



SR-45 ADVANCED

soilmec 
Drilling and Foundation Equipment

This is a great story.

This is the story of machines, of million of pieces, both big and small, put together by human effort and ingenuity. Great, powerful, efficient rigs for deep foundations and shaped for your future.

This is the story of hard work, the daily toil of a team spread out across distant, almost inaccessible lands, but held together by common values and passion that knows no borders, because it's so perfectly human.



Our Vision.

We aim to be leader in the foundation machinery industry by developing a superior competence on combining Machines, Technologies, Software and Service into unique solutions tailored on customer needs:

Soilmec the Ground Engineering Global Solution Provider

An aerial photograph of a construction site. A blue Solitrac SR-45 ADV crane is positioned on a concrete pad, extending its long jib over a large excavation. The excavation is filled with rebar and wooden formwork. The crane's body is labeled 'SR-45' and 'Solitrac'. The background shows more of the construction site with various materials and structures.

SR-45 ADV. Flexible power with advanced technology.

**Advanced technology and flexibility.
Setting new standards to outperform the
foundation industry.**

SR-45 encapsulates power and technology adaptability in a compact size (less than 43 ton / 94,800 lb).

Its accurate and elaborate design makes SR-45 unique within its rig class.

Easy to operate, SR-45 can complete jobsite duties efficiently with maximum performance.



EVO

EVOLUTION

Functionality:

it can meet specific piling requirements. Designed for bored piles with Kelly bar and CFA.



ADV

ADVANCED

Flexibility:

it can suit different technologies. Designed for bored piles with Kelly bar and CFA; complementary kits allow to perform all piling and soil improvement techniques.



HIT

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.

Advanced



Focus on excellence.

A high power developing 209 kW (280 HP) thanks to the perfect combination of mechanical and hydraulic components.

An effective increase in productivity and better performance thanks to a faster feed/hoist system.



Performance

SR-45 highlights.

A redesigned winch crowd system with an improved extraction force up to 240 kNm (53954 lbf) and a 15 m (49.2 ft) stroke to drive segmental casing of max. diameter 1200 mm (47 in).





soilmec

Environment starts from safety.



As always, one of the main drivers of our projects is safety.

For this reason, every Soilmec equipment can be purchased with the 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.



Individuality, quality and technology.



The ergonomic H-cab model embraces the operator. A unique solution in this category (1050 mm /41.6 in wide) in which several accessories facilitate the work of the operator.

Fully adjustable seat, new air conditioner system and sliding door are some of the accessories you can find inside Soilmec cab.

The large windows are designed to improve visibility and brightness improving the general job site safety.

Thank to the package of video cameras with a monitor, has the feeling of full awareness of all the surrounding environment.



Safety & Comfort



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 multilingual touch screen display fitted on an adjustable arm. It is designed to display in real time all the information related to the drilling phases.

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.

DMS PC

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

Your Soilmec rigs and your jobsite... all in your hands.

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.

Everything under control wherever you are.

Drilling Mate System

Supporting you all the way.



Technical support

Original spares

Training

Auditing

Maintenance service contracts

DMS control center

We are ready to support you
at any stage of your choice



and we will always be at your side in every
moment of your work.

Service

DP/
TCT

Quick Change
4-lines pull

CFA

Quick Change
4-lines pull

LDP

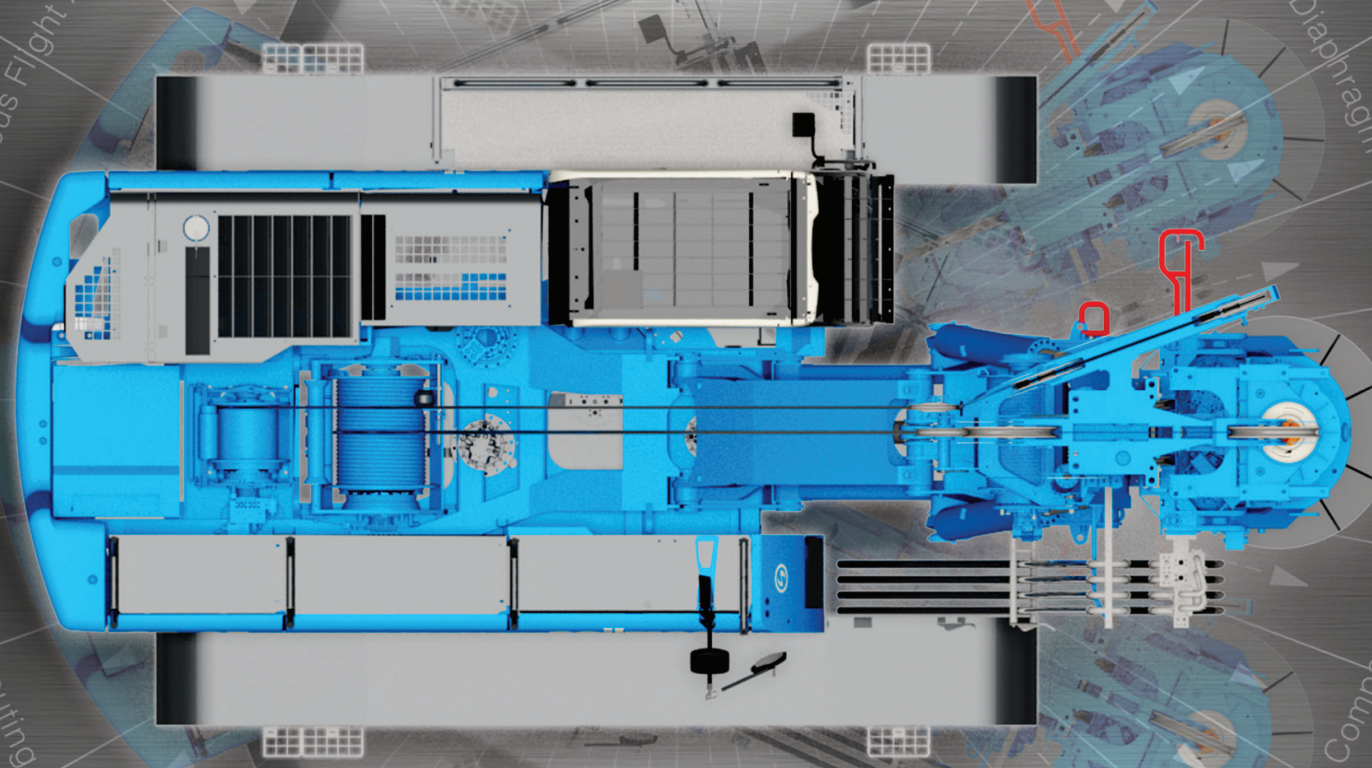
Winch Crowd
System (WCS)
Crowd Cylinder
System (CCS)

TJ

Quick Change
4-lines pull

LHR

Crowd Cylinder
System (CCS)



Continuous Flight Auger Piles (CFA) - Cased Augered & Secant Piles (CAP/CSP) - Displacement Piles (DP) - Diaphragm Walls (DW) - Turpojet (TJ) - Compaction
 LDP - Lateral Drilling Process
 LHR - Lateral Hydraulic Rammer
 DP/TCT - Displacement Piles / Turpojet / Compaction
 CFA - Cased Augered & Secant Piles
 LDP - Lateral Drilling Process
 TJ - Turpojet
 LHR - Lateral Hydraulic Rammer

A world of solutions.

