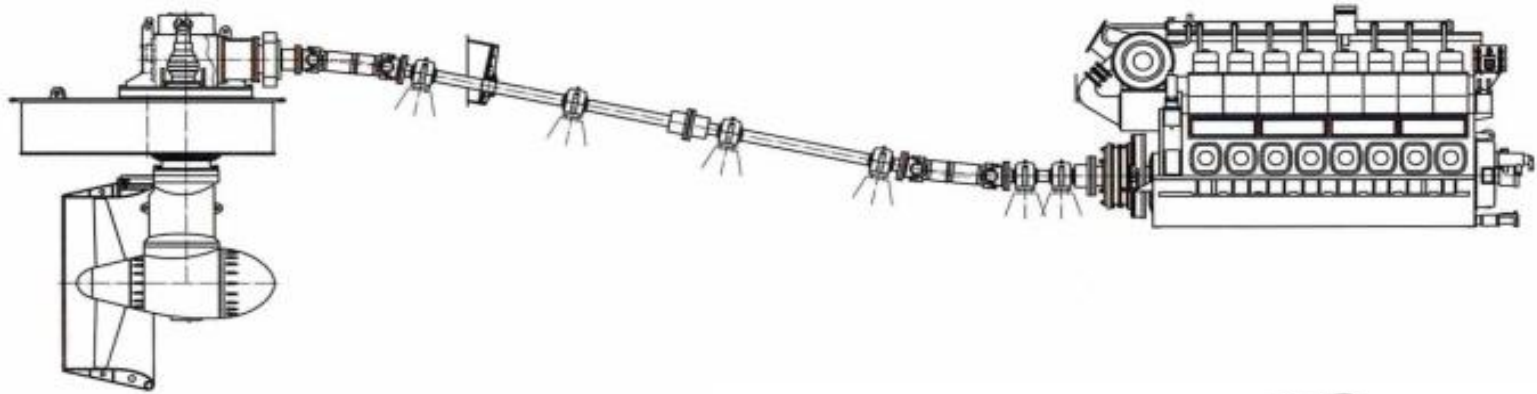


# MARITIME SOLUTIONS

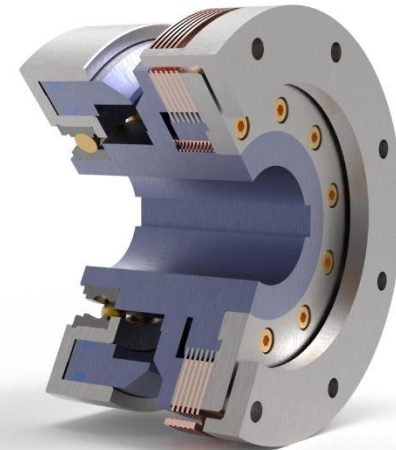


# Main Drive

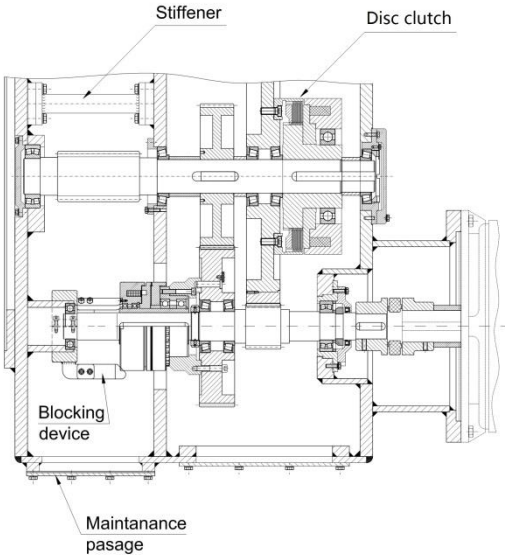
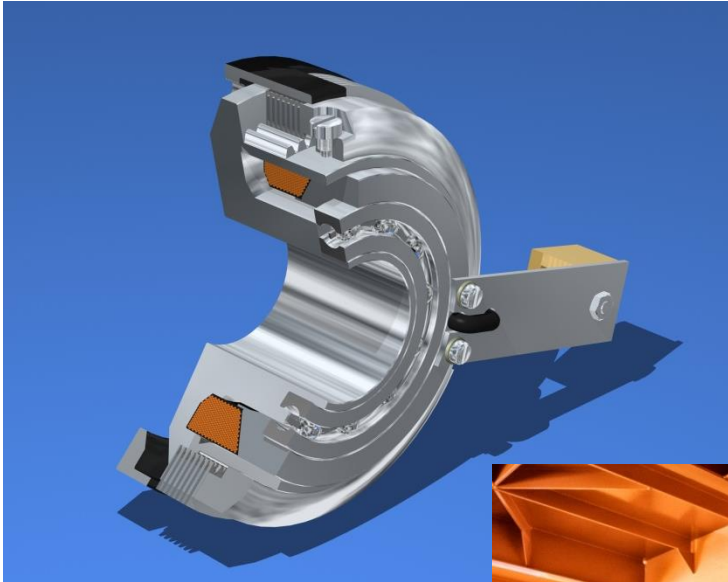
---



