

Hydromill

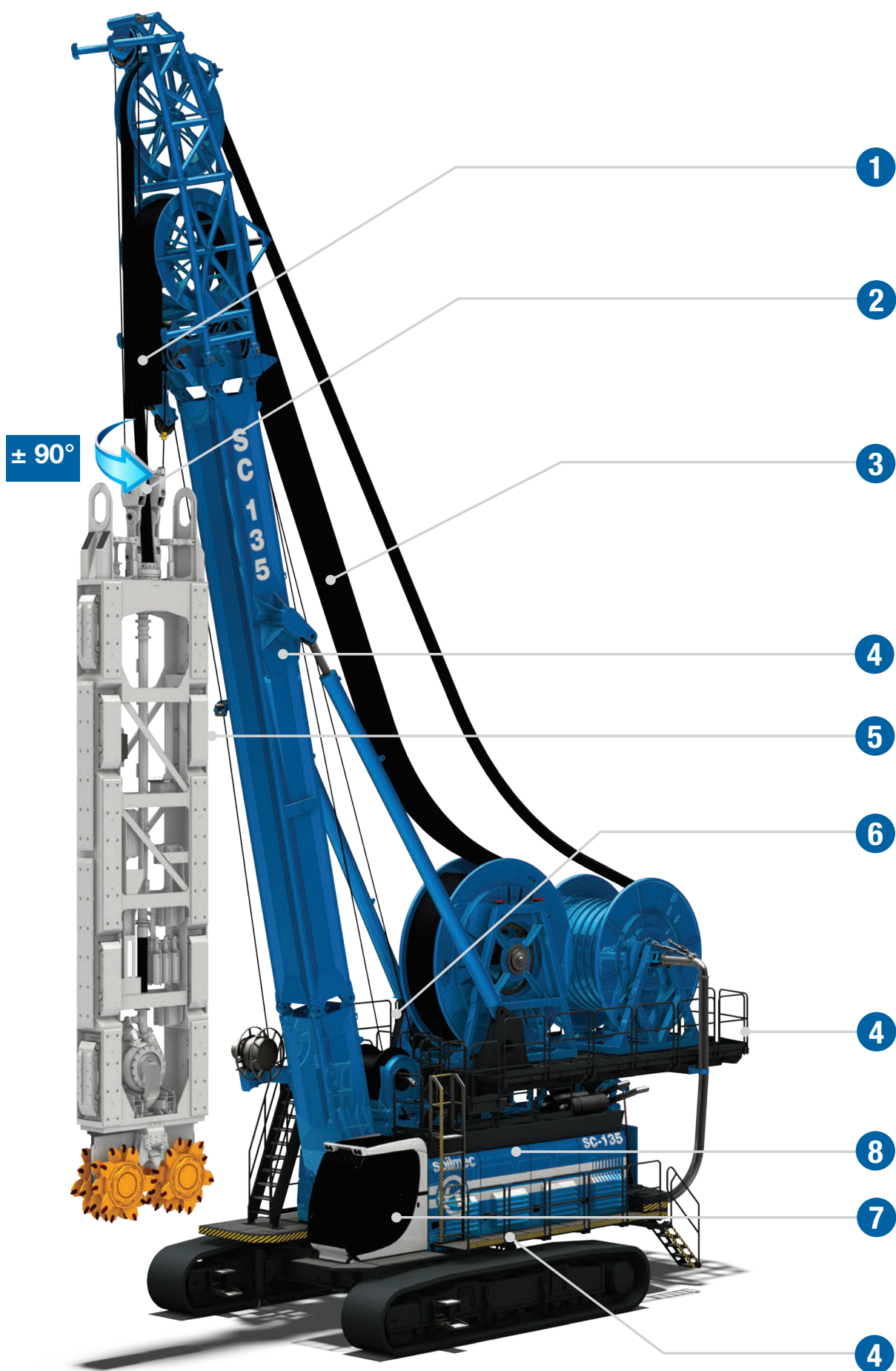
SC-135 Tiger

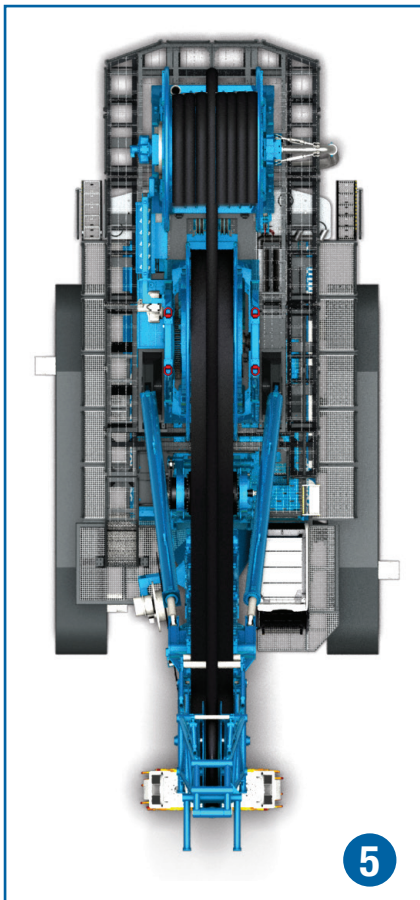
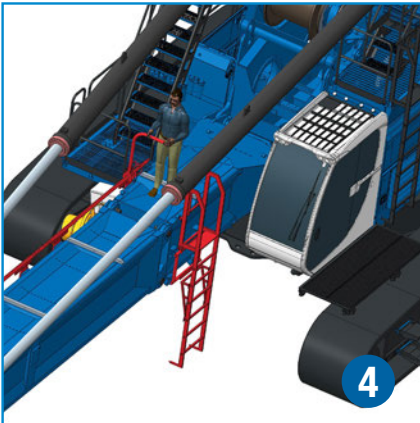