Versatility means rapid conversion into all technologies you need. Among the many packages available, SR-45 offers 2 different types of continuous auger conversion: the first in order to have a quick and fast transformation.

In a few steps to transform your kelly bar rig into CFA Quick Change. The second if you need to set up your machine with the deepest CFA in its class 4-lines pull: up to 25 m (82 ft) drilling depth with auger cleaner and sleeve extension.

Low Head Room (LHR) package is also available on SR-45. This kit allows mast minimum heights (8.5 m/28 ft) and at the same time considerable drilling depth (up to 24 m/78,7 ft with friction kelly and mast extension).

Displacent and Turbojet technology can reach the maximum drilling depth of 23 m (75.6 ft);

SR-45 can be setted with or without lattice boom extension to give you the best solution you need.

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

Autorotary. The operator can active the rotary rotation by an additional pedal in alternative to the usual joystick.

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

Automatic Greasing package. You do not have to worry of when greasing. SR-45 takes care of itself automatically.

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

CFA autodrilling. Automatic device for CFA drilling operations in order to control and optimize the drilling speed.

Casing oscillator. An hydraulic prearrangement to get ready your rig.

Hydraulic device for foldable mast element. It allows to speed up the assembly and set up of you rig.

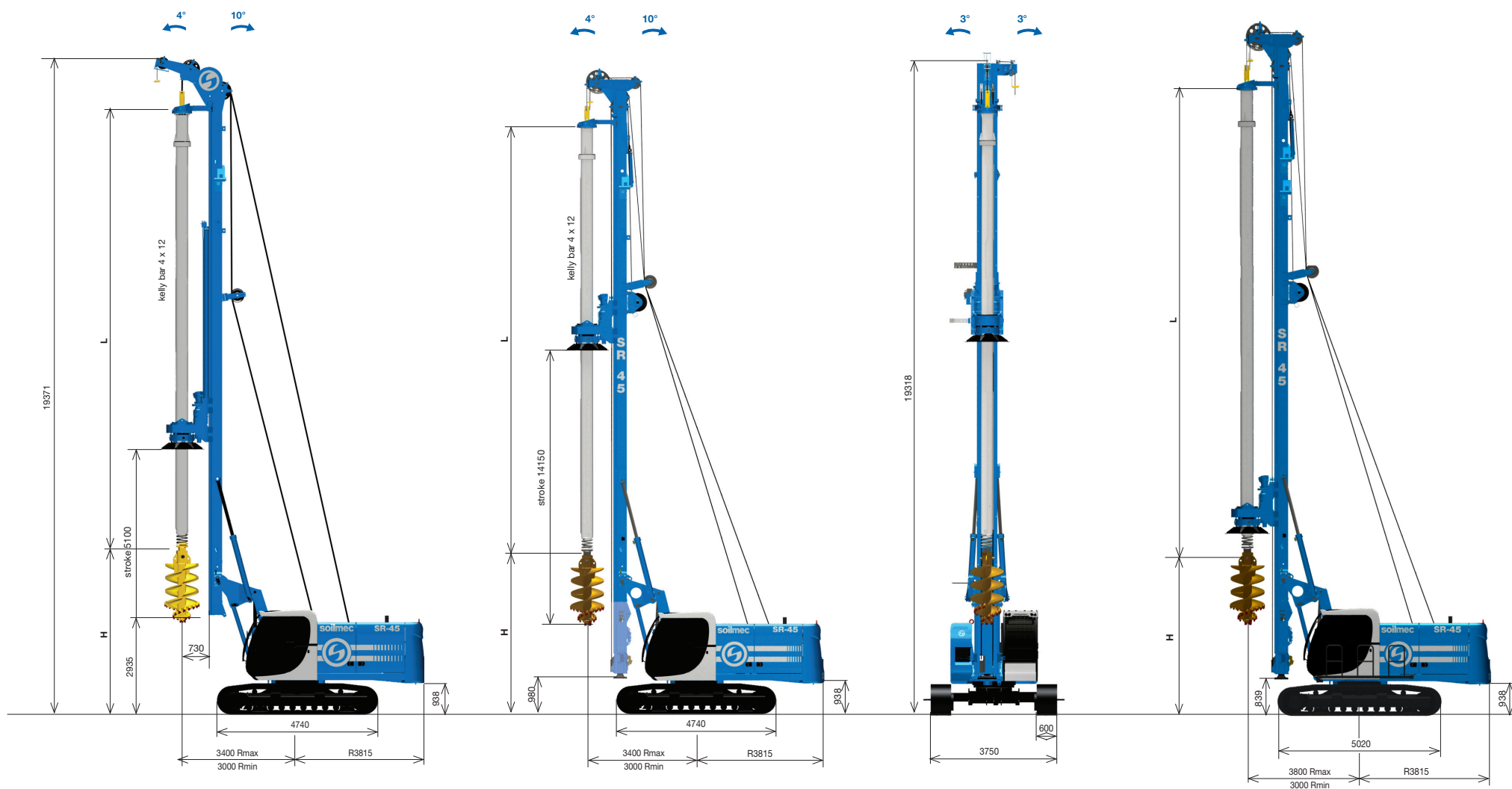
Versatility

Large Diameter Piles

Cylinder Crowd System

Winch Crowd System

Upgraded
in WCS version



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

| LDP - Large Diameter Piles - CCS version | | |
|---|----------------|--------------|
| Operating weight Tier 4f - w/o kelly bar | 37100 kg* | 81791 lb |
| Max pile diameter along mast | 1500 mm | 59 in |
| Max pile diameter w/o lower mast section, tool below mast | 3000 mm | 118 in |
| Working radius | 3000 - 3400 mm | 118 - 133 in |
| Tail swing radius | 3815 mm | 150 in |
| Max pile depth-friction kelly | 59,4 m | 195 ft |
| Max pile depth-locking kelly | 47,4 m | 156 ft |

* For Stage V version. For T3 version weight reduced by 500 kg (1102 lb).

| LDP - Large Diameter Piles - WCS version | | |
|---|----------------|--------------|
| Operating weight Tier 4f - w/o kelly bar | 39000 kg | 85979 lb |
| Max pile diameter along mast | 1400 mm | 55 in |
| Max pile diameter w/o lower mast section, tool below mast | 3000 mm | 118 in |
| Working radius | 3000 - 3400 mm | 118 - 133 in |
| Tail swing radius | 3815 mm | 150 in |
| Max pile depth-friction kelly | 65 m | 213 ft |
| Max pile depth-locking kelly | 51.7 m | 170 ft |

* For Stage V version. For T3 version weight reduced by 500 kg (1102 lb).