**Clutch to connect and disconnect the main drive with „inching function“**



# Towing winch



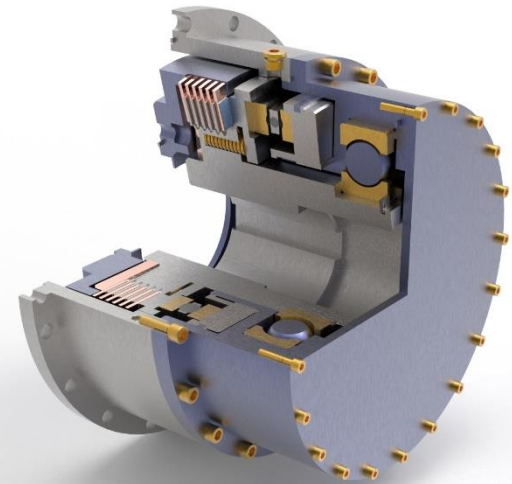
**Clutch FOV series for gear switch low-high for tug main winch**

# Escort winch

---

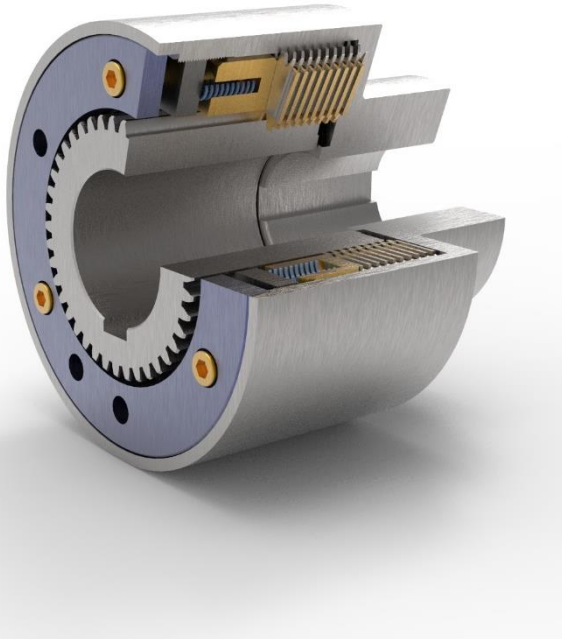


**Escort towing winch 1000 kN: gearbox driven by 2 