

# SR-95

BLUE TECH ⚡



**soilmec** ⚡  
Drilling and Foundation Equipment

# What Drillers Want!

The SR-95 HiT has been upgraded to the Blue Tech version which includes a redesigned operator cabin, new hydraulics and mechanics for an improved efficiency.

Designed around a new energy-saving architecture, the next generation SR-95 Blue Tech is a rig that meets the demands of productivity, flexibility and functionality across all drilling setups and technologies.



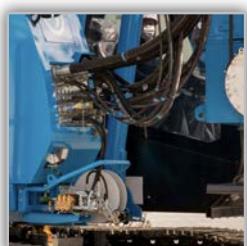
## Higher performance

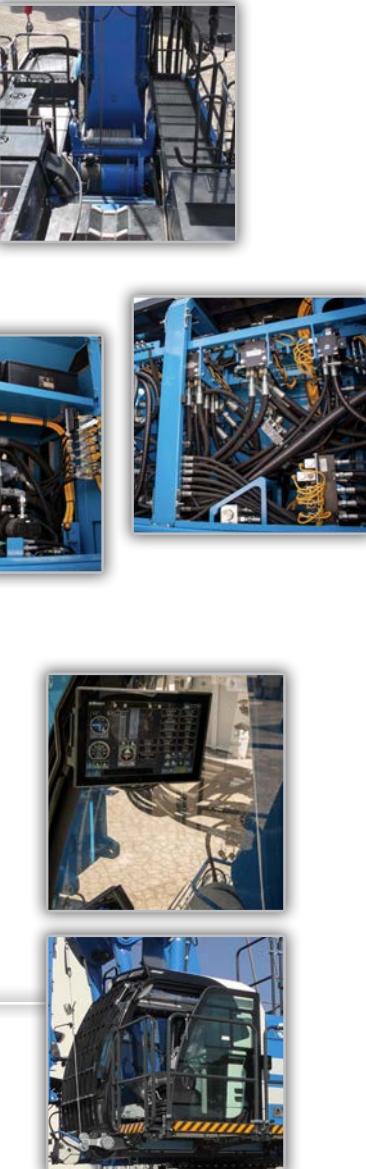
- Automatic control of rotary motors
- Increased extraction force
- + 14% rated torque available



## More efficient

- Optimized lines to the rotary for cutting power loss
- Diesel engine – Auto low idle control for fuel saving
- Main pump with Load Sensing system
- Closed circuit on main winch





## Truly multipurpose

- 5 technologies: LDP, CFA, DP/TCT, TJ and CAP/CSP/VDW
- Many versions: WCS, CCS, Quick Change, 4-lines pull and the latest ETCW Direct pull and the extended versions.



## Environment-friendly

- Complies with the most stringent emission rules
- Lower CO2 emissions
- Improved combustion and cooling efficiency
- Noise reduction



## Proven ergonomics

Sliding door, fully adjustable pneumatic suspension seat, new joysticks and keyboards



## Great visibility

Polycarbonate roof and stratified front glass allow to work without protection grids, LED lights with anti-glare technology and CCTV camera system with dedicated 7" display



## Most comfortable

Powerful HVAC system with recirculating air, USB port, USB or wireless phone charger mount, locked glove boxes (one is air-conditioned), a large compartment for placing helmet and jacket, two dual cupholders and a file folder



## Always connected!

- DMS On Board 4.0
- DMS PC for a complete production analysis
- DMS Manager a cloud service for superior fleet supervision

# SR-95 Blue Tech Is convincing in every aspect

- Higher torque and variable drilling axis feature to drill deeper and bigger piles.
- Powerful stageV Diesel engine with low-idle system and radiators fan control system to reduce fuel consumption and noise.
- The SW350 main winch, available also in single layer version, provides easier handling to the big Kelly bars and offering very high extraction force.





Ready to respond  
to your every need

- Plug & Play design approach for a faster conversion to any technology
- Machine settings performed by DMS on board
- Direct Quick Change version for a quicker conversion to CFA/DP/TCT/TJ technologies
- Unified cathead in CCS and WCS and CFA Quick Change
- Same foot element for both kelly & CFA
- Two VDW kit for Cased Secant Piles

5 technologies  
12 versions

SR-95 Blue Tech

# Your safety is our priority

- Improved direct visibility on right-side through new compact hydraulic compartment
- Camera systems for 360° visibility, giving a clear surround view of the rig
- Powerful led lights with antiglare technology
- Cab platform access with handrails
- Lowest noise emission in its segment
- Radio remote control for safer load/unload and trammimg operations
- Automatic white sound alarm during rig travelling and turret rotation
- Warning system for sleeve extension coupling for CFA / DP / TJ technologies (patent pending).





SR-95 Blue Tech

# The answer to all your job site needs

- **Main winch rope anti-slack.** Managed by DMS, the system indicates when to slow down the kelly bar descent in order to avoid collision with the hole bottom and excessive rope unwinding for longer rope operation life
- **Automatic Mast Raising (Patented).** Automatic tensioning of main and service winch ropes during mast raising and boom adjustment to ease the operations during drilling/transport/maintenance phases
- **Automatic return to centre hole.** Designed to speed up the discharging phase. Very high slewing precision, for a perfect centering of the casing of the kelly bar. One word: faster cycle
- **Locking kelly bar visualization system.** Real time display of locking connection area to simplify the operator job and to protect the rig against wearing and tearing
- **CFA Autodrilling.** An automatic device for CFA mode to control and to optimize the drilling parameters
- **CFA Autorotary (Rotary Revolutions Speed Control).** The operator can activate this function by a dedicated pedal or through joystick
- **CSP Autodrilling.** An automatic device for CAP/CSP mode to control and to optimize the drilling parameters
- **Drilling axis variation.** Easy and fast conversion
- **Potentiometers main functions** in order to manually set up of the drilling parameters
- **Easy maintenance,** automatic lubrication of all the necessary greasing points in kelly and CFA versions
- **Auxiliary cable support device,** easily accessible by the banksman
- **Rotary cradle sliding guide replaceable w/o** dismounting the rotary



## ERGONOMIA & FUNZIONALITA'

La progettazione e lo sviluppo della cabina sono stati realizzati in conformità ai più recenti criteri di ergonomia, in ossequio agli standard internazionali, per fornire all'operatore il massimo comfort, visibilità e accessibilità.

Interni ed esterni rifiniti con la massima cura.

Accurato posizionamento di controlli/comandi attrezzatura per garantire le massime prestazioni in totale sicurezza.

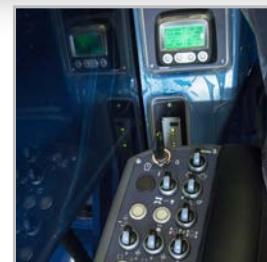
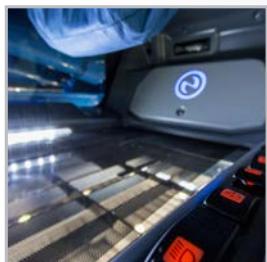
## CONNETTIVITA'

DMS ON BOARD con un display touch multilingue da 12" posizionato nella parte superiore della cabina per garantire la massima visibilità dell'area di perforazione.

Scorrimento orizzontale e regolazione dell'inclinazione (optional).

Semplice menu di navigazione e grafica interattiva intuitiva per aiutare l'operatore nella pianificazione ed esecuzione quotidiana della perforazione.

Pulsanti e interruttori si illuminano quando vengono azionati.



# Soilmec DMS (Drilling Mate System)

Sistema elettronico per il controllo delle attrezzature di perforazione, supervisione della produzione e gestione della flotta sviluppato e di proprietà di Soilmec dalla fine degli anni '90.

