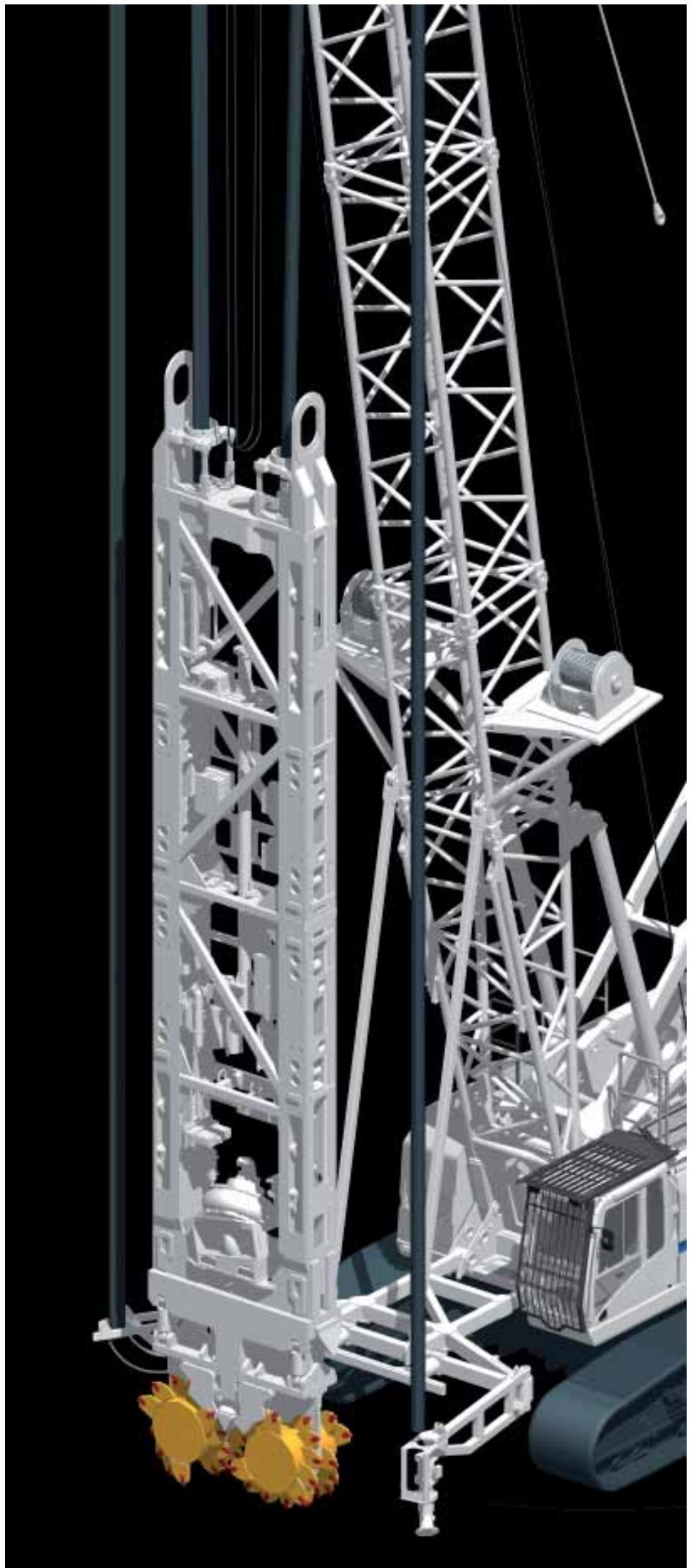
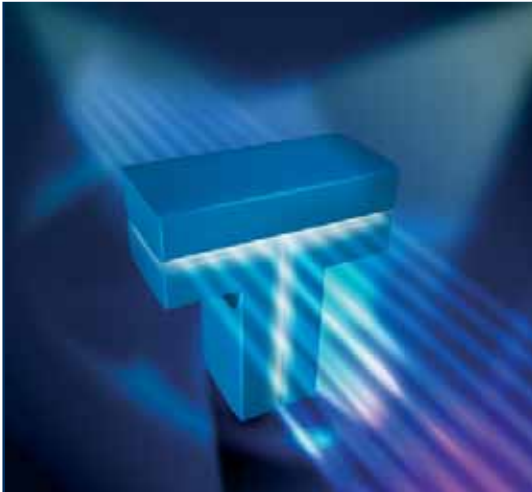


Technology
Information

Hydromill

method



soilmec 
Drilling and Foundation Equipment

More than **25 years** of experience of **TREVI Group Companies** (enriched the experience of Rodio) in the use of Hydromill technologies, have made **SOILMEC** able to engineer the most advanced fleet of Hydromill equipment and to provide the global foundation market with a complete range of models and accessories.

Diaphragm walls are common practice in civil engineering as part of or as aids to the building of civil and hydraulic structures. Hence, they can be either temporary or permanent.

In the realm of structural diaphragm walls a distinction exists between retaining structures (earth and hydraulic) and foundations. Those walls, whose purpose is hydraulic, can be sub-divided into impervious (cut off) and draining. Basically, a trench is excavated in the ground, generally in the presence of a stabilizing fluid, and it is then back-filled with an appropriate material.

The trench geometry (width, depth and length) is designed according to the characteristics of the structure to be built; these geometrical features and also the ground conditions determine the choice of best suitable trenching equipment.

A simple and rational method is trenching by means of jaw-grabs, which dig into the ground and replace it with an equal volume of slurry (bentonite or polymeric fluids) which stabilize the excavation. It is generally found that when excavating diaphragm walls through soils with conventional grabs the maximum practical depth is 40-60 m. The amount of panel deviation from the vertical may be 0.5 to 2% depending on the ground conditions, and below such depths, the quality of the panel joints may be unacceptably low. The continuity and effectiveness of the whole diaphragm will therefore be compromised.

Conventional grabs are also severely limited in their ability to excavate bedrock; in such cases, the traditional method is "chiselling", i.e. the dropping of a large and heavy sharp edged tool to fracture the rock for subsequent grabbing. This is usually a tedious and time consuming process and shows a very low production rate.

The Hydromill system is made up of three main components:

- **supporting crawler crane**
- **milling unit**
- **plant for mud preparation and processing.**



Excavation phases and construction procedure

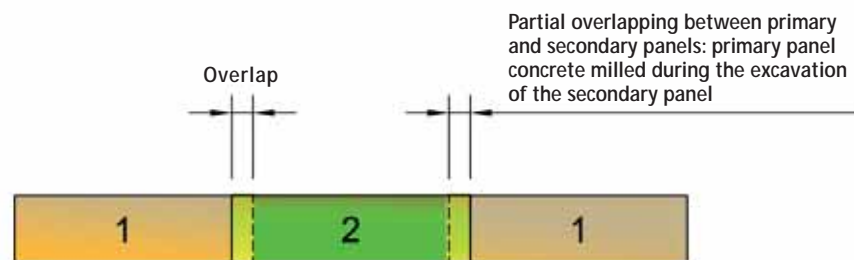
The hydromill allows the excavation of a panel in one single phase, since the excavation cuttings are continuously pumped away by the mud recirculation system.

Typically the procedure for the construction of a structure foresees a series of alternating primary and secondary panels:

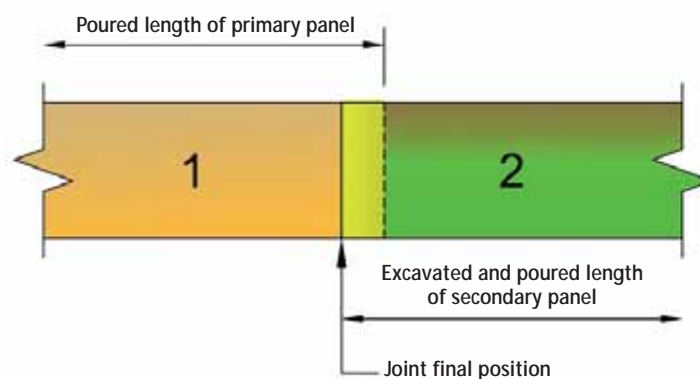
- Excavation of a shallow pre-trench, for the suction pump start-up;
- Excavation of the primary panels; the panels can be individual or multiples, formed by 2 bites, followed by the wedge in between;
- Once the excavation is completed and the drilling mud is properly cleaned (the mud is regenerated until its characteristics in the trench, i.e. density, viscosity and sand content, comply with the technical requirements), the reinforcement cage is placed and concreting can start.
- Excavation of the secondary panel in a single bite. During the excavation a small portion of the concrete on each adjacent primary panel is removed by the hydromill cutter drums. The construction joint between the panels is a high quality "concrete-to-concrete joint". During the excavation of the secondary panels, the hydromill cutter drums creates a rough, clean contact surface on the ends of the primary panels. Shear resistance and water tightness is achieved without the use of conventional stop-ends or steel profiles.
- Again when the excavation is completed and the drilling mud is properly treated, the reinforcement cage is placed and concreting can start.

Concrete-to-concrete joint obtained by partial overlapping between primary and secondary panels.

