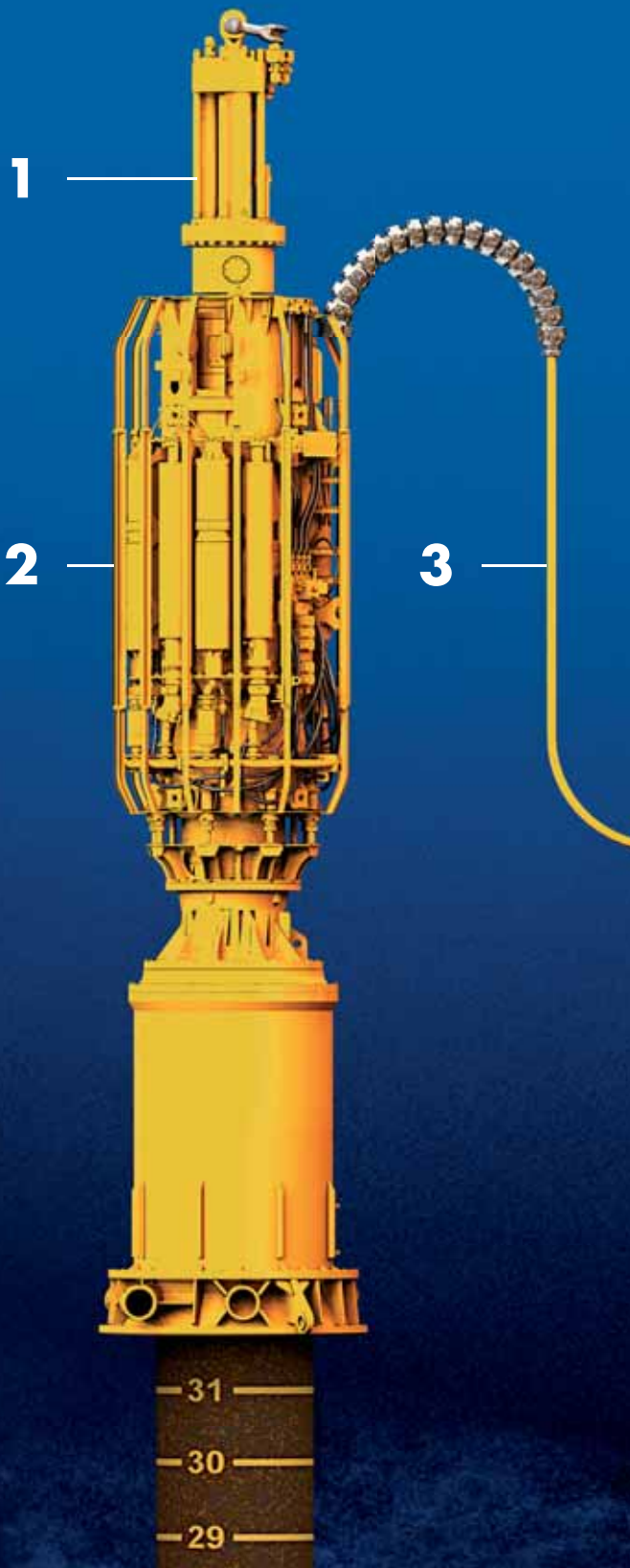




Deep Subsea

MENCK Deepwater Pile Driving System



Deepwater exploration is serious business. There is no room for failure at extreme depths. MENCK has been pushing the technological limit since the introduction of its deepwater system (DWS) in the late 1980's. Traditional "shallow water" equipment starts to lose efficiency and becomes unmanageable in deeper water.

MENCK's innovative solution was to develop a unique power pack (MHP DWS) that sits directly on the hammer. With the hydraulic oil and electrically driven pumps directly at the hammer, only a single umbilical cable is needed to supply communications, energy and air from the surface.

Successful installations on projects such as the Kikeh SPAR, Magnolia TLP and BC-10 conductors have increased our track record (of over 30 deepwater projects) as technological leader in deep subsea pile driving. MENCK has developed a fully integrated and flexible deepwater pile driving system; from power pack and deepwater umbilical to flexible footprint and back-up systems; to meet any challenge.

MHU "T" series hammer

The MHU "T" series hammers ranging from 135-750 kJ can be fitted with the MHU DWS deepwater power pack.

MHP DWS

Sitting directly on the hammer this unique power pack holds oil tanks, hydraulic pumps and electric motors to deliver power directly to the hammer.



MHU 270T entering the water



Jumper prep for launch



MHU 500T DWS

MHC – DWS

The MHC 21 monitoring and control system is beefed up for deepwater pile driving. Vital information such as hammer status and performance is at your fingertips through direct communication with the hammer's onboard computer (muxbox). Real time control allows active adjustments during pile driving. Additional back up sensors ensure reliability and safety systems continue pile driving if communication is severed, but stop driving if the hammer is moved.