pneumatic clutches PLW series with 17.000 Nm torque each.**

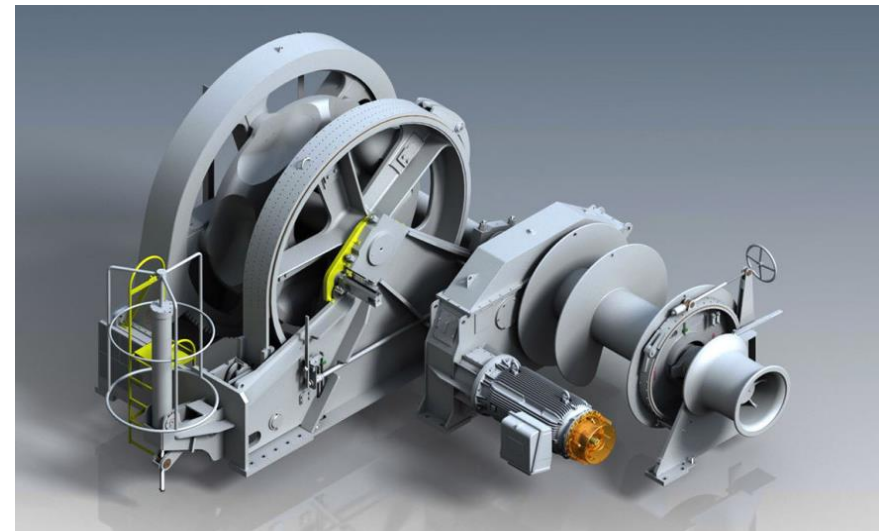


# Anchor winch

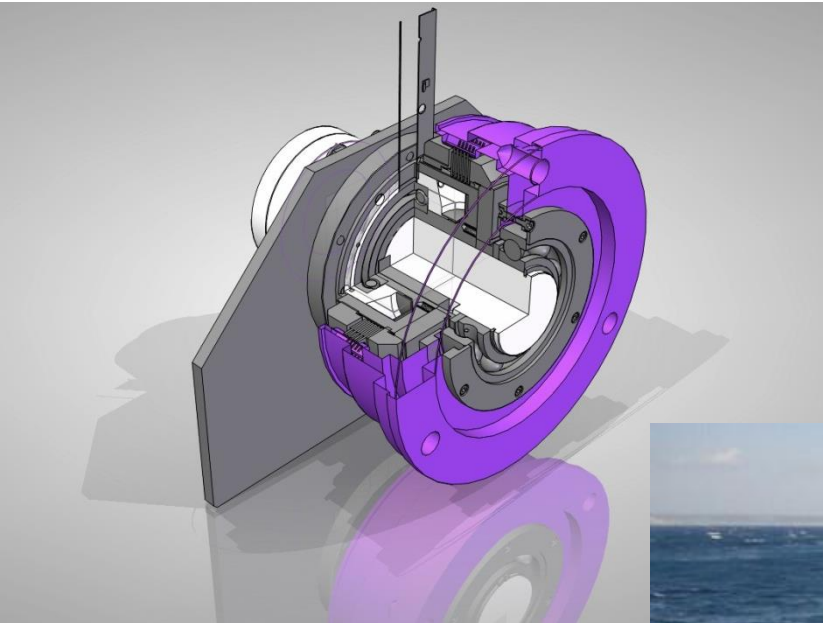
---



**Safety clutch RLO-S series to protect drive units against high torque peaks. Slipping torque is precisely adjusted and certified in our test bench +/- 2%**



