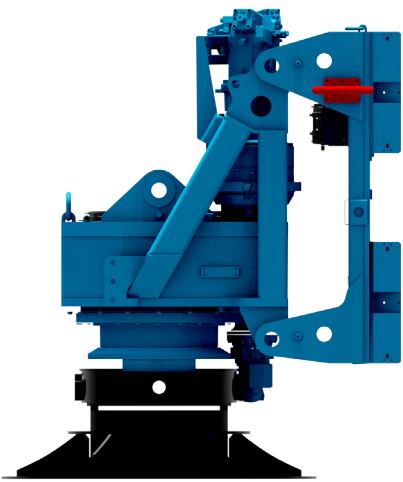
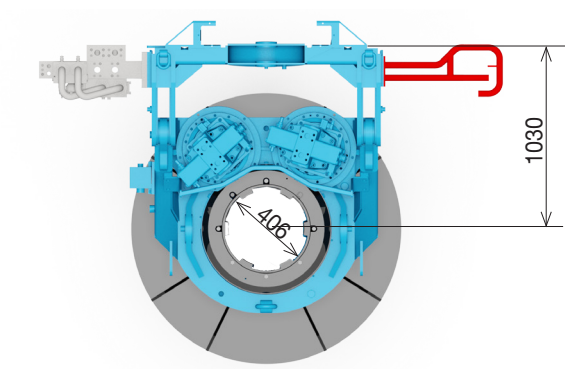
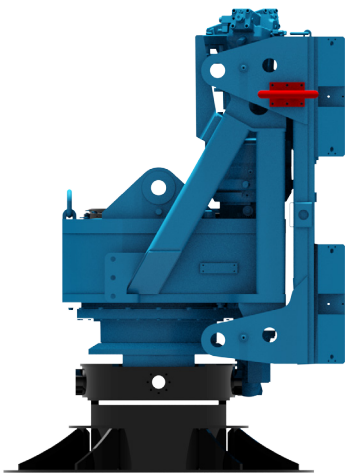
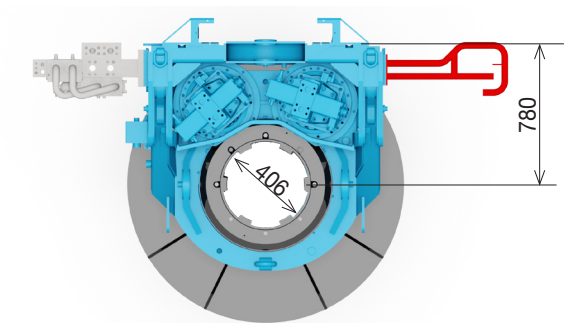
LDP - Large Diameter Piles - WCS version

Operating weight w/o kelly bar	58500 kg	128970 lb
Max pile diameter along mast	1400 mm	55 in
Max pile diameter c/w increased drilling axis along mast	1900 mm	75 in
Max pile diameter w/o lower mast section, tool below mast	3000 mm	118 in
Max pile depth-friction kelly	77,7 m	255 ft
Max pile depth-locking kelly	62,3 m	204 ft

* For T4F version. For T3 version weight reduced by 500 kg (1102 lb) / For segmental mast version weight increased by 720 kg (1587 lb)

SR-65 EVO Hydraulic Rotary Rig

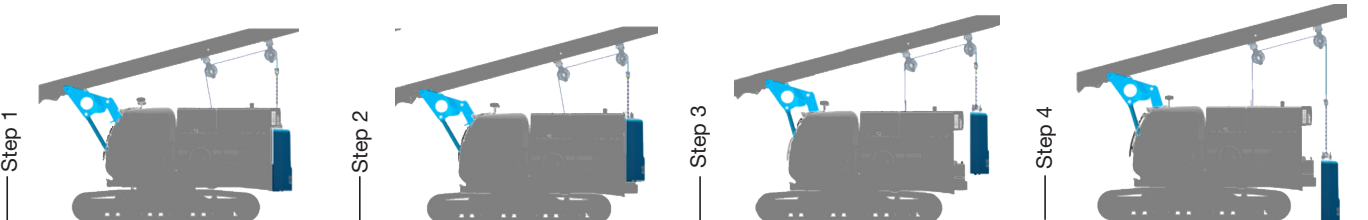
ROTARY TABLE - Increased drilling axis



Rotary drive		
Type	Spin-off type	Spin-off type
Max torque (intermittent)	258,5 kNm	190657 lbf*ft
Rated torque	240 kNm	177012 lbf*ft
Max drilling speed	36,8 rpm	36.8 rpm
Spin off speed	135 rpm	135 rpm