## DMS product suite

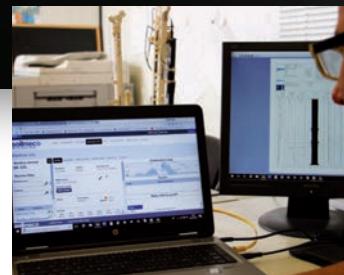
Soluzione integrata che abbraccia la tecnologia intelligente per ottimizzare l'uso delle attrezzature e aumentare l'efficienza nei cantieri. Il DMS aiuta a ottenere informazioni uniche sull'ingegneria del suolo e sulle attività di palificazione, raccogliendo, analizzando e gestendo le informazioni più rilevanti dalle attrezzature di perforazione.

Il sistema ha lo scopo di supportare le società di costruzioni nelle operazioni quotidiane e nei processi aziendali migliorando il processo decisionale e sfruttando il potenziale dell'analisi dei dati.

### DMS ON BOARD



### DMS PC



### DMS MANAGER 4.0



Strumentazione integrata per la supervisione delle attrezzature e il controllo delle prestazioni.

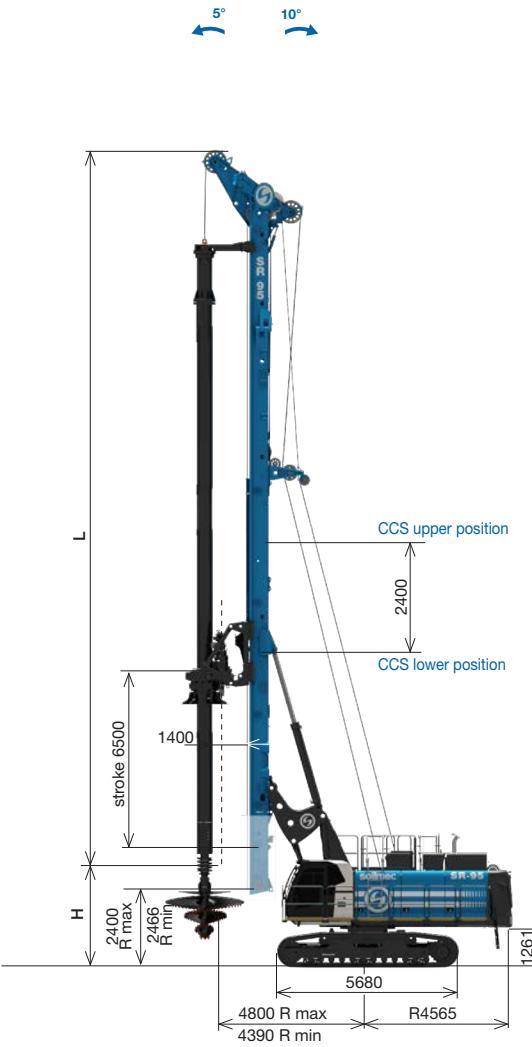
Software con licenza per l'elaborazione e il reporting dei dati di macchina e di produzione.

App cloud per la gestione di risorse, flotte e cantieri.

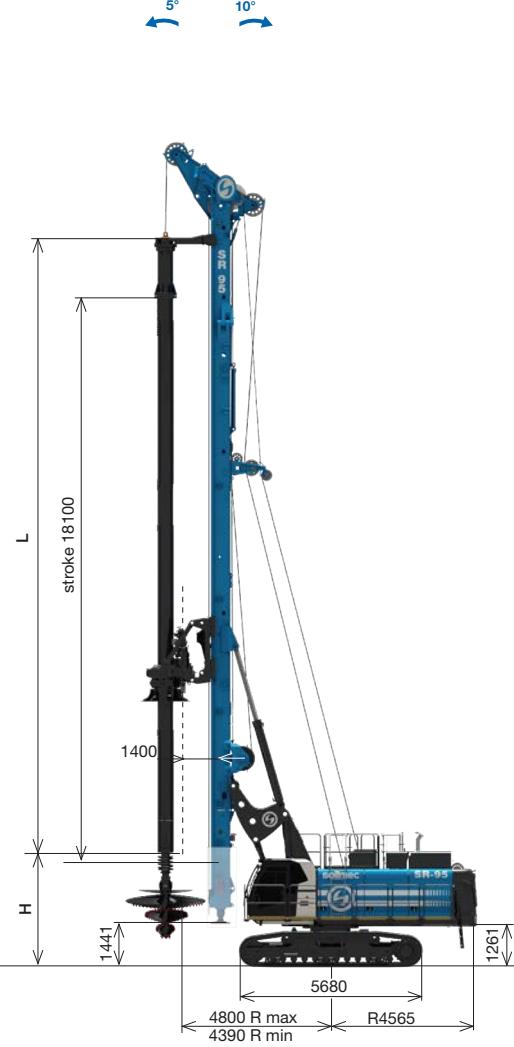


# Large Diameter Piles

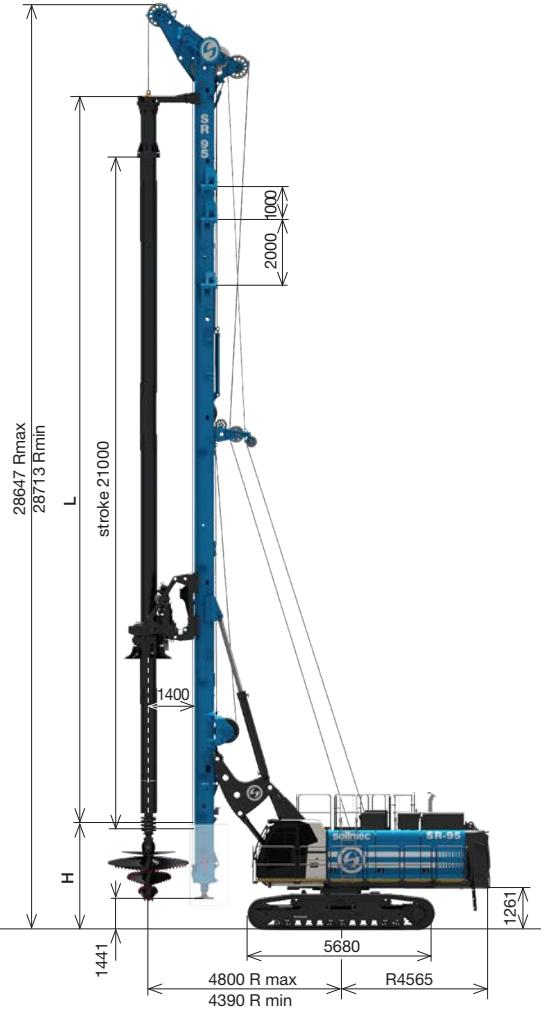
Cylinder Crowd System



Winch Crowd System



Extended version



### LDP - Large Diameter Piles - CCS version

<b>Operating weight w/o kelly bar</b>	91700 kg	202164 lb
<b>Max pile diameter (tool in front of the mast)</b>	2100 mm	83 in
<b>Max pile diameter c/w increased drilling axis (tool in front of the mast)</b>	2700 mm	106 in
<b>Max pile diameter w/o lower mast section <sup>1</sup> (tool below the mast)</b>	3000 mm	118 in
<b>Max pile diameter c/w increased drilling axis &amp; w/o lower mast section <sup>1</sup> (tool below the mast)</b>	3600 mm	142 in
<b>Working radius <sup>3</sup></b>	4090 - 4800 mm	164 - 192 in
<b>Tail swing radius</b>	4565 mm	180 in
<b>Max pile depth - friction kelly</b>	89 m	292 ft
<b>Max pile depth - locking kelly</b>	70 m	230 ft

### LDP - Large Diameter Piles - WCS version

<b>Operating weight w/o kelly bar</b>	93800 kg	206794 lb
<b>Max pile diameter (tool in front of the mast)</b>	1900 mm	75 in
<b>Max pile diameter c/w increased drilling axis (tool in front of the mast)</b>	2500 mm	98 in
<b>Max pile diameter w/o lower mast section <sup>2</sup> (tool below the mast)</b>	3000 mm	118 in
<b>Max pile diameter c/w increased drilling axis &amp; w/o lower mast section <sup>2</sup> (tool below the mast)</b>	3600 mm	142 in
<b>Working radius <sup>3</sup></b>	4090 - 4800 mm	164 - 192 in
<b>Tail swing radius</b>	4565 mm	180 in
<b>Max pile depth - friction kelly</b>	89 m	292 ft
<b>Max pile depth - locking kelly</b>	70 m	230 ft

