



## Marine

### CHALLENGE:

Protecting machinery spaces, engine rooms, pump rooms and electrical switchgear

### SOLUTION:

HYGOOD® FM-200™ Clean Agent Fire Suppression System

### APPLICATION:

Protecting critical operational infrastructure in cramped conditions

Ensuring effective fire protection for marine vessels at sea presents substantial challenges. In a marine environment, fires can develop rapidly and can quickly threaten the safety of the vessel and its personnel. The space and weight restrictions, combined with the critical electronic infrastructure on board the ship, require a robust, reliable solution.

Previously, many vessels used Halon or CO<sub>2</sub>-based fire suppression systems, but Halon-based systems have been found to have a harmful impact on the ozone layer, while CO<sub>2</sub> is only suitable for environments not occupied by people. The HYGOOD FM-200 Clean Agent Fire Suppression System has zero ozone depletion potential (ODP) and is safe for use in occupied areas at the design concentration. FM-200 (HFC-227ea) fire extinguishant is a clear, compressed gas stored as a liquid (under pressure) that vaporizes upon discharge and absorbs heat to rapidly suppress fire. The HYGOOD FM-200 system provides an innovative, clean agent solution that helps to ensure continuity of operations and delivers effective asset protection for the marine industry.

Both automatic and manual actuators are available for release of the agent into the hazard area through fixed piping and nozzles. Seven nozzle sizes are available to provide the correct flow of agent in either 180 or 360 degree horizontal discharge patterns. For large hazards, cylinders can be connected to a common manifold.

The HYGOOD FM-200 system carries both Lloyds and DNV approvals and has Administration acceptances around the world. The system can be designed to meet the requirements of EN 15004, ISO 14520 and NFPA 2001; and components approved according to EN 12094.