

# Lay-up for ships and rigs

In challenging market conditions, many operators choose to temporarily lay-up assets. We assist operators in correct deactivation, protecting vital technical equipment and preserving the building structure.



- Reduce lay-up costs and speed up re-commissioning
- Protect structure and spaces
- Preserve HVAC and refrigeration equipment
- Minimal maintenance during lay-up period

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## Simplify the lay-up process

Callenberg Technology Group's lay-up service simplifies the lay-up process, keeping maintenance costs down and start-up time short. There are two parts to our lay-up offer; Protection of structure and spaces and Preservation of HVAC and refrigeration equipment. In addition we survey, plan maintenance, report and monitor throughout the entire process.



## Protecting structure and spaces ahead of lay-up

To achieve the greatest efficiencies all technical areas should be evaluated separately, with special attention to engine rooms and other rooms with electrical equipment.

### HVAC in the living quarter

- Reduce and optimise equipment capacities
- Seal complete or parts of systems
- Duct cleaning
- Evaluate & adjust internal temperature and humidity

### HVAC in technical areas

- Reduce & calculate ventilation for each area
- Equipment cleaning
- Temperature control of vital machinery, process and utility rooms
- Evaluate ventilation and cooling requirements in LIR/LER, drillers cabin and control rooms
- Minimise heating and natural ventilation in

## Preserving HVAC & refrigeration equipment during lay-up

Air handling units that are not in use typically form mould and fungus. We preserve your HVAC & RFN equipment to avoid hazardous build-up, minimise maintenance costs and enable easier re-commissioning.

### HVAC deactivation

- Lower capacities and reduce energy consumption
- Secure minimum temperature and control of RH in AC rooms
- Equipment cleaning

### Refrigeration deactivation

- Empty chillers and compressors of refrigerant and pressurize with Nitrogen\*
- Monitored shut down of provision/freezing rooms by thermo-camera
- Antifreeze treatment of water traps
- Cleaning of provisions and rooms, with special attention to coils and evaporator

\*All systems containing refrigerant needs regular servicing to comply with F-gas regulations. We recommend emptying the systems of refrigerant and pressurising with Nitrogen to avoid this regular servicing while the systems are not in use.