SR-65 EVO Hydraulic Rotary Rig

Self mounting counterweight



SR-65 EVO Hydraulic Rotary Rig

TECHNICAL DATA SHEET

CCS_Crowd Cylinder System

- Stroke	6500 mm	256 in
- Crowd force pull (down/up)	140 / 280 kN	31473 / 62945 lbf
- Speed up	16,3 m/min	53 ft/min
- Speed down (slow/fast)	9,1 / 20,4 m/min	30 / 67 ft/min

WCS_Crowd Winch System

- Stroke	16200 mm	740 in
- Crowd force pull (down/up)	330 / 330 kN	74186 / 74186 lbf
- Speed up (slow/fast)	15,5 / 34 m/min	51 / 112 ft/min
- Speed down (slow/fast)	15,5 / 34 m/min	51 / 112 ft/min

Engine

- Model	Cummins QSL 9	Cummins QSL 9
- Power rating	261 kW @ 2100 rpm	350 HP @ 2100 rpm
- Max power available	283 kW @ 1900 rpm	379 HP @ 1900 rpm
- Engine conforms to Exhaust emission Standard	EU Stage IV / US EPA Tier 4f	EU Stage IV / US EPA Tier 4f
- Diesel tank capacity	500 l	132 US gal

Noise

- Sound pressure level in cab	76 dB(A)	76 dB(A)
- Sound power level	105 dB(A)	105 dB(A)

Main winch

- Type	control descent	control descent
- Line pull (1st layer)	220 kN	48510 lbf
- Rope diameter	26 mm	1.02 in
- Line speed (max.)	84 m/min	275 ft/min

Auxiliary winch

- Type	control descent	control descent
- Line pull (1st layer)	83 kN	18301 lbf
- Rope diameter	19 mm	0.75 in
- Line speed (max.)	76 m/min	249 ft/min

Hydraulic system

- Flow rates (main circuits)	2x 294 l/min	2x 78 US gal/min
- Third pump flow	160 l/min	42 US gal/min
- Hydraulic oil tank capacity	600 l	159 US gal

Undercarriage

- Type	variable gauge, telescoping sides frames	variable gauge, telescoping sides frames
- Overall width retracted / extended crawlers	2980 / 4500 mm	117 / 177 in
- Width of triple grouser track shoes	700 mm	28 in
- Overall length of crawlers	5686 mm	224 in
- Traction force	395 kN	88798 lbf
- Travel speed	2,2 km/h	1.4 mph