Concrete to concrete joint

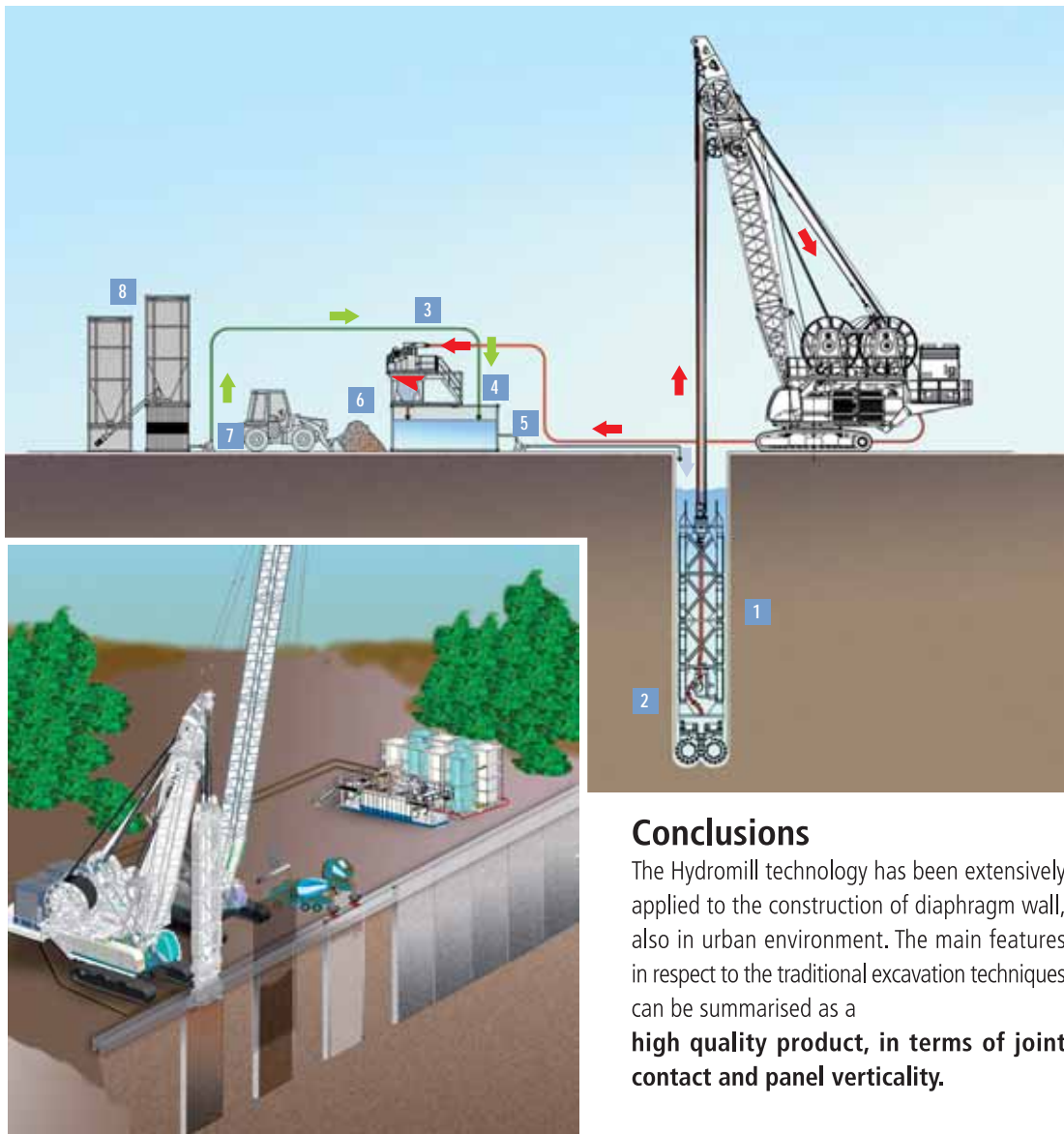


Joint Detail



HYDROMILL SYSTEM

JOB SITE LAYOUT



Drilling mud circulation scheme

- 1 Hydromill
- 2 Suction pump
- 3 Mud processing plant
- 4 Slurry tank
- 5 Slurry pump
- 6 Screened cuttings
- 7 Slurry pump
- 8 Bentonite mixing plant

Conclusions

The Hydromill technology has been extensively applied to the construction of diaphragm wall, also in urban environment. The main features in respect to the traditional excavation techniques can be summarised as a

high quality product, in terms of joint contact and panel verticality.

In particular:

- Concrete-to-concrete joint: when excavating the secondary, the mill cuts on both sides the concrete of the adjacent primaries; by concreting the secondary, a tight concrete to concrete joint is achieved (being milled, the contact surface is adequately rough) which ensure a perfectly satisfactory hydraulic tightness.
- Real time verticality monitoring and guidance during the excavation: the hydromill is equipped with electronic systems (DMS) in order to continuously monitor the excavation parameters of the milling unit and its position. Special devices can be used to ensure verticality correction, if necessary.
- Suitable in all types of soil and rock with UCS value up to 50-100 MPa.
- Mitigation of the construction impact on the urban environment, since the level of noise and vibration induced during the excavation do not create any disturbance to adjacent structures and buildings.
- Clean site operations, as a result of the slurry reverse circulation system utilised for the transport and removal of the cuttings. The excavation material (solid particles separated by the mud treatment plant) can be reutilised as filling material, or easily transported to a disposal area.

HYDROMILL CONFIGURATIONS

MILLING UNIT

Both hydraulic and drilling mud circulation hoses have to move downward and upward, following the milling unit movement; depending on the excavation depth and therefore on the base machine class and boom length, two different configuration can be adopted:

- **Hose drums design (HDD),**

the motorized swivel (able to rotate the hydromill of $\pm 90^\circ$) and the special lattice boom cathead and the related positioning of the drums on the base carrier are manufactured under Soletanche-Fressynet licence,

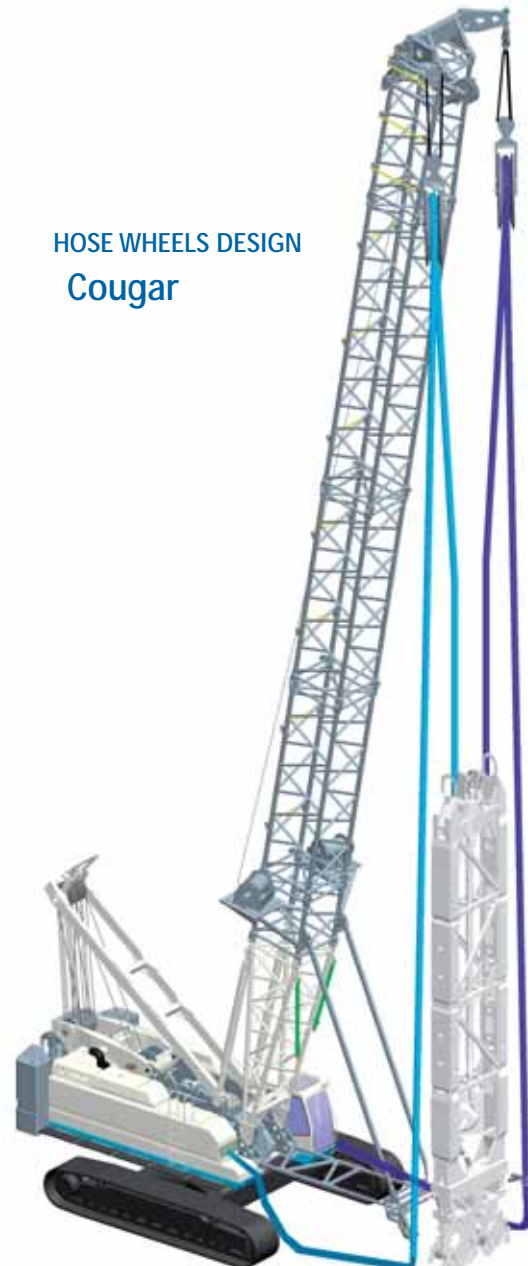
- **Hose wheels design (HWD),**

positioned below the cathead and free to follow the hydromill movements, with a tensioning and rewinding automatic system.

