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SR-125

soilmec

# Experiencing the Soilmec solution

The vital spark of life, the passion of the soul, the wind of new ideas, the energy of the earth in motion, when all these forces unite, machines emerge as power in its purest state. The power of the mind that imagines and designs things ever dreamed of before.

The power of human hands forges these amazingly complex metal giants, that are nonetheless docile and obedient.

The power of the tools that dig, drill and lift to extract resources from the bowels of the earth, to lay solid and safe foundations, to bring energy, wellbeing and security to everyone, everywhere.



## SR-125 HiT, designed around you.

A Soilmec rig offers much more than simple power.

Engineered to be multifunctional and technology-adaptable.

Robust and accurate design for the most challenging jobsite conditions.

Top performance combined with the best comfort and noise control that has ever been achieved.

Up to 4000 mm (157 in) of drilling diameter.

Depth to 120 m (394 ft).

Self-mounting kelly up to 21,5 m (70.5 ft) long.

Sound power level: 109 dB(A).

Conversion kit easy to fit minimized downtime for conversion into CFA or Displacement (DP) piles.

#### More performance. Better performance. Since forever.







SR-125

#### HIT

soilmec

ACCORPTION A

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HIGH TECHNOLOGY

#### Multifunctionality:

it can perform different technologies. Designed for bored piles with Kelly bar and CFA, it can be easily converted to perform all piling and soil consolidation techniques.

# Customized to your needs.

#### CSP technology.

Three different packages for three different solutions.

Maximum depth: 32 m (105 ft) of auger depth – 25,8 m (84.6 ft) cased depth – 900 mm (36 in) diameter Maximum diameter: 1200 mm (47 in) – 28 m (91.9 ft) of auger depth – 21,8 (71.5 ft) cased depth.

Quicker conversion: 26,1 m (85.6 ft) of auger depth – 17,4 m (57 ft) cased depth – 800 mm (31.5 in) diameter

### Drive system.

#### Our challenge: uncompromised performance and efficiency with low consumption and emission.

To achieve these results, our rig has been equipped with a powerful CAT C18 Acert (470 kW - 630 HP) and a complete package of innovations including the "start & slow" system, a new control of the radiators and its air flows.

All configurations have a continuous fan control system that automatically adjust the speed according to needs, reducing fuel consumption and noise.

The SR-125 whole project aims at reducing noise emissions and easing maintenance by means of: hydraulically driven radiators, new canopy design in the area close to the engine, optimization of the sound-absorbing materials, special care in the air flow controls and specific attention on the parts subject to vibrations.

The combination of all these solutions guarantees the lowest noise in its segment with values LwA and LpA of 109 dB and 78 dB for all available engines.



## Environment starts from safety.

Safety is Soilmec's top priority. We constantly enhance product design and we're doing our best to help you meet your safety goals and create safe working environments. We consider the safety of everyone in, on or around Soilmec equipment when developing new products or enhancing safety features for existing products. Our equipment has several safety features such as but not limited to:

- Cab Lighting
- Visibility Arrangements
- Catwalks, non-slip steps and handrails
- Safety cameras
- Operator Not Present Monitoring System

Every Soilmec equipment can be purchased with the EC EN16228 certification package which includes all accessories / devices to ensure the highest level of accessibility and safety in accordance with European standards.

Each machine under goes the most stringent functional and performance tests: all loads are detected and compared with the expected values to guarantee the highest quality in production.











soilmeco

2333

## DMS Everything under control wherever you are.

Ones.

solimece

Profondimetro -1.23 m

Velocità 0.00 m/min Sovraconsumo

23%

Dati calcestruzzo 3.5 m³ 0.0 l/min

60 clp 0.0 clp/min - 0 bar

Total control through the most advanced monitoring system in foundation field.

DMS, Drilling Mate System, is the control center of your job site and Soilmec drilling rigs.

In 2004, Soilmec was the first manufacturer in the world to develop a system for the global control of the drilling rig and of the production processes.

DMS is available in each Soilmec rig and you can have 3 different packages that allow you to have the best possible control of your activities.



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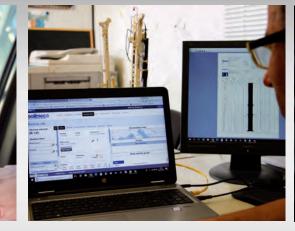
5 bar



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#### DMS ON BOARD

It is the heart of the rig able to monitor all the drilling phases directly from the operator's cab. The system consists of a multilinguage touch screen display fitted on a adjustable arm. It is designed to display in real time all



#### DMS PC

Licensed software that displays and process the data acquired by "DMS On Board".



#### DMS MANAGER 4.0

Soilmec cloud-running application for remote, centralized supervision of the rig fleet and productivity in real time thanks to IoT technology.

### Individuality, quality and technology.



Providing more comfort, added safety, and greater reliability, our ergonomic designed operator's cab will help you produce more. By assessing the specific application and listening properly to the wishes and requirements of the operators, our engineers have designed what we believe to be the most comfortable and productivity-enhancing cabin.

A unique solution in this category (1050 mm /41.6 in wide) in which several accessories facilitate the work of the operator.

• Improved operator performance – Reduced cognitive fatigue and enhanced productivity via the intuitive and visually DMS display monitor. Effortless operation and improved control response resulting from new joysticks with designed ergonomic handles. Fully adjustable seat, new air conditioner system and sliding door are some of the accessories you can find inside Soilmec cab to meet your operator needs for comfort and productivity

• Enhanced safety – The large windows are designed to improve visibility and brightness improving the general job site safety. Maximum operator feeling of full awareness of all the surrounding environment via external camera system with direct feed to overhead monitors in cab.







