

# ENGIE Axima's expertise for oil&gas offshore

## Living quarters:

Individual or collective, low noise air-conditioning systems for crew comfort in accordance with client requirements, international and local safety regulations. Firefighting system design is done in accordance with client and international health and safety regulations.

## Cold rooms:

Supply of dedicated refrigerating plants and evaporators specially designed for optimized performance and hygiene (USPHS regulations). The refrigerating plant secures an adequate supply of provisions for passengers and crew. Refrigerating plant and evaporators are designed under ships constraints (Vibrations, compact volume, power supply, redundancy ..) The system feeds the standard refrigerating room as well as refrigerators in the galley area. The scope of supply can include panels, shelves and refrigerating piping. Use of environmental friendly refrigerant as per the F-Gas regulation.

## Galley:

Supply of dedicated ventilation and AC systems designed for all galley equipment type and all galley equipment type arrangements. The system is designed in accordance with client and international health and safety regulations. Supply of dedicated firefighting system (HiFex) based on CO2 and chemical fire extinguishing agent for galley typical area. Supply of dedicated refrigerating plants for galley.

## Supervision / Central control room:

Dedicated or integrated HVAC AS (Automation System) to run the installations, optimize their energy efficiency and contribute to safety and maintenance management. Proper redundancy and SIL level will be considered as per client needs.

## Muster shelter:

Depending on the client's needs and regulations, this key room will be ventilated using the general system or a dedicated network such as a dedicated split system.

## Laboratory:

Depending on the system selected by the client (type of Fume Cupboard and Safety Cabinets), we design, supply and commission the associated ventilation system for the Laboratory. Firefighting system is designed and adapted to the special requirements of the compartment (CO2, NOVEC HP or LP water mist system...) in accordance with client and international safety regulations.

## Machinery space:

Ventilation and air-conditioning of large machinery spaces, including pump rooms, electrical rooms, essential and emergency diesel generators. Air Handling Units and Centrifugal or Axial Fans can be used. As in the other parts of the Unit, when needed as per Solas and/or client requirements, Type Approved Fire Dampers will be used when crossing bulkheads or decks. Firefighting system is designed and adapted to the special requirements of the compartment (CO2, NOVEC HP or LP water mist system...) in accordance with client and international safety regulations.

## Chiller room:

Calculation of the most efficient cooling capacity, equipment sizing (compact design). Supply of different kinds of chiller technologies, including possibly innovative, low energy in-house equipment. All equipment provided is low-noise, shock and vibration proof. For this room, a dedicated ventilation system might have to be implemented.

## Electrical switch board and control panel:

ENGIE AXIMA manufactures custom tailor made switchboard and control panel with which you will be able to gain a quick and comprehensive overview of different systems installed on board. Equipments are designed under ships constraints conditions (EMC compatibility, compact volume, power supply AC/DC, vibrations resistant). The switchboards and control panel ensure safe operation as per client and international regulations requirements.

## HVAC room:

Design fully integrated to Unit General Arrangement thanks to compact coordination of ducting, piping and electrical networks, providing easy/smart maintenance areas. All equipment provided is low-noise, vibration proof, ATEX when needed and tested at factory (FAT) as per client requirements.

## Topsides / E&I Buildings:

According to the client's Topsides philosophy and design, a general or dedicated HVAC system can be provided for the E&I buildings inside the Topsides. A particular attention will be paid to the hazardous area classification for the ATEX specification of the HVAC equipment.