### LDP - Large Diameter Piles - Extended version <sup>4</sup>

<b>Operating weight - w/o kelly bar - CCS version</b>	93800 kg	206794 lb
<b>Operating weight - w/o kelly bar - WCS version</b>	95900 kg	211423 lb
<b>Max pile depth - locking &amp; friction kelly</b>	81,4 - 101,7 m	267 - 334 ft

<sup>1</sup> cylinder crowd in upper position, depth reduced by 2,4 m (7.8 ft)

<sup>2</sup> rotary stroke and depth reduced by 2,4 m (7.8 ft)

<sup>3</sup> working radius with increased drilling axis: 4390 - 4800 mm (173 - 189 in)

<sup>4</sup> special package with mast extension on request

### Kelly bars for LDP

Kelly type	Kelly dimens.	Drilling Depth <sup>1</sup>	Weight	L	H <sup>5</sup>								
					m	ft	t(US)	m	ft	m	ft		
BL HD	3 x 10,5	27,6	90.6	6,6	7.0	12,0	39.4	8,2	26.9	10,6	34.8	14,1	46.3
BL HD	3 x 13,5	36,9	121.1	8,0	8.8	15,1	49.5	8,2	26.9	10,6	34.8	11,0	36.1
BL HD	3 x 15,5	43,2	141.7	8,9	9.8	17,1	56.1	8,2	26.9	9,0	29.5	9,0	29.5
BL HD	3 x 16,5	46,0	150.9	9,4	10.4	18,1	59.4	8,0	26.2	8,0 <sup>4</sup>	26.2	8,0	26.2
BL HD	3 x 18,5	52,3	171.6	10,4	11.8	20,2	66.3	5,9	19.4	5,9 <sup>4</sup>	19.4	5,9	19.4
BL HD <sup>4</sup>	3 x 20	55,9	183.4	11,1	12.2	21,4	70.2	4,7	15.4	-	4,7	15.4	
BL HD <sup>4</sup>	3 x 21,5	60,9	199.8	11,8	13.0	23,0	75.5	3,1	10.2	-	3,1	10.2	
BL HD	4 x 10,5	37,2	122.0	6,9	7.6	12,0	39.4	8,2	26.9	10,6	34.8	14,1	46.3
BL HD	4 x 13,5	49,5	162.4	8,4	9.3	15,1	49.5	8,2	26.9	10,6	34.8	11,0	36.1
BL HD	4 x 15,5	57,6	189.0	9,4	10.4	17,1	56.1	8,2	26.9	9,0	29.5	9,0	29.5
BL HD	4 x 16,5	61,5	201.8	9,9	10.9	18,1	59.4	8,0	26.2	8,0 <sup>4</sup>	26.2	8,0	26.2
BL HD	4 x 18,5	69,9	229.3	11,0	12.1	20,2	66.3	5,9	19.4	5,9 <sup>4</sup>	19.4	5,9	19.4
BL HD <sup>4</sup>	4 x 19,5	74,0	242.8	11,5	12.7	21,1	69.2	5,0	16.4	-	5,0	16.4	
BL HD <sup>4</sup>	4 x 20	74,7	245.1	11,7	12.9	21,4	70.2	4,7	15.4	-	4,7	15.4	
BL HD <sup>4</sup>	4 x 21,5	81,4	267.1	12,5	13.8	23,0	75.5	3,1	10.2	-	3,1	10.2	
FR HD	5 x 10,5	46,6	152.9	7,7	8.4	12,0	39.4	8,2	26.9	10,6	34.8	14,1	46.3
FR HD	5 x 13,5	62,4	204.7	9,5	10.5	15,1	49.5	8,2	26.9	10,6	34.8	11,0	36.1
FR HD	5 x 15,5	72,3	237.2	10,8	11.9	17,1	56.1	8,2	26.9	9,0	29.5	9,0	29.5
FR HD	5 x 16,5	77,0	252.6	11,4	12.6	18,1	59.4	8,0	26.2	8,0 <sup>4</sup>	26.2	8,0	26.2
FR HD	5 x 18,5	87,5	287.1	12,7	14.0	20,2	66.3	5,9	19.4	5,9 <sup>4</sup>	19.4	5,9	19.4
FR HD <sup>4</sup>	5 x 19	88,9	291.7	13,0	14.3	20,4	66.9	5,7	16.4	5,7 <sup>4</sup>	16.4	5,7	16.4
FR HD <sup>4</sup>	5 x 20	94,2	309.1	13,6	15.0	21,4	70.2	4,7	15.4	-	4,7	15.4	
FR HD <sup>4</sup>	5 x 21,5	101,7	333.7	14,6	16.0	22,9	75.1	3,2	10.2	-	3,2	10.2	

<sup>1</sup> drilling depth is calculated with kelly bar c/w stub 200x200 & drilling tool 1500 mm (4.9 ft) long; drilling depth is reduced by 2.4 m (7.8ft) without lower mast section or CCS in upper position; drilling depth is reduced by 0.1 m (0.33ft) with increased drilling axis.

<sup>2</sup> friction type is also available with the same dimension

<sup>3</sup> rotary torque derated

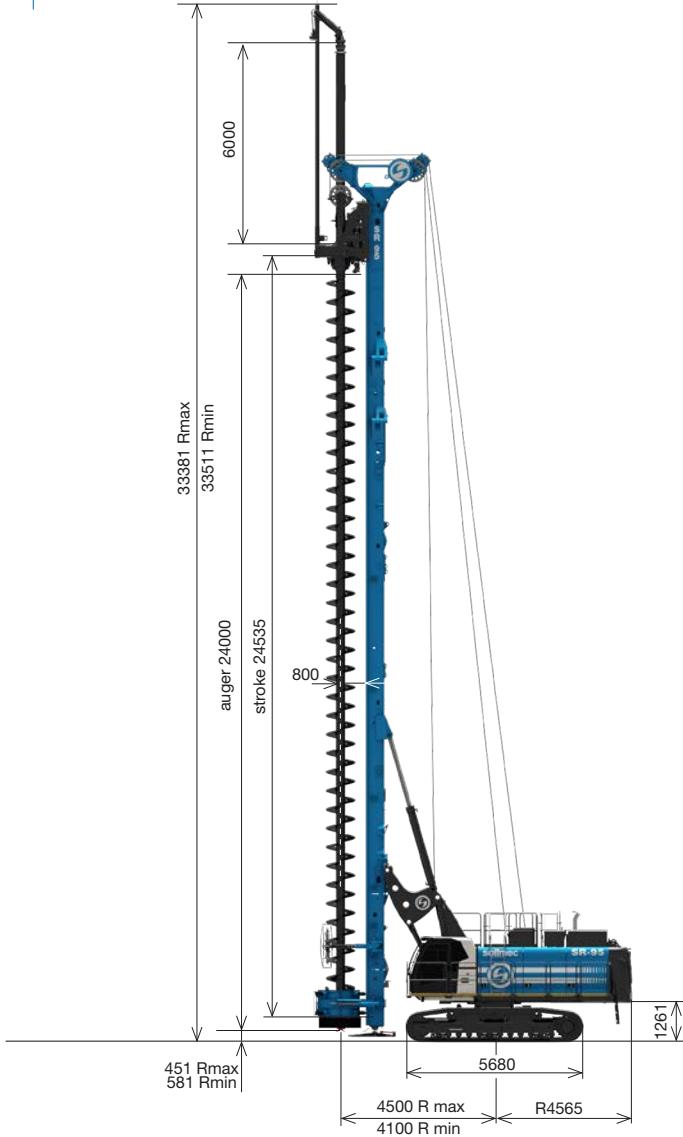
<sup>4</sup> available only c/w 3 m (9.8 ft) mast extension kit

<sup>5</sup> clearance c/w 3 m (9.8 ft) mast extension kit.

