

Hydromill

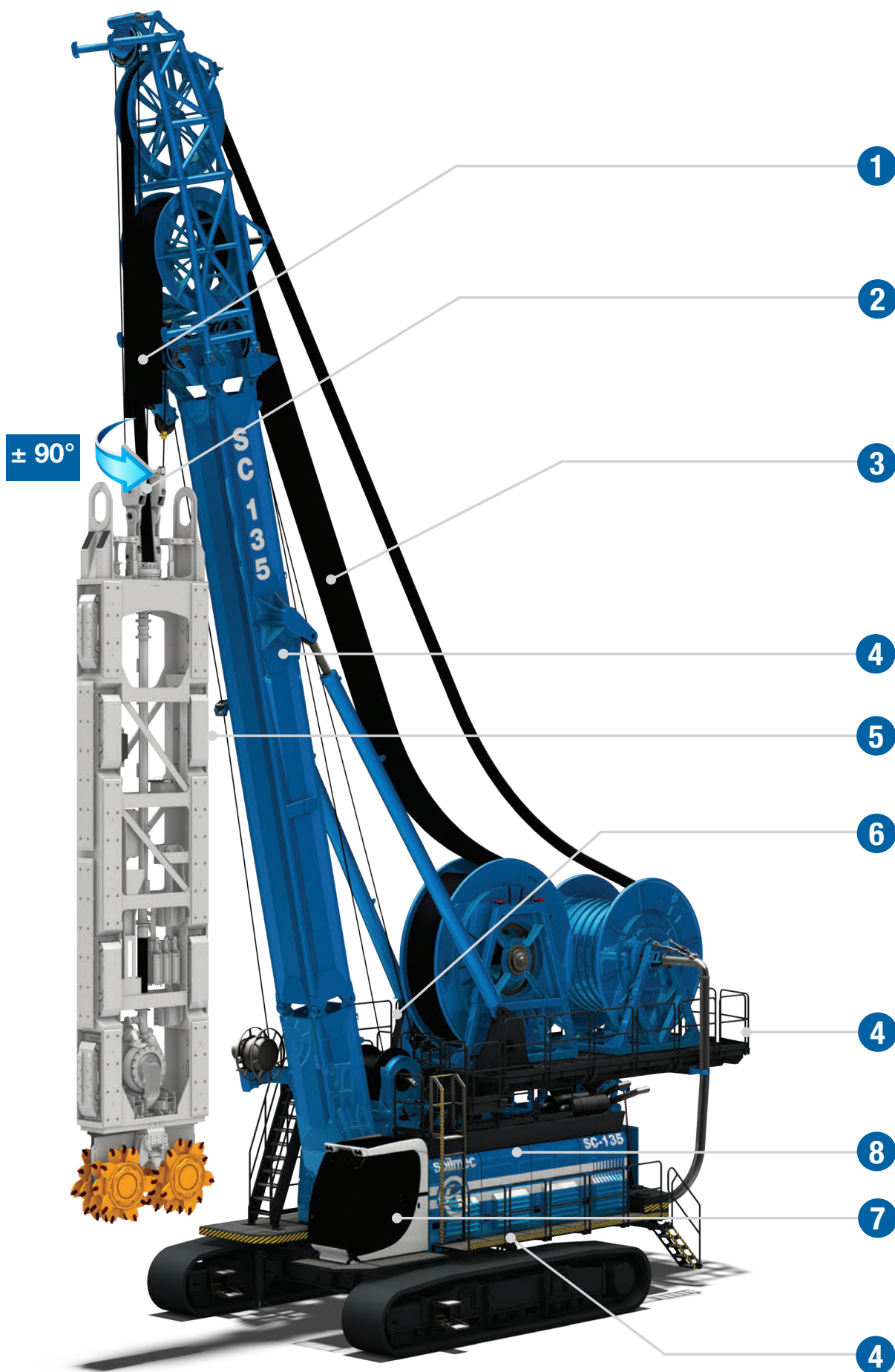
# SC-135 Tiger

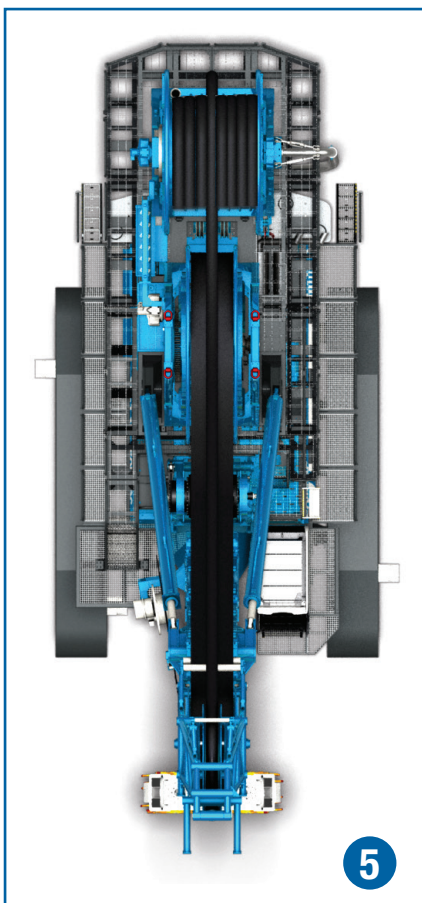
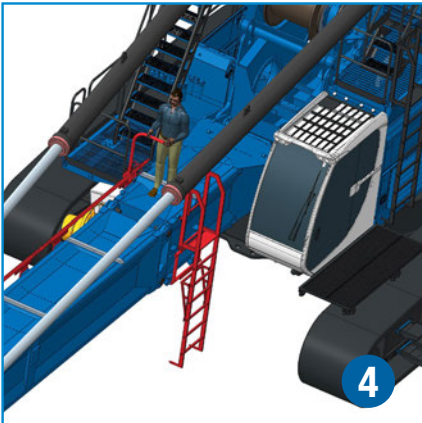