Mast inclination

- Backward	10°	10°
- Forward	5°	5°
- Lateral	5°	5°

SR-65 EVO Hydraulic Rotary Rig

KELLY DRILLING SYSTEM



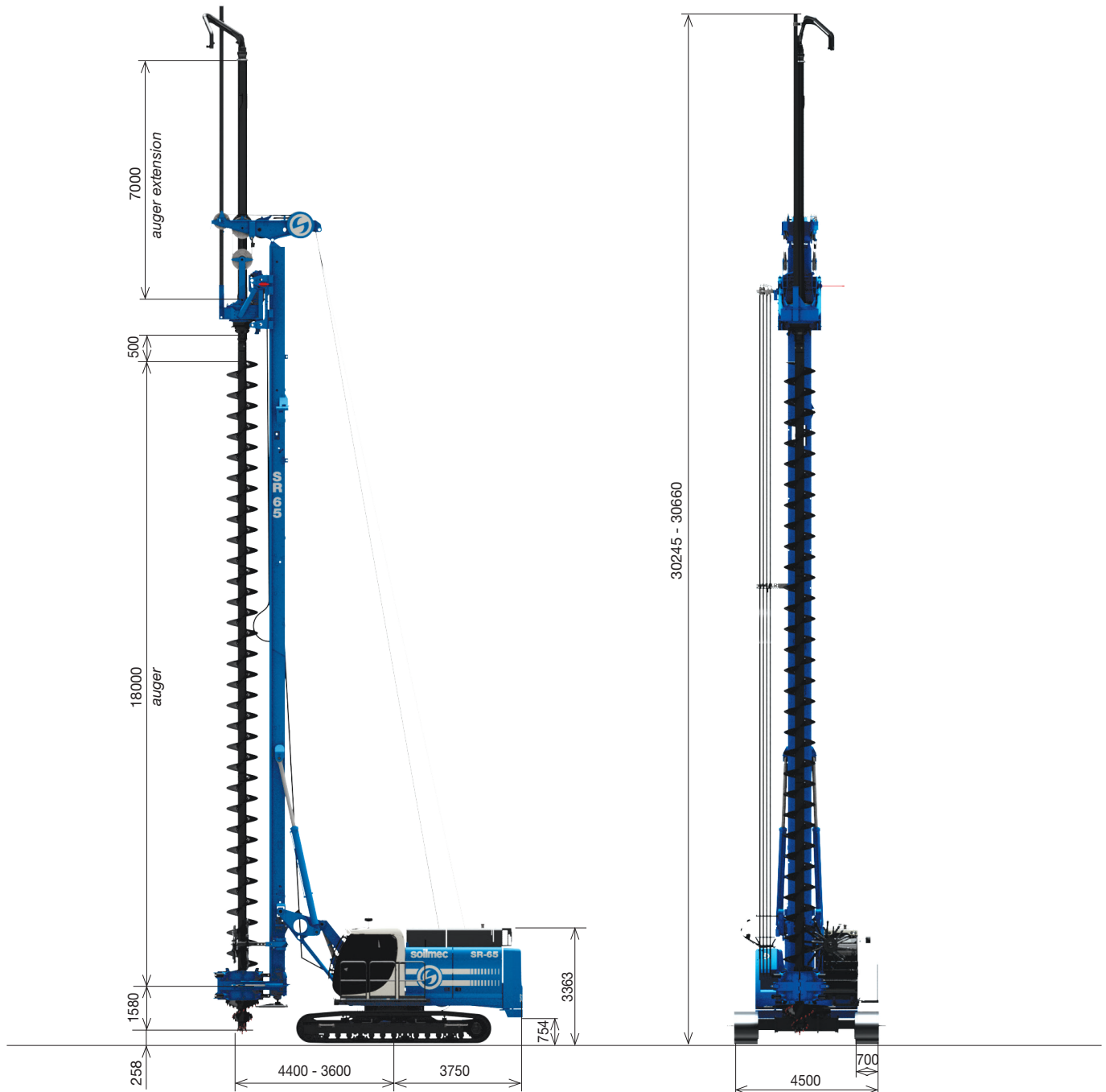
	Drilling Depths	Kelly dimensions	CCS Depth **		Weight		CCS SYSTEM				WCS SYSTEM	
			m	ft	ton	ton (US)	H - low pos		H - high pos		H	
		section x m					m	ft	m	ft	m	ft
3 parts	BL HD	3 x 9	24,1	79.1	4,8	5.3	7,9	25.9	9,2	30.2	10,7	35.1
	BL HD	3 x 11,5	31,3	102.7	5,9	6.5	7,9	25.9	8,4	27.6	8,4	27.6
	BL HD	3 x 13,5	37,3	122.4	6,7	7.4	6,4	21.0	6,4	21.0	6,4	21.0
	BL HD	3 x 15,5	43,4	142.4	7,5	8.3	4,3	14.1	4,3	14.1	4,3	14.1
	BL HD	3 x 16,5	46,7	153.2	8,0	8.8	3,2	10.5	3,2	10.5	3,2	10.5
4 parts	BL HD	4 x 7,5	24,5	80.4	4,3	4.7	7,9	25.9	9,2	30.2	11,6	38.1
	BL HD	4 x 9	32,1	105.3	5,0	5.5	7,9	25.9	9,2	30.2	10,8	35.4
	BL HD	4 x 10,5	37,3	122.4	5,7	6.3	7,9	25.9	9,2	30.2	9,5	31.2
	BL HD	4 x 11,5	41,3	135.5	6,2	6.8	7,9	25.9	8,4	27.6	8,4	27.6
	BL HD	4 x 13,5	49,6	162.7	7,1	7.8	6,4	21.0	6,4	21.0	6,4	21.0
	BL HD	4 x 15,5	57,9	190.0	8,0	8.8	4,4	14.4	4,4	14.4	4,4	14.4
	BL HD	4 x 16,5	62,3	204.4	8,5	9.4	3,2	10.5	3,2	10.5	3,2	10.5
	FR HD	4 x 10,5	37,1	121.7	5,7	6.3	7,9	25.9	9,2	30.2	9,5	31.2
	FR HD	4 x 11,5	41,3	135.5	6,2	6.8	7,9	25.9	8,4	27.6	8,4	27.6
	FR HD	4 x 13,5	49,8	163.4	7,1	7.8	6,4	21.0	6,4	21.0	6,4	21.0
	FR HD	4 x 15,5	56,9	186.7	8,0	8.8	4,3	14.1	4,3	14.1	4,3	14.1
	FR HD	4 x 16,5	62,5	205.1	8,5	9.4	3,2	10.5	3,2	10.5	3,2	10.5
5 parts*	FR HD*	5 x 10,5	46,4	152.2	6,1	6.7	7,9	25.9	9,2	30.2	9,6	31.5
	FR HD*	5 x 11,5	51,8	169.9	6,6	7.3	7,9	25.9	8,5	27.9	8,5	27.9
	FR HD*	5 x 12	53,7	176.2	6,8	7.5	7,9	25.9	7,9	25.9	7,9	25.9
	FR HD*	5 x 13,5	62,2	204.1	7,6	8.4	6,5	21.3	6,5	21.3	6,5	21.3
	FR HD*	5 x 14,5	66,2	217.2	8,0	8.8	5,6	18.4	5,6	18.4	5,6	18.4
	FR HD*	5 x 15,5	71,9	235.9	8,5	9.4	4,5	14.8	4,5	14.8	4,5	14.8
	FR HD*	5 x 16,5	77,7	254.9	9,0	9.9	3,4	11.2	3,4	11.2	3,4	11.2

