SPT OFFSHORE

SUCTION PUMP SPREAD
SAPS-005

The SAPS-005 suction pump skids can be used for both shallow-water as deep-water suction pile installation. The SAPS-005 series are in particular suitable for either relatively small suction piles or suction pile clusters or for installations were installation speed is less critical. The individual control of the suction pressure and subsequent penetration in each pile makes accurate leveling possible.

The main characteristics are:
- a flow capacity up to 43m3/hour
- differential pressure up to 5 bar
- integrated vent valves and installation sensors,
- high vibration and shock resistance.

Pump performance

For establishing pressure difference and subsequent suction pile penetration, water needs to be pumped from the suction pile. Our SAPS-005 suction pump skid consists of a single pump providing a maximum flow 43m3/hour and a maximum pressure of 5bar.

.

Integrated systems

The connection and subsea disconnection of the SAPS-005 is done swiftly with remotely operated hydraulic pins. Vent valves are required to release air and water from the suction pile when lowering the suction pile through the splash zone up to self-weight penetration in the seabed. We integrated a 14” vent valve in our pump skid and monitoring equipment providing life data on suction pressures.

.

Our low-cost pump skid interface consists of a standard 20” pipe and weld neck flange attached to the suction pile. For the eventual closing of the suction interface we use ROV installable closing hatches.

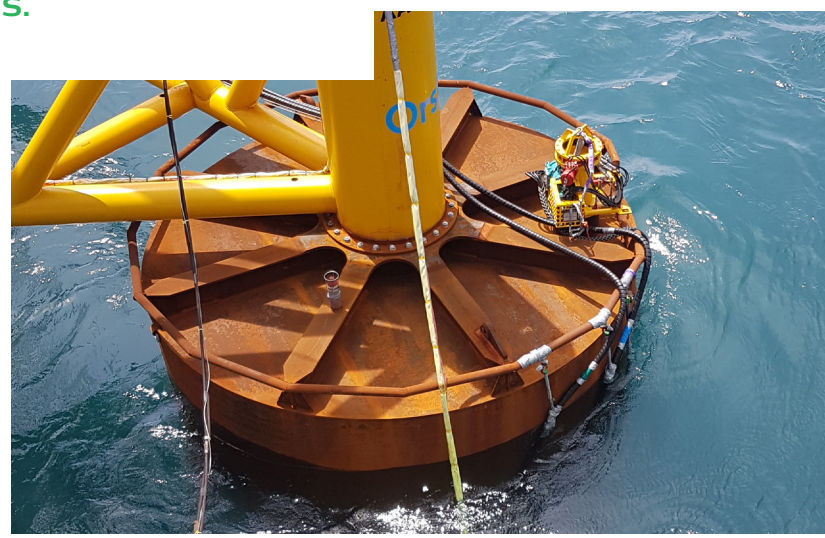
High vibration and shock resistance

Because of the limited sensors and electronics, these pumps system are typically used to install piling templates on suction piles as they have a high vibration and shock resistance.

The SAPS-005 pump skids, umbilical racks and powered sheaves are transported a 20ft standard offshore container. The 20ft control container is equipped with a workshop and spare parts.

The system can be surface powered and controlled for installations in shallow waters, or ROV powered and controlled through a subsea manifold for installations in deep waters up to 3,000m

SPT OFFSHORE OWNS AND OPERATES REMOTELY CONTROLLED SUCTION PUMPS FOR WATER DEPTHS FROM 10M UP TO 3,000M. THESE PUMPS ARE PURPOSELY BUILT FOR THE INSTALLATION OF SINGLE PILES, SUCTION PILE CLUSTERS (SPCS), PLATFORM FOUNDATIONS OR SUBSEA STRUCTURE FOUNDATIONS.



SPECIFICATIONS SUCTION PUMP SPREAD SAPS-005

Pump Skid

• Weight:	0.5mT
• Dimensions:	1.2 x 0.7 x 1.2m
• max. water depth:	3000m
• max. water flow	
Lobe pump	43m3/hr
• max. diff. pressure:	5.0 bar
• vent valves:	1 no's x 14"
• Pile interface	
Flange	20"

Umbilical

• Standard length:	75m
• Diameter:	44mm

Altimeter

• internal soil plug:	0 ~10m (optional)

Power requirements

• Power consumption	
- Single lobe pump	13kW @ 5.0 bar
• Required hydraulic input ROV	
- Directional hydr. flow	40l/min
- Pressure	200 bar (net)
• Pile interface	
- Flange	20"
• Docking	
- Surface/submerged	Remote

SPT OFFSHORE

SPT OFFSHORE
+31 88 220 21 21
info@sptoffshore.com
sales@sptoffshore.com
www.sptoffshore.com

Korenmolenlaan 2
3447 GG Woerden
The Netherlands