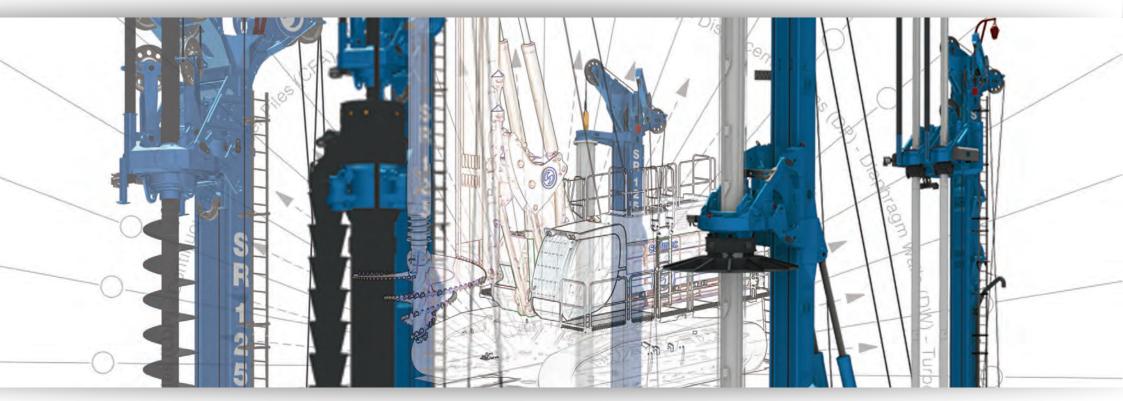


# Ready to support you at any stage of your choice. Always.

Technical<br/>supportOriginal<br/>sparesTraining<br/>Image: AuditingMaintenance<br/>service contractsDMS<br/>control<br/>center

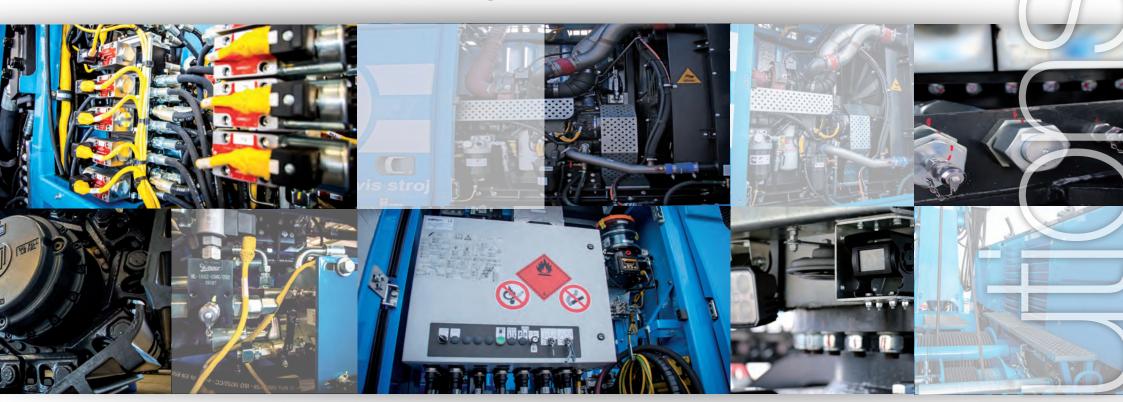
soilmeco

### Our expertise and solution for the foundation industry...



... to operate flawlessly.

#### Choose according to you needs.



Anti-slack rope system (Patent Pending). The system is managed by the DMS ON BOARD and suggests when to slow down the kelly bar descent to avoid collisions with the bottom of the hole and excessive unwinding of the main rope.

Automatic return to centre hole. Designed to speed up the discharging phase.

Main winch SW470 model. Main winch in single layer with 470 kN (105660 lbf) line pull.

**Drilling axis at 1800 mm (70 in).** A simple package to change the drilling axis from 1550 to 1800 mm (from 61 into 70 in).

**CFA/DP technology.** Quick and easy package to convert the rig from LDP to CFA/DP.

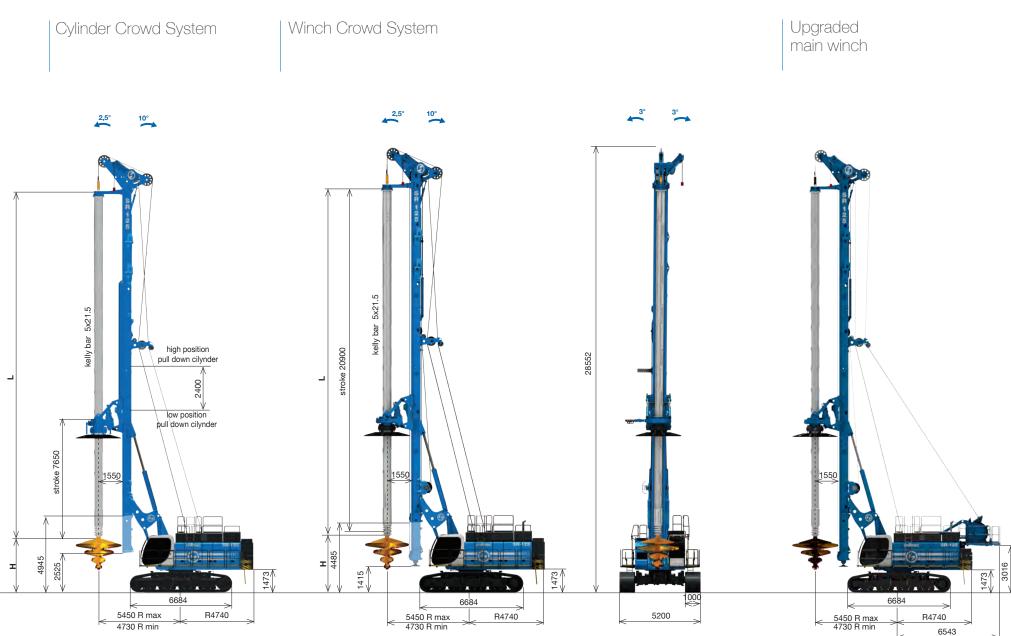
**CSP technological package.** The perfect solution for your cased secant piles.

**CFA autorotary.** The operator can activate this function by a dedicated pedal or joystick.

**CFA autodrilling.** Automated CFA operations by means of electronic device for optimal control of drilling parameters.

Long service rope. 32 m (105 ft) longer than standard rope.

Automatic Greasing package. No more worries, selfgreasing of most critical parts.