soilmec®
Drilling and Foundation Equipment

SC-135 Tiger Hydromill

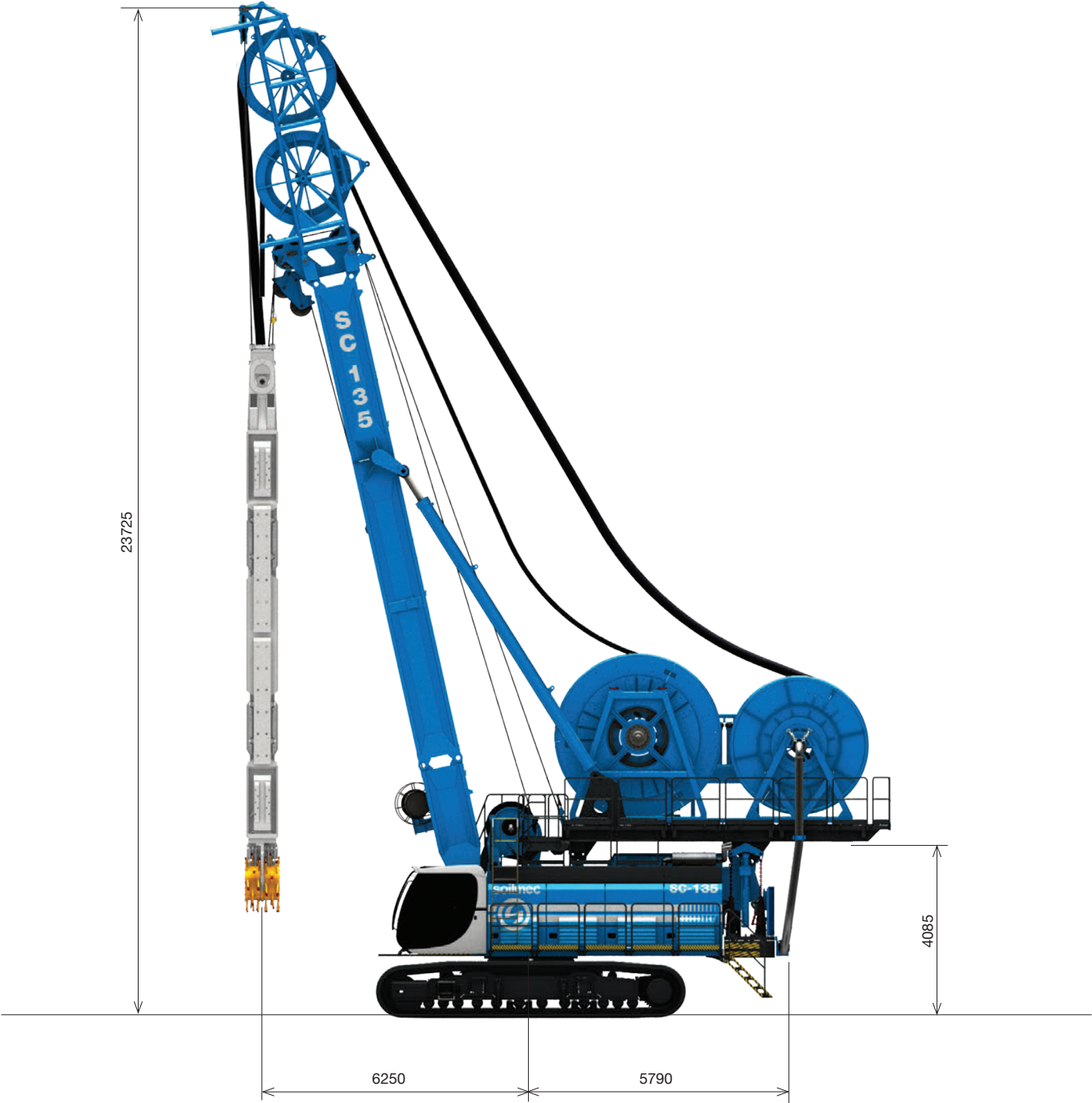
FOCUS OVERVIEW





- 1 Hose Chain System** for 100 m. depth
- 2 Motorized swivel** for module rotation system $\pm 90^\circ$
- 3 Independent mobile flaps** for accurate verticality
 - 6 upper (3 position) and 6 lower (2 position)
- 4 Safety equipments in compliance with CE request of EN16228**
 - 8 video cameras and monitors
 - 8 access ladder points for undercarriage
 - Quick assembly 900 mm catwalk
 - Upper platform catwalks and handrails
 - Remote control board for tramming and service/maintenance
 - High led lighting system
 - Safety Life Line on the boom for service and maintenance
- 5 New Hose Drum and Cathead Layout** for perfect suitability at various working radius with all rotation angles of the module (no torsion on the module during excavation)
- 6 High pressure filters** on the main lines
- 7 Soilmec H-cab** with outstanding volume (1050 mm wide), Air-suspended seat, TouchScreen & Adjustable monitor 12" for DMS and sliding door.
- 8 Separate and independent hydraulic system for both Hydromill module and base machine (PATENTED)**
 - Chance to recover the module and to mobilize the base machine in the site.
 - Less refurbishing costs in case of single system contamination.
 - Fast problem solving for a dedicated hydraulic system in case of oil contamination.
 - Better performances coming from specific oils for each hydraulic system.

SC-135 Tiger Hydromill



Hydromill Type SC-135 Tiger		
