

Hydraulic Rotary Rig

# SR-45

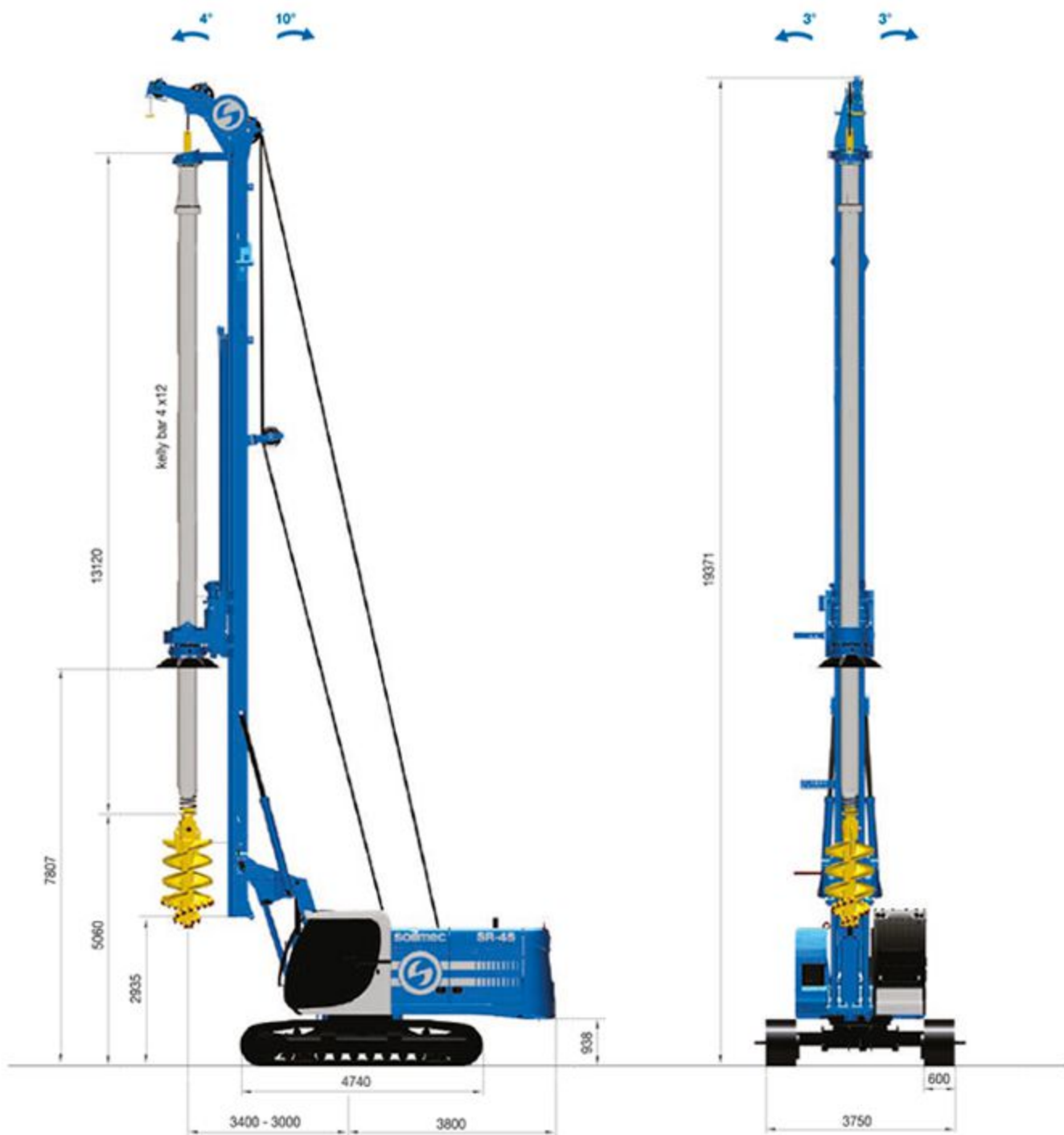
## ADV



**soilmec**   
Drilling and Foundation Equipment

# SR-45 ADV Hydraulic Rotary Rig

## LDP APPLICATIONS - Crowd System with Cylinder



### LDP - Large Diameter Piles - CCS version

Operating weight w/o kelly	36700 kg	80909 lb
Max pile diameter (along mast)	1500 mm	59.06 in
Max pile diameter tool below mast	3000 mm	118 in
Max pile depth - friction kelly	58,5 - 65** m	192 - 213** ft
Max pile depth - locking kelly	47,5 - 50,5* m	156 - 166* ft

