HUESKER SOILTAIN® COASTAL TUBES AND GEOBAGS

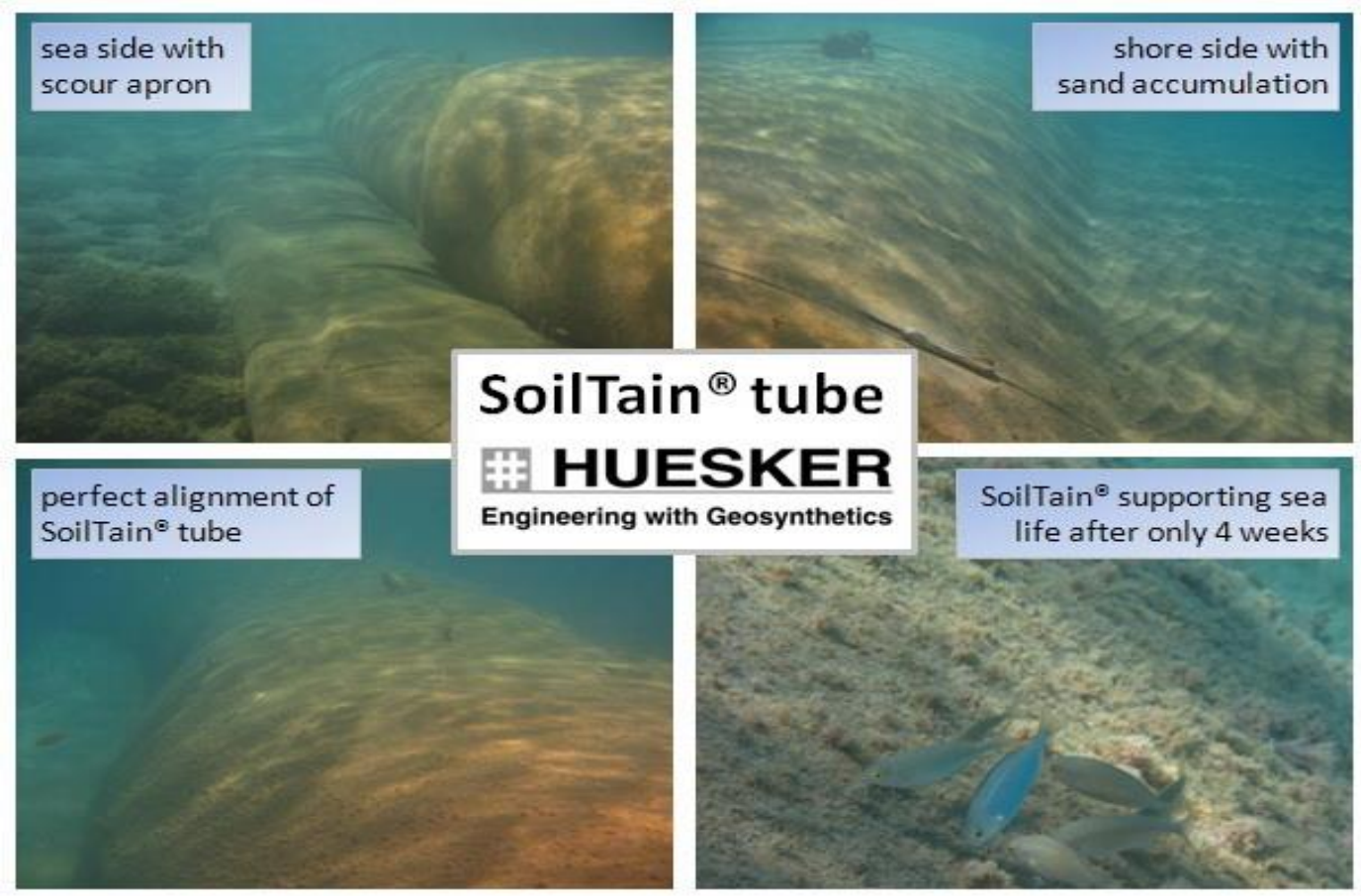
New SoilTain® geocomposites protect your shoreline

Huesker Synthetic has developed a new product range of SoilTain® geocomposites for hydraulic engineering.
SoilTain® is specially designed for shoreline protection systems to form flexible groins, breakwaters or reefs.
SoilTain® can be used in the form of tubes, containers, bags and other flexible structure to be filled with sand or any other appropriate fill material.
SoilTain® flexible structures are economic, ecologically friendly and follow the principles of sustainable engineering.