# Power Take Off



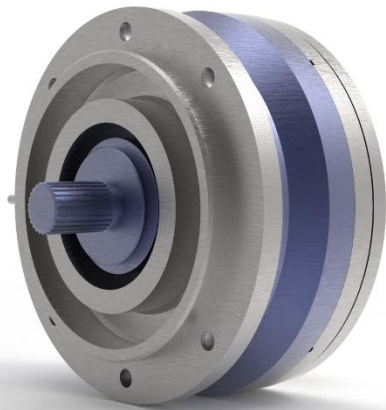
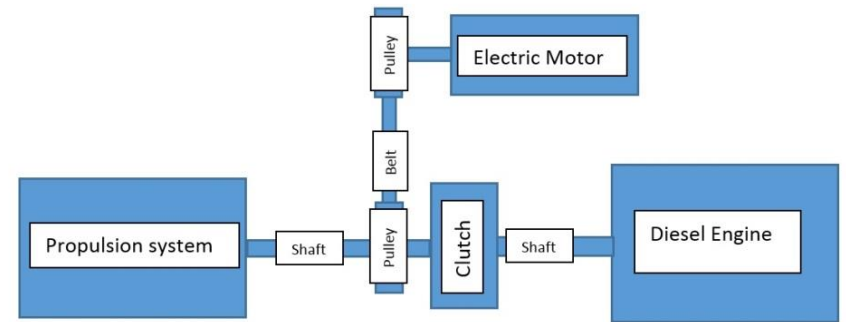
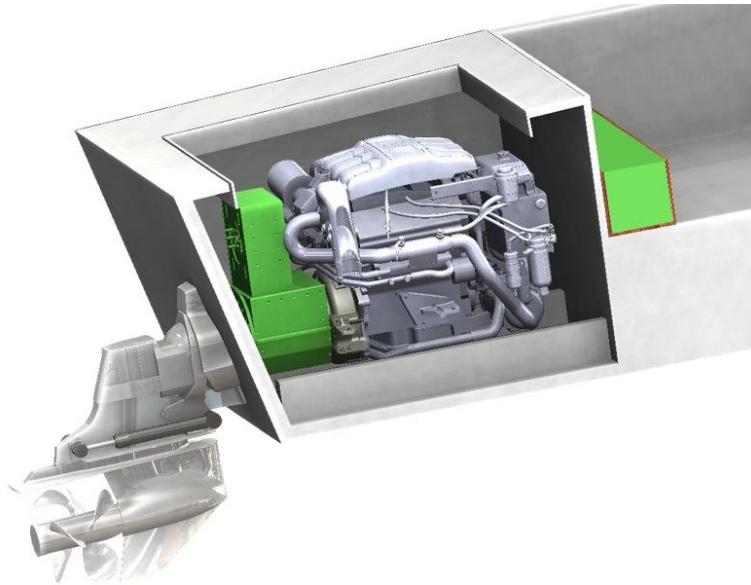
**PTO clutch for hydraulic system, complete unit comprising elastic coupling and welding plate**





**Hybrid drive reduces air  
pollution in UNESCO world  
heritage VENICE**

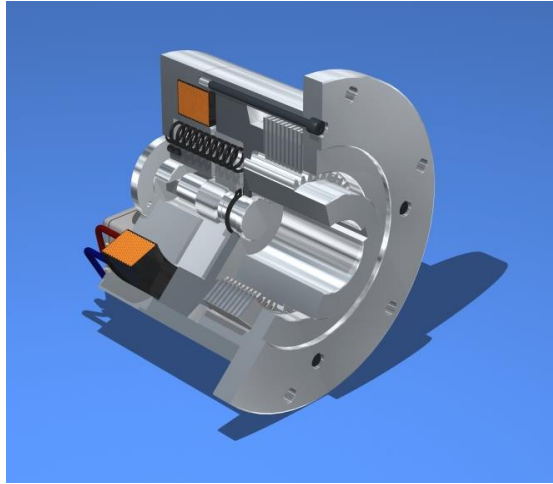
# Hybrid Boat Drive



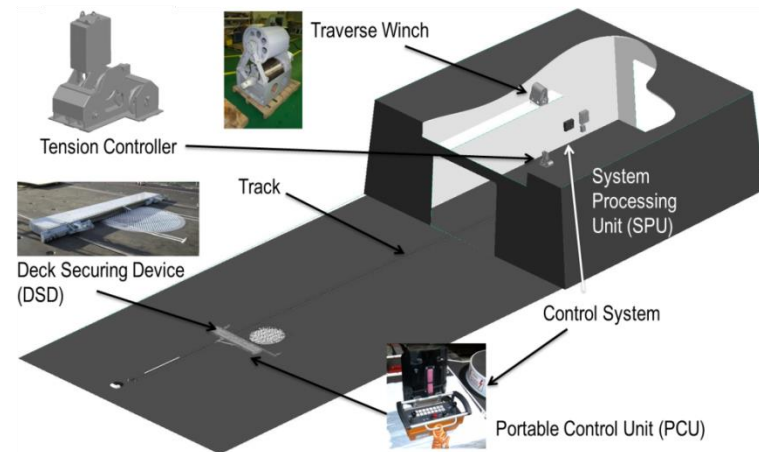
**„Drop-In-Hybrid“ connects and disconnects the combustion engine from and to the system**