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

Large Diameter Piles

| LDP - Large Diameter Piles - CCS version   |                |              |
|--|----------------|--------------|
| Operating weight w/o kelly bar   | 126700 kg      | 279323 lb    |
| Max pile diameter (tool along the mast)  | 3000 mm        | 118 in       |
| Max pile diameter c/w increased drilling axis <sup>1</sup> (tool along the mast)   | 3500 mm        | 138 in       |
| Max pile diameter w/o lower mast section <sup>1-2</sup> (tool below the mast)  | 3500 mm        | 138 in       |
| Max pile diameter c/w increased drilling axis <sup>1</sup> & w/o lower mast section <sup>1-2</sup> (tool below the mast) | 4000 mm        | 157 in       |
| Working radius <sup>4</sup>  | 4730 - 5450 mm | 186 - 214 in |
| Tail swing radius  | 4750 mm        | 15.5 ft      |
| Max pile depth-friction kelly  | 120 m          | 394 ft       |
| Max pile depth-locking kelly   | 100 m          | 328 ft       |

| LDP - Large Diameter Piles - WCS version   |                |              |
|--|----------------|--------------|
| Operating weight w/o kelly bar   | 128700 kg      | 283732 lb    |
| Max pile diameter (tool along the mast)  | 2800 mm        | 110 in       |
| Max pile diameter c/w increased drilling axis <sup>1</sup> (tool along the mast)   | 3300 mm        | 130 in       |
| Max pile diameter w/o lower mast section <sup>1-3</sup> (tool below the mast)  | 3500 mm        | 138 in       |
| Max pile diameter c/w increased drilling axis <sup>1</sup> & w/o lower mast section <sup>1-3</sup> (tool below the mast) | 4000 mm        | 157 in       |
| Working radius <sup>4</sup>  | 4730 - 5450 mm | 186 - 214 in |
| Tail swing radius  | 4750 mm        | 15.5 ft      |
| Max pile depth-friction kelly  | 120 m          | 394 ft       |
| Max pile depth-locking kelly   | 100 m          | 328 ft       |

| LDP - Special arrangement with upgraded main winch |           |           |
|--|-----------|-----------|
| Operating weight w/o kelly bar CCS version         | 127800 kg | 281748 lb |
| Operating weight w/o kelly bar WCS version         | 130100 kg | 286818 lb |
| Tail swing radius                                  | 6543 mm   | 22.1 ft   |
| Max pile depth using single layer                  | 119 m     | 390 ft    |

<sup>1</sup> package on request

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

<sup>3</sup> rotary stroke reduced - depth reduced by 2,4 m (7.8 ft)

<sup>4</sup> working radius with increased drilling axis: 4980 - 5700 mm (199 - 228 in)

#### Kelly bars for LDP

| Kelly | Kelly    | Dr    | illing |      |       |      | L    |     |       |      |      |      |      |
|-------|----------|-------|--------|------|-------|------|------|-----|-------|------|------|------|------|
| type  | dimens.  |       |        |      |       | Ler  | ngth | CC  | S_low | CCS  | high | W    |      |
|       |          | m     | ft     | t    | t(US) | m    | ft   | m   | ft    | m    | ft   | m    | f    |
| BL HD | 3 x 11   | 28,6  | 93.8   | 7,8  | 8.6   | 12,5 | 41.0 | 9,7 | 31.8  | 12,1 |      | 13,7 | 44.9 |
| BL HD | 3 x 12   | 32,2  | 105.6  | 8,4  | 9.2   | 13,8 | 45.3 | 9,7 | 31.8  |      | 39.7 | 12,5 | 41.0 |
| BL HD | 3 x 13,5 | 36,1  | 118.4  | 9,2  | 10.1  | 15,0 | 49.2 | 9,7 | 31.8  |      | 36.7 | 11,2 | 36.7 |
| BL HD | 3 x 14,5 | 39,2  | 128.6  | 9,8  | 10.7  | 16,1 | 52.8 | 9,7 | 31.8  |      | 33.5 | 10,2 | 33.5 |
| BL HD | 3 x 16   | 43,2  | 141.7  | 10,6 | 11.6  |      | 57.4 | 8,8 | 28.9  |      | 28.9 | 8,8  | 28.9 |
| BL HD | 3 x 19,5 | 53,9  | 176.8  | 12,5 | 13.8  | 21,0 | 68.9 | 5,3 | 17.4  |      | 17.4 | 5,3  | 17.4 |
| BL HD | 3 x 21,5 | 59,9  | 196.5  | 13,6 | 15.0  | 23,0 | 75.5 | 3,3 | 10.8  |      | 10.8 | 3,3  | 10.8 |
| BL HD | 4 x 11   | 38,1  | 125.0  | 9,2  | 10.1  | 12,5 | 41.0 | 9,7 | 31.8  | 12,1 | 39.7 | 13,7 | 44.9 |
| BL HD | 4 x 12   | 43,3  | 142.1  | 9,8  | 10.8  | 13,8 | 45.3 | 9,7 | 31.8  | 12,1 | 39.7 | 12,5 | 41.0 |
| BL HD | 4 x 13,5 | 48,0  | 157.5  | 10,8 | 11.9  | 15,0 | 49.2 | 9,7 | 31.8  | 11,2 | 36.7 | 11,2 | 36.7 |
| BL HD | 4 x 14,5 | 52,5  | 172.2  | 11,5 | 12.6  | 16,1 | 52.8 | 9,7 | 31.8  | 10,2 | 33.5 | 10,2 | 33.5 |
| BL HD | 4 x 16   | 57,9  | 190.0  | 12,4 | 13.7  | 17,5 | 57.4 | 8,8 | 28.9  | 8,8  | 28.9 | 8,8  | 28.9 |
| BL HD | 4 x 17,5 | 65,0  | 213.3  | 13,4 | 14.7  | 19,2 | 63.0 | 7,0 | 23.0  | 7,0  | 23.0 | 7,0  | 23.0 |
| BL HD | 4 x 19,5 | 72,1  | 236.5  | 14,7 | 16.1  | 21,0 | 68.9 | 5,3 | 17.4  | 5,3  | 17.4 | 5,3  | 17.4 |
| BL HD | 4 x 21,5 | 80,1  | 262.8  | 16,0 | 17.6  | 23,0 | 75.5 | 3,3 | 10.8  | 3,3  | 10.8 | 3,3  | 10.8 |
| BL HD | 5 x 13,5 | 60,4  | 198.2  | 11,8 | 13    | 15.0 | 49.2 | 9,7 | 31.8  | 11,2 | 36.7 | 11,2 | 36.7 |
| BL HD | 5 x 14,5 | 65,7  | 215.6  | 12,5 | 13.8  | 16,1 | 52.8 | 9,7 | 31.8  | 10,2 | 33.5 | 10,2 | 33.5 |
| BL HD | 5 x 16   | 72,4  | 237.5  | 13,7 | 15    | 17,5 | 57.4 | 8,8 | 28.9  | 8,8  | 28.9 | 8,8  | 28.9 |
| BL HD | 5 x 17,5 | 81,4  | 267.1  | 14,8 | 16    | 19.2 |      | 7,0 | 23.0  | 7,0  | 23.0 | 7,0  | 23.0 |
| BL HD | 5 x 19,5 | 90,3  | 296.3  | 16,3 | 18    | 21.0 | 68.9 | 5,3 | 17.4  | 5,3  | 17.4 | 5,3  | 17.4 |
| BL HD | 5 x 21,5 | 100,1 | 328.4  | 17,8 | 19.6  | 23.0 | 75.5 | 3,3 | 10.8  | 3,3  | 10.8 | 3,3  | 10.8 |
| FR HD | 6 x 16   | 87,6  | 287.4  | 15,2 | 16.7  | 17.5 | 57.4 | 8,8 | 28.9  |      | 28.9 | 8,8  | 28.9 |
| FR HD | 6 x 17,5 |       | 321.2  | 16,4 | 18.1  | 19.2 |      | 7,0 | 23.0  |      | 23.0 | 7.0  | 23.0 |
| FR HD | 6 x 19   | 105,4 |        | 17,7 | 19.5  |      | 67.3 | 5,8 | 19.0  |      | 19.0 | 5,8  | 19.0 |
| FR HD | 6 x 19,5 | 108,5 |        | 18.1 | 19.9  | 21.0 |      | 5.3 | 17.4  |      | 17.4 | 5.3  | 17.4 |
| FR HD |          | 120,5 |        | 19.8 | 21.8  |      | 75.5 | 3.3 | 10.8  |      | 10.8 | 3.3  | 10.8 |