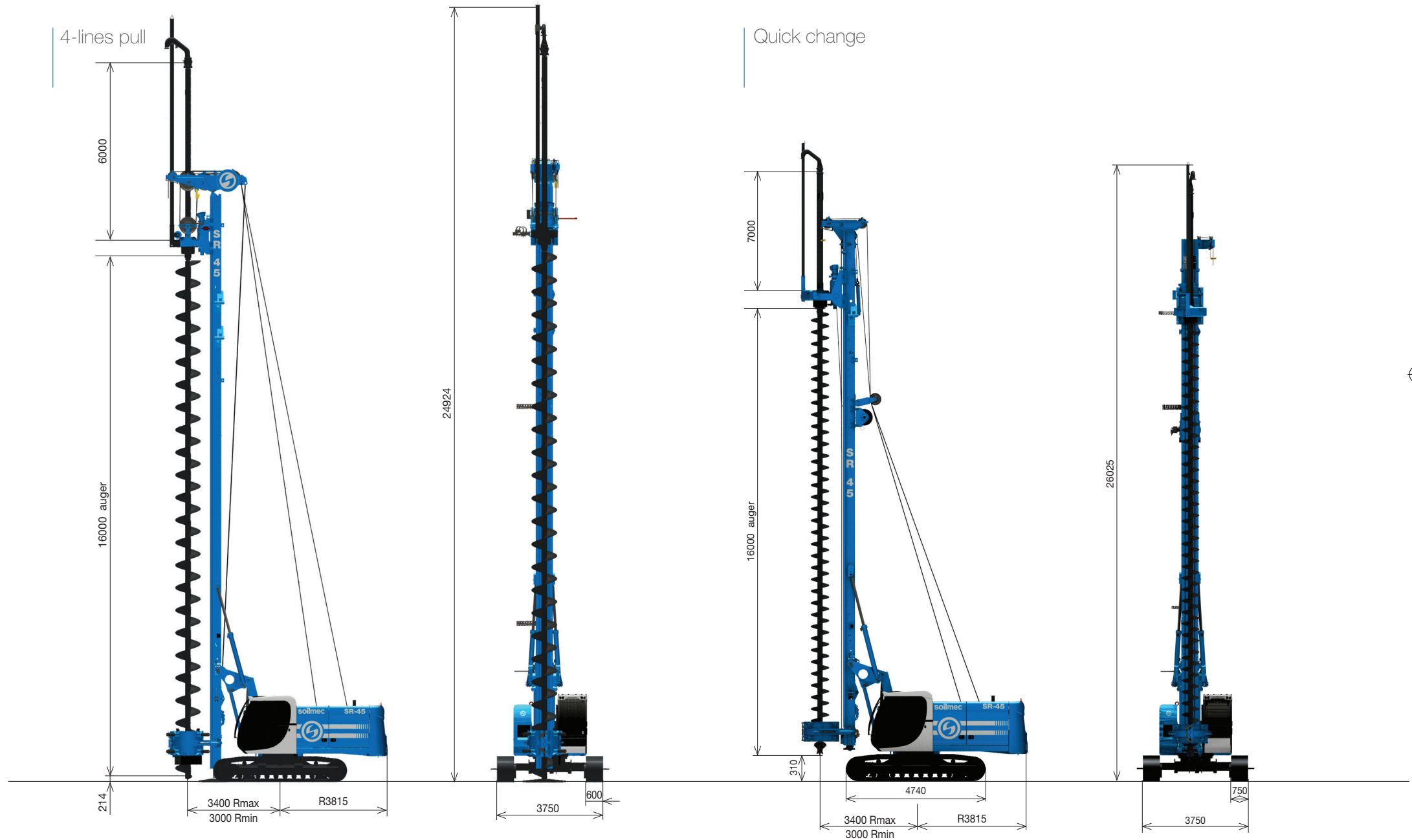
| LDP - Large Diameter Piles - Upgraded version | | |
|--|----------------|--------------|
| Operating weight Tier 4f - w/o kelly bar - CCS version | 39400 kg | 88686 lb |
| Operating weight Tier 4f - w/o kelly bar - WCS version | 41300 kg | 91050 lb |
| Working radius | 3000 - 3800 mm | 118 - 150 in |
| Max pile depth | 62,7 m | 206 ft |

Kelly bars for LDP

| | Kelly type | Kelly dims. | Drilling Depth * | | Weight | | L Length | | H CCS SYSTEM | | H WCS SYSTEM | |
|---------|------------|-------------|------------------|-------|--------|--------|----------|------|--------------|------|--------------|------|
| | | | m | ft | ton | t (US) | m | ft | m | ft | m | ft |
| 3 parts | BL HD | 3 x 8 | 21,6 | 70.9 | 3,1 | 3.4 | 9,1 | 29.9 | 7,8 | 25.6 | 8,5 | 27.9 |
| | BL HD | 3 x 9 | 24,5 | 80.4 | 3,4 | 3.7 | 10,1 | 33.1 | 7,6 | 24.9 | 7,5 | 24.6 |
| | BL HD | 3 x 12 | 33,6 | 110.2 | 4,3 | 4.7 | 13,1 | 43.0 | 4,5 | 14.8 | 4,5 | 14.8 |
| | BL HD | 3 x 14 | 38,9 | 127.6 | 4,9 | 5.4 | 14,9 | 48.9 | n/a | n/a | 2,7 | 8.9 |
| | BL HD | 4 x 8 | 29,0 | 95.1 | 3,5 | 3.9 | 9,1 | 29.9 | 7,8 | 25.6 | 8,5 | 27.9 |
| | BL HD | 4 x 9 | 32,2 | 105.6 | 3,9 | 4.3 | 9,9 | 32.5 | 7,7 | 25.3 | 7,7 | 25.3 |
| 4 parts | BL HD | 4 x 10,5 | 38,4 | 126.0 | 4,4 | 4.9 | 11,6 | 38.1 | 6,1 | 20.0 | 6,0 | 19.7 |
| | BL HD | 4 x 12 | 44,7 | 146.7 | 5,0 | 5.4 | 13,2 | 43.3 | 4,5 | 14.8 | 4,4 | 14.4 |
| | BL HD | 4 x 13 | 48,2 | 158.1 | 5,3 | 5.8 | 14,0 | 45.9 | 3,6 | 11.8 | 3,6 | 11.8 |
| | BL HD | 4 x 14 | 51,5 | 169.0 | 5,7 | 6.2 | 14,9 | 48.9 | n/a | n/a | 2,7 | 8.9 |
| | FR HD | 4 x 9 | 32,6 | 107.0 | 3,9 | 4.3 | 10,0 | 32.8 | 7,7 | 25.3 | 7,6 | 24.9 |
| | FR HD | 4 x 12 | 44,2 | 145.0 | 5,0 | 5.4 | 12,9 | 42.3 | 4,8 | 15.7 | 4,7 | 15.4 |
| | FR HD | 4 x 13 | 48,5 | 159.1 | 5,3 | 5.8 | 14,0 | 45.9 | 3,7 | 12.1 | 3,6 | 11.8 |
| | FR HD | 4 x 14 | 52,1 | 170.9 | 5,7 | 6.2 | 14,9 | 48.9 | n/a | n/a | 2,7 | 8.9 |
| | FR HD | 5 x 9 | 40,7 | 133.5 | 4,1 | 4.5 | 10,0 | 32.8 | 7,7 | 25.3 | 7,6 | 24.9 |
| | FR HD | 5 x 11 | 48,8 | 160.1 | 4,8 | 5.3 | 11,6 | 38.1 | 6,0 | 19.7 | 6,0 | 19.7 |
| 5 parts | FR HD | 5 x 12 | 55,1 | 180.8 | 5,2 | 5.7 | 12,9 | 42.3 | 4,8 | 15.7 | 4,7 | 15.4 |
| | FR HD | 5 x 13 | 60,5 | 198.5 | 5,5 | 6.1 | 14,0 | 45.9 | 3,7 | 12.1 | 3,6 | 11.8 |
| | FR HD | 5 x 13,5 | 63,8 | 209.3 | 5,7 | 6.3 | 14,6 | 47.9 | n/a | n/a | 3,0 | 9.8 |
| | FR HD | 5 x 14 | 65,0 | 213.3 | 5,9 | 6.5 | 14,9 | 48.9 | n/a | n/a | 2,7 | 8.9 |