# Deck securing system

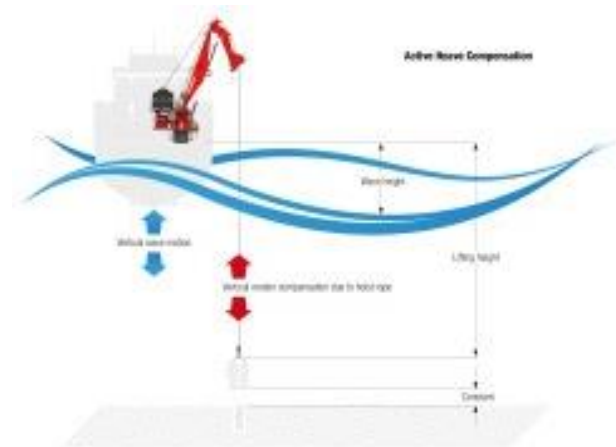
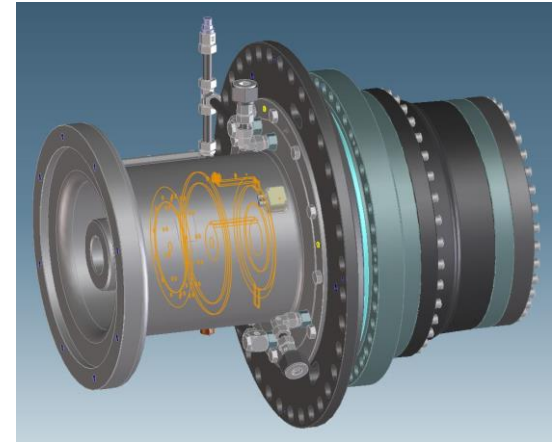


**Positioning brake FMOB series  
for deck securing system  
system used for onboard  
helicopter landing platforms**



# Heave compensation winch

Heave compensation winch: max torque output  
gearbox 94 kN drive power 280 kW  
A&G clutch FZVAM 1000 with 10.000 Nm has safety  
function between gearbox and e-engine