Operating weight	205000 kg	451947 lb
Operating height	23,7 m	77.7 ft
Max depth	100 m (150 m*)	328 ft (492 ft*)
Milling unit	SH-30 / SH-40 (SH-50*)	SH-30 / SH-40 (SH-50*)

* high depth version

SC-135 Tiger Hydromill

TECHNICAL DATA SHEET

Diesel engine	CAT C27	CAT C27
Max Rated Power	708 kW @ 1800 rpm	950 HP @ 1800 rpm
- Engine conforms to exhaust emissions standard	EU Stage IV / US EPA Tier 4f *	<i>EU Stage IV / US EPA Tier 4f *</i>
- Fuel tank capacity	1200 l	317 US gal
- Hydraulic oil tank capacity	1050 + 815 l	277 + 215 US gal
- Hydraulic system	1050 + 815 l	277 + 215 US gal
Main pums max oil flow (cutter)		
- Main pums max oil flow (base machine)	3x 460 l/min	3x 122 US gal
- Auxiliary pums max oil flow	2x 460 l/min	2x 122 US gal
Main winches	50 + 26 l/min	13 + 7 US gal
- Type	controlled descent/vario type	<i>controlled descent/vario type</i>
- 1st layer line pull (nominal load)	297 kN	66767 lbf
- Rope diameter	26 mm	1.02 in
- Rope speed (max)	52 m/min	171 ft/min
- Max rope length on winch	406 m	1332 ft
Boom	Mast type	<i>Mast type</i>
- Length	16 + 6 m	52.5+19.7 ft
Undercarriage	fixed gauge - removable side frames	<i>fixed gauge - removable side frames</i>
- Overall width	6300 mm	248.03 in
- Overall length of crawlers	7200 mm	28346 in
- Track shoe width	1000 mm	39.37 in
- Track shoe style	Flat shoes	<i>Flat shoes</i>
- Travel speed	0,7 - 1,4 km/h	0.4 - 0.9 mph
- Traction force	925 kN	207945 lbf
Upper structure		
- Turret width	3500 mm	137.79 in
- Slewing speed	1,3 rpm	1.3 rpm
- Swing tail radius	5765 mm	226.97 in