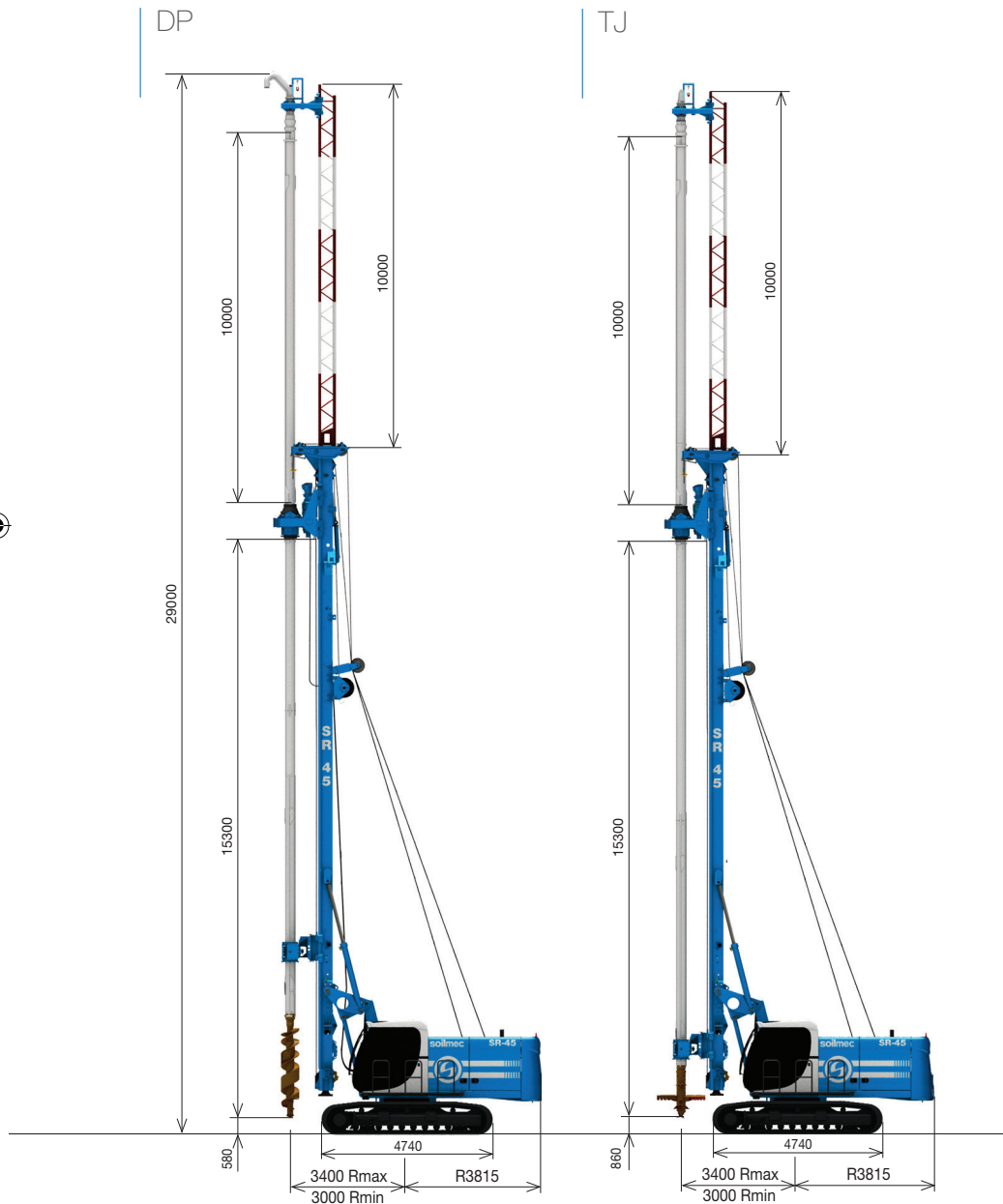
* Reduced drilling depth by 1.1 m (3.61 ft) in CCS version
 Kelly bar c/w stub 150x150 mm
 Drilling depth with tool 1500 mm (4.9 ft) long
 Reduced drilling depth by 1200 mm (3.9 ft) without lower mast section.

CFA / DP / TJ



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DP/TJ applications



| CFA - Continuous Flight Auger - 4 line pull - standard version | | |
|--|----------|------------|
| Operating weight (c/w 6 m / 19.7 ft sleeve extension, w/o auger) | 40600 kg | 89507 lb |
| Max pile diameter | 1000 mm | 39.37 in |
| Max length of auger | 16 m | 52 ft |
| Max length of sleeve extension | 6 m | 20 ft |
| Max pile depth c/w 6 m sleeve extension* | 21,5 m | 71 ft |
| Extraction force | 480 kN | 107906 lbf |
| Additional extraction force on auger (on request) | 100 kN | 22481 lbf |

| CFA - Continuous Flight Auger - 4 lines pull - special version | | |
|--|----------|------------|
| Operating weight (c/w 6 m / 19.7 ft sleeve extension, w/o auger) | 42100 kg | 92814 lb |
| Max pile diameter | 1000 mm | 39.37 in |
| Max length of auger | 18,5 m | 61 ft |
| Max length of sleeve extension | 8 m | 26 ft |
| Max pile depth c/w 6 m / 19.7 ft m sleeve extension* | 24 m | 78.7 ft |
| Extraction force | 455 kN | 102286 lbf |
| Additional crowd force on auger (on request) | 100 kN | 22481 lbf |

| CFA - Continuous Flight Auger - Quick change | | |
|--|----------|-----------|
| Operating weight (c/w 6 m / 19.7 ft sleeve extension, w/o auger) | 40900 kg | 90168 lb |
| Max pile diameter | 1000 mm | 39.37 in |
| Max length of auger | 16 m | 52 ft |
| Max length of sleeve extension | 8 m | 26 ft |
| Max pile depth c/w 7 m / 23 ft m sleeve extension* | 21 m | 69 ft |
| Max pile depth with special package (auger length: 17 m - 55,7 ft, on request) | 23,2 m | 76 ft |
| Extraction force | 394 kN | 88573 lbf |
| Crowd force on auger | 140 kN | 31473 lbf |