* Rotary head derate

** For CCS w/o mast lower element, depth reduced by -1300 mm / For WCS version depth reduced by -200 mm / For WCS w/o mast lower element, depth reduced by -1600 mm / For Kelly c/w stub 200x200, depth reduced by -200mm

SR-65 EVO Hydraulic Rotary Rig

CFA APPLICATIONS 4° line pull



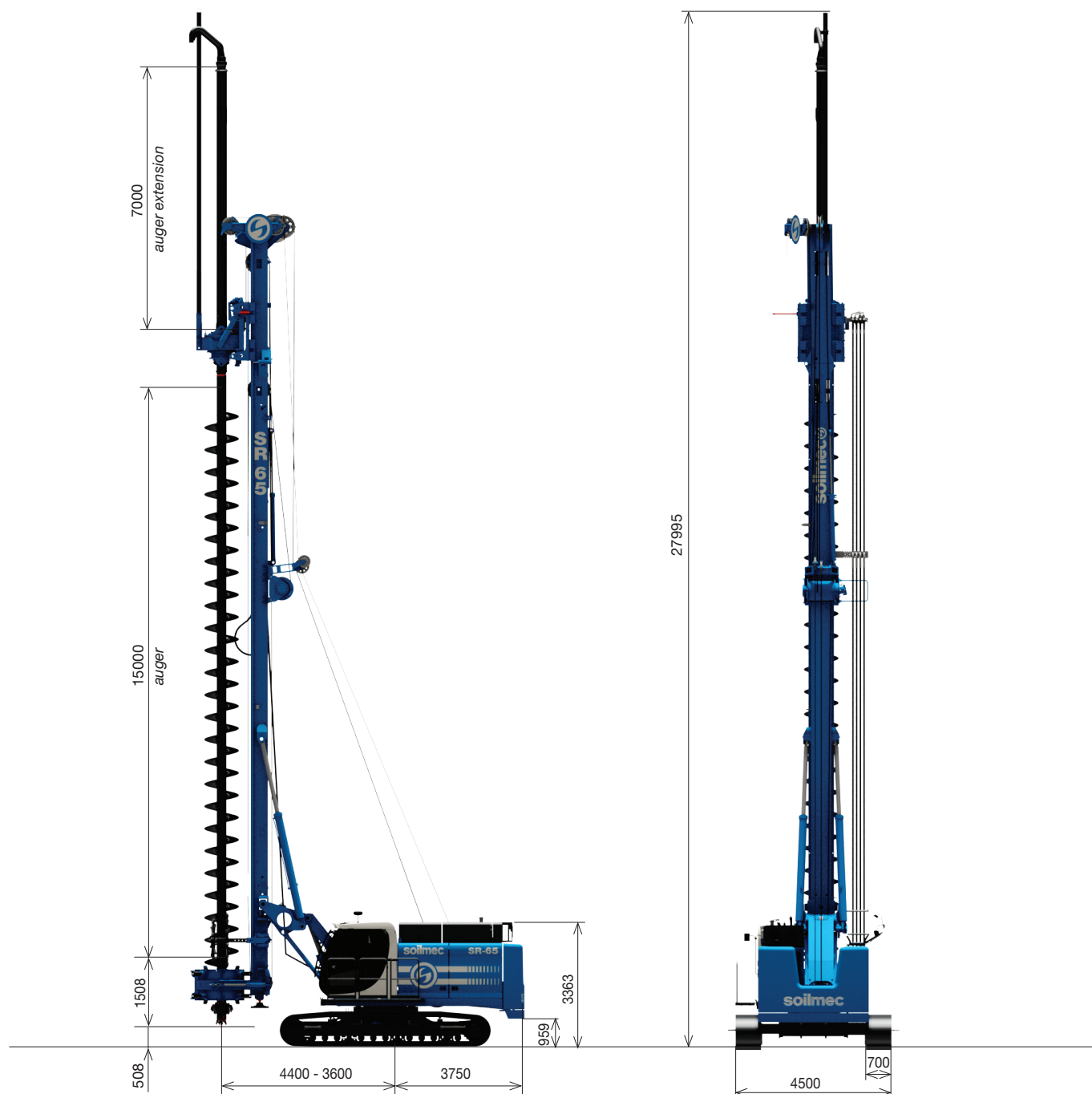
CFA - Continuous Flight Auger - 4° line pull