**soilmec**   
Drilling and Foundation Equipment

# SC-135 Tiger Hydromill

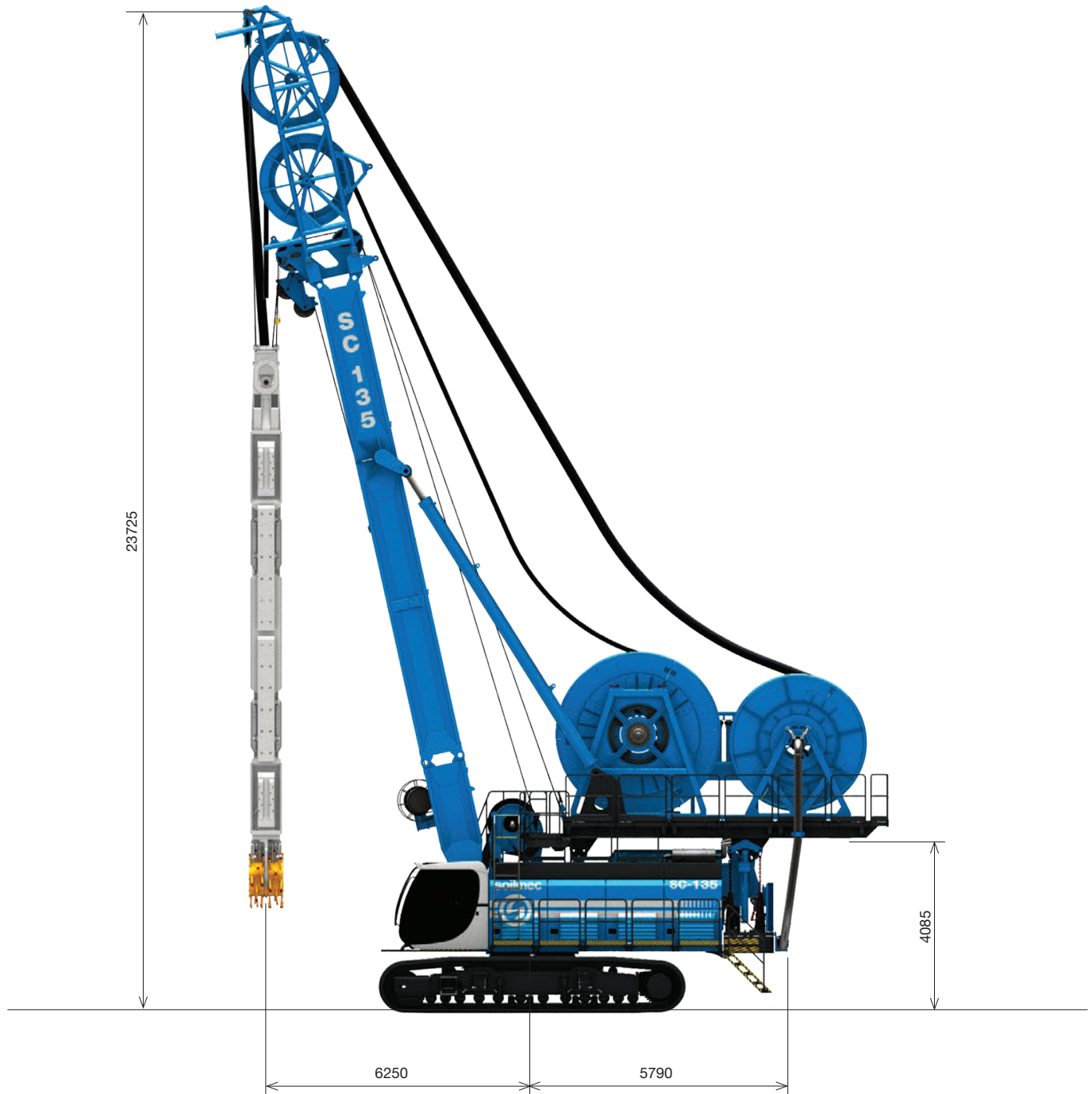
## FOCUS OVERVIEW





- 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

<b>Operating weight</b>	205000 kg	451947 lb
<b>Operating height</b>	23,7 m	77.7 ft
<b>Max depth</b>	100 m (150 m*)	328 ft (492 ft*)
<b>Milling unit</b>	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
<b>Max Rated Power</b>	<b>708 kW @ 1800 rpm</b>	<b>950 HP @ 1800 rpm</b>
- Engine conforms to exhaust emissions standard	<b>EU Stage IV / US EPA Tier 4f *</b>	<i>EU Stage IV / US EPA Tier 4f *</i>
- Fuel tank capacity	<b>1200 l</b>	<b>317 US gal</b>
- Hydraulic oil tank capacity	<b>1050 + 815 l</b>	<b>277 + 215 US gal</b>
- Hydraulic system	<b>1050 + 815 l</b>	<b>277 + 215 US gal</b>
<b>Main pums max oil flow (cutter)</b>		
- Main pums max oil flow (base machine)	<b>3x 460 l/min</b>	<b>3x 122 US gal</b>
- Auxiliary pums max oil flow	<b>2x 460 l/min</b>	<b>2x 122 US gal</b>
<b>Main winches</b>	<b>50 + 26 l/min</b>	<b>13 + 7 US gal</b>