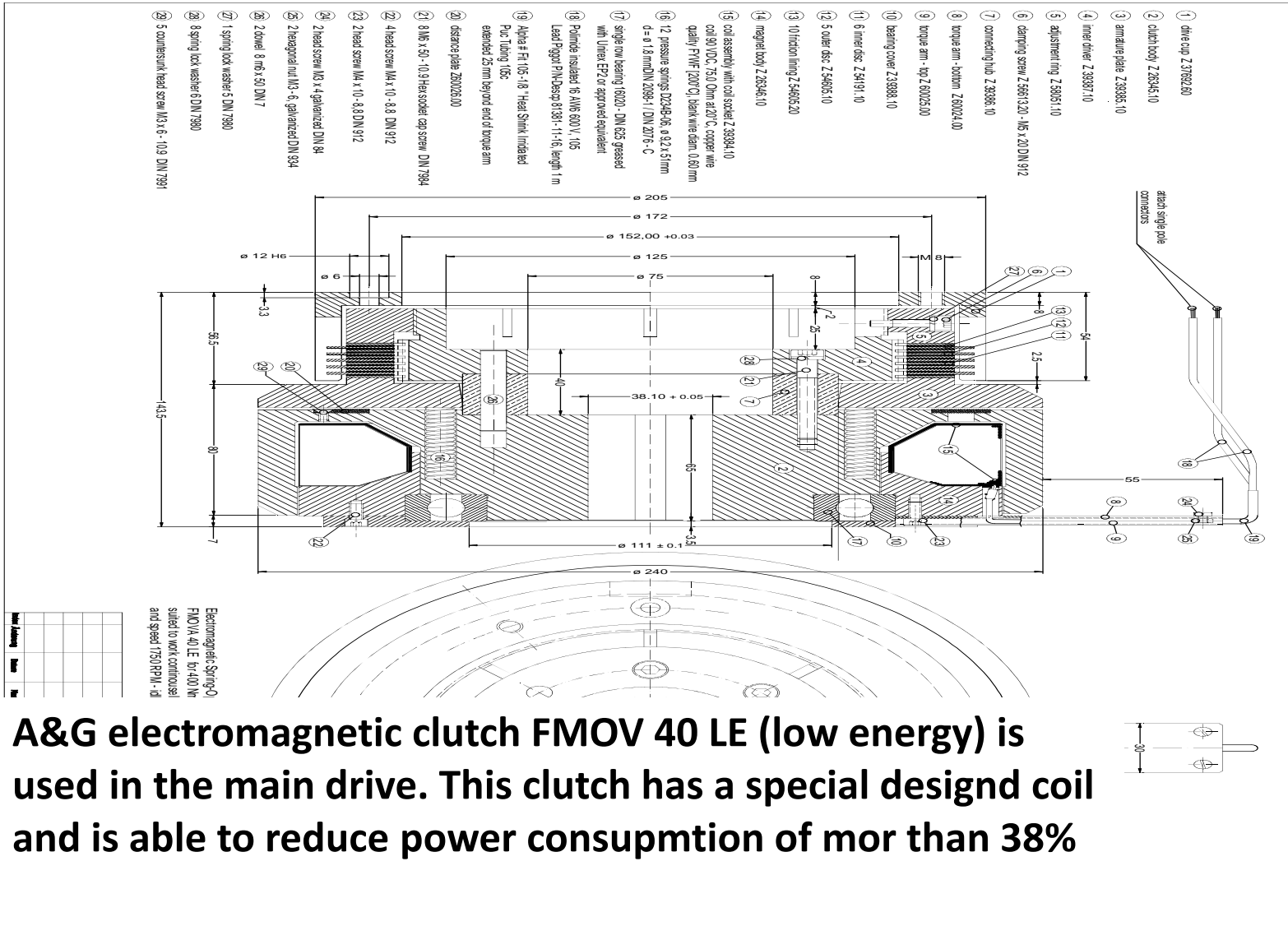
**3 sizes of special designed  
brake MUOB-S with  
adjustable brake torque hold  
the manipulation arms and  
slips when overloaded**



