



# SR-75 LHR

BLUE TECH 

**soilmec**   
Drilling and Foundation Equipment

1) Time / P. C.

2) over max h.

# Discover the SR-75 LHR Kit

The ultimate solution for drilling large and deep piles in areas with limited headroom, such as beneath power lines, bridges, or near existing structures.

Designed to maximize safety and efficiency, Low-Headroom attachments allow you to work confidently while reducing overall costs.

**Compact yet powerful, the SR-75 Blue Tech in LHR configuration is easy to assemble, transport, and reassemble, ensuring unmatched flexibility on site.**

**Thanks to Soilmec's cutting-edge design, the rig can be effortlessly transformed into a long mast version in just a few steps, ensuring unmatched adaptability and maximum versatility for any project.**

And with all the advantages of Blue Tech technology – superior performance, optimized energy consumption, and enhanced sustainability – the SR-75 LHR is not just a rig, it's a smarter way to drill.

# As usual we combine performance with comfort and design.



## PERFORMANCE

**Engine.** Cummins X12 with 336 kW (450 hp), turbocharged and air cooled

Extreme efficiency for a more real power at each function

**Torque.** Increased by 13%. Innovative design to reach 281 kNm (207255 lb\*ft) of rated value. Unique in its class.

**Saving.** The new set-up saves fuel and time during the work cycle - up to 50% on the winch cycle and approx. 10,4 litres (2.75 gal) of fuel saved per hour.

**Main winch.** 270 kN line pull for an improved production.



## DESIGN

**Operator cabin.** Conceptually designed and developed to provide maximum comfort, visibility and accessibility.

**Maintenance.** A new hydraulic skid for an easy and safe access to servicing.

**Self-mounting counterweight.**

**Variable drilling axis** for increased pile diameter in front of the mast

**Fast conversion** from LHR to LDP version.



## SAFETY

**Increased visibility.** Improved direct visibility on right-side through new compact hydraulic compartment, full view on the top roof without the protection grid thanks to a resistant special polycarbonate material used.

**Camera systems** for a greater visibility, giving a clear surround view of the rig.

**Powerful led lights** with antiglare technology.

**Integrated led ambient lights** to give best visibility inside the cabin.



## CONNECTIVITY

**DMS ON BOARD**, a high-tech instrumentation to increase piling efficiency through improved operations control and automated drilling functions.

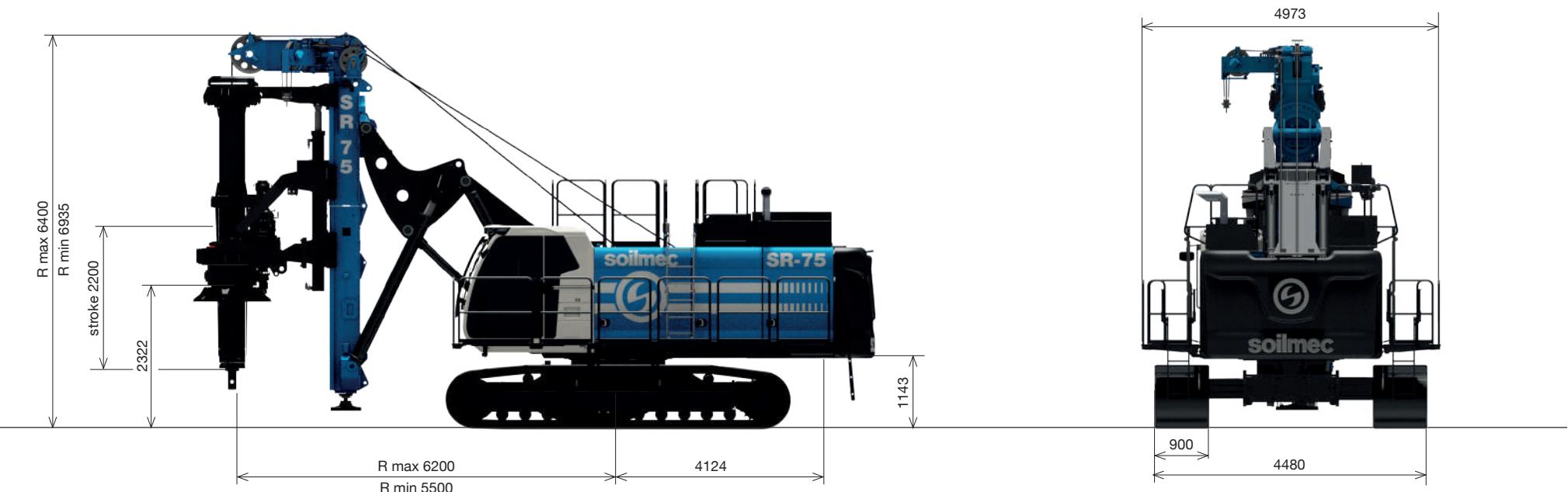
**Remote service assistance.**  
**USB port and phone wireless charger support.**