*depth reduced of 1 m (3.28 ft) with hydraulic auger cleaner

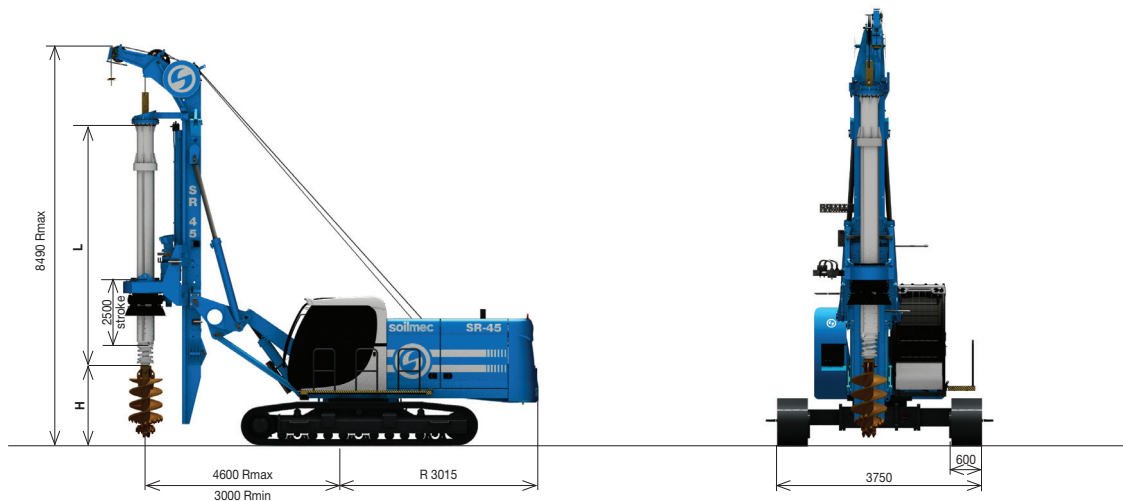
| DP - Displacement pile - Quick change* | | |
|--|----------|----------|
| Operating weight (w/o string and tool, c/w lattice) | 43500 kg | 95900 lb |
| Max recommended DP pile diameter | 350 mm | 13.78 in |
| Max recommended TCT pile diameter | 400 mm | 15.75 in |
| Max length of string | 15,3 m | 50 ft |
| Max pile depth w/o lattice boom extension c/w 7 m (23 ft) string extension | 20,0 m | 66 ft |
| Lattice boom extension length | 10,0 m | 33 ft |
| Max pile depth c/w lattice boom extension | 23,0 m | 75 ft |

| TJ - Turbo jet - Quick change* | | |
|--|----------|----------|
| Operating weight (w/o string and tool, c/w lattice) | 43900 kg | 96782 lb |
| Max recommended TJ pile diameter | 1000 mm | 39.37 in |
| Max length of string | 15,3 m | 50 ft |
| Max pile depth w/o lattice boom extension c/w 6 m (23 ft) string extension | 19,0 m | 62 ft |
| Lattice boom extension length | 10,0 m | 33 ft |
| Max pile depth c/w lattice boom extension | 23,0 m | 75 ft |

* DP/TCT and TJ are also available with 4-line pull version

LHR

Low Head Room



| LHR_Low Head Room | | |
|---|----------------|-------------------|
| Operating weight w/o kelly bar | 35800 kg | 78925 lb |
| Min operating height without / with mast extension | 8,5 / 9,8 m | 28 / 32 ft |
| Max operating height without / with mast extension | 9,5 / 10,75 m | 31 / 35 ft |
| Max pile diameter | 1500 mm | 59 in |
| Max pile diameter w/o lower mast section, tool below mast | 3000 mm | 118 in |
| Max pile depth-friction kelly (c/w mast extension) | 23,7 m | 78 ft |
| Max pile depth-locking kelly (c/w mast extension) | 19,3 m | 63 ft |
| Cylinder crowd system stroke | 2500 mm | 98,43 in |
| Crowd force pull (down/up) | 140 / 207 kN | 31473 / 46535 lbf |
| Working radius | 4600 - 3000 mm | 181 - 118 in |

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

Kelly bar for LHR

Standard version

H max 8,5 m / 28 ft - Max working radius

| Kelly type | Kelly dimens. | Weight | | Drilling Depth | | L Length | | Clearance | |
|------------|---------------|--------|-------|----------------|------|----------|------|-----------|-----|
| | | ton | t(US) | m | ft | m | ft | m | ft |
| BL HD | 4 x 4,5 | 2,2 | 2.4 | 15,9 | 52.2 | 5,5 | 18.0 | 1,5 | 4.9 |
| BL HD | 4 x 5 | 2,4 | 2.6 | 16,5 | 54.1 | 5,8 | 18.9 | 1,2 | 3.9 |
| BL HD | 5 x 4,5 | 2,4 | 2.6 | 19,4 | 63.6 | 5,5 | 18.0 | 1,5 | 4.9 |
| BL HD | 5 x 5 | 2,6 | 2.9 | 20,3 | 66.6 | 5,8 | 18.9 | 1,2 | 3.9 |

Mast extended version

H max 9,8 m / 31,5 ft with CCS in low position - Max working radius

| Kelly type | Kelly dimens. | Weight | | Drilling Depth | | L Length | | Clearance | |
|------------|---------------|--------|-------|----------------|------|----------|------|-----------|-----|
| | | ton | t(US) | m | ft | m | ft | m | ft |
| BL HD | 4 x 4,5 | 2,2 | 2.4 | 15,9 | 52.2 | 5,5 | 18.0 | 2,7 | 8.9 |
| BL HD | 4 x 5 | 2,4 | 2.6 | 17,0 | 55.8 | 5,8 | 18.9 | 2,4 | 7.9 |
| BL HD | 4 x 5,5 | 2,6 | 2.9 | 19,3 | 63.3 | 6,4 | 20.8 | 1,8 | 5.9 |
| BL HD | 5 x 4,5 | 2,4 | 2.6 | 19,4 | 63.6 | 5,5 | 18.0 | 2,7 | 8.9 |
| BL HD | 5 x 5 | 2,6 | 2.9 | 20,8 | 68.2 | 5,8 | 18.9 | 2,4 | 7.9 |
| BL HD | 5 x 5,5 | 2,8 | 3.1 | 23,7 | 77.8 | 6,4 | 20.8 | 1,8 | 5.9 |