HOSE DRUMS DESIGN
Tiger



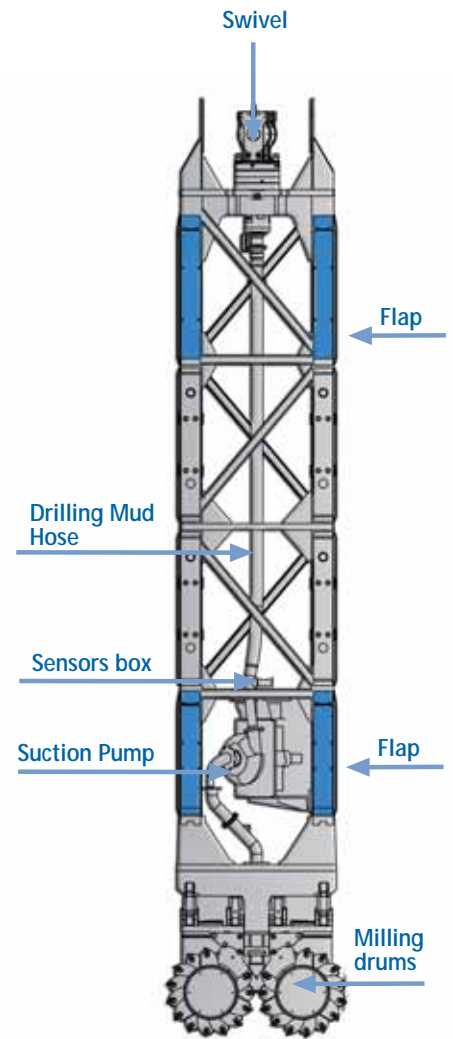
HOSE WHEELS DESIGN
Cougar



HYDROMILL SYSTEM

MILLING UNIT

The milling unit is constituted by a heavy steel frame on which are mounted two counter-rotating and independent milling drums. Drums with different torque and dimensions can be adopted in order to match the geometrical requirement; several Soilmec tooth types can be mounted on the milling drums, depending on the characteristics of soil to be excavated. The hydromill is lowered progressively into the trench, excavates and crushes the soil or rock. A powerful submerged mud pump (with nominal output of 500 cubic metre per hour), located immediately above the cutter drums, creates a reverse circulation of the stabilizing fluid (bentonite mud or water), which acts as a transport medium to evacuate the cuttings from the excavation, and delivers the cuttings-laden mud to a mud treatment plant.



The cuttings are removed from the stabilizing fluid by means of vibrating screens or cyclones, depending on the size particles. Cleaned and fresh slurry is fed back into the top of the trench to maintain the slurry level and so the trench stability.



Soilmec tooth types

Hydromill Module	H-5	H-8	H-10
Torque	2 x 51 kNm	2 x 87 kNm	2 x 102 kNm
Width	800 - 1200 mm	800 - 1500 mm	800 - 1500 mm
Length	2600 - 3000 mm	2600 - 3000 mm	2600 - 3000 mm
Height	13 m	13 m	13 m
Weight	37 - 38 ton	38 - 40 ton	38 - 40 ton
Max rotation speed (with external power pack)*	37 rpm @ 39 kNm	27 rpm @ 53 kNm	23 rpm @ 61 kNm
Max rotation speed (w/o external power pack)	37 rpm @ 39 kNm	22 rpm @ 65 kNm	19 rpm @ 76 kNm

* And SC-120 High Power Version

MONITORING CONTROL AND CORRECTION SYSTEM

CORRECTION SYSTEM

In detail it is possible to correct hydromill verticality deviation:

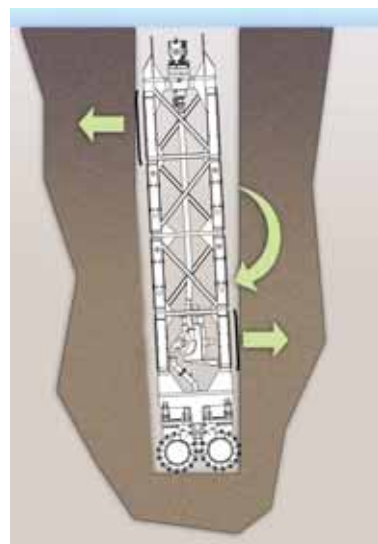
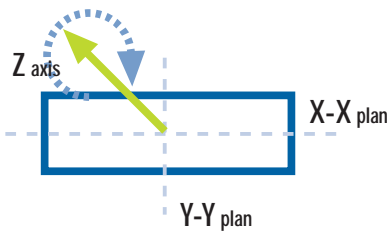
CORRECTION ON X-X PLAN

Correction in the X-X- plan can be achieved in two ways:

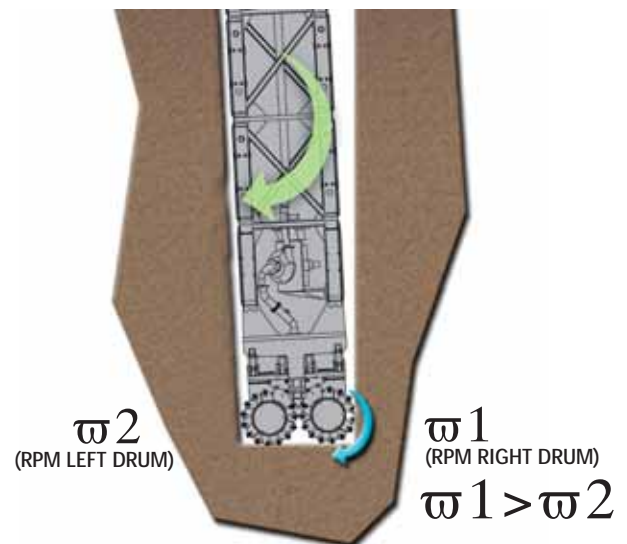
¥ **Adjusting the rotation speed of the milling drums.** If necessary the rotation speed of one drum can be adjusted to maintain verticality therefore achieving a quick displacement. Usually, the excavation is maintained constant while the rotation speed of one drum is increased compared to the other.

¥ **Moving the sides flaps.**

Hydromill orientation
Reference scheme



MOVING SIDE FLAPS



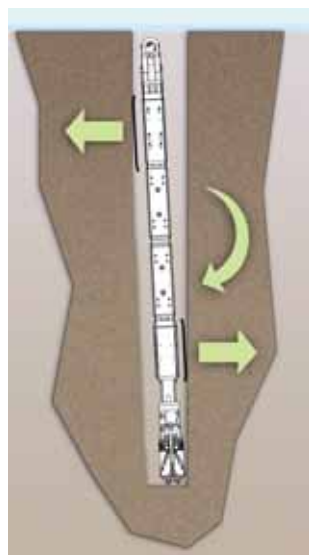
DIFFERENT RPM DRUMS

CORRECTION ON Y-Y PLAN

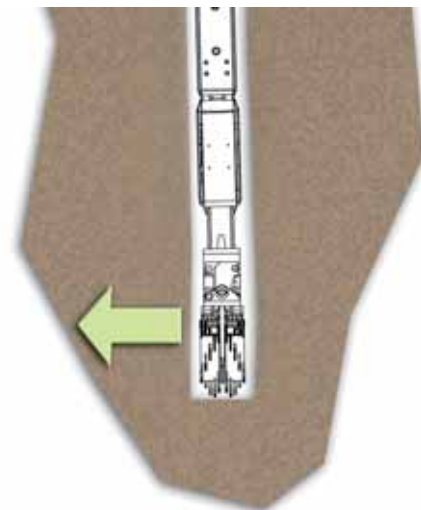
Correction in the Y-Y- plan can be achieved in two ways:

¥ **moving faces flaps**

¥ **varying the inclination of the drum group in respect to the main hydromill frame**



MOVING FACES FLAPS



VARYING INCLINATION OF DRUM GROUP

MONITORING CONTROL AND CORRECTION SYSTEM

CORRECTION SYSTEM

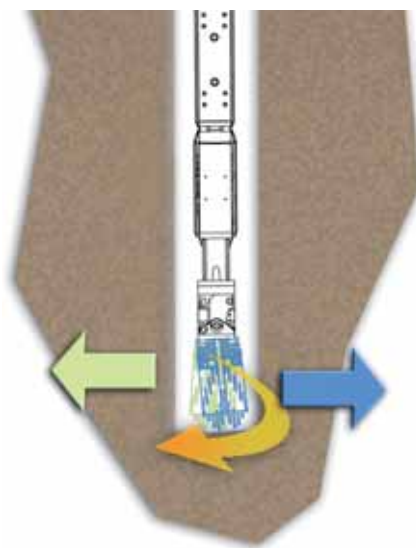
CORRECTION OF TWISTING ALONG Z AXIS

Correction of twisting along the Z axis can be achieved in two ways:

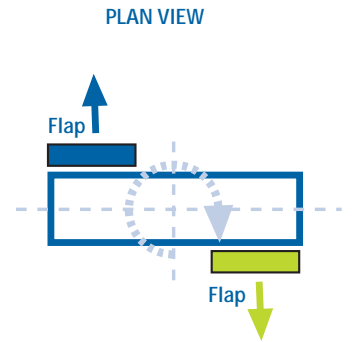
- ¥ moving face flaps
- ¥ moving separately each drum in respect to the main hydromill frame