**Radio player.**

**DMS MANAGER**  
cloud-running application.

**DMS PC.** Licensed software to show, analyse and elaborate production data.

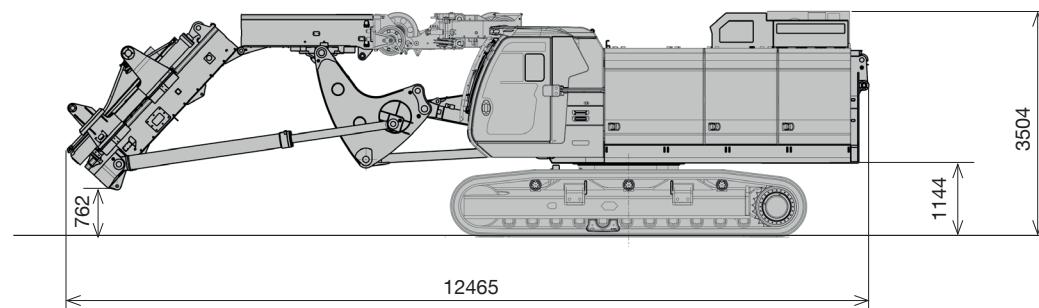
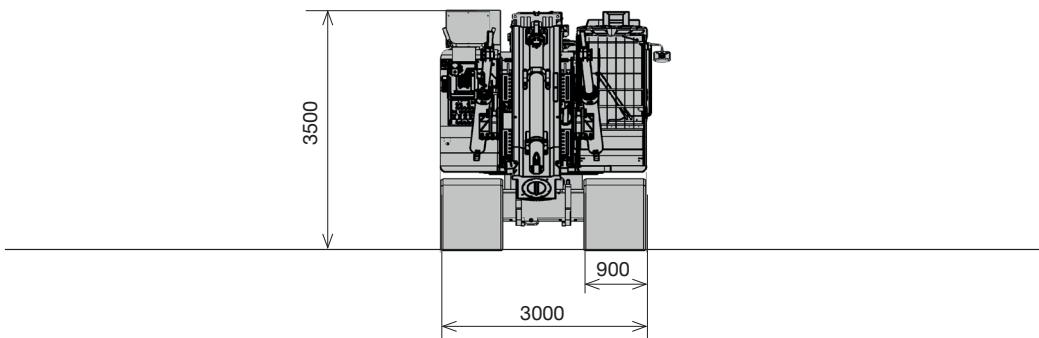
# Large Diameter Piles



## LHR\_Large Diameter Piles

<b>Min operating height</b>	6,4 m	21 ft
<b>Working radius</b>	5500 - 6200 mm	217 - 244 in
<b>Max pile diameter (tool along the mast)</b>	3500 mm	138 in
<b>Max pile diameter w/o lower mast section (tool below the mast)</b>	4000 mm	157 in
<b>Max pile depth - friction kelly</b>	44,6 m	146 ft
<b>Max pile depth - locking kelly</b>	39 m	129 ft
<b>Operating weight</b>	68000 kg	149914 lb