* Low regulation engine available upon request

STANDARD EQUIPMENT

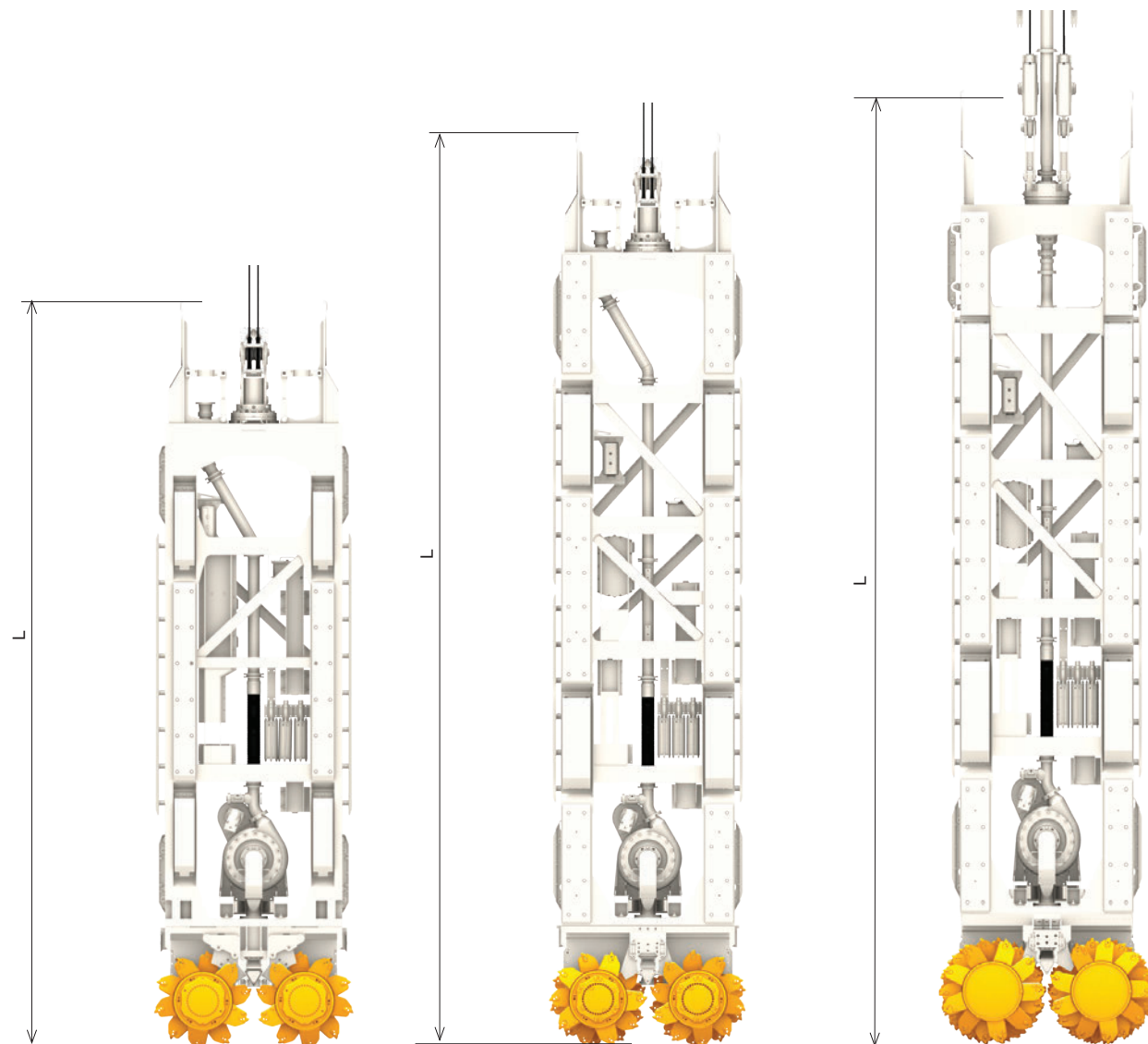
- Hydro-clean micro filtration with water separation
- In cab warning alarm in case of hydraulic oil contamination
- Hydromill Module and Base Machine hydraulic systems separated (PATENTED)
- Electro-proportional control system
- High pressure filters on the main lines
- Drain tank c/w filters for drain oil lines
- Hydraulic hose set for 100 m. depth complete with an extra spare hose
- Heavy Duty Mud Hose Assembly for 100 m. depth
- New Hose Drum Layout - perfect suitability at various working radius with all rotation angles of the module (no torsion on module during excavation)
- DMS system for a total control over machine performance and excavation parameters
- DMS PC software for production data analysis and report
- 8 video-cameras
- 8 access ladder points for undercarriage
- Turret quick assembly catwalk 900 mm
- Lashing Points on undercarriage for transport
- Upper platform catwalks and handrails
- Control Board for rope changing
- Assembly mode selector for safe rigging / de-rigging
- Remote Control Board for assembly disassembly and transport phase
- Remote control board for teeth changing