- Type	<b>controlled descent/vario type</b>	<i>controlled descent/vario type</i>
- 1st layer line pull (nominal load)	<b>297 kN</b>	<b>66767 lbf</b>
- Rope diameter	<b>26 mm</b>	<b>1.02 in</b>
- Rope speed (max)	<b>52 m/min</b>	<b>171 ft/min</b>
- Max rope length on winch	<b>406 m</b>	<b>1332 ft</b>
<b>Boom</b>	<b>Mast type</b>	<i>Mast type</i>
- Length	<b>16 + 6 m</b>	<b>52.5+19.7 ft</b>
<b>Undercarriage</b>	<b>fixed gauge - removable side frames</b>	<i>fixed gauge - removable side frames</i>
- Overall width	<b>6300 mm</b>	<b>248.03 in</b>
- Overall length of crawlers	<b>7200 mm</b>	<b>28346 in</b>
- Track shoe width	<b>1000 mm</b>	<b>39.37 in</b>
- Track shoe style	<b>Flat shoes</b>	<i>Flat shoes</i>
- Travel speed	<b>0,7 - 1,4 km/h</b>	<b>0.4 - 0.9 mph</b>
- Traction force	<b>925 kN</b>	<b>207945 lbf</b>
<b>Upper structure</b>		
- Turret width	<b>3500 mm</b>	<b>137.79 in</b>
- Slewing speed	<b>1,3 rpm</b>	<b>1.3 rpm</b>
- Swing tail radius	<b>5765 mm</b>	<b>226.97 in</b>