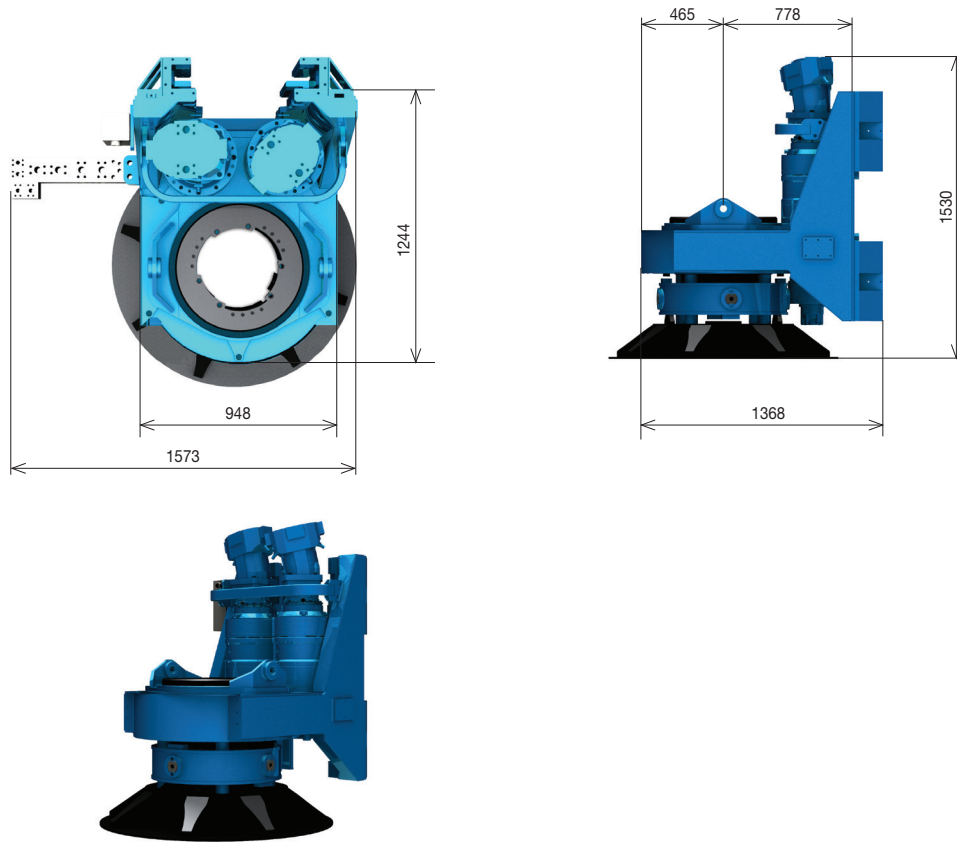
Mast extended version

H max 10 m / 23 ft with CCS in high position - Max working radius

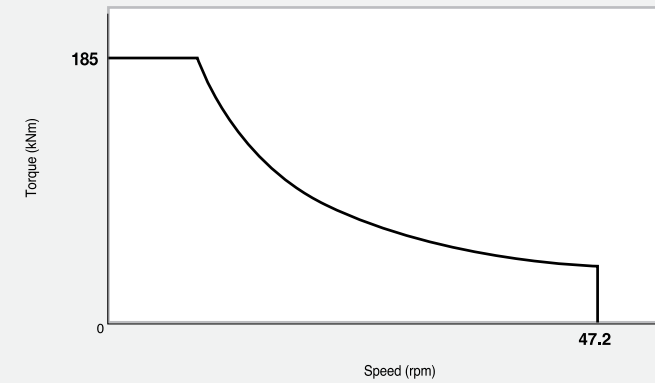
| Kelly type | Kelly dimens. | Weight | | Drilling Depth | | L Length | | Clearance | |
|------------|---------------|--------|-------|----------------|------|----------|------|-----------|-----|
| | | ton | t(US) | m | ft | m | ft | m | ft |
| BL HD | 4 x 4,5 | 2,2 | 2.4 | 14,4 | 47.2 | 5,5 | 18.0 | 2,7 | 8.9 |
| BL HD | 4 x 5 | 2,4 | 2.6 | 15,5 | 50.9 | 5,8 | 18.9 | 2,4 | 7.9 |
| BL HD | 4 x 5,5 | 2,6 | 2.9 | 17,8 | 58.4 | 6,4 | 20.8 | 1,8 | 5.9 |
| BL HD | 5 x 4,5 | 2,4 | 2.6 | 17,9 | 58.7 | 5,5 | 18.0 | 2,7 | 8.9 |
| BL HD | 5 x 5 | 2,6 | 2.9 | 19,3 | 63.3 | 5,8 | 18.9 | 2,4 | 7.9 |
| BL HD | 5 x 5,5 | 2,8 | 3.1 | 22,2 | 72.8 | 6,4 | 20.8 | 1,8 | 5.9 |

Rotary

Increased drilling axis



Rotary torque diagram



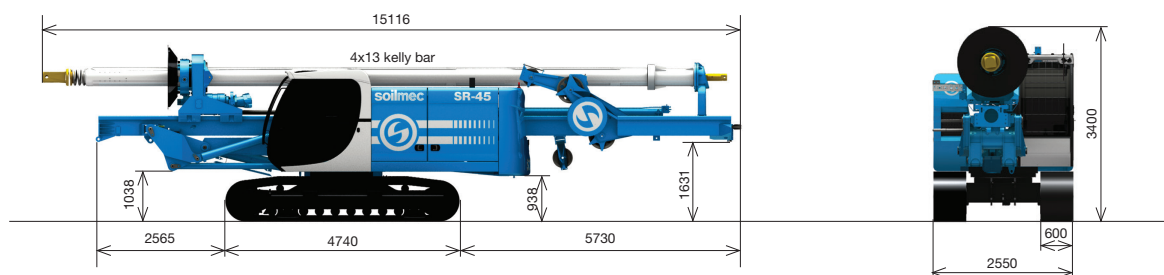
The easy replacement of the drive ribs and pads have been purposely designed for the specific needs of the job site.

The rotary implements with a new device that allows the automatic control of the motor displacement. This optimizing the drilling speed and the productivity in every phase.

| Rotary drive | Spin off type | Spin off type |
|--|---------------|---------------|
| Max torque | 185 kNm | 136447 lbf*ft |
| Rated torque | 161 kNm | 118746 lbf*ft |
| Max drilling speed | 47 rpm | 47 rpm |
| Spin off speed | 146 rpm | 146 rpm |
| Weight (w/o cradle and casing flange) | 2850 kg | 6283 lb |

Transport

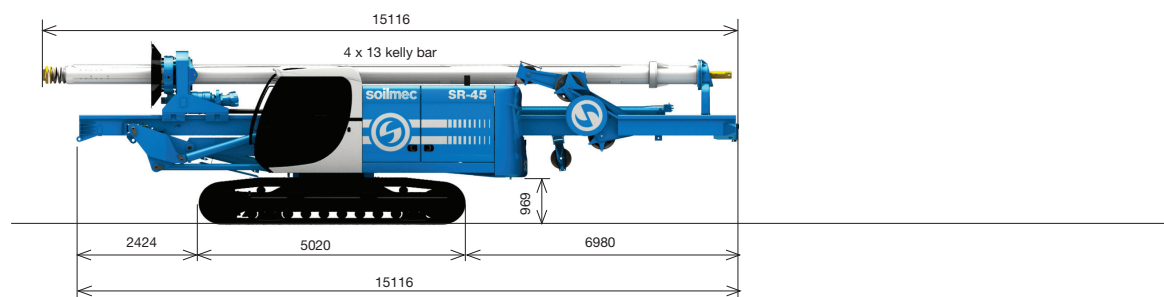
Dimensions and Weights



| Transport standard version | CCS | | WCS | |
|----------------------------|----------|----------|----------|----------|
| Transport weight* | 42400 kg | 93475 lb | 44300 kg | 97664 lb |
| Transport length** | 15116 mm | 49.6 ft | 15200 mm | 49.9 ft |

* includes the base carrier Tier 4f, c/w undercarriage, mast, rotary and 4x13 m kelly bar