MOVING FACES FLAP



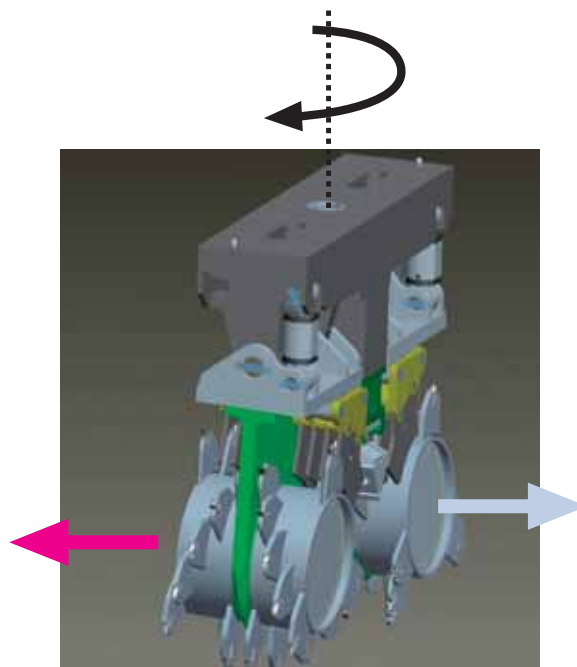
DIFFERENT INCLINATION OF EACH DRUMS

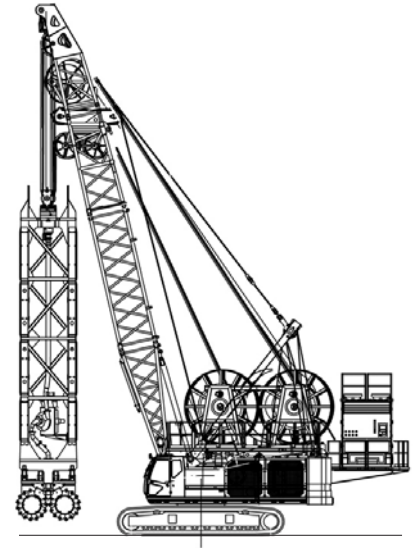
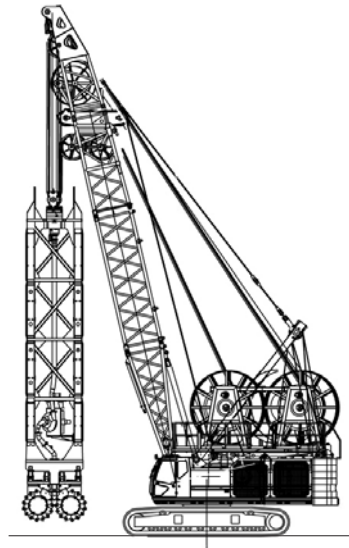


These inclination corrections are then progressively reduced until the complete correction of the verticality is achieved. The operator can combine such actions in order to adjust the deviation and reposition the hydromill back to the vertical position, while excavation continues.

All the correction operations are shown and controlled by the Soilmec DMS system. The recorded data, graphically represented, will give a document proving the verticality of each excavated bite and panel.

In normal operating conditions, the Hydromill models are capable of achieving depth up to 80-100 meters, with a vertical tolerance in the range of 0.2 - 0.4%, both in longitudinal and perpendicular direction.





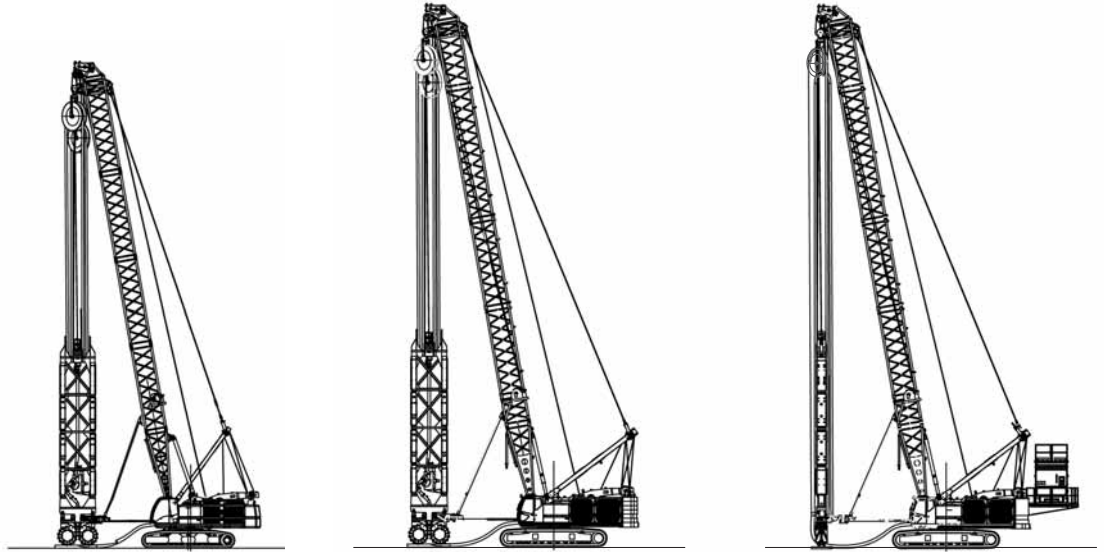
Carrier	SC-120	SC-120 EP
Height	23 m	23 m
Cutting depth	90 m	90 m
Engine power	522 kW / 707 kW*	522 kW
Ext. Power pack power	-	708 kW
Machine class	120 tons	120 tons
Suggested milling unit	H-5/8/10*	H-5/8/10
Configuration	HDD (Hose Drum Design)	HDD (Hose Drum Design)

* High Power Version



EQUIPMENT

COUGAR



Carrier	SC-100	SC-120	SC-120 EP
Height	28 m	37 m	37 m
Cutting depth	52 m	60 m	60 m
Engine power	480 kW/563 kW*	522 kW/707 kW*	522 kW
Ext. Power pack power	-	-	708 kW
Machine class	90 tons	120 tons	120 tons
Suggested milling unit	H-5/8*	H-5/8/10*	H-5/8/10
Configuration	HWD (Hose Wheel Design)	HWD (Hose Wheel Design)	HWD (Hose Wheel Design)

* High Power Version



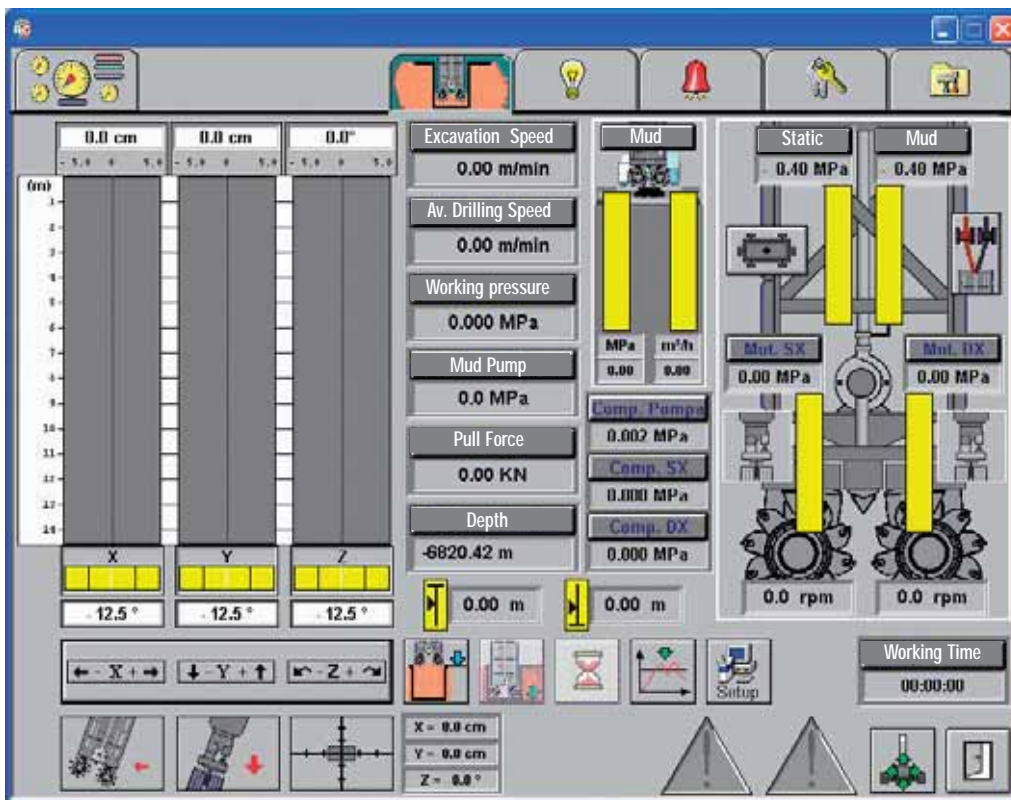
MONITORING CONTROL AND CORRECTION SYSTEM

DRILLING MATE SYSTEM

The hydromill allows a constant control, in real time, of all the excavation parameters. Moreover, the verticality is constantly monitored by means of sensors installed directly on the hydromill frame, allowing the operator to take corrective action at the slightest sign of deviation.