\* Low regulation engine available upon request

## STANDARD EQUIPMENT

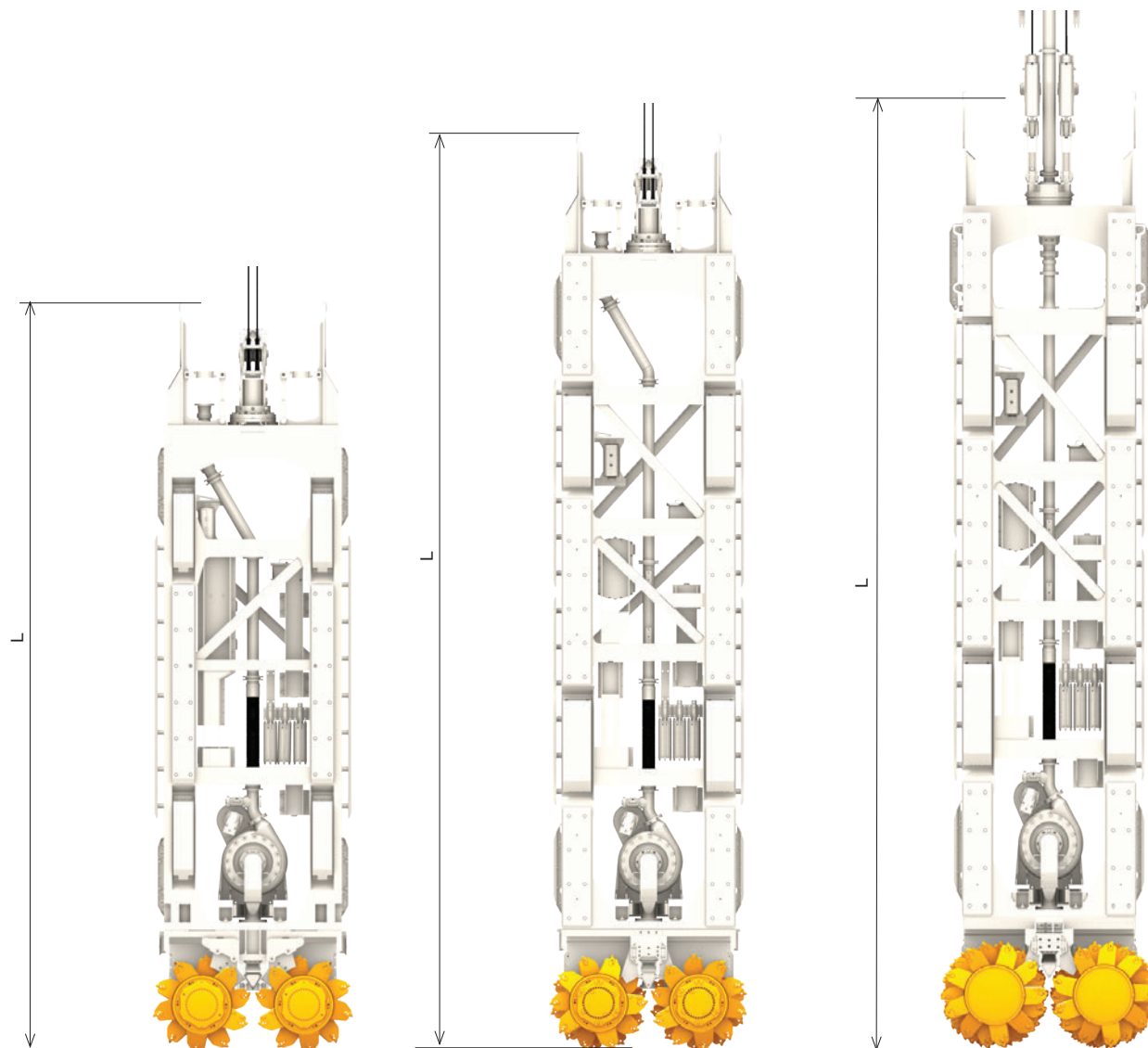
- Hydro-clean micro filtration with water separation
- In cab warning alarm in case of hydraulic oil contamination
- Hydromill Module and Base Machine hydraulic systems separated (PATENTED)
- Electro-proportional control system
- High pressure filters on the main lines
- Drain tank c/w filters for drain 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