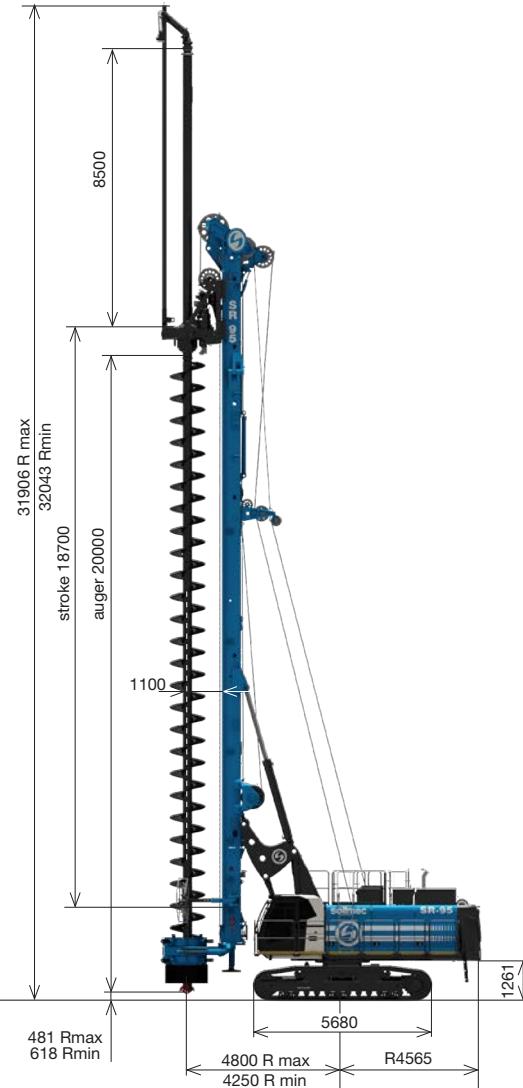
<sup>6</sup> data referred to kelly "full depth" type; available "full torque" type..