Advantages of SoilTain® geocomposites

- SoilTain® provides ideal containment of fines while remaining permeable due to its high filter stability
- high stability to dynamic loads such as waves
- SoilTain® is characterized by high tensile strength and resistance to installation damage
- high abrasion resistance
- high UV-Stability
- easy to handle
- SoilTain can be manufactured in various shapes for different applications
- SoilTain® with its sand colour provides a pleasant appearance especially when used on busy beaches

The specially designed SoilTain® geocomposite have proven their superior performance in submerged coastal barriers in terms of durability, resistance and ease of application.
SoilTain® supports the growth of sea life by providing an open textured surface.



HUESKER'S GEOTECHNICAL DEPARTMENT OFFER A COMPREHENSIVE, PROMPT IN HOUSE DESIGN SERVICEFOR MORE DETAILS CONTACT GEOTECH SYSTEMS LTD

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Questionnaire for geosynthetic SoilTain® tubes

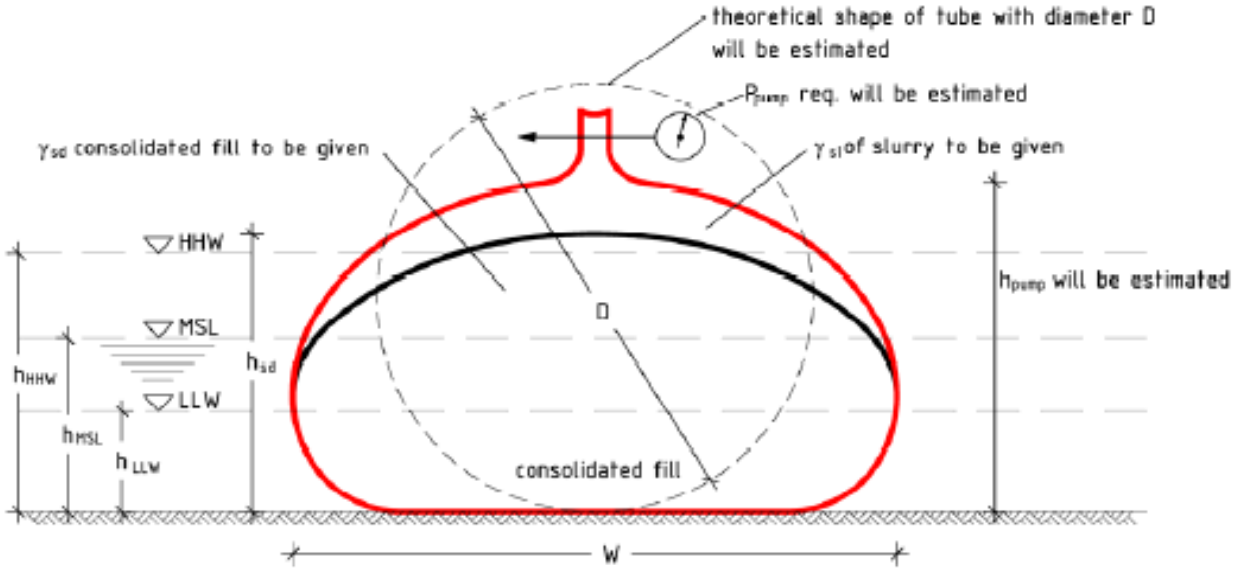
Client:	

Project details:

Project name:		
Work to be carried out:	☐ core of a groin	☐ core of a breakwater
	☐ submerged breakwater	☐ storm damage limitation (above MSL)

Please attach a position plan of tube with corresponding water levels at start and end of the tube!

h_{sd} – final height after consolidation to be given
W – final width of tube after consolidation to be given



Tube dimensions, water levels and soil conditions:

final height after consolidation h_{sd}	m		length	m	
final width after consolidation W	m				
Mean sea level MSL h_{MSL}	m				
Lower Low Water (LLW) h_{LLW}	m		Higher High Water (HHW) h_{HHW}	m	
Soil material:					
Ground inclination along the tube	%		Ground inclination perpendicular the tube	%	

Slurry and fill material, filling equipment:

Grain size distribution of fill material or grain size distribution curve	clay		%	silt		%	sand		%	gravel		%
Unit weight of slurry γ_{sl}				kN/m³								
Unit weight of consolidated fill γ_{sd}				kN/m³								
Description of filling equipment												
Pump pressure	kPa											
Pump capacity	m³/h											

☐ The design should also consider wave action. Additional information are then required on page 2.