The Soilmecc DMS system shows and records the following main parameters, versus depth and/or versus time:

- ¥ depth
- ¥ milling unit position on three axis, X, Y and Z
- ¥ rpm and oil pressure per each drum
- ¥ static drilling mud pressure inside the trench
- ¥ drilling mud pressure inside the debris evacuation hoses (close to the suction pump and at the surface)
- ¥ drilling mud delivery rate
- ¥ penetration rate
- ¥ hoist on main winch



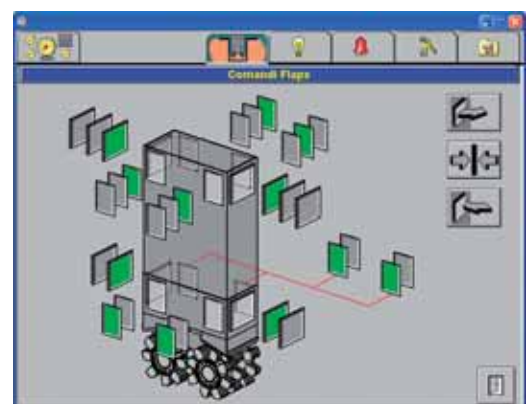
DMS General Control Board



The DMS system can also monitor the machine working parameters (engine data, etc), representing therefore a fundamental instrument to reduce intervention times on the equipment and to collect feedback on present rig status and on components average life.

For the first meters of excavation, the Hydromill is placed and maintained in the proper position by means of a guide frame fixed to the guide walls by hydraulic jacks. The monitoring system indicates the position at the reached depth of the hydromill referred to two vertical reference plans X-X (longitudinal) and Y-Y (transversal), and the rotation along Z axis.

- The new Soilmecc milling unit allows to perform corrections by:
- ¥ controlling the rotation speed (rpm) of the milling drums
 - ¥ varying the inclination of one or both milling drums
 - ¥ using a steering system, formed by 12 flap elements, positioned on two levels and connected on the main frame sides and faces.



Flap system
DMS control board

CUTTER UNIT

SOILMEC TEETH TYPE

The milling unit drums are equipped with tooth holders suitable to mount all types of Soilmec teeth. Different types of teeth are specially designed in order to tackle the characteristics of the soil conditions (sharp for clayey material, crushing for gravel, boulders or rocks). All Soilmec teeth are reinforced by tungsten carbide insert, in order to confer strength, hardness and life against the abrasion and wear.

The main characteristics of Soilmec teeth are shown in the table below:

- **Body thickness:** 36 - 42 mm
- **Body height:** 153 - 156 mm
- **Teeth shape:** Flat or Conical
- **Available in right or left version**

The shape of the teeth, function of soil conditions can be:

¥ Multipurpose flat tooth, with carbide plate, suitable for all type of soil (soft to medium stiff)

¥ Conical tooth, with carbide round insert, suitable for boulders and rocks

Conical self sharpening teeth can be supplied for hard rock applications.

