



Pump Caisson Repair

Seawater caissons are used extensively offshore for applications such as fire pump seawater intake and cooling water discharge. Due to high erosion and galvanic phenomena linked to the seawater pump service, regular repair and change out of the caissons are required.

LICEngineering A/S has assisted the operators with this work, including a variety of tasks from design of simple repair clamp systems to full change out of the caissons by diverless operations including writing the offshore work procedures.

For full change out of caissons LICEngineering A/S made the designs in sections utilising wellknown threaded / stabbed connectors from the drilling industry. Oilstates outside flush connectors were applied to obtain that the new caissons could be installed into the existing guide support system once the old caisson was removed and without diver intervention.

The new designs included at some locations special polymer / glass fibre reinforced lining. Design of the caisson tip with a special camera support system mounted was undertaken, thereby ensuring that correct stabbing was achieved at the lowest subsea support.

Tools were designed to allow safe removal of partly corroded existing caisson pipe first, which was then taken out in sections.

Engineering has so far been carried out on a number of locations in the North Sea oil and gas fields.

For more information:

Nils Fog Gjersøe

nfg@liceng.dk

+45 76 10 94 11



Hellerup Office
Ehlersvej 24
2900 Hellerup
Denmark
+ 45 39 62 16 42

Esbjerg Office
Kirkegade 25
6700 Esbjerg
Denmark
+ 45 75 18 16 88

Svendborg Office
Kulinggade 31E
5700 Svendborg
Denmark
+ 76 10 94 30