deep referred to 1550 mm (61 in) drilling axis. Depth reduced by 300 mm (11.8 in) using 1800 mm (70.9 in) drilling axis

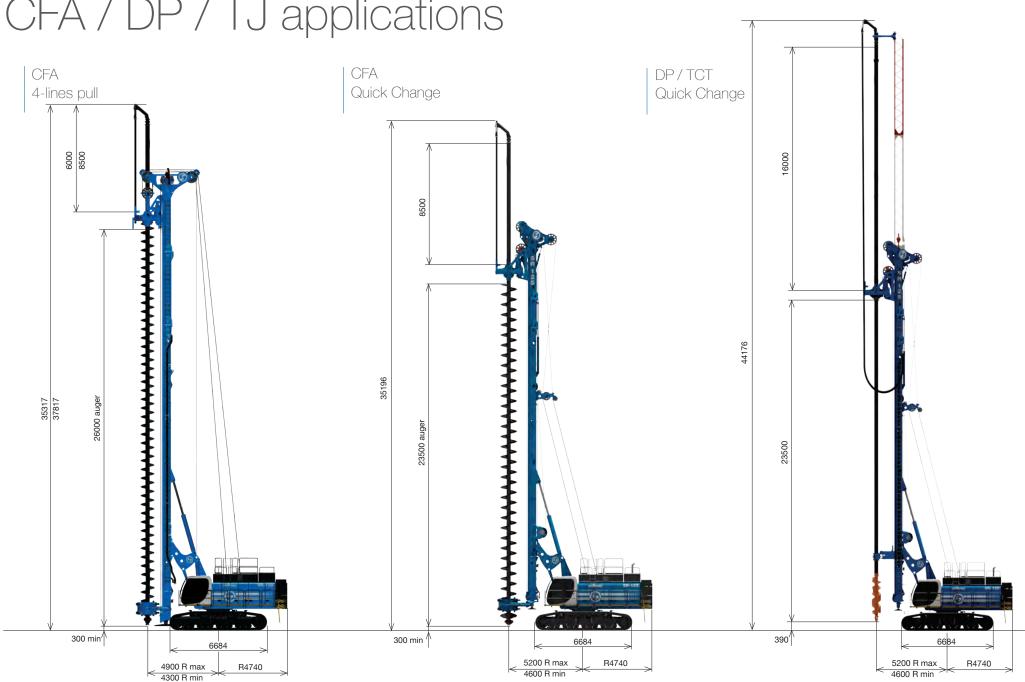
kelly over 19 m (62.3 ft) length becames not self-mounting w/o lower mast section

<sup>1</sup> drilling depth is reduced by 2,4m (7.8 ft) without lower mast section or cylinder crowd in high position; drilling depth is calculated with kelly bar c/w stub 200x200 and drilling tool 1500 mm (4.9 ft) long

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

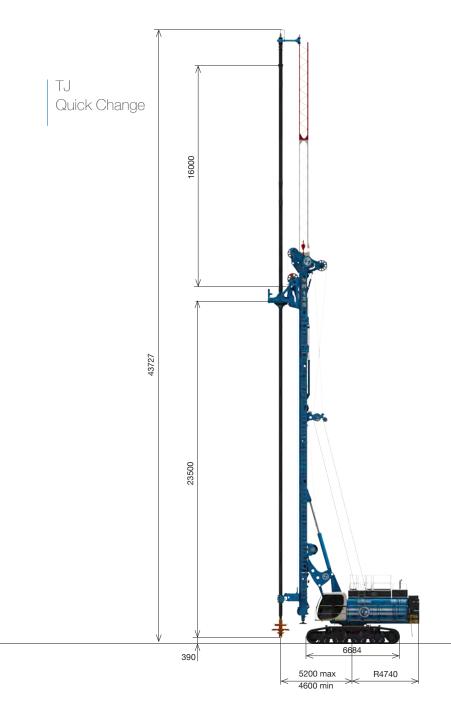
<sup>3</sup> special kelly bars are available in order to increase the residual extraction force (rotary torque derated)