Operating weight (c/w auger ext, w/o auger)	61200 kg	134922 lb
Max pile diameter	1200 mm	47.24 in
Max pile depth with 7 m auger extension	25,9 m	85 ft
Max pile depth with rotating auger cleaner, with 7 m auger extension	24,6 m	81 ft
Extraction force	620 kN	139379 lbf
Crowd force on auger (opt.)	100 kN	22481 lbf

* For segmental mast version weight increased by 870 kg (1918 lb)

SR-65 EVO Hydraulic Rotary Rig

CFA APPLICATIONS Quick conversion kit



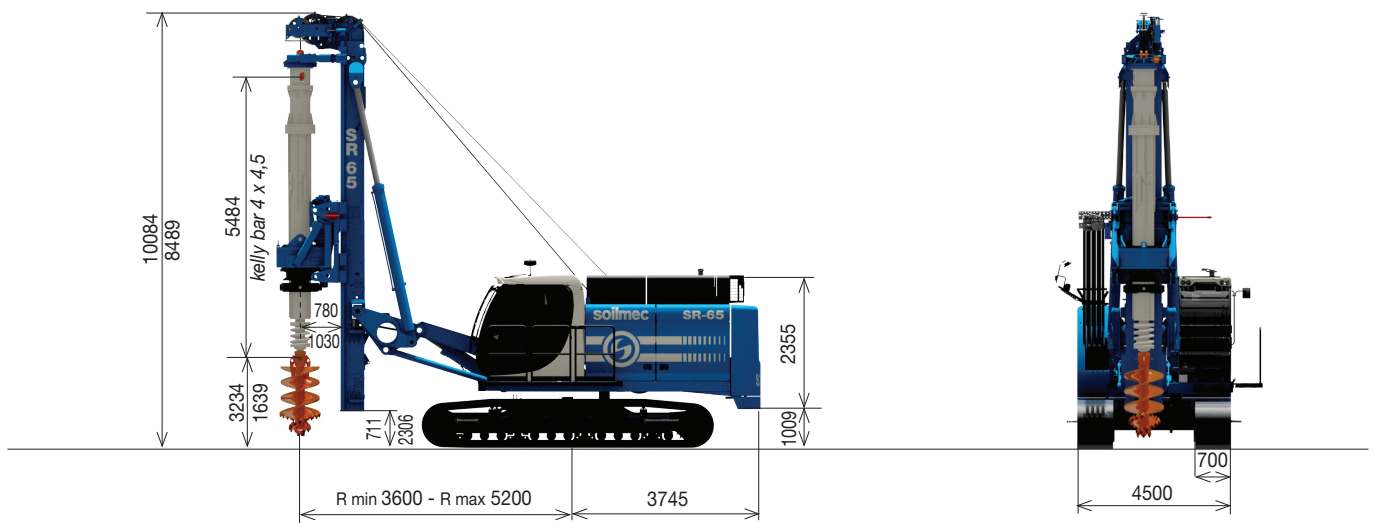
CFA - Continuous Flight Auger - Quick conversion kit

Operating weight (c/w auger ext, w/o auger) *	60500 kg	133378 lb
Max pile diameter	1200 mm	47.24 in
Max pile depth with 7 m auger extension	22,5 m	74 ft
Max pile depth with rotating auger cleaner, with 7 m auger extension	21,2 m	70 ft
Extraction force	550 kN	123643 lbf
Crowd force on auger	330 kN	74186 lbf

* For segmental mast version weight increased by 720 kg (1587 lb)