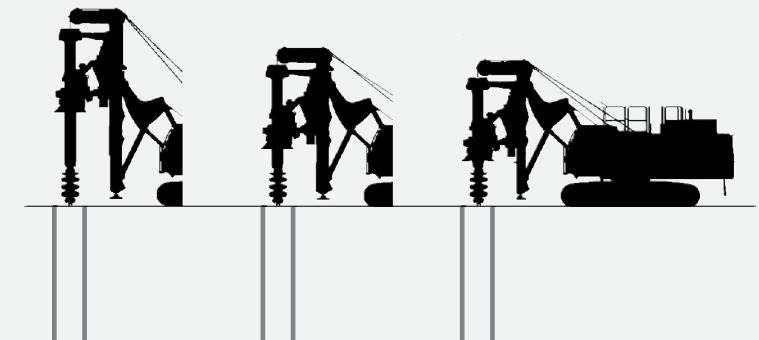
# Transport, dimensions & weights



## Transport data

Transport length	12470 mm	41 ft
Transport width	3000 mm	9.8 ft
Transport height	3500 mm	11 ft
Transport weight	68000 kg	149914 lb
Transport weight w/o cwt	56000 kg	123459 lb
Transport weight w/o rotary	51000 kg	112436 lb

1 m, 2 m mast extension are available



## Kelly bars for LDP

Rotary type	Kelly type	Kelly dimensions	Drilling Depth		Mast extension	
			m	ft	m	ft
Ø 406/431	BL HD	4x4	11,5	37.7	-	-
	BL HD	4x4,5	13,5	44.2	-	-
	BL HD	4x5	15,5	50.5	1	3.3
	BL HD	4x5,5	17,5	57.4	1	3.3
	BL HD	4x6	19,5	64	2	6.6
	FR HD	5x4	14,6	47.9	-	-
	FR HD	5x4,5	17,1	58.1	-	-
	FR HD	5x5	19,6	64.3	1	3.3
	FR HD	5x5,5	22,1	72.5	1	3.3
	FR HD	5x6	24,6	80.7	2	6.6
Ø 665	BL HD	8x4	23,4	76.8	-	-
	BL HD	8x4,5	27,4	89.9	-	-
	BL HD	8x5	31,4	103	1	3.3
	BL HD	8x5,5	35,4	116.1	1	3.3
	BL HD	8x6	39,4	129.3	2	6.6
	FR HD	9x4	26,6	87.3	-	-
	FR HD	9x4,5	31,1	102	-	-
	FR HD	9x5	35,6	116.8	1	3.3
	FR HD	9x5,5	40,1	131.5	1	3.3
	FR HD	9x6	44,6	146.3	2	6.6

# Technical data

## Undercarriage



### Undercarriage

Type	variable gauge, telescopic side frames	
Overall width with retracted crawlers	2980 mm	117.32 in
Overall width with extended crawlers	4480 mm	176.38 in
Width of triple grouser track shoes	900 mm	35.43 in
Overall length of crawlers	5544 mm	218.27 in
Traction force	495 kN	111278 lbf
Travelling speed	1,6 km/h	1 mph

## Engine



### Engine

Engine model	Cummins X12	Cummins X12
Power rating	336 kW @ 1800 rpm	450 HP @ 1800 rpm
Engine conforms to Exhaust emission Standard	EU stage V *	
Fuel tank capacity	650 l	172 US gal
AD Blue tank capacity	57 l	15 US gal

\* Cummins QSM11 Tier 3

## Rotary



### Rotary

	Option 1	
Rated torque	250 kNm	14390 lb*ft
Max drilling speed	20,2 rpm	20 rpm
Spin off speed	84 rpm	84 rpm
Kelly bars Ø	665 mm	26 in
Kelly bars max number of elements	8/9	8/9

### Rotary

	Option 2	
Rated torque	280 kNm	206517 lb*ft
Max drilling speed	24,8 rpm	25 rpm
Spin off speed	130 rpm	130 rpm
Kelly bars Ø	406 - 431 mm	16 - 17 in
Kelly bars max number of elements (BL/FR)	5/4	5/4