<sup>4</sup> rotary torque derated



## CFA / DP / TJ applications

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

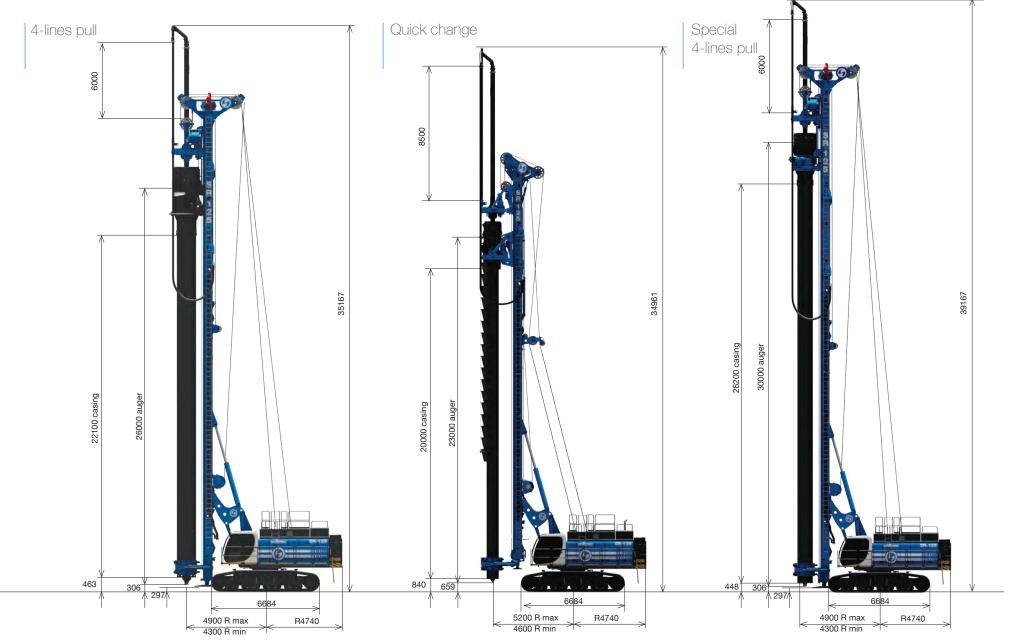


| CFA - Continuous Flight Auger - 4-lines pull - standard version                       | 101000 km            | 290566 lb     |
|---|----------------------|---------------|
| Operating weight (c/w 6 m - 19.6 ft sleeve extension, w/o auger)<br>Max pile diameter | 131800 kg<br>1200 mm | 47.24 in      |
| Max length of auger (max length of sleeve extension)                                  | 26 m (8,5 m)         | 85 ft (28 ft) |
| Max pile depth (c/w 8,5 m - 27.9 ft sleeve extension) 1                               | 34,5 m               | 113 ft        |
| Nominal extraction force  | 1296 kN              | 291347 lbf    |
| Nominal crowd force on auger <sup>2-3</sup>   | 540 kN               | 121395 lbf    |
| CFA - Continuous Flight Auger - 4-lines pull - special version                        |                      |               |
| <b>Operating weight</b> (c/w 6 m - 19.6 ft sleeve extension, w/o auger)               | 133100 kg            | 293432 lb     |
| Max pile diameter   | 1200 mm              | 47.24 in      |
| Max length of auger (max length of sleeve extension)                                  | 30 m (8,5 m)         | 98 ft (28 ft) |
| Max pile depth (c/w 8,5 m - 27.9 ft sleeve extension) <sup>1</sup>                    | 38,5 m               | 126 ft        |
| Nominal extraction force  | 984 kN               | 221208 lbf    |
| Nominal crowd force on auger <sup>2-3</sup>   | 540 kN               | 121395 lbf    |
| CFA - Continuous Flight Auger - Quick change  |                      |               |
| Operating weight (c/w 8,5 m - 27.9 ft sleeve extension, w/o auger)                    | 130400 kg            | 287480 lb     |
| Max pile diameter   | 1200 mm              | 47.24 in      |
| Max length of auger (max length of sleeve extension)                                  | 23,5 m (8,5 m)       | 77 ft (28 ft) |
| Max pile depth (c/w 8,5 m - 27.9 ft sleeve extension) <sup>1</sup>                    | 29,7 m               | 97 ft         |
| Nominal extraction force  | 1200 kN              | 269766 lbf    |
| Nominal group force on autor  | 540 LN               | 121395 lhf    |
| DP - Displacement pile - <b>Quick change</b> <sup>4</sup>                             |                      |               |
| <b>Operating weight</b> (w/o string and tool and extension 16 m - 52.5 ft)            | 132400 kg            | 291889 lb     |
| Max recommended DP pile diameter  | 800 mm               | 31.50 in      |
| Max recommended TCT pile diameter   | 1000 mm              | 39.37 in      |
| Max length of string  | 23,5 m               | 77 ft         |
| Max pile depth w/o lattice boom extension c/w 8,5 m (27.9 ft) string extension        | 28,5 m               | 94 ft         |
| Lattice boom extension length   | 16 m                 | 52 ft         |
| TJ - Turbo jet - <b>Quick change</b> <sup>4</sup>                                     | 00                   | 110 4         |
| <b>Operating weight</b> (w/o string and tool and extension 16 m - 52.5 ft)            | 132800 kg            | 292771 lb     |
| Max recommended TJ pile diameter  | 1500 mm              | 59.06 in      |
| Max length of string  | 23.5 m               | 77.1 ft       |
| Max pile depth w/o lattice boom extension c/w 8,5 m (27.9 ft) string extension        | 26 m                 | 85 ft         |
| Lattice boom extension length   | 16 m                 | 52 ft         |
| Max pile depth c/w lattice boom extension   | 36 m                 | 118 ft        |

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<sup>1</sup> depth reduced of 1,8 m (5.90 ft) with roller auger cleaner <sup>2</sup> package on request - depth reduced by 1,4 m (4.59 ft) <sup>3</sup> 100 kN (22480 lbf) also available on request - depth reduced by 250 mm (0.82 ft) <sup>4</sup> DP/TCT and TJ are also available with 4-line pull version