SR-65 EVO Hydraulic Rotary Rig

LHR Low Head Room



LHR - Large Diameter Piles CCS version

Operating weight w/o kelly bar*	52900 kg	116624 lb
Min / Max operating height**	8,5 / 10 m	28 / 33 ft
Cylinder crowd system stroke	2500 mm	98 in
Crowd force pull (down/up)	140 / 280 kN	31473 / 62945 lbf
Max pile diameter along mast	1500 mm	59 in
Max pile diameter c/w increased drilling axis along mast	2000 mm	79 in
Max pile diameter w/o lower mast section, tool below mast	3000 mm	118 in

* For 1,5 m (5 ft) mast extension version weight increased by 650 kg (1433 lb)

** For 1,5 m (5 ft) mast extension version min/max operating height become 10 / 11,6 m (33/38 ft)

Standard version - H max 8,5 m / 28 ft

Type	Section x m	Depth	Depth
BL HD	4 x 4,5	14,7 m	48 ft
BL HD	4 x 5	16,6 m	54 ft
FR HD	5 x 4,5	18,6 m	61 ft
FR HD	5 x 5	21,0 m	69 ft

Mast extended version - H max 10 m / 33 ft

Type	Section x m	Depth	Depth
BL HD	4 x 6	20,7 m	68 ft
BL HD	4 x 6,5	22,6 m	74 ft
FR HD	5 x 6	26,1 m	86 ft
FR HD	5 x 6,5	28,5 m	94 ft

SR-65 EVO Hydraulic Rotary Rig

CONFIGURATIONS

	LDP Large Diameter Pile with kelly bar			CFA Continuous Flight Auger Piles	
	(WCS)	(CCS)	(LHR)	(4 th)	(2 nd)
UNDERCARRIAGE	●	●	●	●	●
Variable gauge, telescopic side frames	●	●	●	●	●
Machine anchor points for transport	●	●	●	●	●
Mechanical prearrangement for casing oscillator	●	●	●	●	●
Hydraulic prearrangement for casing oscillator	○	○	○	○	○
VRM120KL casing oscillator	○	○	○	○	○
VRM150KL casing oscillator	○	○	○	○	○
 Radio remote control for tramming operation	○	○	○	○	○
UPPER STRUCTURE					
Diesel engine QSL 9 EU Stage IV – US EPA Tier 4F	●	●	●	●	●
Diesel engine QSL 9 EU Stage IIIA – US EPA Tier 3	○	○	○	○	○
Diesel engine QSL 9 EU Stage V – US EPA Tier 4F	○	○	○	○	○
Start and slow system	●	●	●	●	●
Harness technology for electrical system	●	●	●	●	●
Automatic Greasing kit	○	○	○	○	○
PTO kit for washing pressure gan	○	○	○	○	○
Self-mountig counterweight	○	○	○	○	○
Catwalks for centre of turret	●	●	●	●	●
 Rear ladder turret access	●	●	●	●	●
Machine lifting kit	○	○	○	○	○
 Foldable catwalk 600 mm (2 ft) with handrails for cabin access	○	○	○	○	○
 Acoustic & light alarm for tramming	●	●	●	●	●
 Lighting led system package	○	○	○	○	○
Sound proofed canopies	●	●	●	●	●
H-CAB					
Front protective grille	●	●	●	●	●
Falling object protective structure (FOPS)	●	●	●	●	●
Lower front protective grille	○	○	○	○	○
 Rearview mirrors	●	●	●	●	●
Comfort packakge (cup holder, radio, A/C system, USB port and 12 V power socket, roll-up awning, courtesy lights)	●	●	●	●	●
Operator seat (air suspension, lumbar support, fully adjustable positioning, safety belt & operator presence micro-switch)	●	●	●	●	●
Front tools support	○	○	○	○	○
Service rope holder	○	○	○	○	○
Lighting system in front of the cab	●	●	●	●	●
CONTROL AND MONITORING SYSTEM					
DMS ON BOARD with technological package	●	●	●	●	●
DMS PC	●	●	●	●	●
DMS manager 4.0	○	○	○	○	○
GSM / GPRS / WIFI Modem	●	●	●	●	●
PLC processor for electrically actuated functions	●	●	●	●	●
DMS ON BOARD adjustable monitor 12" touch screen	●	●	●	●	●
 Video 4 cameras with display in the cab	○	○	○	○	○
WINCHES					
Main winch SW220 model	●	●	●	●	●
Load cell for main winch	○	○	○	●	●
 Limit switch for rope winding and winches	○	○	○	○	○