# Diving Robot

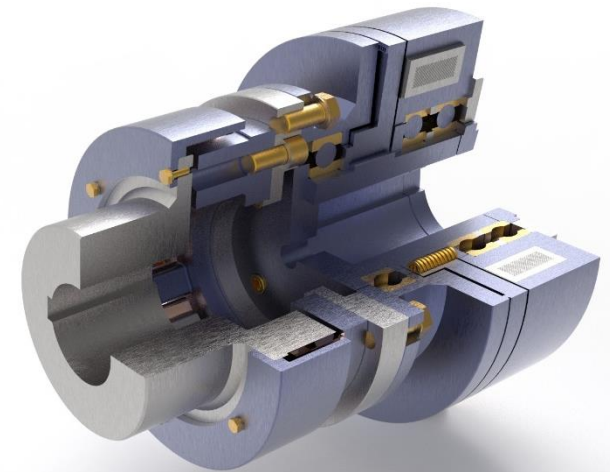
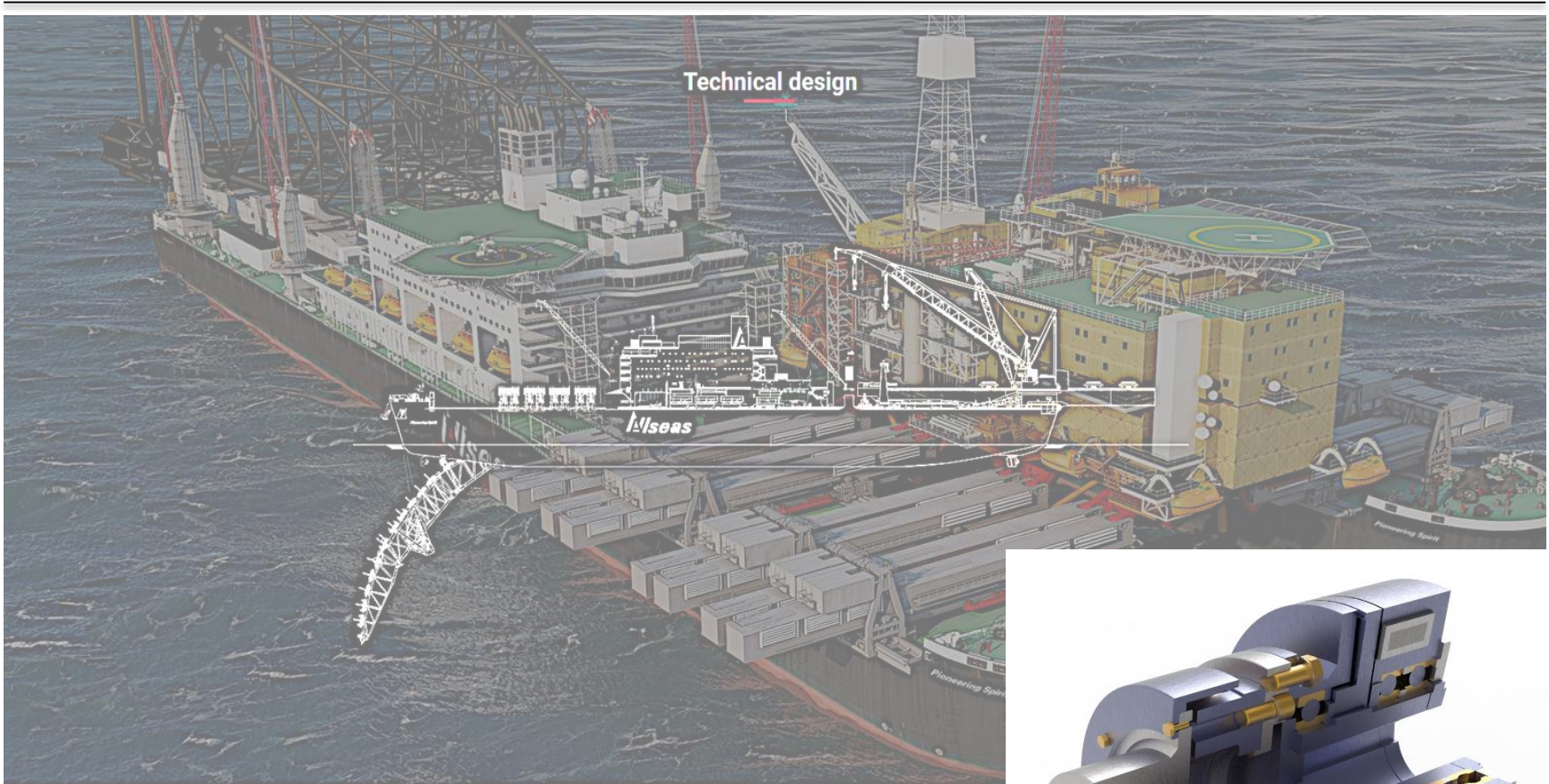