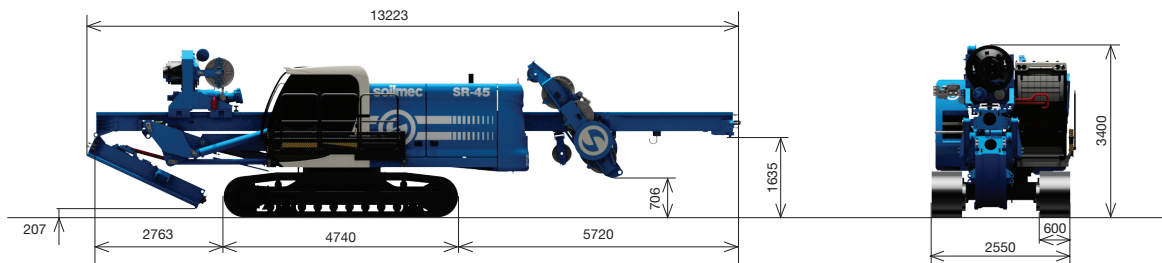
** with 4x13m kelly bar



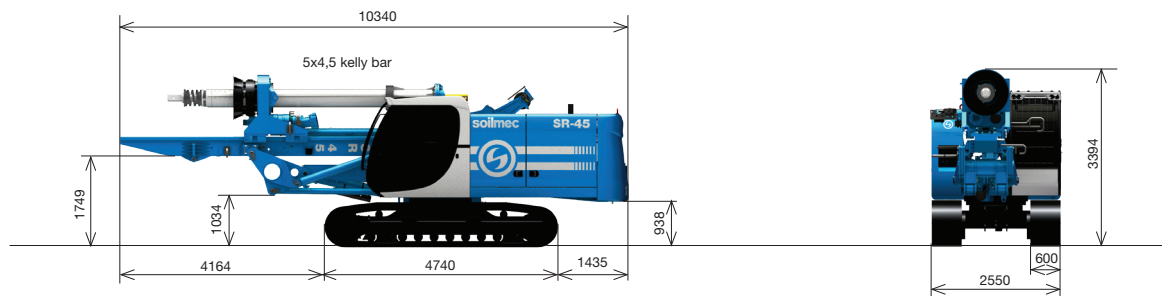
| Transport upgraded version | CCS | | WCS | |
|----------------------------|----------|----------|----------|-----------|
| Transport weight* | 44700 kg | 98854 lb | 46600 kg | 102734 lb |
| Transport length** | 15116 mm | 49.6 ft | 15120 mm | 49.6 ft |

* includes the base carrier Tier 4f, c/w undercarriage, mast, rotary and 4x13 m kelly bar

** with 4x13m kelly bar



| Transport CFA version | 4-line pull | | Quick change | |
|-----------------------|-------------|----------|--------------|----------|
| Transport weight | 38500 kg | 84877 lb | 38600 kg | 85098 lb |
| Transport length | 13250 mm | 43.5 ft | 13250 mm | 43.5 ft |



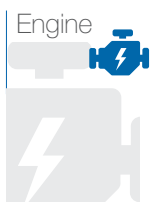
| Transport LHR version | 8.5 | | 9.75 | |
|-----------------------|----------|----------|----------|----------|
| Transport weight | 38000 kg | 83775 lb | 38400 kg | 84657 lb |
| Transport length | 10340 mm | 33.9 ft | 10340 mm | 33.9 ft |

* includes the base carrier Tier 4f, c/w undercarriage, mast, rotary and 4x4,5 m kelly bar
 ** with 4x4,5m kelly bar

Technical data



| CCS_Cylinder Crowd System | | |
|------------------------------|--------------|-------------------|
| - Stroke | 5100 mm | 201 in |
| - Crowd force pull (down/up) | 140 / 207 kN | 31473 / 46535 lbf |
| - Speed up | 19 m/min | 62 ft/min |
| - Speed down | 25 m/min | 82 ft/min |
| WCS_Winch Crowd System | | |
| - Stroke | 14175 mm | 740 in |
| - Crowd force pull (down/up) | 240 / 240 kN | 53953 / 53953 lbf |
| - Speed up | 22 m/min | 71 ft/min |
| - Speed down | 22 m/min | 72 ft/min |



| Engine | Cummins B6.7 | Cummins B 6.7 |
|--|-----------------------------|-----------------------------|
| - Rated output | 209 kW @ 2000 rpm | 280 HP @ 2000 rpm |
| - Engine conforms to Exhaust emission Standard | EU Stage V / US EPA Tier 4f | EU Stage V / US EPA Tier 4f |
| - Fuel tank capacity | 380 l | 100 US gal |
| - AD Blue tank capacity | 57 l | 15 US gal |

Available: Engine Tier 3 power rating 201 kW @ 2000 rpm



The cleaning of hydraulic oils is electronically monitored and any clogging is show to operator on DMS control system in the cab.

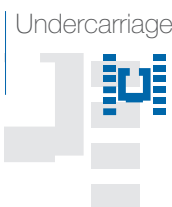
| Main pumps flow | | |
|-----------------------|--------------|------------------|
| - Main pump flow | 2x 214 l/min | 2x 57 US gal/min |
| - Auxiliary pump flow | 160 l/min | 42 US gal/min |
| - Hydraulic oil tank | 450 l | 119 US gal |



| Main winch | | |
|-------------------------|--------------------|--------------------|
| - Type | controlled descent | controlled descent |
| - Line pull (1st layer) | 165 kN | 37093 lbf |
| - Rope diameter | 24 mm | 740 in |
| - Line speed (max.) | 78 m/min | 256 ft/min |
| Auxiliary winch | | |
| - Type | controlled descent | controlled descent |
| - Line pull (1st layer) | 65 kN | 14612 lbf |
| - Rope diameter | 18 mm | 740 in |
| - Line speed (max.) | 81 m/min | 266 ft/min |



| Noise | | |
|--|-----------|-----------|
| - Sound pressure level in cab c/w Tier 4f | 76 dB(A) | 76 dB(A) |
| - Sound power level c/w Tier 4f | 107 dB(A) | 109 dB(A) |
| - Vibration transmitted to the hand-arm system of the machine operator | < 2.5 m/s | < 2.5 m/s |
| - Vibration transmitted to the whole body of the machine operator | < 0.5 m/s | < 0.5 m/s |



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.

| Undercarriage | | |
|---|--|--|
| - Type | variable gauge, telescoping sides frames | variable gauge, telescoping sides frames |
| - Overall width with retracted / extended crawlers* | 2550 / 3750 mm | 100 / 148 in |
| - Width of triple grouser track shoes | 600 mm | 24 in |
| - Overall length of crawlers | 4740 mm | 187 in |
| - Traction force | 424 kN | 95317 lbf |
| - Travelling speed | 1,9 km/h | 1.18 mph |

* upgraded undercarriage is available on request



Soilmecc H-cab. By assessing the specific application and listening properly to the wishes and requirements of the operators, Soilmecc provides the optimal operator cab 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 Soilmecc - 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 multi language 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

