

**NLI**

# Fire & Safety

## Active fire fighting and fire suppression systems

### Unique Competence – Unique Solutions



#### Our Competence

During the last ten years, NLI Solutions has gained comprehensive offshore and NORSOK experience through several topside engineering projects and EPC supplies.

For design and supply of fire suppression systems, NLI Solutions as will work in close partnership with recognized suppliers in the business (like Tyco and Minimax Viking).

The combination of our suppliers expertise and NLI Solutions in-house project management and EPC competence has proven a successful recipe on the Martin Linge project where we contracted the Inert gas (Novec 1230) and the central foam tank packages.

We believe this successful combination can also be to the advantage for upcoming project.

NLI Solutions is a provider of reputable products which is NORSOK classified and suitable for offshore facilities.

#### Gaseous systems:

- Novec 1230
- Ingergen
- Argonite
- CO2

#### Example of use:

- LER Rooms
- Control Rooms
- E-house
- Hydrocarbon fires

#### Water / Foam systems:

- Deluge
- Foam tanks
- Water mist
- Sprinkler

#### Example of use:

- Gas turbines
- Hydraulic systems
- Generators
- Compressors



#### About NLI

NLI is a group of companies supplying engineering and fabrication services, technology products and process solutions to the offshore oil and gas industry. We undertake the complete responsibility from concept development to manufactured product.

Our mission is to make life easy for our customers. To fulfill this goal we focus on competence development, high quality, flexibility and punctuality. NLI has today approximately 650 highly qualified employees.



#### Contact

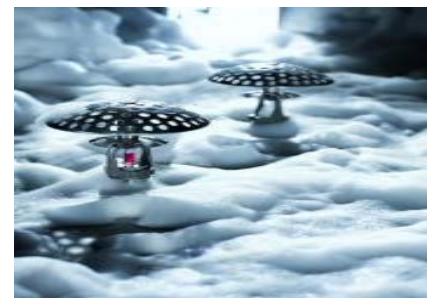
For Inquiries, please contact:

#### NLI Solutions

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# Fire & Safety Systems

<p><b>Minifog</b></p> <p>Water mist systems disperse the extinguishing water in tiny droplets through special nozzles. The water surface is increased, enabling it to absorb more heat and evaporate faster. The related cooling and smothering effect makes it possible to fight fires effectively with reduced water consumption. Diverse systems, customized for each application, ensure optimal protection for buildings, rooms and facilities.</p>	<p><b>Sprinkler</b></p> <p>Sprinkler system detect and extinguish fire with water. The principle of selective extinguishing makes the system extremely effective. Only the sprinklers located in the immediate proximity of the fire will be activated. Immediate extinguishing action using water is taken, while the remaining sprinklers remain closed. Sprinkler systems provide reliable fire protection for buildings and industrial plants. For special fire risks, a film-forming foaming agent can be added to the extinguishing water to increase the extinguishing</p>	<p><b>Water Deluge</b></p> <p>Deluge sprinkler system detect and report fires automatically, initiating the water extinguishing process with or without foam. Deluge provide a simultaneous application of water over the entire hazard. Deluge System comprises a deluge control valve, a distribution pipework (dry or wet) and deluge nozzles. Deluge Nozzles are evenly distributed above the protected area.</p>
<p><b>Novec - 1230™</b></p> <p>Novec 1230, a non-corrosive and non-conductive chemical estinguishant, is suitable for protecting rooms containing electric and electronic equipment. Novec 1230 systems extinguish without leaving any residues and offer a high level of personal and environmental protection. Systems are suitable for protection of small and medium-sized rooms. The extinguishing agent are stored compactly in cylinders, either inside protected room or outside. The environmental properties of Novec™ 1230: ODP=0, GWP=1 Atmospheric lifetime – 5 days</p>	<p><b>Central Foam Skid</b></p> <p>Central Foam Skids supply foam concentrate to deluge skids, foam monitors, hose-reels, hydrants etc. Foam is supplied into a piping distribution system to which the foam consumers are connected. Foam is used in oil and chemical spill fires. Central foam skids comprises a storage tank, pumps, pipe works and instrumentation.</p>	<p><b>Surveillance</b></p> <p>Fire Detection, Monitoring and Control System. Integration to ensure fast reaction. The proper selection and integration of control panels, detectors, and alarms is crucial in making sure your fire protection system reacts quickly. NLI design, install and provide expertise and services on products and applications from Minimax Viking Group to optimize your system for fast detection and response.</p>

## Project references

<p><b>Central Foam Package</b></p> <p>Project: Martin Linge Year: 2014/2015          Client: Technip / Total          SoW EPC of Fixed Foam Package Including: SS316L foam tank, Foam Injection Pumps, interconnecting pipe works in super duplex and E&amp;I.          Tech: Foam liquid: AFFF Viscosity range -10/+50 °C NORSOK</p>	<p><b>Clean agent Fi-Fi</b></p> <p>Project: Martin Linge Year: 2015          Client: Apply / Total          SoW EPC of six inertgas skids with cylinders, release valves, enclosure and E&amp;I Protecting 20 rooms.          Tech: NOVEC 1230 NORSOK and NFPA 2001</p>
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