OPTIONAL EQUIPMENT

- Hydraulic oil filtering external group complete with oil contamination indicator
- DMS PC 3D option for panels overlap control
- High led lighting system
- Access ladder on the boom
- Safety Life Line on the boom
- Turret catwalk handrails
- Complete safety equipments for CE request of EN16228

SC-135 Tiger Hydromill

SH-30 / SH-40 / SH-50 MODULE DATA SHEET



ModuleType	SH-30	SH-30	SH-40	SH-40	SH-50*	SH-50*
Body length (L)	10,5 m	34.4 ft	13 m	42.7 ft	14,7 m	48 ft
Weight class	30000 kg	66139 lb	40000 kg	88185 lb	50000 kg	110231 lb
Torque range	78 - 123 kNm	57530 - 90720 lbf*ft	78 - 153 kNm	57530 - 112847 lbf*ft	109 - 153 kNm	80394 - 112847 lbf*ft
Drilling speed range	30 - 18 rpm	30 - 18 rpm	30 - 15 rpm	30 - 15 rpm	22 - 15 rpm	22 - 15 rpm
Trench length range	2600 / 3000 mm	102.4 / 118.1 in	2800 / 3200 mm	110.2 / 126 in	2800 / 3200 mm	110.2 / 126 in
Trench width range	700 / 1200 mm	27.6 / 47.2 in	800 / 1800 mm	31.5 / 70.9 in	1000-2000 mm	39 - 79 in

* High depth version

STANDARD EQUIPMENT

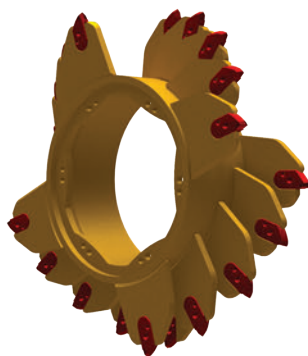
- Double axis inclinometer
- DMS verticality control system
- Scrapers folding system allows a fast drums assembly/disassembly
- Independent mobile flaps, 6 upper (3 position) and 6 lower (2 position)
- High performance mud pump
- Anti-wearing 3 parts flipper teeth cam
- Wide range of cutting drums for the various soil types
- Module rotation system ($\pm 90^\circ$)
- Motoreducer tungsten protection plate options

OPTIONAL EQUIPMENT

- Simultaneous or independent tilting cutters
- Triple axis inclinometer
- High accuracy triple axis inclinometer (especially designed for depth excavation)

SC-135 Tiger Hydromill

DRUMS CHART



Type 1 teeth drums

Coarse and cohesive soil, alluvial soil with small size boulders soft rocks, medium-soft rocks formation and decompressed rocks.



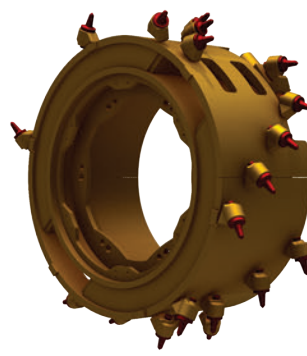
Type 2 teeth drums

Medium-hard fractured and decompressed rocks.



Type 1 Pick drums

Low fractured medium and hard rock formation over 50 MPa.