| | LDP Large Diameter Pile with Kelly bar | | | CFA Continuous Flight Auger Piles | |
|--|---|-------|-------|--------------------------------------|----------------|
| | (WCS) | (CCS) | (LHR) | (4-lines pull) | (Quick change) |
| UNDERCARRIAGE | | | | | |
| Undercarriage 2550/3750/600 | ● | ● | ● | ● | ● |
| Upgraded undercarriage 2550/4000/600 | ○ | ○ | ○ | ○ | ○ |
| Mechanical prearrangement for casing oscillator | ● | ● | ● | ● | ● |
| Hydraulic prearrangement for casing oscillator | ○ | ○ | ○ | n.a. | n.a. |
| VRM120KL casing oscillator | ○ | ○ | ○ | n.a. | n.a. |
| CE Radio remote control for tramping operation | ○ | ○ | ○ | ○ | ○ |
| UPPER STRUCTURE | | | | | |
| Diesel engine Cummins QSB6.7 EU Stage V – US EPA Tier 4F | ● | ● | ● | ● | ● |
| Diesel engine Cummins QSB6.7 EU Stage IIIA – US EPA Tier 3 | ○ | ○ | ○ | ○ | ○ |
| Start and slow system | ● | ● | ● | ● | ● |
| Harness technology for electrical system | ● | ● | ● | ● | ● |
| Automatic greasing package | ○ | ○ | ○ | ○ | ○ |
| PTO kit | ○ | ○ | ○ | ○ | ○ |
| Machine lifting kit (harbor use) | ○ | ○ | ○ | ○ | ○ |
| CE Foldable side catwalks for cabin with handrails | ○ | ○ | ○ | ○ | ○ |
| CE Acoustic & light alarm for tramping | ● | ● | ● | ● | ● |
| CE Lighting led system package | ○ | ○ | ○ | ○ | ○ |
| Sound proofed canopies | ● | ● | ● | ● | ● |
| Front support for tools | ○ | ○ | ○ | ○ | ○ |
| H-CAB | | | | | |
| Front protective grille | ● | ● | ● | ● | ● |
| Falling object protective structure (FOPS) | ● | ● | ● | ● | ● |
| Lower front protective grille | ● | ● | ● | ● | ● |
| Rearview mirrors | ● | ● | ● | ● | ● |
| Comfort package | ● | ● | ● | ● | ● |
| 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 | ● | ● | ● | ● | ● |
| 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 | ● | ● | ● | ● | ● |
| CE Video control by 4 cameras with display in the cab | ○ | ○ | ○ | ○ | ○ |
| Inclinometer device | ● | ● | ● | ● | ● |
| WINCHES | | | | | |
| Main winch SW160 model | ● | ● | ● | ● | ● |
| Load cell for main winch | ○ | ○ | ○ | ○ | ○ |
| CE Limit switch for rope winding and winches | ○ | ○ | ○ | ○ | ○ |
| Depthmeter for main winch | ● | ● | ● | ● | ● |
| Anti-slack system for main winch | ○ | ○ | n.a. | n.a. | n.a. |
| Service winch SW65 model | ● | ● | ● | ● | ● |
| CE Load cell for service winch | ○ | ○ | ○ | ○ | ○ |
| Service rope holder | ○ | ○ | ○ | ○ | ○ |

| | LDP Large Diameter Pile with Kelly bar | | | CFA Continuous Flight Auger Piles | |
|---|---|-------|-------|--------------------------------------|----------------|
| | (WCS) | (CCS) | (LHR) | (4-lines pull) | (Quick change) |
| ROTARY UNIT | | | | | |
| Rotary unit c/w spinoff; Max torque intermitted: 184,8 kNm (136301 lb-ft) | ● | ● | ● | ● | ● |
| Spin off system | ● | ● | ● | ● | ● |
| Replaceable drive ribs | ● | ● | ● | ● | ● |
| Automatic greasing kit for cradle | ○ | ○ | ○ | ○ | ○ |
| Oil discharge conveying system | ○ | ○ | ○ | ○ | ○ |
| MAST | | | | | |
| Hydraulic folding mast kit | ○ | ○ | n.a. | ○ | ○ |
| Pressure automatic control of lifting cylinders | ● | ● | ● | ● | ● |
| Automatic greasing package for cathead | ○ | ○ | ○ | ○ | ○ |
| KELLY BAR TECHNOLOGY | | | | | |
| Rotary sleeve with 3 ribs | ● | ● | ● | n.a. | n.a. |
| Replaceable rotary ribs | ● | ● | ● | n.a. | n.a. |
| Cardan joint | ● | ● | ● | n.a. | n.a. |
| Flange for casing driving d.1300 mm (51.1 in) | ● | ● | ● | n.a. | n.a. |
| Flange for casing driving d.900 mm (34.4 in) | ○ | ○ | ○ | n.a. | n.a. |
| Spin off discharging system | ● | ● | ● | n.a. | n.a. |
| Automatic return to the centre hole | ○ | ○ | ○ | n.a. | n.a. |
| Package to increase the drilling depth up to 62,7 m (205 ft) | ○ | ○ | n.a. | n.a. | n.a. |
| Telescopic mast foot | ● | n.a. | n.a. | n.a. | n.a. |
| CFA TECHNOLOGY | | | | | |
| HD4 sleeve type | n.a. | n.a. | n.a. | ○ | ○ |
| HD5 sleeve type | n.a. | n.a. | n.a. | ● | ● |
| HD15 sleeve type | n.a. | n.a. | n.a. | ○ | ○ |
| Sleeve 3 m / 9.0 ft long | n.a. | n.a. | n.a. | ○ | ○ |
| Sleeve 7 m / 19.7 ft long | n.a. | n.a. | n.a. | ○ | ○ |
| Sleeve 8 m / 26.2 ft long | n.a. | n.a. | n.a. | ○ | ○ |
| Package for CFA 21 m / 68.9 ft drilling depth w/o cleaner | n.a. | n.a. | n.a. | ● | ● |
| Package for CFA 23,2 m / 76.9 ft drilling depth w/o cleaner | n.a. | n.a. | n.a. | n.a. | ○ |
| Package for CFA 26 m / 85.3 ft drilling depth w/o cleaner | n.a. | n.a. | n.a. | ○ | n.a. |
| DMS ON BOARD with automatic auger lifting | n.a. | n.a. | n.a. | ● | ● |
| Autodrilling package | n.a. | n.a. | n.a. | ○ | ○ |
| Autorotary package | n.a. | n.a. | n.a. | ○ | ○ |
| Automatic greasing kit for CFA cathead | n.a. | n.a. | n.a. | ○ | ○ |
| Additional pull-down winch | n.a. | n.a. | n.a. | ○ | n.a. |
| Universal openable lower guide d.1000 mm / 39.4 in | n.a. | n.a. | n.a. | ● | ● |
| Hydraulic kit for lower guide | n.a. | n.a. | n.a. | ○ | ○ |
| Auger cleaner star type | n.a. | n.a. | n.a. | ○ | ○ |
| Double roller auger cleaner d.1000 mm / 39.4 in | n.a. | n.a. | n.a. | ○ | ○ |
| Two pressure transducers kit | n.a. | n.a. | n.a. | ○ | ○ |
| Concrete pipe on turret and mast | n.a. | n.a. | n.a. | ○ | ○ |
| Hydraulic prearrangement for VTH-1 vibrator | n.a. | n.a. | n.a. | ○ | ○ |
| Lattice mast extension for DP/TCT and TJ technology | n.a. | n.a. | n.a. | n.a. | ○ |
| Additional package for DP/TCT technology; 23 m / 75.5 ft depth with lattice extension | n.a. | n.a. | n.a. | n.a. | ○ |
| Additional package for TJ technology; 23 m / 75.5 ft depth with lattice extension | n.a. | n.a. | n.a. | n.a. | ○ |

● standard ○ optional n.a. not available

CE standard equipment for CE certification

A close-up photograph of a tractor tire tread on a muddy surface. The tire is in the foreground, showing deep grooves and a textured pattern. The background is blurred, showing more of the muddy ground and a hint of a blue object, possibly a tractor component. The overall scene is outdoors, likely in a field or construction site.

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