# CFA / DP / TJ applications

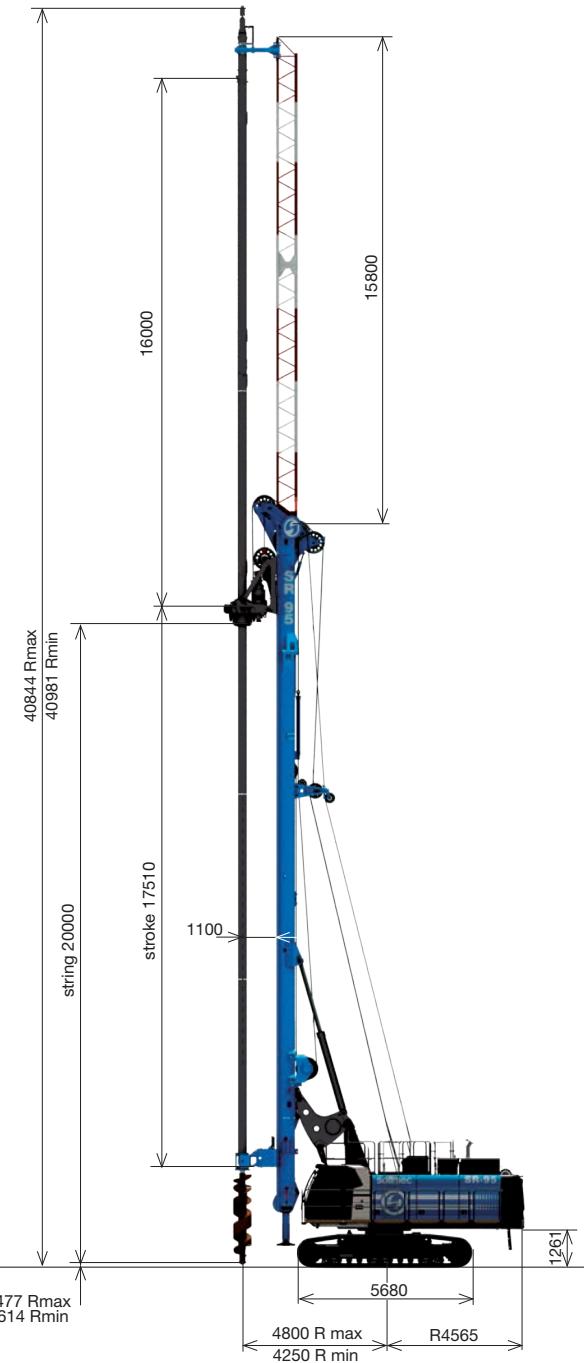
CFA  
4-lines pull

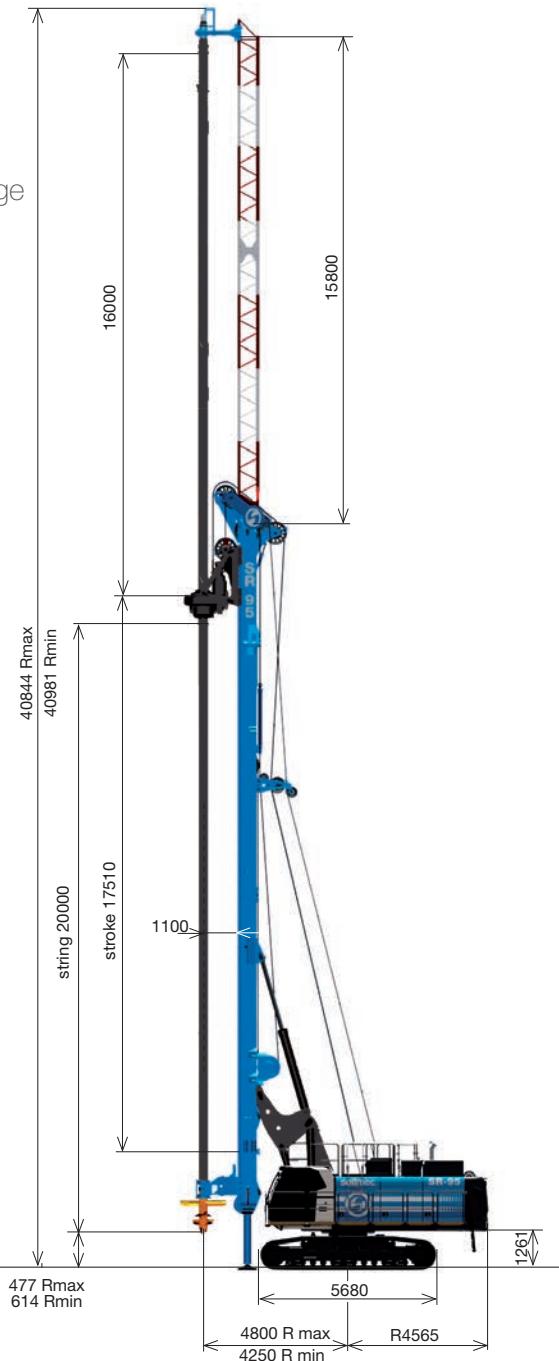


CFA  
Quick Change



DP / TCT  
Quick Change





CFA - Continuous Flight Auger - 4-lines pull		standard version	extended version <sup>3</sup>	
Operating weight (c/w 6 m - 20 ft sleeve extension, w/o auger)	96000 kg	211644 lb	96500 kg	212746 lb
Max pile diameter	1200 mm	47 in	1200 mm	47 in
Max length of auger	24 m	79 ft	26 m	85 ft
Max length of sleeve extension	8,5 m	28 ft	8,5 m	28 ft
Max pile depth (c/w 8,5 m - 28 ft sleeve extension) <sup>1</sup>	32,5 m	107 ft	34,5 m	113 ft
Nominal extraction force	1110 kN	249534 lbf	1110 kN	249534 lbf
Additional crowd force on auger <sup>2</sup>	100/484 kN	22481/108806 lbf	100 / 484 kN	22481/108806 lbf
CFA - Continuous Flight Auger - Quick change		standard version	extended version <sup>3</sup>	
Operating weight (c/w 8,5 m - 28 ft sleeve extension, w/o auger)	96700 kg	213187 lb	98800 kg	217817 lb
Max pile diameter	1200 mm	47 in	1200 mm	47 in
Max length of auger	20 m	66 ft	23 m	75 ft
Max length of sleeve extension	8,5 m	28 ft	8,5 m	28 ft
Max pile depth (c/w 8,5 m - 28 ft sleeve extension) <sup>1</sup>	26,5 m	87 ft	29,5 m	97 ft
Nominal extraction force	1000 kN	224805 lbf	1000 kN	224805 lbf
Additional crowd force on auger	484 kN	108806 lbf	484 kN	108806 lbf
CFA - Continuous Flight Auger - Direct Quick change		standard version	extended version <sup>3</sup>	
Operating weight (c/w 8,5 m - 28 ft sleeve extension, w/o auger)	96500 kg	212746 lb	98600 kg	217376 lb
Max pile diameter	1200 mm	47 in	1200 mm	47 in
Max length of auger	20 m	66 ft	23 m	75 ft
Max length of sleeve extension	8,5 m	28 ft	8,5 m	28 ft
Max pile depth (c/w 8,5 m - 28 ft sleeve extension) <sup>1</sup>	26,5 m	87 ft	29,5 m	97 ft
Nominal extraction force	484 kN	108806 lbf	484 kN	108806 lbf
Additional crowd force on auger	484 kN	108806 lbf	484 kN	108806 lbf
DP - Displacement pile - Quick change <sup>4</sup>		standard version	extended version <sup>3</sup>	
Max recommended DP/TCT pile diameter	600 mm	24 in	600 mm	24 in
Max recommended TCT pile diameter	800 mm	31.50 in	800 mm	31.50 in
Max length of string	20 m	66 ft	23 m	75 ft
Max pile depth w/o lattice boom extension c/w 8,5 m (27.8 ft) string extension	25,5 m	84 ft	28,5 m	94 ft
Lattice boom extension length	16 m	52 ft	n.a.	n.a.
Max pile depth c/w lattice boom extension	33 m	108 ft	n.a.	n.a.
TJ - Turbo jet - Quick change <sup>4</sup>		standard version	extended version <sup>3</sup>	
Max recommended TJ pile diameter	1900 mm	75 in	1900 mm	75 in
Max length of string	20 m	66 ft	23 m	75 ft
Max pile depth w/o lattice boom extension c/w 6 m (19,6 ft) string extension	23 m	75 ft	26 m	85 ft
Lattice boom extension length	16 m	52 ft	n.a.	n.a.
Max pile depth c/w lattice boom extension	33 m	108 ft	n.a.	n.a.

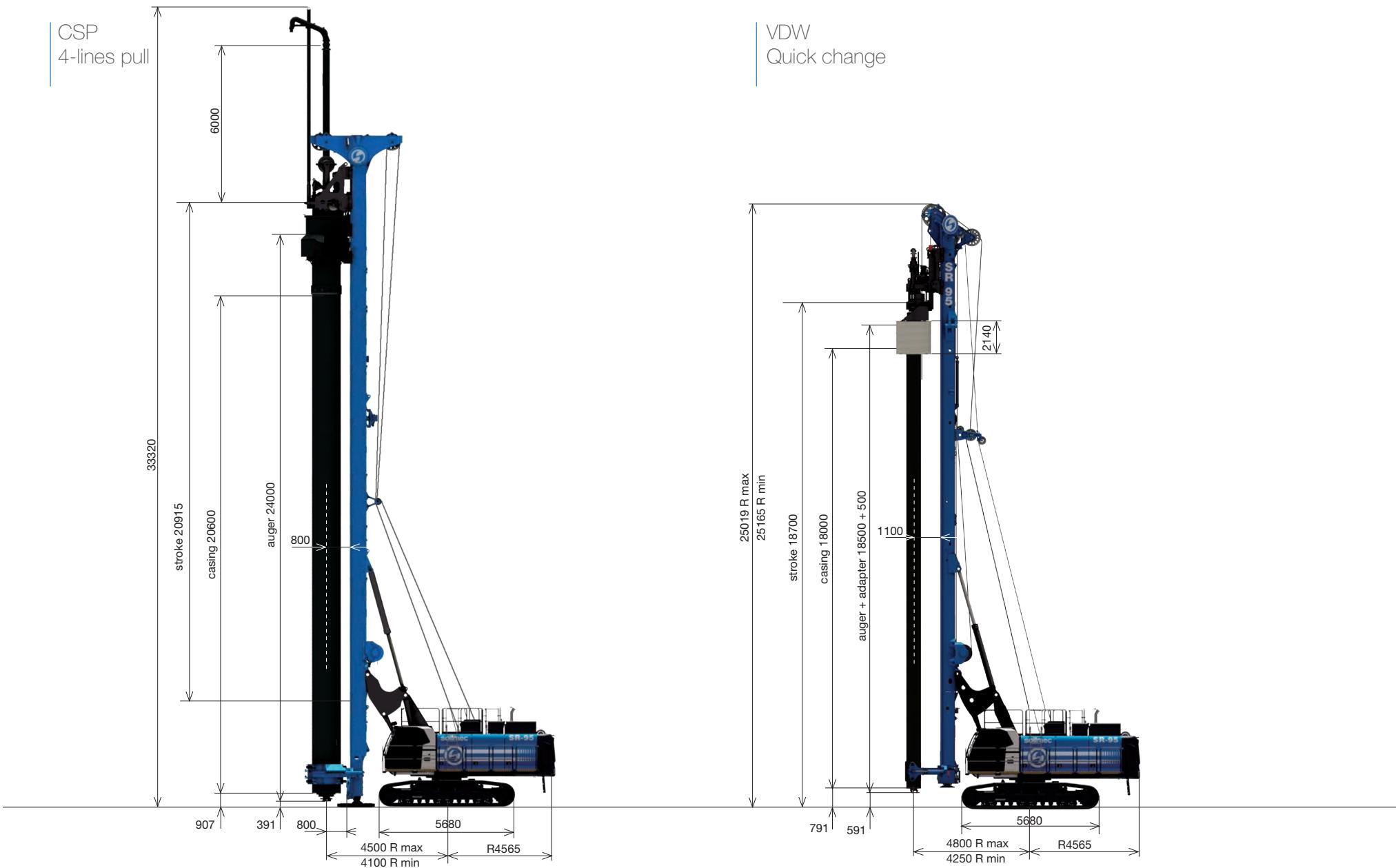
<sup>1</sup> depth reduced by 1,5 m (4.9 ft) with hydraulic auger cleaner

<sup>2</sup> depth reduced by 0,2 m (0.66 ft) with 100 kN - by 1,4m (4.5 ft) with 484 kN

<sup>3</sup> special package with mast extension on request

<sup>4</sup> DP/TCT and TJ are also available with 4-lines pull version

# CSP / VDW applications



Drawing are not to scale. All technical data are purely indicative and subject to change without notice.

**CSP - Cased secant piles - 4-lines pull<sup>1</sup>**

<b>Max pile diameter</b>	<b>800 / 1000<sup>2</sup> mm</b>	<b>31.5 / 39.1<sup>2</sup> in</b>
<b>Max augered depth (c/w 6 m - 19.7 ft auger extension)</b>	<b>26,3 m</b>	<b>87 ft</b>
<b>Max cased depth</b>	<b>19,7 m</b>	<b>65 ft</b>
<b>Auger max torque (intermittent)</b>	<b>250 kNm</b>	<b>184387 lbf*ft</b>
<b>Max auger speed rotation</b>	<b>26,3 rpm</b>	<b>25.4 rpm</b>
<b>Auger pull up/down</b>	<b>1110 / 332 kN</b>	<b>249534 / 74635 lbf</b>
<b>Casing max torque (intermittent)</b>	<b>252,6 kNm</b>	<b>185863 lbf*ft</b>
<b>Max casing speed rotation</b>	<b>5 rpm</b>	<b>5 rpm</b>
<b>Casing pull up/down</b>	<b>816<sup>3</sup> kN</b>	<b>183441 / 108806 lbf</b>

The SR-95 Blue Tech has a very wide offer for the cased augered piles technology.