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Questionnaire for geosynthetic SoilTain® tubes

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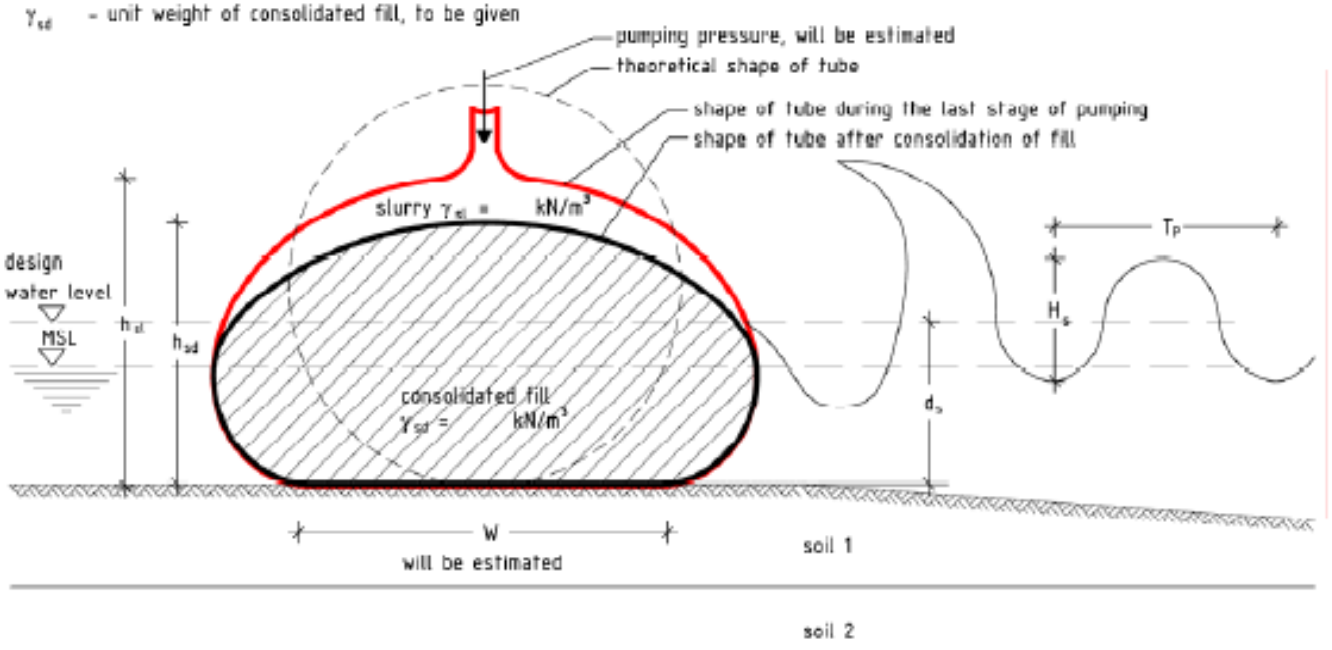
Coastal protection with SoilTain

h_{sl} – tube height during pumping, will be estimated
γ_{sl} – unit weight of slurry, to be given
h_{sd} – tube height after consolidation, to be given
γ_{sd} – unit weight of consolidated fill, to be given



T_P – Peak wave periode, to be given
H_s – significant wave height, to be given
d_s – water depth in the vicinity of tube, design water level, to be given
W – width of tube, will be estimated

Additional needed information:

Peak wave period T_P	sec	
Significant wave height H_S	m	
Water depth in the vicinity of tube, design water level d_s	m	

☐ **Seabed is stable, no stability calculation and no settlement calculation are needed.**

☐ **A separate stability calculation and a separate settlement calculation are needed:**

	Soil type:	Depth	effective shear parameter		undrained shear parameter		Soil unit weight	oedometric module
		z [m]	φ′ [°]	c′ [kN/m²]	φu [°]	cu [kN/m²]	γ [kN/m³]	E_s [kN/m²]
Seabed soil 1:								
Seabed soil 2:								

Date: _____ Signature: _____