# CSP applications



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

| Operating weight (c/w 6 m - 19.6 ft sleeve extension, w/o auger and casing) | 151800 kg         | 334658 lb            |
|---|-------------------|----------------------|
| Max pile diameter   | 1200 mm           | 47.24 in             |
| Max augered depth w/o auger cleaner <sup>1</sup>                            | 28,6 m (22,6 + 6) | 94 ft (74.15 + 19.6) |
| Max cased depth w/o auger cleaner <sup>1</sup>                              | 22,4 m            | 73 ft                |
| Casing max torque   | 400 kNm           | 295020 lbf*ft        |
| Max casing speed rotation   | 9,6 rpm           | 9.6 rpm              |
| Auger max torque  | 411 kNm           | 303133 lbf*f         |
| Max auger speed rotation  | 34,7 rpm          | 34.7 rpm             |
| Nominal auger pull up/down  | 1296 / 400 kN     | 291347 / 89922 f     |
| Nominal casing pull up/down   | 940 / 540 kN      | 211317 / 121395 f    |

| CSP - Cased secant piles - Quick change                                       |                     |                       |
|---|---------------------|-----------------------|
| Operating weight (c/w 8,5 m - 27.9 ft sleeve extension, w/o auger and casing) | 141500 kg           | 311951 lb             |
| Max pile diameter   | 800 mm              | 31.5 in               |
| Max augered depth w/o auger cleaner <sup>1</sup>                              | 26,7 m (18,2 + 8,5) | 87.6 ft (59.7 + 27.9) |
| Max cased depth w/o auger cleaner <sup>1</sup>                                | 18 m                | 59.06 ft              |
| Casing max torque   | 411 kNm             | 303133 lbf*ft         |
| Max casing speed rotation   | 9,7 rpm             | 9.7 rpm               |
| Auger max torque  | 250 kNm             | 184387 lbf*ft         |
| Max auger speed rotation  | 19,6 rpm            | 19.6 rpm              |
| Nominal auger pull up   | 720 kN              | 161860 lbf*ft         |
| Nominal casing pull up/down   | 490 / 490 kN        | 110154 / 110154 lbf   |

| Operating weight (c/w 6 m - 19.6 ft sleeve extension, w/o auger and casing) | 153300 kg         | 337965 lb            |
|---|-------------------|----------------------|
| Max pile diameter   | 900 mm            | 35.43 in             |
| Max augered depth w/o auger cleaner <sup>1</sup>                            | 32,6 m (26,6 + 6) | 107 ft (87.2 + 19.6) |
| Max cased depth w/o auger cleaner <sup>1</sup>                              | 26,4 m            | 87 ft                |
| Casing max torque   | 400 kNm           | 295020 lbf*ft        |
| Max casing speed rotation   | 9,6 rpm           | 9.6 rpm              |
| Auger max torque  | 411 kNm           | 303133 lbf*ft        |
| Max auger speed rotation  | 34,7 rpm          | 34.7 rpm             |
| Nominal auger pull up/down  | 984 / 315 kN      | 221208 / 70814 fi    |
| Nominal casing pull up/down   | 740 / 540 kN      | 166356 / 121395 f    |

<sup>1</sup> depth reduced of 0,6 m (1.9 ft) with cleaner

Soilmec competitive edge in CSP mode is a higher performance which is achieved by having two independent rotaries: during auger lifting to remove the spoil, there is no need to extract the casing.

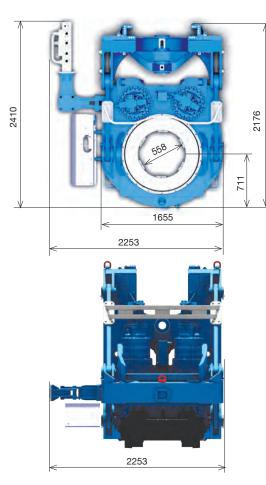
940 kN extraction force on casing, the highest extraction force within its class range.

This thanks to the additional winch, which is included in our standard package.

Soilmec innovative solution is a special kit for a rapid conversion of your drilling rig into CSP mode. The existing rotary is used to drive the casing.

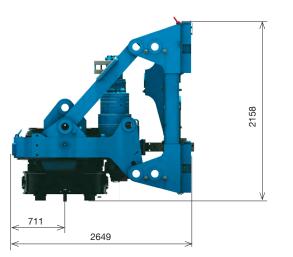
The easy conversion allows you to choose the best rig configuration to suit your different needs.

#### Rotary



| Туре                                  | Multigear version | Multigear version |
|---------------------------------------|-------------------|-------------------|
| Max torque                            | 435 kNm           | 320834 lbf*ft     |
| 1 <sup>st</sup> gear rated torque     | 411 kNm           | 303133 lbf*ft     |
| Max drilling speed                    | 35 rpm            | 35 rpm            |
| Max spin off speed                    | 81 rpm            | 81 rpm            |
| Weight (w/o cradle and casing flange) | 7000 kg           | 15432 lb          |

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



#### Rotary torque diagram



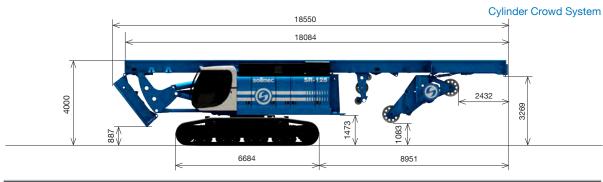
The new rotary design allows a longer stroke, a higher extraction force and maximum use of available power. Every detail has been accurately designed to increase jobsite production.

The rotary sleeve is composed of 6 symmetrical and interchangeable ribs in order to reduce maintenance time. The inner passage is 617 mm (24.2 in) without ribs.

All our rotary heads are equipped with an automatic control of motor displacements. This optimizing the drilling speed and the productivity in every phase.

Our rotary can be equipped with a new system to variate the drilling axis clearance, from 1550 mm to 1800 mm (from 61 in to 70 in).

## Transport, dimensions & weights

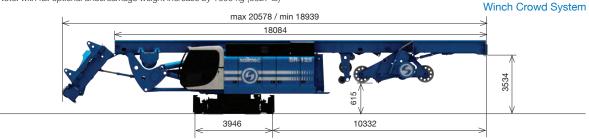


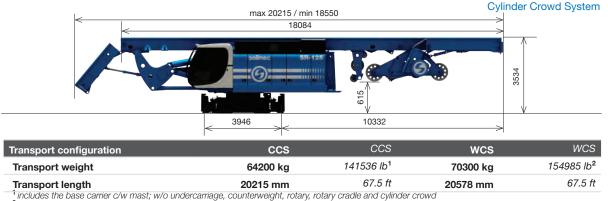
| Transport configuration                     | ccs                               | CCS                          | WCS      | WCS                    |
|---|-----------------------------------|------------------------------|----------|------------------------|
| Transport weight                            | 90340 kg                          | 199165 lb¹                   | 96600 kg | 212966 lb <sup>2</sup> |
| Transport length <sup>3</sup>               | 18550 mm                          | 60.8 ft                      | 18939 mm | 62.1 ft                |
| includes the base carrier c/w undercarriage | mast: w/o counterweight rotary ro | stary cradle and cylinder cr | rowd     | **                     |