\* c/w non self-mounting 4x14 kelly bar \*\* c/w non self-mounting 5x14 kelly bar

### LDP - Large Diameter Piles - CCS Rathlers

Max pile depth - locking kelly	61,5 m	201.77 ft
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# SR-45 ADV Hydraulic Rotary Rig

## LDP APPLICATIONS - Crowd System with Winch

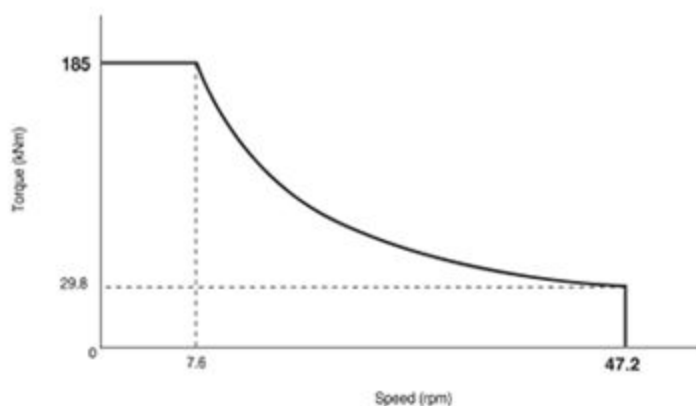
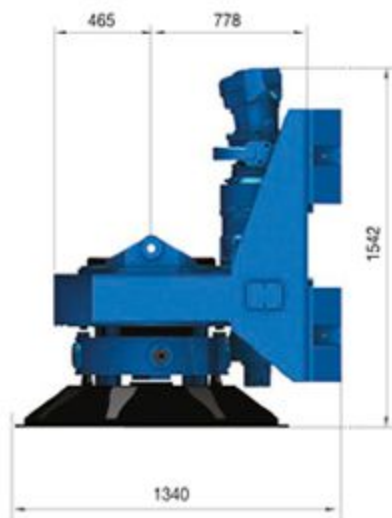
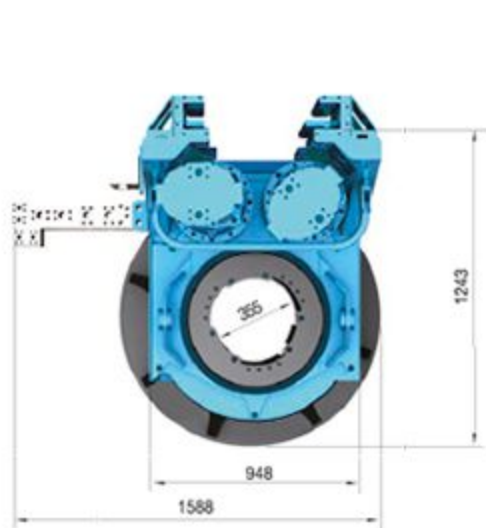


### LDP - Large Diameter Piles - WCS version

Operating weight w/o kelly	38200 kg	84216 lb
Max pile diameter (along mast)	1300 mm	51.18 in
Max pile diameter w/o lower mast section, tool below mast	3000 mm	118 in
Max pile depth - friction kelly	65,5 m	215 ft
Max pile depth - locking kelly	51,8 m	170 ft

## SR-45 ADV Hydraulic Rotary Rig

### ROTARY TABLE



#### Rotary drive

- Max torque (intermittent)
- Rated torque
- Speed of rotation (max)
- Spin-off speed
- Weight