		LDP Large Diameter Pile with kelly bar			CFA Continuous Flight Auger Piles	
		(WCS)	(CCS)	(LHR)	(4 th)	(2 nd)
CE	Main & service winch pull instant value displayed on DMS On Board	○	○	○	○	○
	Depthmeter for main winch	●	●	●	●	●
	Anti-slack system for main winch	○	○	○	○	○
	Service winch SW100 model	●	●	●	●	●
CE	Load cell for service winch	○	○	○	○	○
	ROTARY					
	RD240 model Max torque intermitted: 258.5 kNm	●	●	●	●	●
	RD240G with gear box model Max torque intermitted: 267 kNm	○	○	○	○	○
CE	Interchangeable rotary sleeve	●	●	●	●	●
	Quick disassembling rotary kit	○	○	○	○	○
	Automatic greasing kit for cradle	○	○	○	○	○
	Automatic control of motor displacement	●	●	●	●	●
CE	Oil discharge conveying system	○	○	○	○	○
	MAST					
	Modular main mast	○	○	●	○	○
	Mast guide cleaner	○	○	○	○	○
CE	Kit for assisted rasing mast	○	○	○	○	○
	Lower foldable mast element	●	●	●	●	●
	Hydraulic cathead folding kit	○	○	○	○	○
	Cathead greasing kit	○	○	○	○	○
	Double positioning of cylinder	n.a.	●	n.a.	n.a.	n.a.
	Double positioning of sheaves	●	n.a.	n.a.	n.a.	n.a.
	KELLY BAR TECHNOLOGY					
	Rotary sleeve with 3 ribs	●	●	●	n.a.	n.a.
	Rotary sleeve with 6 ribs	○	○	○	n.a.	n.a.
	Spin off discharging system	●	●	●	n.a.	n.a.
	"Click-click" discharging system	○	○	○	n.a.	n.a.
	Cardan joint	●	●	●	n.a.	n.a.
	Flange for casing driving d.1300	●	●	●	n.a.	n.a.
	Flange for casing driving d.1500	○	○	○	n.a.	n.a.
	Flange for casing driving d.1700	○	○	○	n.a.	n.a.
	Variable drilling axis clearance	●	●	●	n.a.	n.a.
	Automatic return to the centre hole	○	○	○		
	Kelly bar guide	○	○	n.a.		
	CFA TECHNOLOGY					
	Hydraulic prearrangement for CFA 4th line pull	n.a.	n.a.	n.a.	●	n.a.
	Sleeve 3m long	n.a.	n.a.	n.a.	○	○
	Sleeve 6m long	n.a.	n.a.	n.a.	○	○
	Sleeve 7m long	n.a.	n.a.	n.a.	○	○
	DMS ON BOARD with automatic auger lifting	n.a.	n.a.	n.a.	●	●
	Autodrilling package	n.a.	n.a.	n.a.	○	○
	Autorotary package	n.a.	n.a.	n.a.	○	○
	Additional pull-down winch 100 kN	n.a.	n.a.	n.a.	○	n.a.
	Openable lower guide d.1200mm	n.a.	n.a.	n.a.	●	●
	Auger cleaner star type	n.a.	n.a.	n.a.	○	○
	Double roller auger cleaner d.1200mm	n.a.	n.a.	n.a.	○	○
	Two pressure transducers kit	n.a.	n.a.	n.a.	●	●
	Hydraulic prearrangement for VTH-1 vibrator	n.a.	n.a.	n.a.	○	○
	Automatic greasing package for CFA cathead	n.a.	n.a.	n.a.	○	○