<sup>2</sup> includes the base carrier c/w undercarriage, mast, w/o counterweight, rotary, rotary cradie and cylinder crowc
<sup>2</sup> includes the base carrier c/w undercarriage, mast, rotary cradle, winch crowd; w/o counterweight and rotary

<sup>3</sup> by truck shipment the maximum length will be 20578 mm (67.5 ft)

Note: with full optional undercarriage weight increase by 1600 kg (3527 lb)

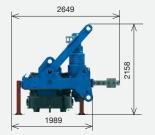


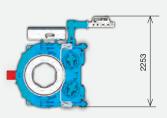


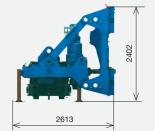
<sup>2</sup> includes the base carrier c/w mast; w/o undercarrage, counterweight, rotary, rotary cradie and cylinder crowd

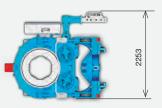
Note: with full optional undercarriage weight increase by 1500 kg (3306 lb)

Rotary

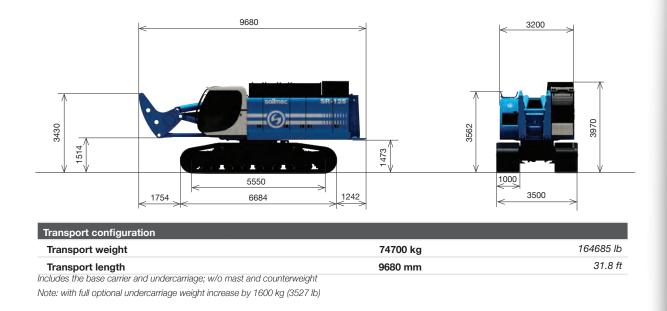


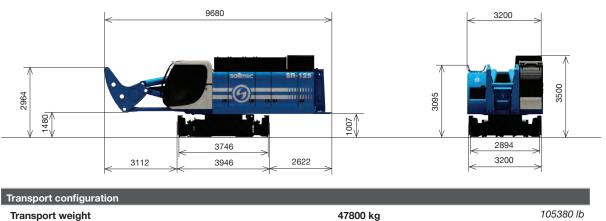






## Transport, dimensions & weights





 Transport weight
 47800 kg
 705307 lb

 Transport length
 9680 mm
 31.8 ft

Includes the only base carrier

Note: with full optional undercarriage weight increase by 1500 kg (3306 lb)

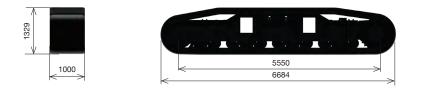
#### Streamlined mast disassembly

A new useful system (patent pending) to make mast disassembly easy, fast and safe. This innovative system consists of mechanical lifting accessories (which are fixed on the mast and kinematic mechanism) and a hydraulic device to move the mast cylinders during assembling and disassembling operations. You only need one external service crane to remove the mast from base carrier.





| Transport configuration | CCS      | CCS       | WCS      | WCS      |
|-------------------------|----------|-----------|----------|----------|
| Transport weight        | 18800 kg | 41446 lb* | 23300 kg | 51367 lb |
| Transport length        | 20423 mm | 67 ft     | 21339 mm | 70 ft    |
| Transport width         | 2500 mm  | 8.2 ft    | 2500 mm  | 8.2 ft   |

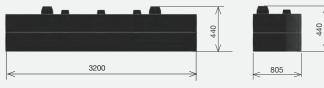


| Transport configuration           |          |           |
|-----------------------------------|----------|-----------|
| Transport weight for each element | 13300 kg | 29321 lb  |
| Transport length                  | 6684 mm  | 263.15 in |

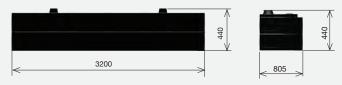
#### Stackable counterweight



n.1 x 4 ton (8818 lb)



n.2 x 1,4 ton (3086 lb)



n.3 x 4,4 ton (9700 lb)

Weights referred to kelly version. Different configuration of counterweights are available for other versions.

| Transport stackable counterweight |         |         |
|-----------------------------------|---------|---------|
| Transport length                  | 3200 mm | 10.5 ft |

## Technical data

| Crowd  |  |
|--------|--|
| svstem |  |

| Crowd    | CCS_Cylinder Crowd System                          |                               |                              |
|----------|--|-------------------------------|------------------------------|
| system   | Stroke   | 7650 mm                       | 301 in                       |
|          | Crowd force pull (down/up)                         | 345 / 412 kN                  | 77558 / 92620 lbf            |
|          | Speed up (slow/fast)                               | 5,5 / 20 m/min                | 18.04 / 65.62 ft/min         |
|          | Speed down (slow/fast)                             | 5,5 / 20 m/min                | 18.04 / 65.62 ft/min         |
|          | WCS_Winch Crowd System                             |                               |                              |
|          | Stroke   | 20400 / 23400 mm              | 803 / 921 in                 |
|          | Crowd force pull (down/up)                         | 540 / 540 kN                  | 121395 / 121395 lbf          |
|          | Speed up (slow/fast)                               | 8,8 / 35,3 m/min              | 29 / 116 ft/min              |
|          | Speed down (slow/fast)                             | 8,8 / 35,3 m/min              | 29 / 116 ft/min              |
|          | Engine   |                               |                              |
| Engine 🔔 | Engine   | CAT C18 Acert                 | CA C18 Acert                 |
|          | Rated output ISO 3046-I                            | 470 kW @ 1800 rpm             | 630 HP @ 1800 rpm            |
|          | Engine conforms to Exhaust emission Standard       | EU stage V<br>US EPA Tier4f * | EU stage V<br>US EPA Tier4f* |
|          | Fuel tank capacity                                 | 1052 I                        | 278 US gal                   |
|          | AD Blue tank capacity                              | 48 I                          | 13 US gal                    |
|          | * CAT C18 Stade IIIA / LIS EPA Tier 3 is available | on request                    |                              |