# Diving Robot



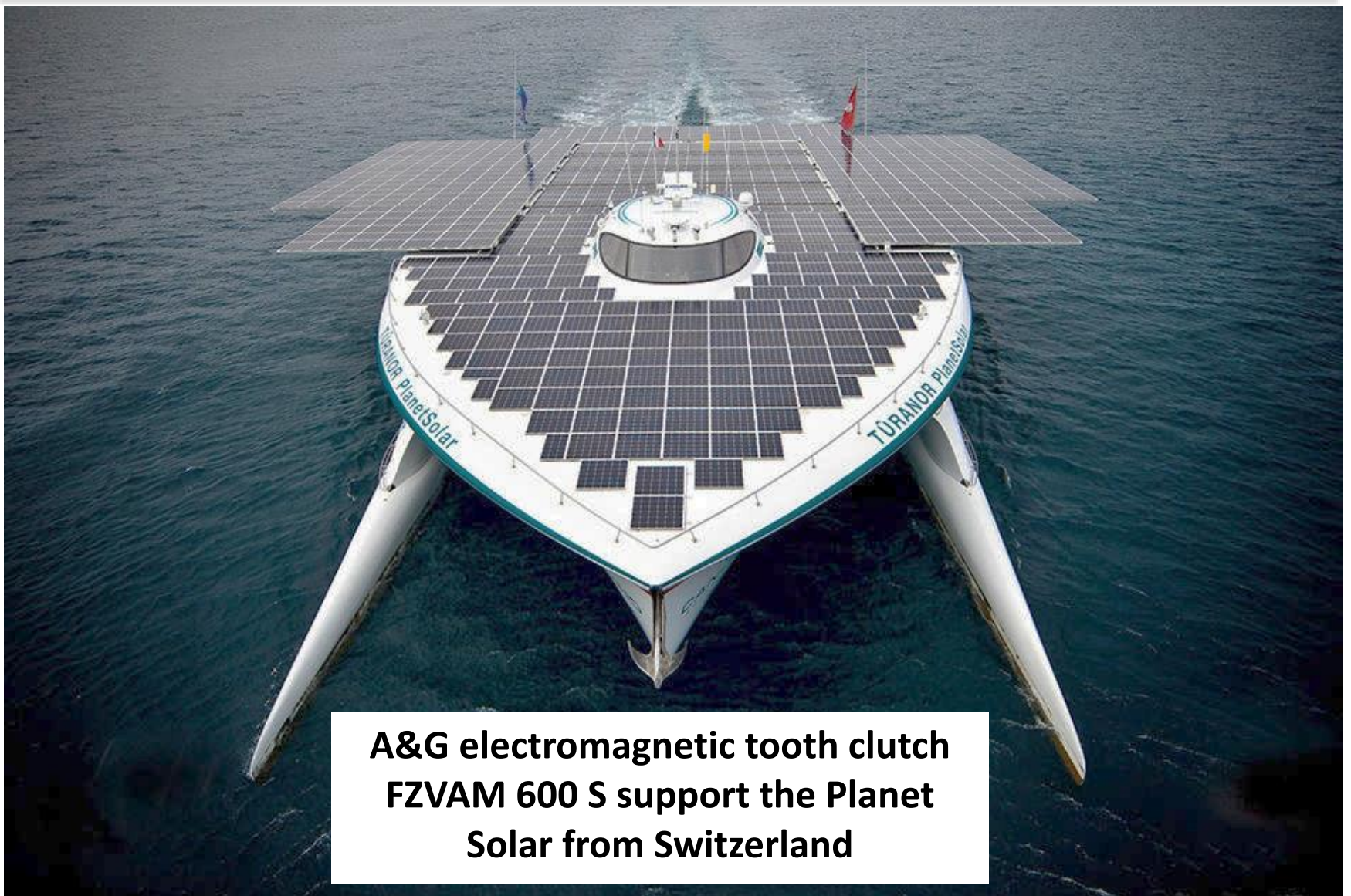
**A&G electromagnetic clutch FMOV 40 LE (low energy) is used in the main drive. This clutch has a special designed coil and is able to reduce power consumption of more than 38%**

# Pipe laying



**A&G electromagnetic spring actuated tooth clutch FZO 630 drives the rope winch for adjusting the layer (tail winch)**

# Solar panel adjustment



**A&G electromagnetic tooth clutch  
FZVAM 600 S support the Planet  
Solar from Switzerland**



**Multi disc clutch FMV 10 connects the  
grinders man power to the on bord  
hydraulic pump**

---