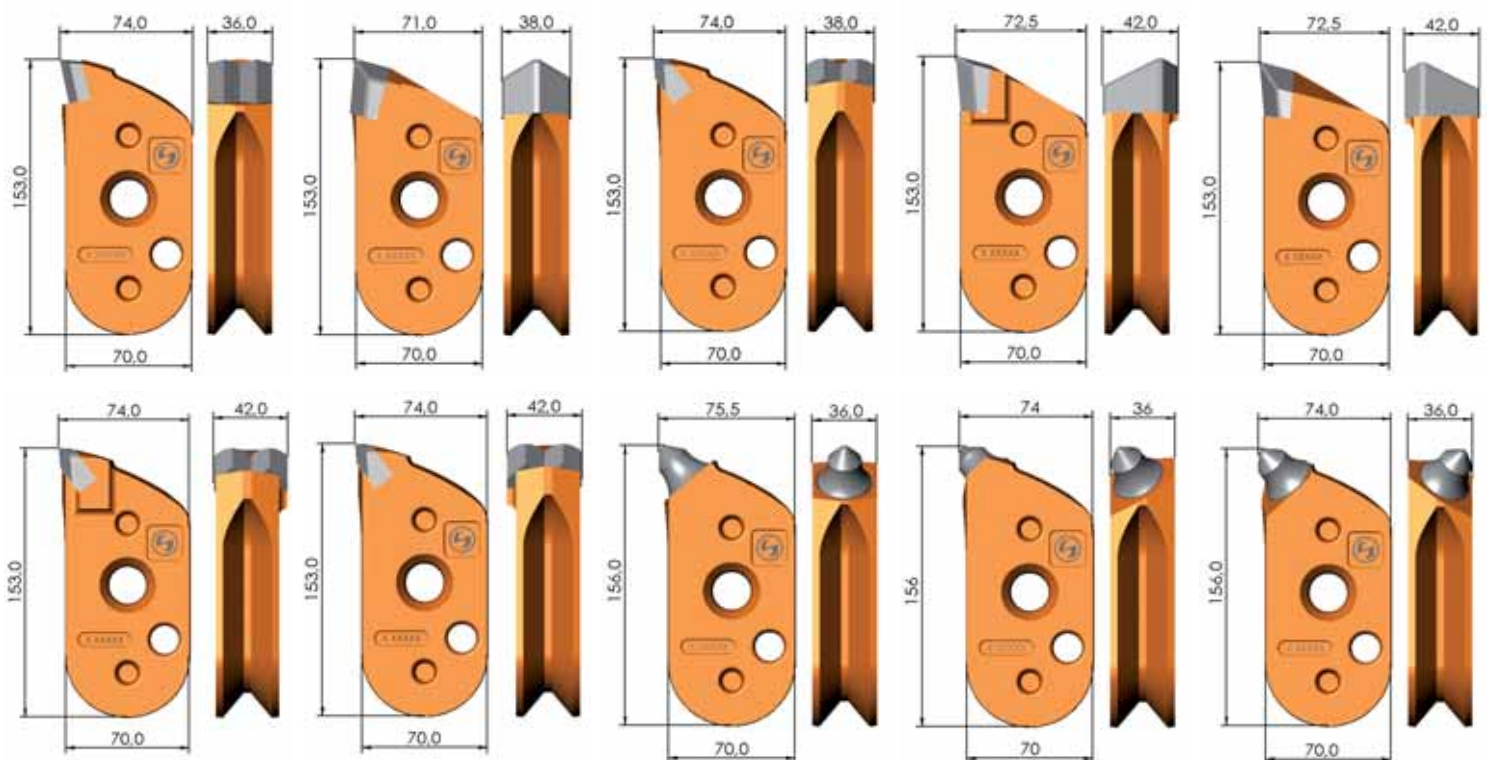
Multipurpose flat Soilmec tooth



Conical self sharpening teeth



Available teeth table





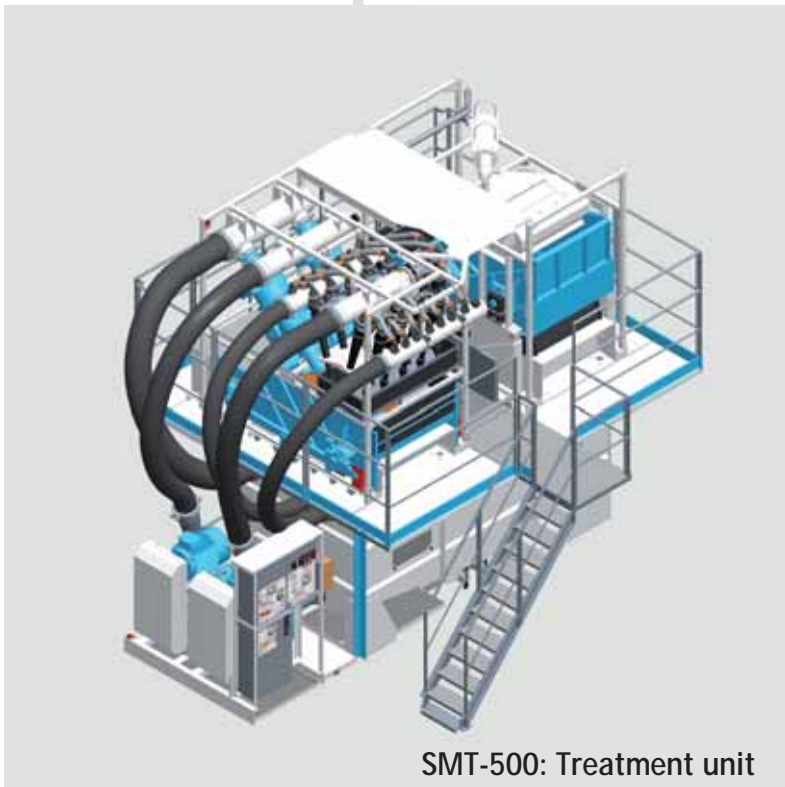
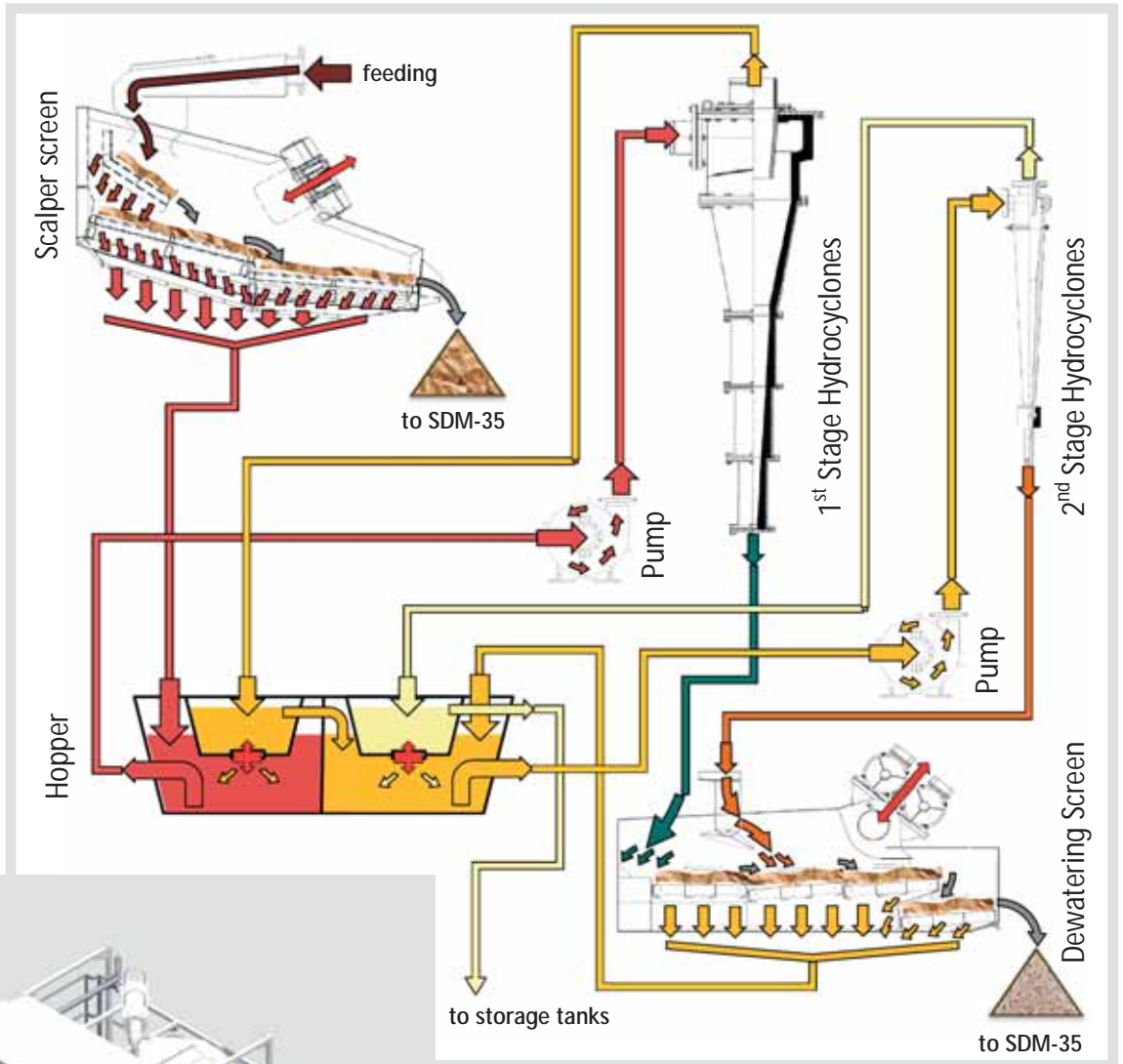
MUD PROCESSING EQUIPMENT

PLANTS & TECHNICAL FEATURES

In order to have the best working performance, it is necessary to have a perfect synergy between the various types of equipment on the site: drilling rigs, cranes, systems.

Therefore it is essential to arrange mud treatment equipment just for the application field, that is, such as to be able to process mud, by way of a continuity of 450-500 mc/h, and also under conditions of high concentration and density. A series of shakers and cyclones are aimed at cleaning the mud from the debris that are suspended in it, by trying to restore the original properties of the mud in order to store into tanks, before sending it back to the excavation that is in progress. Over decades of activity, the know-how acquired by the Trevi Group into the execution of diaphragm walls by means of hydrocutter, and also the direct experience in the Oil sector, have both allowed the Group's R&D to develop a new mud processing system that boasts the most updated and advanced technical solutions available, so that the Group can now suggest special unit in alternative to the most conventional ones.

SMT-500: Layout Two Step System



SMT-500: Treatment unit

SOILMEC SMT-500 & SDM-35

This new system, starting from consolidated principles, has optimised the mud processing treatment, being also able to improve site performances. The Soilmec SMT-500 main difference, compared to what is proposed by other competitors, is the adopted MUD CLEANER solution.

The mud cleaner (shaker and cyclones) solution comes from the Oil application field, where high performance is an essential condition. The problem linked to the space availability in metropolitan sites is a recurrent reality and, for this reason, our experience has allowed the execution of a unit which covers the system of tanks and mud stirring in order to reduce as much as possible the overall dimensions on the map and gain vertical space. The unit is assembled on the top of the tanks and it is designed in such a way as to be compact and functional with regard to the operator's activities.

MUD PROCESSING EQUIPMENT

PLANTS & TECHNICAL FEATURES

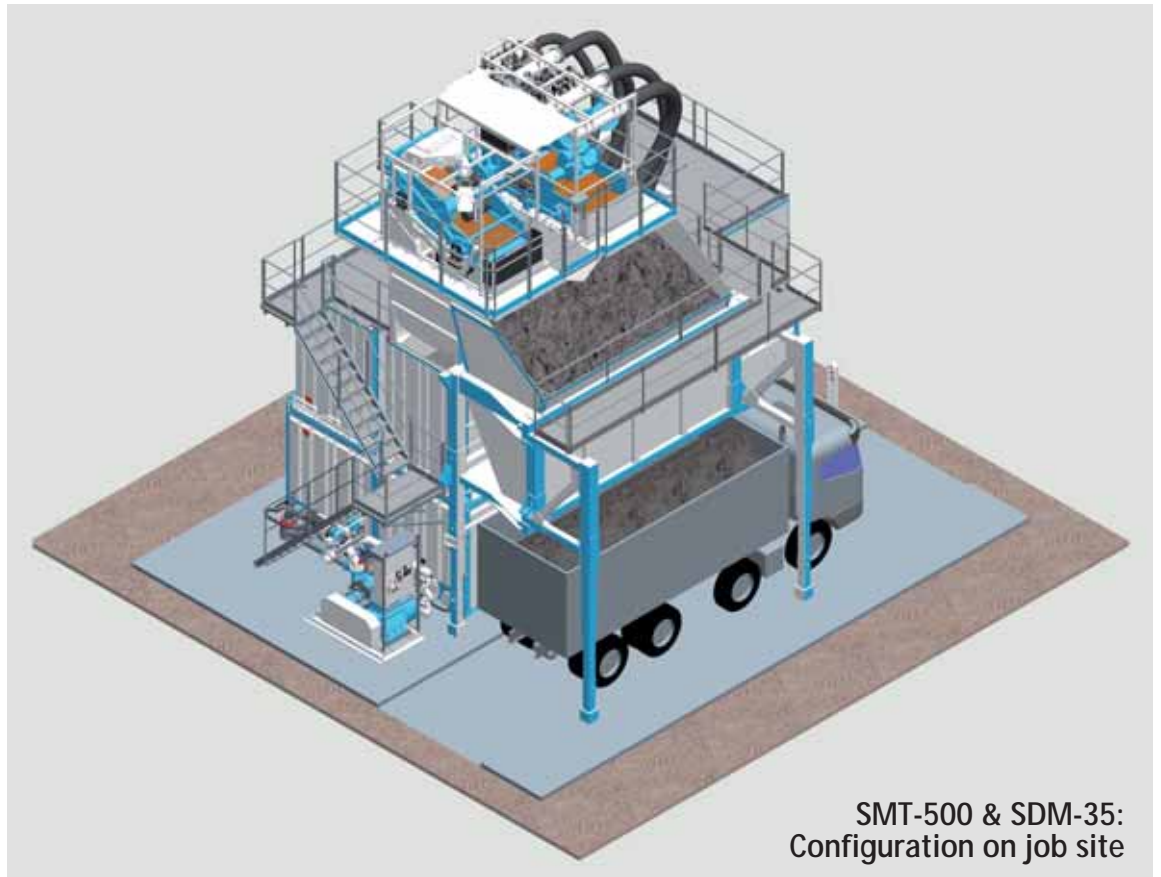
The innovative design of the mud treatment unit, which is characterised by the remarkable height at which separated solids are unloaded, has also allowed to develop the project Detritus Management (SDM) where the excavation debris are destined to be piled up.

This unit is schematically characterised by being a hopper provided with a controlled unloading system through a screw conveyor placed on the bottom.