The rig can be fitted with the "classic" CAP/CSP system developed by Soilmec or with the new VDW system.

The CAP/CASP system, with the machine in 4-lines pull version, enables you to get the higher performance thanks to the independent rotaries and a very high extraction force.

The VDW system ensure an easy conversion from quick change and allows a front of wall minimum distance.

**VDW 2010 - Cased secant piles - Quick change**

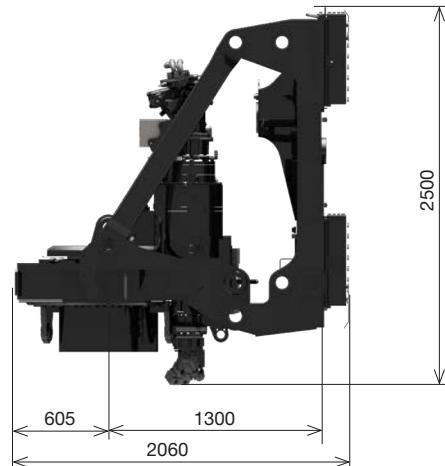
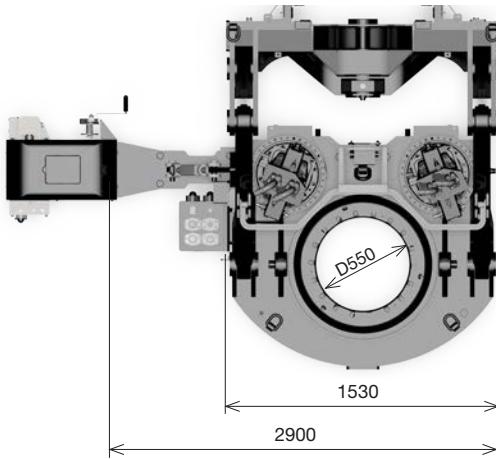
		<b>standard version</b>	<b>extended version<sup>3</sup></b>	
<b>Operating weight (w/o auger and casing)</b>	<b>95400 kg</b>	<b>209437 lb</b>	<b>97800 kg</b>	<b>214287 lb</b>
<b>Max pile diameter</b>	<b>800 mm</b>	<b>31.50 in</b>	<b>600 / 800<sup>2</sup> mm</b>	<b>23.6 / 31.52<sup>2</sup> ft</b>
<b>Max augered depth w/o auger cleaner</b>	<b>18 m</b>	<b>59 ft</b>	<b>21 m</b>	<b>69 ft</b>
<b>Max cased depth w/o auger cleaner</b>	<b>17,8 m</b>	<b>58 ft</b>	<b>20,8 m</b>	<b>68 ft</b>
<b>Casing max torque</b>	<b>203 kNm</b>	<b>147510 lbf*ft</b>	<b>203 kNm</b>	<b>147510 lbf*ft</b>
<b>Max casing speed rotation</b>	<b>18 rpm</b>	<b>20 rpm</b>	<b>18 rpm</b>	<b>20 rpm</b>
<b>Auger max torque</b>	<b>101,4 kNm</b>	<b>73755 lbf*ft</b>	<b>101,4 kNm</b>	<b>73755 lbf*ft</b>
<b>Max auger speed rotation</b>	<b>37,9 rpm</b>	<b>40 rpm</b>	<b>37,9 rpm</b>	<b>40 rpm</b>
<b>VDW pull up/down</b>	<b>850 / 484 kN</b>	<b>191084 / 108806 lbf</b>	<b>850 / 484 kN</b>	<b>191084 / 108806 lbf</b>

<sup>1</sup> 17,3 t (30140 lb) counterweight is required

<sup>2</sup> special undercarriage required

<sup>3</sup> special package with mast extension on request

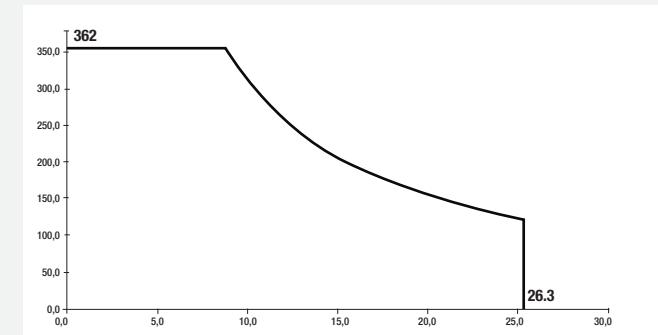
# Rotary



## Type

<b>Max torque</b>	<b>362,4 kNm</b>	<b>267292 lbf*ft</b>
<b>1<sup>st</sup> gear rated torque</b>	<b>342 kNm</b>	<b>252246 lbf*ft</b>
<b>Max drilling speed</b>	<b>26,3 rpm</b>	<b>26.3 rpm</b>
<b>Max spin off speed</b>	<b>120 rpm</b>	<b>120 rpm</b>
<b>Weight (w/o cradle and casing flange)</b>	<b>5040 kg</b>	<b>11111 lb</b>

Rotary torque diagram



Kelly bars for rotary OD 482 mm /19 in

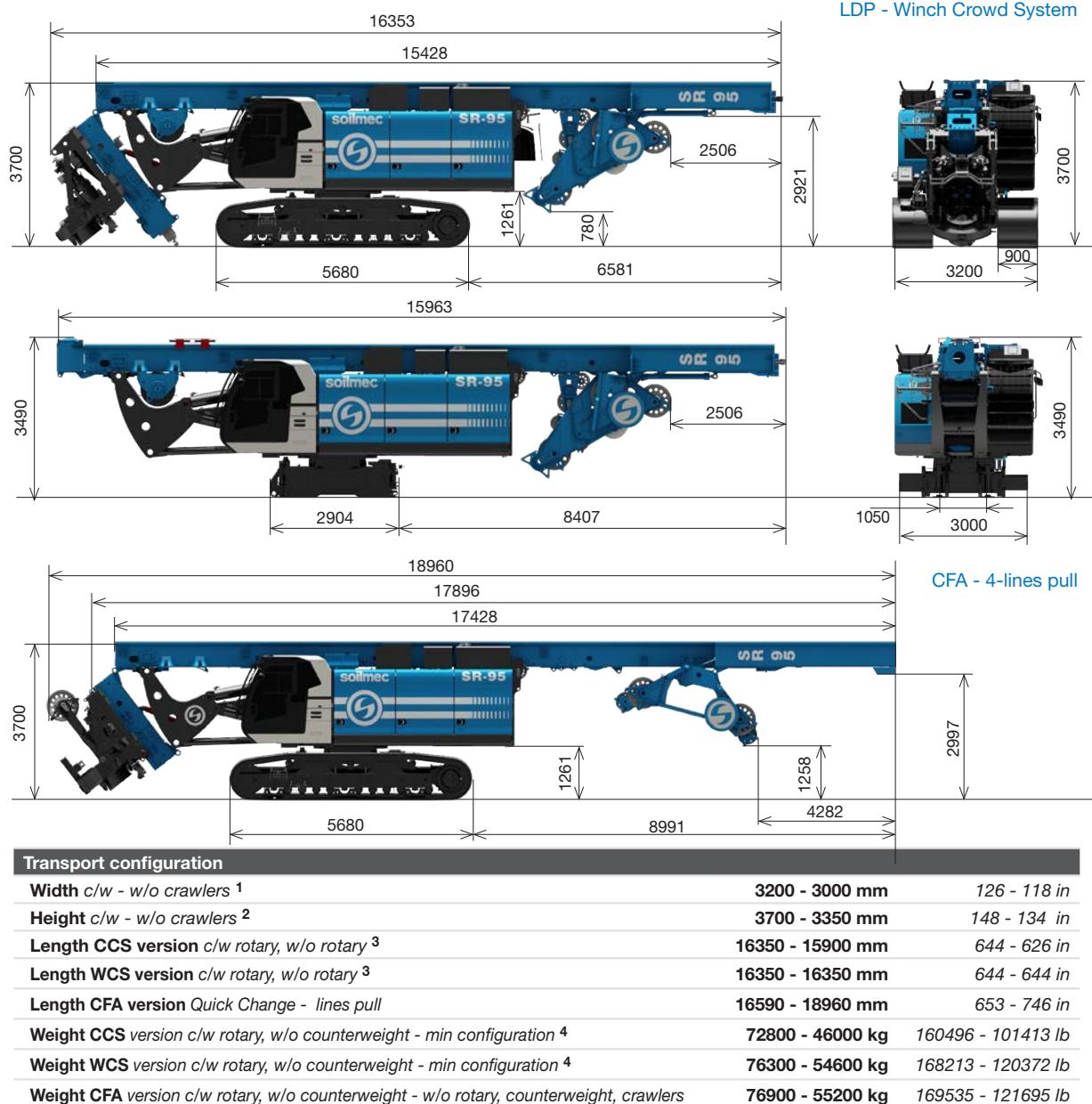
Rotary motors displacement automatic controlled by DMS.