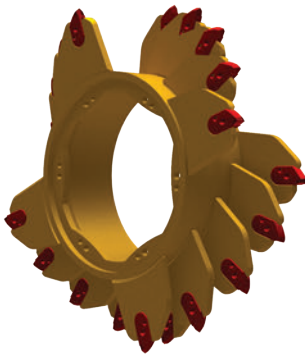
- Double axis inclinometer
- DMS verticality control system
- Scrapers folding system allows a fast drums assembly/disassembly
- Independent mobile flaps, 6 upper (3 position) and 6 lower (2 position)
- High performance mud pump
- Anti-wearing 3 parts flipper teeth cam
- Wide range of cutting drums for 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.



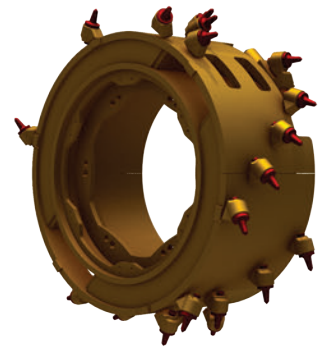
### Type 2 teeth drums

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

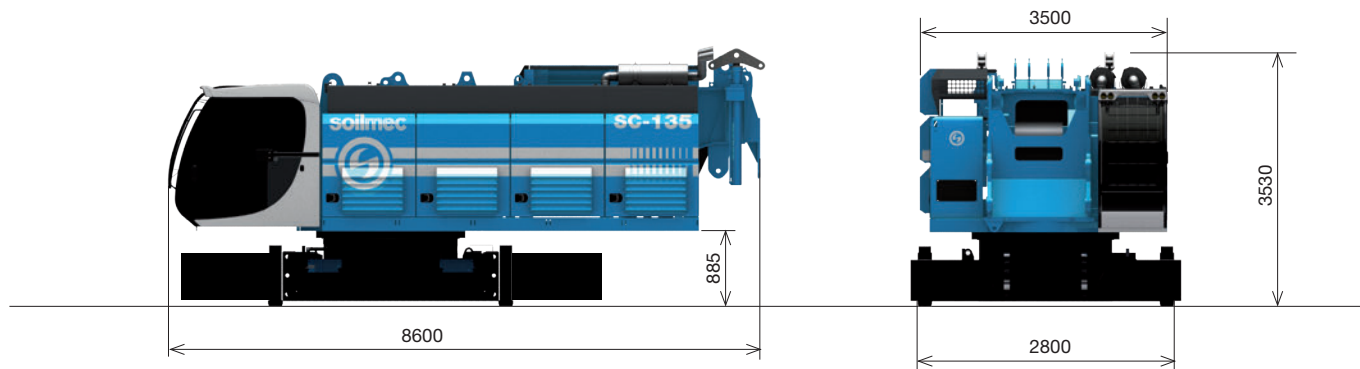
\* Max panel width for SH-30 (1200 mm)

\*\* 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

This brochure has been edited and distributed by SOILMEC Spa. The present document cancels and override any previous ones. This brochure shall not be distributed, reproduced or exhibited without SOILMEC Spa. authorization in accordance with to SOILMEC web site disclaimer condition.

SOILMEC Spa distributes machinery and structures all over the world, supported by SOILMEC Spa subsidiary companies and dealers. The complete Soilmec network list is available on the web site [www.soilmec.it](http://www.soilmec.it)