Type 2 Pick drums

Not fractured medium and hard rock formation over 50 MPa.

SC-135 Tiger Hydromill

HYDROMILL CUTTING UNIT

Panel width	800 - 1000 mm	31.5 - 39.4 in	1000 - 1500 mm	39.4 - 59 in	1500 - 2000 mm	59 - 78.7 in
SH-30	H-9 / H - 11	H-9 / H - 11	HH-11*	HH-11*	-	-
SH-40	H-9 / H - 11	H-9 / H - 11	HH-11	HH-11	HH-13 / HH-15	HH-13 / HH-15
SH-50 **	-	-	HH-11	HH-11	HH-13 / HH-15	HH-13 / HH-15

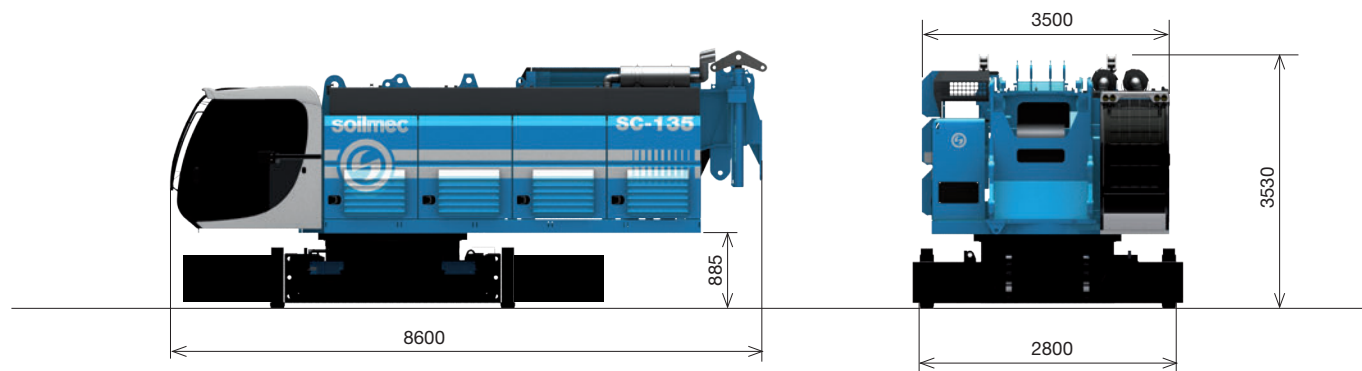
* Max panel width for SH-30 (1200 mm)

** High depth version

Cutting Unit	H-9	H-9	H-11/HH-11	H-11/HH-11	HH-13	HH-13	HH-15	HH-15
Rated torque	93 kNm	68593 lbf*ft	109 kNm	80394 lbf*ft	131 kNm	96620 lbf*ft	153 kNm	112847 lbf*ft
Drilling Speed	25 rpm	25 rpm	22 rpm	22 rpm	18 rpm	18 rpm	15 rpm	15 rpm

SC-135 Tiger Hydromill

TRANSPORT, DIMENSIONS AND WEIGHTS



Transport configuration

Base machine

- Weight w/o counterweight and w/o crawlers	45000 kg	99208 lb
- Length	8600 mm	338.6 in
- Width	3500 mm	137.79 in

Mud hose drum

- Weight	5700 kg	12566 lb
- Dimension (length x width)	3450 x 3000 mm	136 x 118 in

Hydraulic hose drum

- Weight	11200 kg	24692 lb
- Dimension (length x width)	3300 x 1900 mm	130 x 75 in

Boom mast type

- Weight - boom foot	2000 kg	4409 lb
- Dimension (length x width)	4000 x 1200 mm	157 x 47 in
- Weight - boom extension	5000 kg	11023 lb
- Dimension (length x width)	12000 x 1300 mm	472 x 51 in
- Weight - boom head	3400 kg	7496 lb
- Dimension (length x width)	6200 x 1500 mm	244 x 59 in

Platform

- Weight	10000 kg	22046 lb
- Dimension (length x width)	7697 x 2930 mm	303 x 115 in

Module SH-40 (w/o cutting unit)

- Weight	24600 kg	54233 lb
- Dimension (length x width)	11450 x 2690 mm	451 x 106 in

All technical data are purely indicative and subject to change without notice

Technical data sheet SC135Tiger-003 03/2016

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