#### Single gear version

185 kNm  
161 kNm  
47 rpm  
146 rpm  
2850 kg

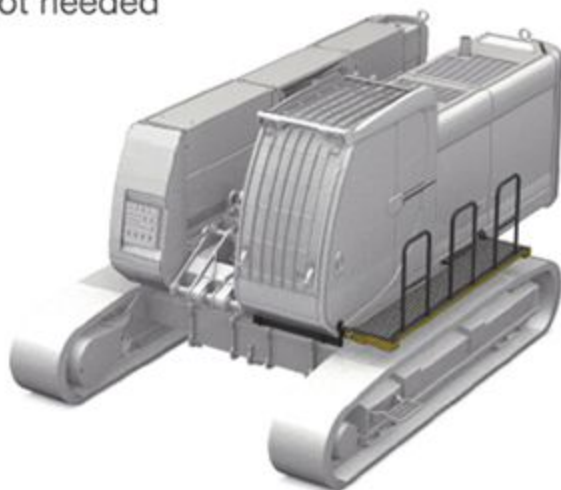
#### Single gear version

136447 lb\*ft  
118746 lb\*ft  
47 rpm  
146 rpm  
6283 lb

## SR-45 ADV Hydraulic Rotary Rig

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

- Catwalks for cab 600 mm (2 ft) wide
- Handrails kit
- Acoustic alarm for rotation and translation
- Radio remote control for tramping on ramp
- Video-camera set with 4 cameras included
- Rearview mirrors
- Led lights
- Oil discharge conveying system
- Load cell for service winch





<b>CCS - Cylinder crowd system</b>		
- Crowd force pull (down/up)	140 / 207 kN	31500 / 46500 lbf
- Stroke	5100 mm	201 in
- Speed (down/up)	17,4 m/min	57 ft/min
- Fast speed (down/up)	18,8 m/min	62 ft/min
<b>WCS - Winch crowd system</b>		
- Crowd force pull (down/up)	240 / 240 kN	54000 / 54000 lbf
- Stroke	14500 mm	740 in
- Speed (down/up)	28 m/min	92 ft/min
- Fast speed (down/up)	28 m/min	92 ft/min
<b>Main winch</b>	<b>controlled descent</b>	<i>controlled descent</i>
- Line pull (1st layer)	165 kN	37100 lbf
- Rope diameter	24 mm	1.26 in/482.28 ft
- Line speed (max.)	78 m/min	256 ft/min
<b>Auxiliary winch</b>	<b>controlled descent</b>	<i>controlled descent</i>
- Line pull (1st layer)	65 kN	29225 lbf
- Rope diameter	18 mm	0.87 in
- Line speed (max.)	81 m/min	230 ft/min
<b>Engine</b>	<b>CUMMINS QSB 6.7</b>	<i>CUMMINS QSB 6.7</i>
- Rated output	201 kW @ 2000 rpm	269 HP @ 2000 rpm
- Engine conforms to Exhaust emission Standard	<b>EU stage IV, US EPA Tier 4f</b>	<i>EU stage IV, US EPA Tier 4f</i>
- Diesel tank capacity	380 l	100 US gal
<b>Hydraulic system</b>		
- Flow rates (main circuits)	2x 214 l/min	2x 57 US gal/min
- Flow rates (auxiliary circuits)	120 l/min	26.4 US gal/min
- Hydraulic oil tank capacity	450 l	119 US gal
<b>Undercarriage</b>	<b>variable gauge, telescoping side frames</b>	<i>variable gauge, telescoping sides frames</i>
- Overall width of crawlers retracted/extended	2550 / 3750 mm	100 / 147 in
- Width of triple grouser track shoes	600 mm	24 in
- Overall length of crawlers	4740 mm	187 in
- Traction force effective/nominal	386 kN	68800 lbf
- Travel speed	2 km/h	1.2 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 and service rope
- Swivel for main rope
- Service rope parking point
- GSM/GPRS/GPS modem kit
- DMS system electronic monitoring and visualization system
- Mast inclination measurement on X/Y axes (digital/analog display)
- Automatic vertical mast alignment
- Depth measuring device
- Rotary speed measuring device
- Variable gauge undercarriage
- Wider triple grouser track shoes
- Transport securing lugs on crawler units
- Oscillator attachment brackets
- Lower foldable mast element
- Cardan joint
- Flange for casing driving
- Kelly swivel
- Kelly guide
- Kit for fastening kelly bar during transport
- On board lighting set
- On board tool set
- Electric refuelling pump
- High comfortable H-Cab 1050 mm (3,4 ft) wide
- Protective roof grate (FOPS compliant)
- Sliding door
- Adjustable console with sliding support for DMS 12" touch screen
- Engine and Diesel particulate diagnostic panel 3 color warning light
- Ergonomic seat with air suspension, fully-adjustable positioning and lumbar support
- Heat and Air Conditioning control unit
- Courtesy lights in the cab
- Radio and CD player

## OPTIONAL EQUIPMENT

- Diesel Engine with EU Stage III A - US EPA Tier 3 motorization
- Additional Counterweight 1 ton
- Fiberglass canopies
- Lubricator pump kit for rotary pads cradle
- Flange for bucket opening
- Hydraulic prearrangement for casing oscillator
- Mast extension for special configuration
- Automatic hydraulic kit for upper mast folding
- Limit switch for rope winding and winches
- Free fall service winch
- Double roller auger cleaner
- Star auger cleaner
- Prearrangement for VTH-1
- Automatic mast raising kit
- Kit for transport w/o counterweight