Engine power saving in a resulting lower consumption thanks the contribution of the main valve fitted on rotary

The rotary sleeve is composed of symmetrical and interchangeable ribs in order to reduce maintenance time. The inner passage is 550 mm (21.6 in) without ribs.

The variable drilling axis device (from 1100 mm to 1400 mm / 45 in to 55 in) ensures the maximum geometric clearance in front of the mast (CCS up to diameter 2700 mm / 106 in - WCS up to diameter 2500 mm / 98 in)

# Transport, dimensions & weights

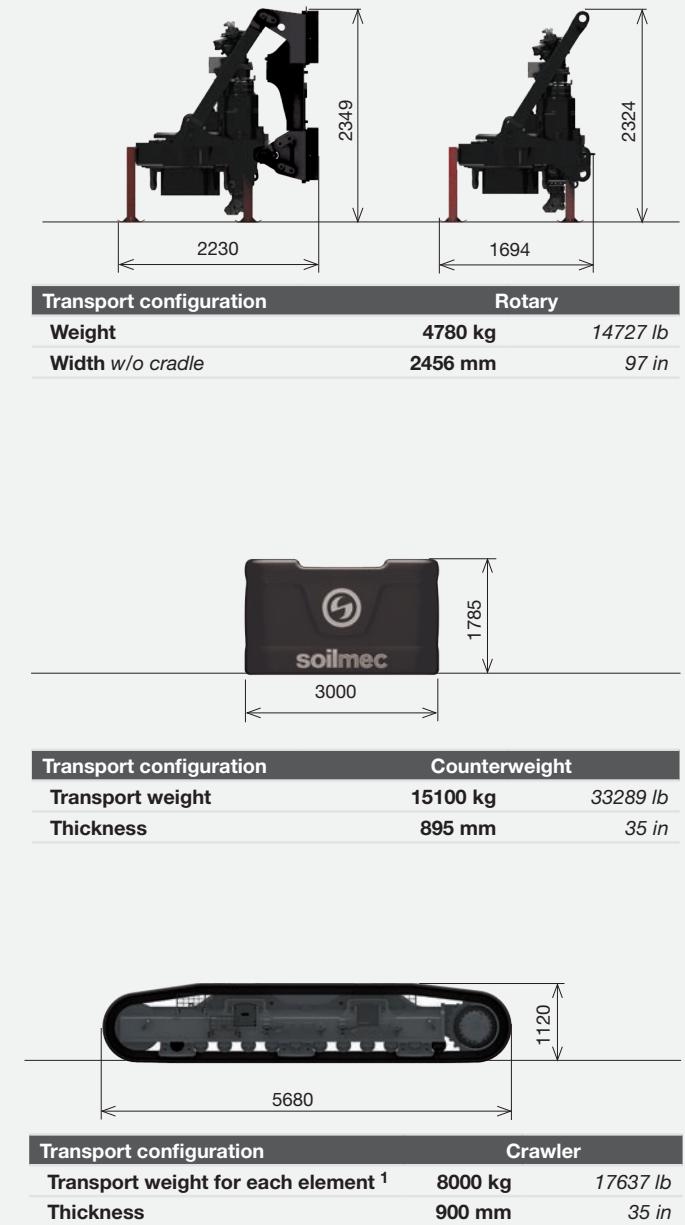


<sup>1</sup> 3400 - 3000 (134 - 118 in) c/w special undercarriage

<sup>2</sup> 3750 - 3400 (149 - 134 in) c/w special undercarriage

<sup>3</sup> for extended version, add. 2000 mm (79 in)

<sup>4</sup> for extended version, add. 2200 kg (4850 lb)



<sup>1</sup> 9000 kg (19842 lb) c/w special undercarriage

# Technical data

## Undercarriage



### Undercarriage

Type	variable gauge, telescoping removable sides	variable gauge, telescoping removable sides
Overall width with retracted/extended crawlers	<b>3200 / 4700 mm</b>	<b>126 / 185 in</b>
Width of triple grouser track shoes	<b>900 mm</b>	<b>35.4 in</b>
Overall length of crawlers	<b>5680 mm</b>	<b>224 in</b>
Traction force	<b>668 kN</b>	<b>150172 lbf</b>
Travelling speed	<b>1,9 km/h</b>	<b>1.2 mph</b>

### Special undercarriage - CSP & TJ version

Type	variable gauge, telescoping removable sides	variable gauge, telescoping removable sides
Overall width with retracted/extended crawlers	<b>3400 / 5000 mm</b>	<b>134 / 197 in</b>
Width of triple grouser track shoes	<b>900 mm</b>	<b>35.4 in</b>
Overall length of crawlers	<b>5968 mm</b>	<b>235 in</b>
Traction force	<b>771 kN</b>	<b>173328 lbf</b>
Travelling speed	<b>1,65 km/h</b>	<b>1.03 mph</b>

## Engine



### Engine

Engine model 1	<b>Cummins X15</b>	<b>Cummins X15</b>
Power rating	<b>455 kW @ 1900 rpm</b>	<b>610 HP @ 1900 rpm</b>
Engine conforms to Exhaust emission Standard	<b>EU stage V, US EPA Tier 4f</b>	<b>EU stage V, US EPA Tier 4f</b>
Fuel tank capacity	<b>870 l</b>	<b>230 US gal</b>
AD Blue tank capacity	<b>56,8 l</b>	<b>15 US gal</b>

<sup>1</sup> CAT C15 - Tier3 is available on request

### Hydraulic system



Main pumps flow	<b>518 / 2x 358 l/min</b>	<b>137 / 2x 96 US gal/min</b>
Auxiliary pumps flow	<b>148 l/min</b>	<b>39 US gal/min</b>
Hydraulic oil tank capacity	<b>880 l</b>	<b>232 US gal</b>

### CCS\_Cylinder Crowd System



Stroke	<b>6500 mm</b>	<b>256 in</b>
Crowd force pull (down/up)	<b>280 / 365 kN</b>	<b>62945 / 82054 lbf</b>
Speed up (slow/fast)	<b>3,7 / 10,8 m/min</b>	<b>12 / 35.4 ft/min</b>
Speed down (slow/fast)	<b>3,5 / 11 m/min</b>	<b>11.5 / 36 ft/min</b>

### WCS\_Winch Crowd System



Stroke <sup>2</sup>	<b>18800 mm</b>	<b>740 in</b>
Crowd force pull (down/up)	<b>484 / 484 kN</b>	<b>108800 / 108800 lbf</b>
Speed up (slow/fast)	<b>6 / 26 m/min</b>	<b>19.7 / 85.3 ft/min</b>
Speed down (slow/fast)	<b>6 / 26 m/min</b>	<b>19.7 / 85.3 ft/min</b>

