

United Technologies Corporation Fire & Security: Field Operations (B)

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Formed in 1983, Deluge is a major designing, engineering, supplying, installation, testing & commissioning and maintenance contractor of fire protection services. We have the ability to deliver end to end projects in the following sectors:

COMMERCIAL	RESIDENTIAL	INSTITUTIONAL
> Offices	> Apartments	> Public buildings
> Hotels	> Condominiums	> Schools
> Shopping centers		> Learning institutions
> Public entertainment cent	ers	> Airports
> Aviation > Transportation - MRT	TheCaseSolutions	.com

INDUSTRIAL	OFFSHORE & MARINE	PPOG
> pharmaceutical	> Jack-up rig	> Power Plants
> process industry	> Semi-submersibles	> Petrochemical
> semi-conductor	> FSO & FPSO	> Oil
> warehousing	> Harbors	> Gas

> Transportation - MRT

> logistics centers

Daring to be creative. Passionate about our work. Thinking out reliable solutions. Focused on success. These qualities have defined Deluge for over 30 years, and deliver results to you today.

DESIGN & ENGINEERING

SOLUTIONS & SYSTEM INTEGRATION

Deluge offers a complete range of fire detection systems and suppression systems for all types of fire risks to meet the business and protection needs of our clients.

1. FIRE DETECTION SYSTEMS

- Conventional Fire Alarm System
- Addressable Fire Alarm System
- Aspirating Smoke Detection System
- Video Smoke Detection System
- Fire & Gas Detection Systems
- •UV/IR Detection Systems
- Voice Communication Systems
- Linear Heat Detection Systems

2. FIRE SUPPRESSION SYSTEMS

Water

- Automatic Sprinkler System
 - Wet Pipe System
 - **Dry Pipe System**
 - **Deluge System**
 - **Pre-Action Sprinkler System**
- Water Mist System
- Dry/Wet Riser System
- Hose Reel System
- Hydrant System
- Water Monitor
- Fire Pumps
- Extinguishers Class A

Gas

- FM200 System
- CO2 System
- Inergen System
- Novec 1230 System
- CO2 Extinguishers Class C

Foam

- Deluge System
- Closed Head Sprinkler System
- Foam Chambers, Pourers and Monitors
- Foam Skids
- Bladder Tanks & Pump Skids

Dry Chemical

- Dry Chemical Skids
- Dry Chemical Monitor
- Extinguishers Class B

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Product and services - Basic Fire Protection needs

Detection and Alarm Systems































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Product and services - Higher Value add







leat Sensitive Foam Application Systems



Inert Gas Suppression Systems



Water Mist Systems









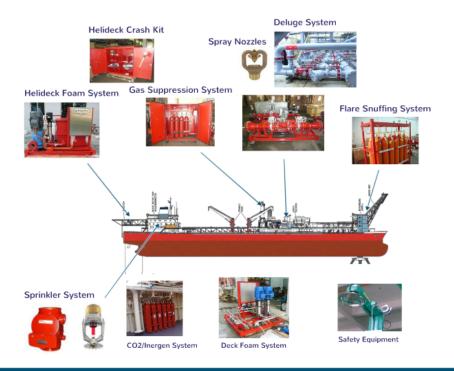






Product and services - Higher Value add

service to the FPSO, LNG, Marine and Offshore Industries





Pre-fabricated Skids



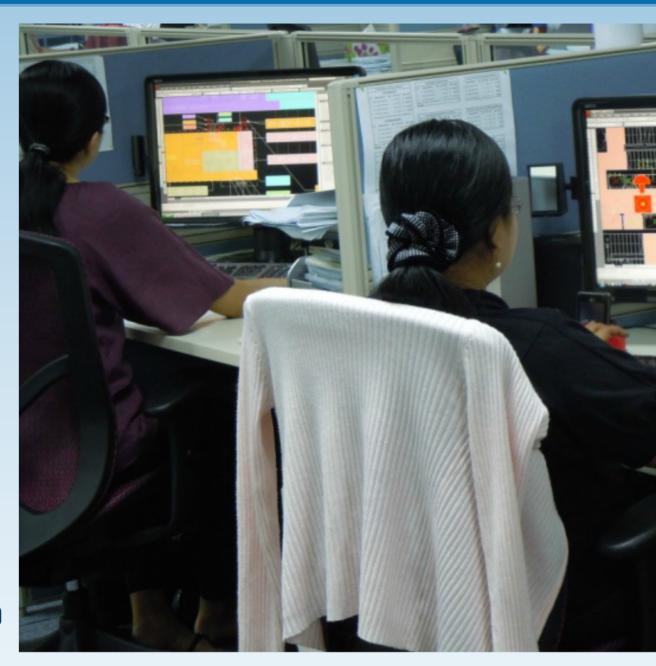


DESIGN & ENGINEERING

LEADER IN THE FIELD OF DESIGN

- Active participation with Review Boards of several Fire and Safety professional bodies.
- DFP's design staff are experienced in the design and modification of fire protection systems to the standard of international EPC contractors.
- We are using Primavera planning, sprinkler design software and 'FHC', 'Hyena' and 'pipenet' software for our hydraulic calculation.
- Building Information Model (BIM)
 Readiness
- Experience and knowledge in both local and international fire codes.

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DESIGN & ENGINEERING

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Compliance to Local and International Fire Codes & Standards

REGULAR CODES AND STANDARDS

- · MS (Malaysian Standard)
- SIRIM (Quality and Technology Innovation, MY)
- NFPA (National Fire Protection Association, US)
- FM (Factory Mutual, US)
- UL (United Listed, US)
- LPCB (Approval Mark for Passive Fire Protection Installation, UK)
- · EN (European Norm)
- · VdS (Vertrauen durch Sicherheit, EU)
- PSB (Laboratory scale fire testing, SG)
- BCA (Building and Construction Authority, SG)
- CP (Codes of Practice, SG)





















MARITIME AND OFFSHORE CODES AND STANDARDS

- · SOLAS (International Convention for the Safety of Life at Sea)
- · ABS (Setting Standards of Excellence in Marine and Offshore Classification)
- · DNV (Managing risks in the maritime industry)
- · United States Coast Guard Auxiliary
- · Lloyds register (development of new technologies and standards)
- · Bureau Veritas (Testing, Inspection and Certification services)





ISO 9001:2008



OHSAS 18001:2007



ISO 14001:2004