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## KELLY DRILLING SYSTEM



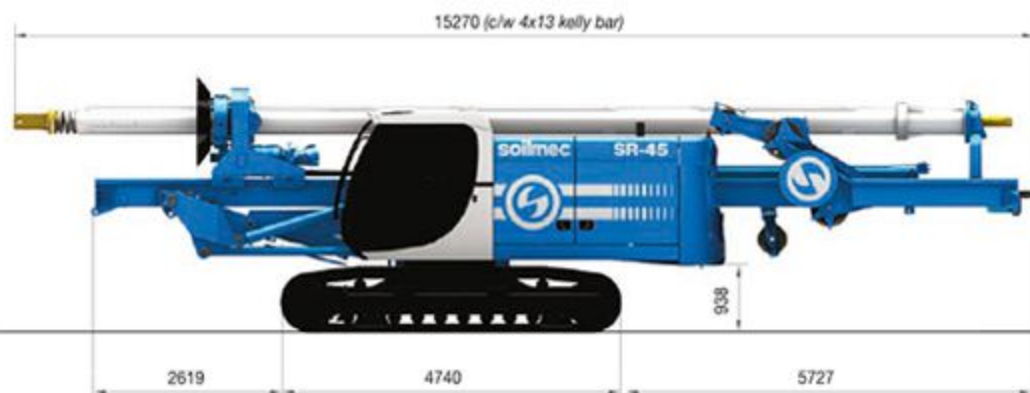
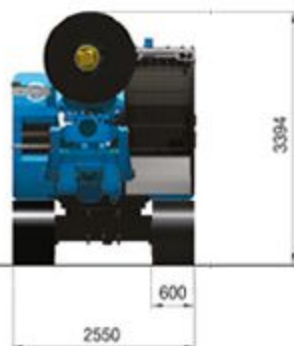
Drilling Depths	Kelly Dimensions section x m	Depth		Weight		CCS SYSTEM		WCS SYSTEM	
		m	ft	ton	ton (US)	H		H	
						m	ft	m	ft
3 parts	BL HD 3 x 8	21,0	68,9	3,1	3,1	7,9	25,9	8,8	28,9
	BL HD 3 x 10,5	28,5	93,5	3,8	3,9	6,3	20,7	6,3	20,7
	BL HD 3 x 12	33,1	108,6	4,3	4,4	4,8	15,7	4,8	15,7
4 parts	BL HD 4 x 9	31,8	104,3	3,4	3,5	7,8	25,6	7,8	25,6
	BL HD 4 x 10,5	38,1	125,0	3,9	4,0	6,3	20,7	6,3	20,7
	BL HD 4 x 11,5	40,6	132,2	4,7	4,8	5,3	17,4	5,3	17,4
	BL HD 4 x 12	44,1	144,7	5,0	5,1	4,9	16,0	4,9	16,0
	BL HD 4 x 13	48,0	157,5	5,3	5,4	3,9	12,8	3,9	12,8
	BL HD * 4 x 14	51,8	170,0	6,7	6,8	2,9	9,5	2,9	9,5
5 parts	FR HD 4 x 9	32,1	105,3	3,4	3,5	7,9	25,9	7,9	25,9
	FR HD 4 x 12	44,5	146,0	4,3	4,4	5,0	16,4	5,0	16,4
	FR HD 5 x 12	54,5	178,8	5,2	5,3	4,9	16,1	4,9	16,1
	FR HD ** 5 x 13,5	61,5	201,8	7,6	7,7	5,5	18	5,5	18,0
	FR HD * 5 x 14	65,5	214,9	7,8	7,9	3,0	9,8	3,0	9,8

\* Non self-mountable kelly bar

\*\* Rathole dedicated kelly bar

# SR-45 ADV Hydraulic Rotary Rig

## TRANSPORT, DIMENSIONS AND WEIGHTS



### Transport configuration

Width	2550 mm	100 in
Height	3400 mm	134 in
Length - Kelly <12 m	13050 mm	514 in
Weight - CCS Version c/w 4x9 Kelly bar	40600 kg	89507 lb
Weight - WCS Version c/w 4x9 Kelly bar	42100 kg	92814 lb

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