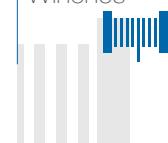
## Hydraulic system



## Crowd system



## Winches



## Hydraulic system

Main pumps flow	2x 304 + 460 l/min	2x 80 + 121 US gal/min
Third pump flow	121 l/min	32 US gal/min
Hydraulic oil tank capacity	685 l	181 US gal

## CCS\_Cylinder Crowd System

Stroke	2200 mm	87 in
Crowd force pull (down/up)	204 / 313 kN	45860 / 70364 lbf
Speed up (slow/fast)	5,4 / 14,4 m/min	17.72 / 47.24 ft/min
Speed down (slow/fast)	3,4 / 7,8 m/min	11.2 / 25.6 ft/min

## Main winch - standard

Type	controlled descent	controlled descent
Model	SW270	SW270
Rope layers	2	2
Line pull (1st layer)	270 kN	60697 lbf
Rope diameter	30 mm	1,18 in
Rope speed (1st layer)	81,6 m/min	268 ft/min

## Auxiliary winch

Type	controlled descent	controlled descent
Rope layers	2	2
Line pull (1st layer)	127 kN	28550 lbf
Rope diameter	22 mm	0.87 in
Rope speed (1st layer)	70 m/min	230 ft/min

## Noise



## Sound pressure level in cab c/w Tier 4f Engine

Sound pressure level in cab c/w Tier 4f Engine	109 dB	109 dB
Sound power level c/w Tier 4f Engine	75 dB	75 dB
Vibration transmitted to the hand-arm system of the machine operator	< 2.5 m/s <sup>2</sup>	< 8.2 ft/s <sup>2</sup>
Vibration transmitted to the whole body of the machine operator	< 0.5 m/s <sup>2</sup>	< 1.64 ft/s <sup>2</sup>

# Configurations

LDP Large Diameter Pile with kelly bar (CCS)	
<b>UNDERCARRIAGE</b>	
Mechanical prearrangement for casing oscillator	●
Hydraulic prearrangement for casing oscillator	○
Radio remote control for trammimg operation	●
<b>UPPER STRUCTURE</b>	
Auto low idle system	●
Electroproportional system	●
Automatic greasing package	○
Washer lancer	○
Compressor kit	○
Foldable catwalk with handrails	○
Removable catwalk with handrails	●
Acoustic & light alarm for trammimg	●
Lighting led system package	●
Sound proofed canopies	●
Hydraulic prearrangement for additional technologies	●
<b>CAB</b>	
Falling object protective structure (FOPS)	●
Protective grille	●
Rearview mirrors	●
Comfort packagge	●
Sliding door	●
Sliding window	●
Lighting system in front of the cab	●
<b>CONTROL AND MONITORING SYSTEM</b>	
DMS ON BOARD with technological package	●
DMS PC	●
DMS manager 4.0	○
GSM / GPRS / WIFI Modem	●
DMS ON BOARD adjustable monitor 12" touch screen	●
Surround view cameras with display in the cab	●
Inclinometer device with automatic verticality	●
<b>WINCHES</b>	
Load cell for main winch	●

LDP Large Diameter Pile with kelly bar (CCS)	
Limit switch for rope winding and winches	
Depthmeter for main winch	●
Load cell for service winch	●
Service rope holder	●
Swivel for service rope	○
<b>ROTARY UNIT</b>	
Replaceable drive ribs	●
Automatic greasing kit for cradle	●
Oil discharge conveying system	●
<b>MAST</b>	
Lower foldable mast element	●
Cathead greasing kit	○
Package for long mast - 1 -2 m (3.3 - 6.6 ft) extension available	○
<b>KELLY BAR TECHNOLOGY</b>	
Rotary sleeve with 3 ribs - for kelly bar 665 mm (26 in)	○
Rotary sleeve with 3 ribs - for kelly bar 431 mm (17 in)	●
Package for kelly bar 406 mm (16 in)	○
Cardan joint	●
Flange for casing driving d.900 mm (35 in)	○
Flange for casing driving d.1300 mm (52 in)	●
Flange for casing driving d.1500 mm (59 in)	○
Automatic return to the centre hole	●

● standard

○ optional

n.a. not available

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