<sup>2</sup> stroke 21100 mm (831 in) with 3 m (10 ft) mast extension is available on request

## Winches



### Main winch - standard

Type	<b>controlled descent</b>	<b>controlled descent</b>
Rope layers	<b>3</b>	<b>3</b>
Line pull (1 <sup>st</sup> layer)	<b>352 kN</b>	<b>79133 lbf</b>
Rope diameter	<b>32 mm</b>	<b>1.26 in</b>
Rope speed (1 <sup>st</sup> layer)	<b>80 m/min</b>	<b>263 ft/min</b>

### Main winch - single layer (on request)

Type	<b>controlled descent</b>	<b>controlled descent</b>
Line pull	<b>350 kN</b>	<b>78683 lbf</b>
Rope diameter	<b>32 mm</b>	<b>1.26 in</b>
Rope speed	<b>80 m/min</b>	<b>263 ft/min</b>

### Auxiliary winch

Type	<b>controlled descent</b>	<b>controlled descent</b>
Rope layers	<b>2</b>	<b>2</b>
Line pull (1 <sup>st</sup> layer)	<b>134 kN</b>	<b>30124 lbf</b>
Rope diameter	<b>22 mm</b>	<b>0.87 in</b>
Rope speed (1 <sup>st</sup> layer)	<b>70 m/min</b>	<b>230 ft/min</b>

## Noise



### Noise

Sound power level c/w Tier 4f Engine c/w Tier 4f EU Stage V, US EPA Engine	<b>108 dB</b>	<b>108 dB</b>
Sound pressure level in cab c/w Tier 4f EU Stage V, US EPA Engine	<b>70 dB</b>	<b>70 dB</b>
Vibration transmitted to the hand-arm system of the machine operator	<b>&lt; 2,5 m/s<sup>2</sup></b>	<b>&lt; 8.2 ft/s<sup>2</sup></b>
Vibration transmitted to the whole body of the machine operator	<b>&lt; 0,5 m/s<sup>2</sup></b>	<b>&lt; 1.67 ft/s<sup>2</sup></b>

Soilmec H-cab. By assessing the specific application and listening properly to the wishes and requirements of the operators, Soilmec provides the optimal operator cabin for comfort. Ergonomic seat with air suspension, fully adjustable, lumbar support, air management, as well as lines of sight, quality and safety are standard aspects considered during the design of the right configuration for the cabin.



- Cabin width **1050 mm** **3.4 ft**

- Sliding door, Courtesy lights, Air conditioning system and climate control unit, Radio player with USB aux port



DMS control system, developed and manufactured by Soilmec - is designed to give you a total control over performance, production and all your drilling rigs. In real time all the information relating to the operation work cycles and diagnostics of faults are shown on a multilanguage touch screen display installed in the cab.

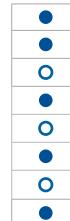
All drilling operations are actuated by two innovative joysticks.

Automatic controls of rotary head and drilling phases are available on request thanks to simple implementation of our DMS system.

# Configurations

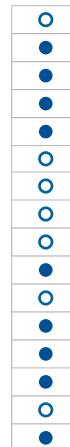
## UNDERCARRIAGE

- Variable gauge, telescopic removable sides
- Stabilizers cylinders
- Hydraulic prearrangement for casing oscillator
- Mechanical prearrangement for casing oscillator
- VRM200KL casing oscillator
- Radio remote control for trammimg operation
- Radio remote control for dismounting track
- Machine anchor points for transport



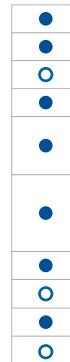
## UPPER STRUCTURE

- Diesel engine CAT C15 ACERT EU Stage IIIA – US EPA Tier 3
- Diesel engine Cummins X15 EU Stage V – US EPA Tier 4F
- Start and slow system
- Electroproportional system
- Harness technology for electrical system
- Automatic greasing package
- Compressor kit
- Electro-proportional system
- Washer lance
- Removable catwalk 900 mm (35.4 in) wide c/w handrails
- Foldable catwalk 900 mm (35.4 in) wide c/w handrails
- Acoustic alarm for trammimg
- Lighting led system package
- Sound proofed canopies
- Silent pack
- Hydraulic prearrangement for additional technologies



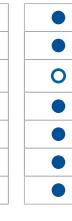
## H-CAB

- Front protective grille
- Falling object protective structure (FOPS)
- Lower front protective grille
- Rearview mirrors
- Comfort packakge (cup holder, radio, A/C system, USB port & 12 V power socket, roll-up awning, courtesy lights)
- Operator seat  
(air suspension, lumbar support, fully adjustable positioning, safety belt & operator presence micro-switch)
- Sliding door
- Sliding window
- Lighting system in front of the cab
- Front tools support



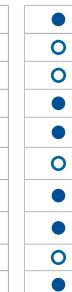
## CONTROL AND MONITORING SYSTEM

- DMS ON BOARD with technological package
- DMS PC
- DMS manager 4.0
- GSM / GPRS / WIFI Modem
- DMS ON BOARD adjustable monitor 12" touch screen
- Video control by 5 cameras with display in the cab
- Inclinometer device with automatic verticality



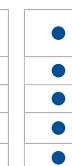
## WINCHES

- Main winch SW350 model - multi layers
- Main winch SW350 model - single layer
- Load cell for main winch
- Limit switch for rope winding and winches
- Depthmeter for main winch
- Anti-slack system for main winch
- Service winch SW130 model
- Load cell for service winch
- Swivel for auxiliary winch
- Service rope holder



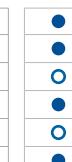
## ROTARY UNIT

- Rotaty unit RD 340 model
- Max torque intermitted: 351 kNm (258880 lbs\*ft)
- Replaceable drive ribs
- Automatic greasing kit for cradle
- Automatic control of motor displacement
- Oil discharge conveying system



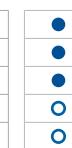
## MAST

- Upper foldable mast element
- Lower foldable mast element
- Automatic greasing package for cathead
- Hydraulic cathead folding kit
- Hydraulic upper mast folding kit
- Double positioning of cylinder



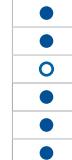
## KELLY BAR TECHNOLOGY

- Rotary sleeve with 3 ribs
- Cardan joint
- Flange for casing driving d. 1500 mm (59 in)
- Automatic return to the centre hole
- Automatic greasing kit for winch crowd



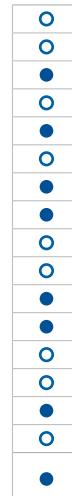
## TELESCOPIC MAST FOOT (ONLY FOR WCS)

- Variable Drilling axis from 1100 mm (43 in) to 1400 (55 in)
- Package for long mast - upgraded version
- Spin off discharging system
- "Click-click" discharging system
- Kelly bar guide



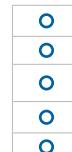
## CFA TECHNOLOGY

- Sleeve 6 m (19.7 in) long 25HD-5
- Sleeve 8,5 m (27.8 in) long 25HD-5
- Package for CFA quick change & direct quick change
- Package for CFA 4-lines pull
- DMS ON BOARD with automatic auger lifting
- Concrete pipe on turret and mast
- Autodrilling package
- Autotary package
- Automatic greasing kit for sleeves block
- Additional pull-down winch
- Hydraulic universal openable lower guide Ø 1200mm (47.2 in)
- Auger cleaner star type
- Double roller auger cleaner Ø 1200 mm (47.2 in)
- Wi-Fi pressure transducer kit for concrete line
- Pressure transducers kit
- Hydraulic prearrangement for VTH-1 vibrator
- Warning system for CFA sleeve extension coupling (patent pending)



## OTHER TECHNOLOGIES

- CSP technology for 4-lines pull version
- Special undercarriage for CSP version
- VDW tech.for Quick Change std and Direct Quick Change version
- DP/TCT tech.for Quick Change std and Direct Quick Change ver.
- TJ tech.for Quick Change std and Direct Quick Change version



standard

optional

\* The technology package is only referred to the machine set up in this specific version

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