● standard

○ option

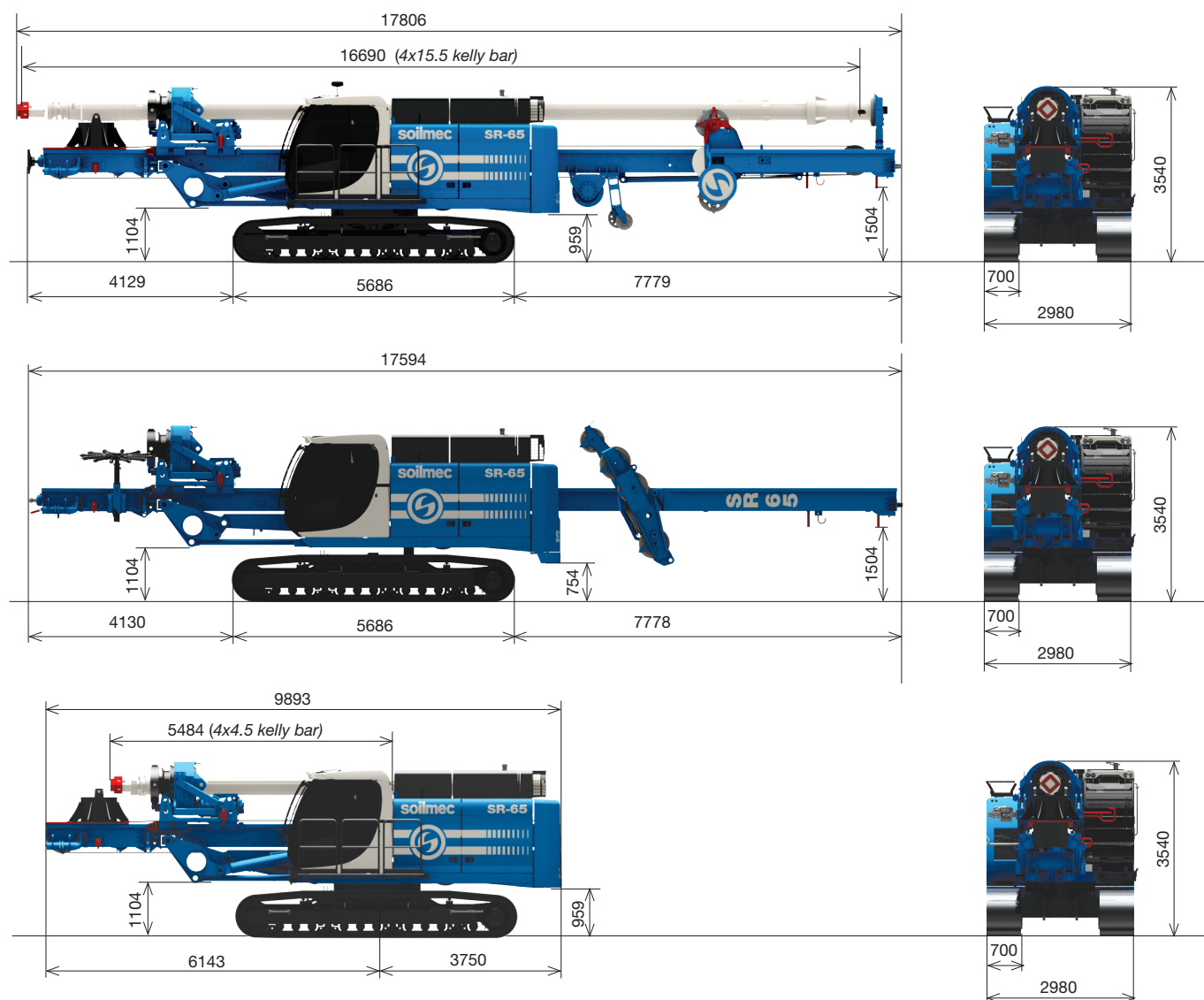
n.a. not available



Safety equipment compulsory for EC marking. On request whenever EC marking is not needed.

SR-65 EVO Hydraulic Rotary Rig

TRANSPORT, DIMENSIONS AND WEIGHTS



Transport configuration		
Transport width	2980 mm	117.32 in
Transport length c/w kelly bar < 14 m (46 ft)	17600 mm	692.91 in
Transport height	3540 mm	139.37 in
Transport weight c/w kelly bar 4x10,5 (CCS - WCS)*	62100 / 64300 kg	136907 / 141757 lb
Min transport weight w/o kelly bar, counterweight and mast foot (CCS - WCS)*	48450 / 49850 kg	106813 / 109899 lb
CFA trans.weight (quick conversion - 4°line pull)*	57600 / 58300 kg	126985 / 128528 lb
LHR trans. weight (with kelly bar 4x4,5 / w/o kelly, rotary) **	55900 / 47200 kg	123238 / 104058 lb
Removable counterweight	7500 kg	16535 lb
Rotary and cradle	3440 kg	7584 lb

* For segmental mast version weight increased by 870 kg (1918 lb) for CCS and CFA4° and by 720 kg (1587 lb) for WCS and CFA Quick conversion kit.

** For 1,5 m (5 ft) mast extension version weight increased by 650 kg (1433 lb)

This brochure has been edited and distributed by SOILMEC Spa. The present document cancels and override any previous ones. This brochure shall not be distributed, reproduced or exhibited without SOILMEC Spa. authorization in accordance with to SOILMEC web site disclaimer condition.

SOILMEC Spa distributes machinery and structures all over the world, supported by SOILMEC Spa subsidiary companies and dealers. The complete Soilmec network list is available on the web site www.soilmec.it

www.soilmec.it

soilmec
Drilling and Foundation Equipment