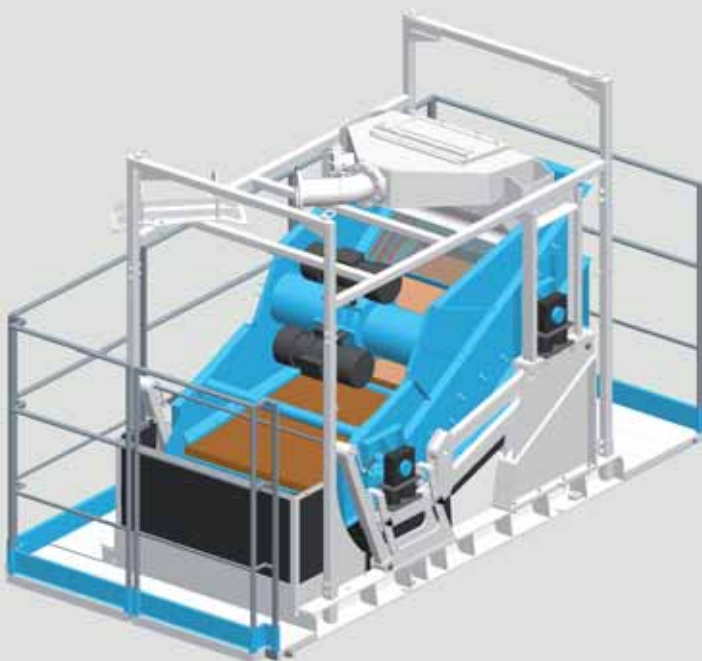
The installation in the portal allows to transit behind the hopper of the vehicles in order to make automation possible during the loading phase. The debris storage capacity is sufficient to guarantee the unit activity: the exhibited version shows a storing capacity of 35mc. This solution has the merit of avoiding the construction of storing tanks during the works, further reducing the overall space required on site. Further more, the adoption of the SDM allows reduction at an

excavator or buckets and relevant operator, hence cutting site costs. For both exhibited units, the folding solution allows

the maximum optimisation of volumes and transport logistics, but without compromising the easy and quick set-up on the site.



**SMT-500 & SDM-35:
Configuration on job site**



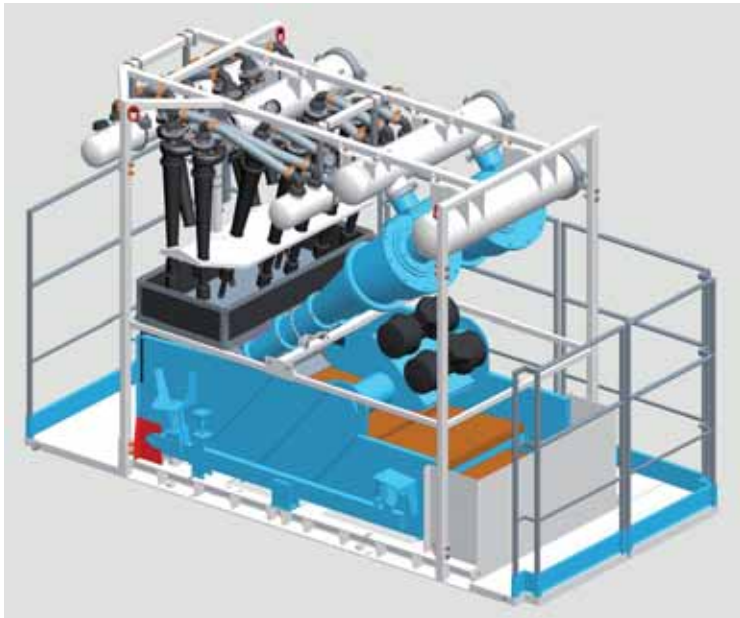
SMT-500: Scalper group

Scalper group features

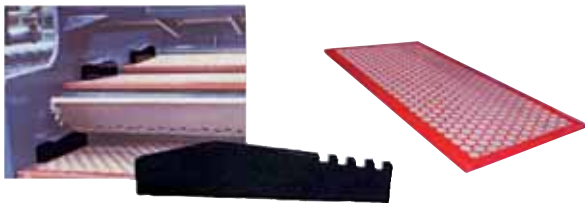
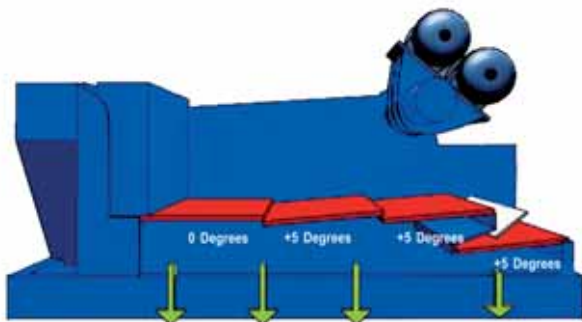
Length	4300 mm 14.11ft
Width	2150 mm 7.05 ft
Height	2720 mm 8.92 ft
Weight	3600 kg 7936.64 lb
Motors power	2x1,9 kW 2x2.5 HP
Vibration motion	linear
First Layer	0,9 m² 9.69 ft
angle	35°
slot	12 mm 0.47 in
Second Layer	2,78 m² 29.92 ft
angle	15°, Jump, 5°
slot	3,5 or 5 mm 0.14 or 0.20 in
disposition	longitudinal and/or transverse
Adjustment angle basket	optional
angle	-5°/+10°
Water HP pump	optional
nozzle	double

MUD PROCESSING EQUIPMENT

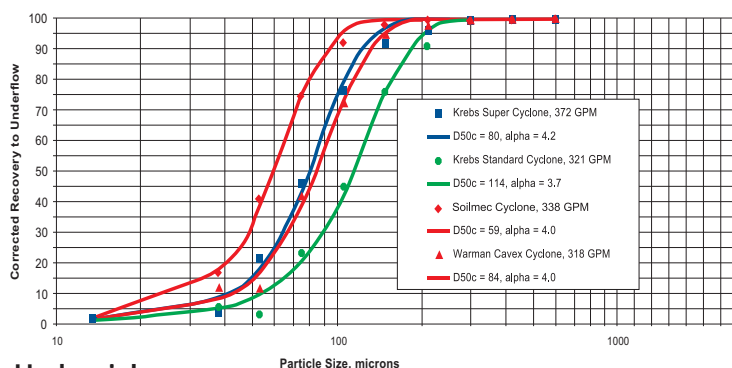
PLANTS & TECHNICAL FEATURES



SMT-500: Mud cleaner group



SMT-500: Shaker and screens



SMT-500: Hydrocyclones

Mud cleaner features

Dimensions

Length	4300 mm	14.11ft
Width	2150 mm	7.05 ft
Height	2770 mm	9.09 ft
Weight	4800 kg	10582.19 lb

Shaker

Motors power	2x1,9 kW	2x2.5 HP
Vibration motion	linear (6.1 G s)	
Screen	# 4	

separation potential	50 to 214 m (D ₅₀)	
type	pretension, repairable	
dimensions	635 x 1253 mm	25 x 49.33 in
weight	15,4 kg	34 lb
fixing mode	hammerwedge	

Deck	3,1 m ²	33.4 ft ²
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screen angle	0 _i ,5 _i ,5 _i , Jump, 5 _i	
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Adjustment basket	standard	
-------------------	----------	--

angle	adjustable -3 _i /+5 _i	
-------	---	--

1st stage hydrocyclones	standard	
-------------------------	----------	--

nominal size	2 x 380 mm	2 x 15 in
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type	gMAX	
------	------	--

wear resistance	rubber lined	
-----------------	--------------	--

working pressure bar	0,1 MPa	145.04 psi
----------------------	---------	------------

cut point	60 m (D ₅₀)	
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2nd stage hydrocyclones	optional	
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nominal size	15 x 100 mm	15 x 4 in
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type	gMAX	
------	------	--

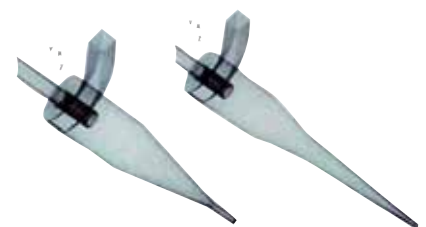
wear resistance	molded polyurethane	
-----------------	---------------------	--

working pressure bar	0,18 MPa	261.07 psi
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cut point	20 m (D ₅₀)	
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On the whole, the system is extremely flexible and the following features are to be outlined:

¥ **Compactness.** Nowadays, the problem of narrow areas inside sites placed in metropolitan centres is very common. Together of the system made of Soilmec tanks and mud stirrers allow to reduce the bulk on the plan (-50%) and to gain room vertically. The tank system allows a complete modularity by starting from a base of 210 mc of storage, to be expanded by means of modules of 105 mc. The system is placed on the top of the tanks and it is designed in such a way as to be compact and functional with regard to the activities of the operator.



CFD (Computational Fluid Dynamics) technology and installation data worldwide prove that the patented gMAX cone angle combination provides the best (finest and sharpest) separation available. The result is higher recovery of fine material. In other cases, it means the removal of more material from waste streams. Keeping fines out of waste ponds increases pond capacity, and reduces expensive and time consuming pond cleaning activities.