\* CAT C18 Stage IIIA / US EPA Tier 3 is available on request

Winches 

| Туре                         | controlled descent | controlled descent |
|------------------------------|--------------------|--------------------|
| Model                        | SW440              | SW440              |
| Rope layers                  | 2                  | 2                  |
| Line pull (1st layer)        | 442 kN             | 99366 lbi          |
| Rope diameter                | 36 mm              | 1.42 in            |
| Line speed (max.)            | 68 m/min           | 223 ft/min         |
| Single layer main winch - on | request            |                    |
| Туре                         | controlled descent | controlled descent |
| Model                        | SW470              | SW470              |
| Rope layers                  | 1                  | 1                  |
| Line pull (1st layer)        | 470 kN             | 105660 lb          |
| Rope diameter                | 38 mm              | 1.50 ir            |
| Line speed (max.)            | 56 m/min           | 183 ft/mir         |
| Auxiliary winch              |                    |                    |
| Туре                         | controlled descent | controlled descent |
| Rope layers                  | 2                  | 2                  |
| Line pull (1st layer)        | 132 kN             | 29674 lbi          |
| Rope diameter                | 22 mm              | 0.87 in            |
| Line speed (max.)            | 77 m/min           | 253 ft/min         |

| Hydraulic                             | Hydraulic system  |                        |                          |
|---------------------------------------|---|------------------------|--------------------------|
| system                                | Main pumps flow 2   | 2x451 + 2x292 l/min    | 2x119 + 2x77 US gal/min  |
| 0                                     | Third pump flow   | 98 l/min               | 26 US gal/min            |
| Pare 4                                | Hydraulic oil tank capacity   | 1000 I                 | 264 US gal               |
| Noise                                 | Noise   |                        |                          |
|                                       | Sound pressure level in cab c/w Tier 4f Engin                           | e 76 dB(A)             | 76 dB(A)                 |
|                                       | Sound power level c/w Tier 4f Engine                                    | 107 dB(A)              | 107 dB(A)                |
|                                       | Vibration transmitted<br>to the hand-arm system of the machine operator | < 2.5 m/s <sup>2</sup> | < 8.2 ft/s²              |
|                                       | Vibration transmitted<br>to the whole body of the machine operator      | < 0.5 m/s <sup>2</sup> | < 1.64 ft/s <sup>2</sup> |
| Undercarriage                         | Undercarriage   |                        |                          |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Туре  | variable gauge, tele   | escoping removable sides |
|                                       | Overall width with retracted crawlers                                   | 3500 mm                | 137.80 in                |
|                                       | Overall width with extended crawlers                                    | 5200 mm                | 204.72 in                |
|                                       | Overall width with removed crawlers                                     | 2980 mm                | 117.32 in                |

| Overall width with extended crawlers | 5200 mm        | 204.72 in   |
|--------------------------------------|----------------|-------------|
| Overall width with removed crawlers  | 2980 mm        | 117.32 in   |
| Width of triple grouser track shoes  | 1000 mm        | 39.37 in    |
| Overall length of crawlers           | 6684 mm        | 263.15 in   |
| Traction force                       | 889 kN         | 199855 lbf  |
| Travelling speed                     | 0,8 / 1,7 km/h | 0.5 / 1 mph |

Especially designed for heavy duty applications that require less penetration, better turning capability and less ground disturbance. Maintenance-free crawler track. Hydraulic chain tensioning device.

# Configurations

| UNDERCARRIAGE  |   | WINCHES   |                     |
|--|---|---|---------------------|
| Stabilizers cylinders  | 0 | Load cell for main winch  |                     |
| Hydraulic prearrangement for casing oscillator   | 0 | Limit switch for rope winding and winches                         |                     |
| Mechanical prearrangement for casing oscillator  | • | Depthmeter for main winch   |                     |
| VRM250KL casing oscillator   | 0 | Anti-slack system for main winch                                  | 0                   |
| Radio remote control for tramming operation  | • | Load cell for service winch                                       | •                   |
| Radio remote control for dismounting track   | 0 | Swivel for auxiliary winch  | 0                   |
| Machine anchor points for transport  |   | Service rope holder   |                     |
| UPPER STRUCTURE  |   | ROTARY  | ,                   |
| Start and slow system  |   | Replaceable drive ribs  | •                   |
| Electroproportional system   |   | Automatic greasing kit for cradle                                 | •                   |
| Harness technology for electrical system   |   | Automatic control of motor displacement                           | •                   |
| Automatic greasing package   | • | Oil discharge conveying system                                    | •                   |
| Compressor kit   | 0 | MAST  |                     |
| Washer lance   | 0 | Upper foldable mast element                                       |                     |
| Acoustic alarm for tramming  | • | Lower foldable mast element                                       | •                   |
| Lighting led system package  | • | Automatic greasing package for cathead                            | •                   |
| Sound proofed canopies   |   | Hydraulic cathead folding kit                                     | •                   |
| Hydraulic prearrangement for additional technologies   | • | Hydraulic upper mast folding kit                                  |                     |
| САВ  |   | Double positioning of cylinder                                    |                     |
| Front protective grille  | • | TECHNOLOGY  |                     |
| Falling object protective structure (FOPS)   | • | Sleeve 6 m (19.7 in) long 25HD-5                                  | 0                   |
| Lower front protective grille  | 0 | Sleeve 8,5 m (27.8 in) long 25HD-5                                | 0                   |
| Rearview mirrors   | • | Package for CFA quick change & direct quick change                | •                   |
| Comfort packakge   | • | Package for CFA 4-lines pull                                      | 0                   |
| (cup holder, radio, A/C system, USB port & 12 V power socket, roll-up awning, courtesy lights)               |   | DMS ON BOARD with automatic auger lifting                         |                     |
| Operator seat  | • | Concrete pipe on turret and mast                                  | 0                   |
| (air suspension, lumbar support, fully adjustable positioning, safety belt & operator presence micro-switch) |   | Automatic greasing kit for sheeves block                          |                     |
| Sliding door Sliding window  |   | Additional pull-down winch  | 0                   |
|  |   | Wi-Fi pressure transducer kit for concrete line                   | 0                   |
| Lighting system in front of the cab  |   | Pressure transducers kit  |                     |
| Front tools support CONTROL AND MONITORING SYSTEM  | 0 | Hydraulic prearrangement for VTH-1 vibrator                       | 0                   |
|  |   | Warning system for CFA sleeve extension coupling (patent pending) |                     |
| DMS suite<br>GSM / GPRS / WIFI Modem   |   | CSP technology for 4-lines pull version                           | 0                   |
|  |   |   |                     |
| DMS ON BOARD adjustable monitor 12" touch screen   |   | _   |                     |
| Video control by 5 cameras with display in the cab   |   | _   | standard O optional |
| Inclinometer device with automatic verticality   |   |   |                     |

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