System Footprint

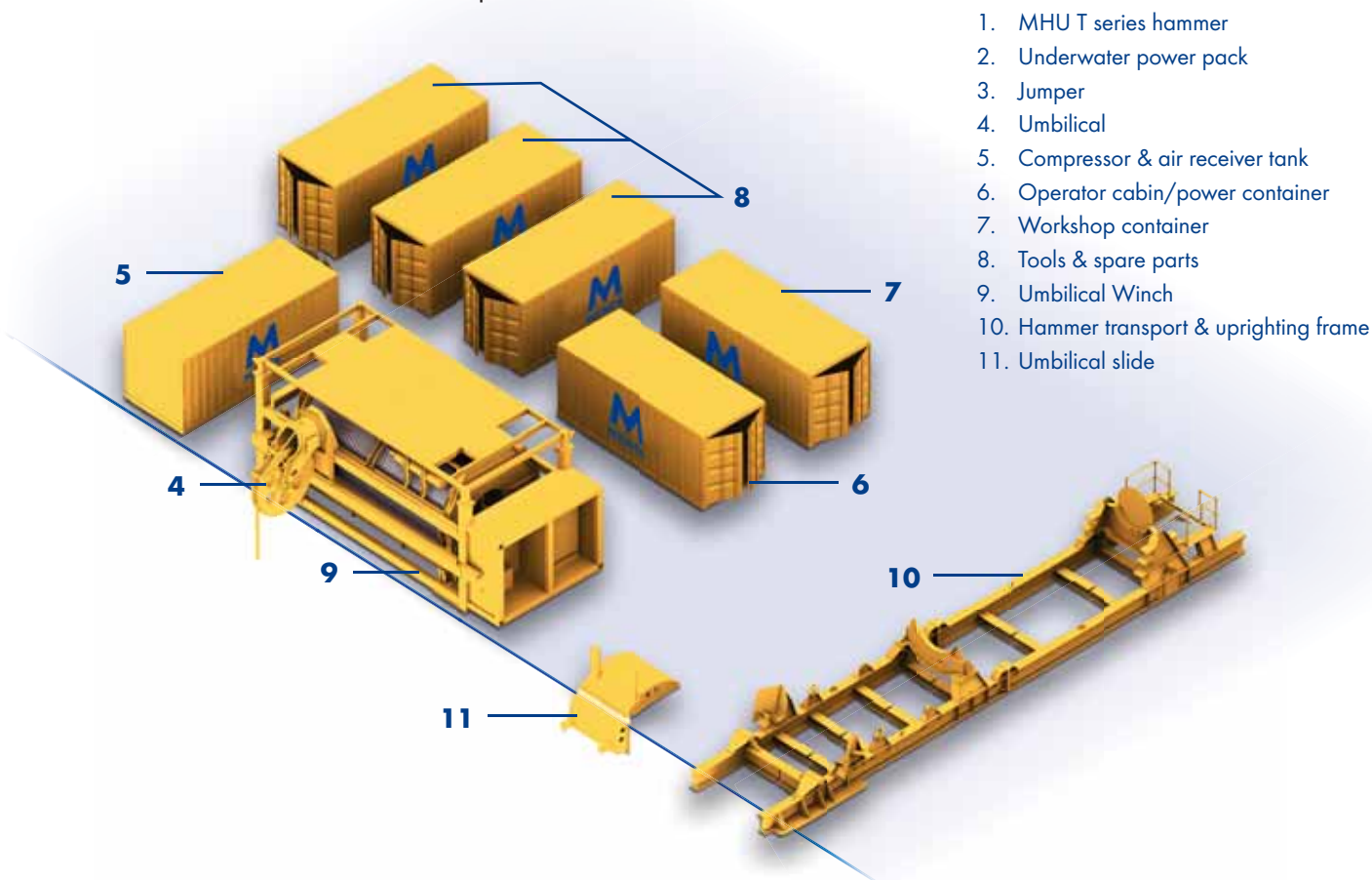
We have developed a modular plug and play system for increased flexibility to change and in some circumstances reduce our deck footprint.

Umbilical

The connection to the top, this single cable carries communications between computers, provides electricity to run the electric motors and supplies air to create the air bubble needed between the anvil and pile.

Jumper

The area of connection where the umbilical meets the hammer receives the most stress of the entire umbilical system. The jumper serves as a intermediary connection between the hammer and the full umbilical. It can be easily repaired or replaced, reducing risk of damage to the entire system.



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