MUD PROCESSING EQUIPMENT

PLANTS & TECHNICAL FEATURES

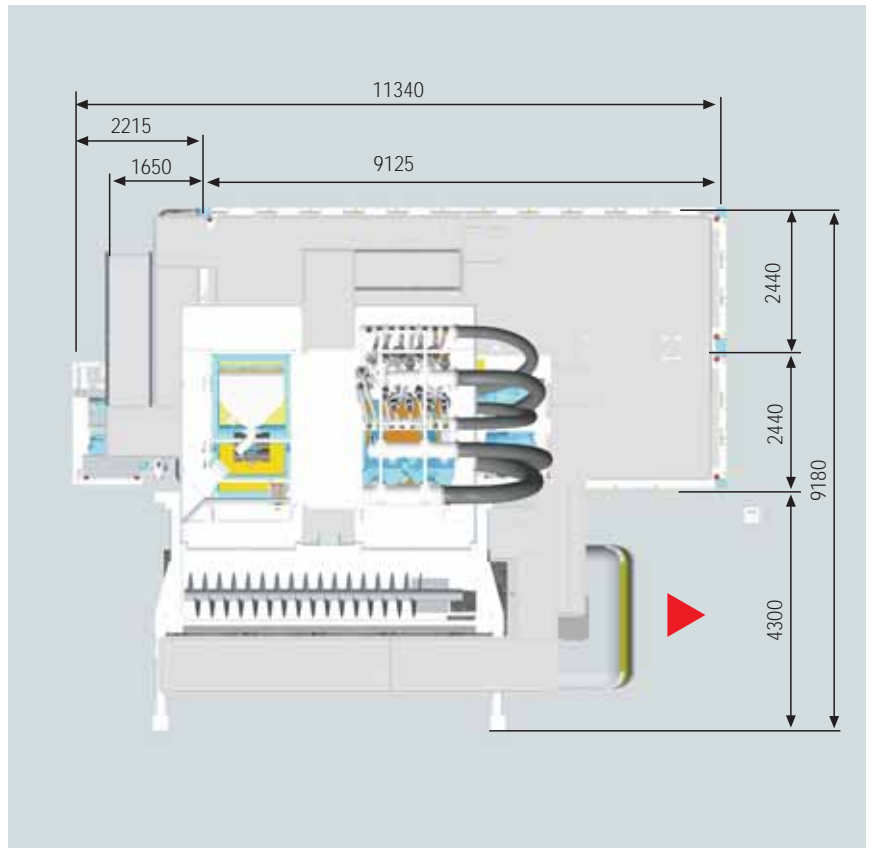
¥ **Modularity.** The modularity of the system is developed into the possibility of reaching, from its basic configuration, a range of optionals that allow facing each site requirement: from additional modules for finer particles to optionals allowing to soundproof the whole equipment.

¥ **Treatment quality.** This equipment is born out of the optimisation of the performances, by being able to adapt itself to the different geological conditions that can be encountered in job sites. The use of Shakers deriving from the Oil Field experience is of basic importance in order to reach the result.

¥ **Energy saving.** At a time when the environmental impact of our activities has become so crucial, during the development phase much importance was given to the optimisation of energy consumptions and of employed powers by choosing solutions that have allowed an energy saving always maintaining the same performance and reliability. There has been an accurate choice of components in order to have products that were technologically advanced from a fluid-dynamic point of view, in order to minimise pressures and allow the minimum loss of energy. The saving in the installed power is on the average higher than 30% compared to similar products offered by competitors.

¥ **Logistics** (fitting and transport). The system and tank modularity also takes into account the need for reducing fitting times as much as possible as well as its transport from one site to the other. In this regard, a series of constructive devices have been developed in order to reduce times of about 30% and also to optimise shipping volumes: the standard system can be stored inside the basic tanks (210 mc) and these have a transport size limited to just 2 containers ISO BBB (30 High cube).

¥ **Simplification and unification of components.** The remarkable thrust towards the concept of system modularity has not penalised the choice of the components, from site experience and requirements, we tried to simplify and to unify the components that are the core of the plant and tank system, in order to cover all needs also with a single size of pumps and a couple of engines. The easiness and the speed of intervention on these components can, in needed, allow quick replacement with a stand-by unit.



SMT-500 & SDM-35: Dimensions on job site



MUD PROCESSING EQUIPMENT

TECHNICAL SPECIFICATIONS (SMT-500 & SDM-35)

GENERAL	Nominal flow rate (on water)	500 m ³ /h	294,29 ft ³ /min
	Max feed density	1,25 t/m ³	78,03 lb/ft ³
	Max solid WT	33 %	
	Max solid vol	16 %	
	Max viscosity marsh	50 s	
	Approx. Solid separation	up to 200 t/h	220,46 ton/h
	Power supply	400 V @ 50 Hz (on request 480 V @ 60 Hz)	
Installed power (SMT-500 + SDM-35)	207,6 + 39,6 kW	278.40 + 53.10 HP	
SCALPER	Type	Soilmec innovative design	
	Feeding	150 / 100 mm	6 / 4 in
	Screening area	3,68 m ²	39,61 ft ²
	Sloped layer	High performance double layers	
	Motors power	2 x 1,9 kW	2 x 2.5 HP
	I layer slot	12 mm	3,17 in
	II layer slot	3,5 or 5 mm	0,92 or 1,32 in
	Primary mud hopper	5,15 m ³	181,87 ft ³
Lever control	automatic		
HYDROCICLONES	Type	gMAX high performance	
	I stage	standard	
	Nominal size	2 x 380 mm	2 x 15 in
	Heavy duty pump	8"x6" Meta-chrome	
	Motor power	45 kW	60,35 HP
	Min working pressure	0,1 MPa	14,50 psi
	Cut point D50	60 μm	
	II stage	optional	
	Nominal size	15 x 100 mm	15 x 4 in
	Heavy duty pump	8"x6" Meta-chrome	
	Motor power	45 kW	60,35 HP
	Min working pressure	0,18 MPa	26,11 psi
Cut point D50	20 μm		
DEWATERING	Type	Shaker Oil Field (6,1 G-Force)	
	Screening area	3,1 m ²	33,40 ft ²
	Sloped layer	Contour Plus Deck	
	Motors power	2 x 1,9 kW	2 x 2.5 HP
	Screen panels	4 , stainless Heavy Duty	
	Potential separation	50 to 214 μm (D50)	
	Primary mud hopper	5,15 m ³	181,87 ft ³
Lever control	automatic		
STORAGE SYSTEM	Single level tanks type	optional	
	Size available	container 20', 30', 30'HC, 40'	
	Min arrangement	2 n	
	Mud agitation system	submersible fan or Soilmec integrated system	
	Soilmec 'Extended' tanks type	optional	
	Size available	container 30'HC	
	Min arrangement	2 n	
	Min net capacity	210 m ³	7416,08 ft ³
	Mud agitation system	Soilmec integrated system	
	Vertical silos	optional to the min tanks' arrangement	
	Type	standard or containerized	
	Size available	on customer request	
Mud agitation system	nothing or Soilmec integrated system		

MUD PROCESSING EQUIPMENT

TECHNICAL SPECIFICATIONS (SMT-500 & SDM-35)

MUD BOOSTER STATION	Heavy duty pump	8"x6" Meta-chrome	
	Motor power	110 kW	147,51 HP
	Max capacity	520 m ³ /h	306,06 ft ³ /min
	Max discharge height	50 m	164,04 ft
	Suction	Soilmec innovative design	
	Remote radio control	optional	
	Feed agitation system	optional, Soilmec innovative design	
	filtering battery	standard on agitation system	
	Capacity regulation	electroproportional on agitation system	
	Pressure agitation system	0,5 MPa	72,52 psi
DETRITUS MANAGEMENT	SDM-35 Portal Folding	optional with 'Extended' tanks type	
	Storage capacity	35 mc	1236,01 ft ³
	Installed power	39,6 kW	53,10 HP
	Discharge flow rate	240 mc/h	141,26 ft ³ /min
	Screw conveyer speed	17,9 rpm	
	SMT Solid production	fully monitored	
	Discharge cycle	automatic or manual setting	
	Discharge weight	setting free	
	Discharge control	automatic	
Drainage system	integrated		
DIMENSIONS FULLY ASSEMBLED	only Mud Treatment Unit		
	Length	6500 mm	21,33 ft
	Width	4300 mm	14,11 ft
	Height	5000 mm	16,40 ft
	with two 'Extended' tanks		
	Length	11400 mm	37,40 ft
	Width	5000 mm	16,40 ft
	Height	10400 mm	34,12 ft
	with SDM-35 by side		
	Length	11400 mm	37,40 ft
	Width	9200 mm	30,18 ft
	Height	10400 mm	34,12 ft
PACKAGING	SMT-500 with two 'Extended' tanks	2 x 30' HC open top container	
	Pre-assembled groups	standard	
	Slatted floors	integrated	
	Quick assembly & fast connections	standard	
	Folding tanks	standard	
	Approx dry weight	45 t	49,60 ton
	SDM-35	1 x 20' open top container	
	Folding portal version	standard	
Approx dry weight	18 t	19,84 ton	

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CERTIFIED QUALITY SYSTEM

In 1990 Soilmec was awarded with the certification of its Quality System complying with ISO 9001:2000 and ISO 14001:2004 standards.



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