Global Marine Solutions

From Ship to Shore, single source providers for Fire Protection, Electronic Security, Life-Safety and Communications Systems





Specialists in Fire, Security, Communications Systems & Life Safety

Tyco have over 100 years specialised marine experience you can trust. We protect vessels at sea and safeguard what matters most – life and assets.

We provide through-life support and maintain vessels globally to ensure fleets are safe, reliable and dependable which is essential for our customers.

At sea or inland we can offer you...

Fire Protection

 Dry chemical powder, deck foam, high/low pressure CO2, local area watermist, hi-expansion, fire detection and alarm system.

Electronic Security

 Ship perimeter protection, access control, video surveillance and 24/7 monitoring to demonstrate continuous compliance with ISPS.

Life Safety

 Gas detection, general alarm, personal breathing devices, emergency shutdown systems, onboard hospital/ healthcare as well as fire and life saving appliances

Communication

 Networking of audio, video and data signals.

Service & Maintenance

You can always count on us for round-the-clock support wherever you might be. We offer 24/7 service and maintenance via local Tyco offices located strategically across the globe. Together we can help support and protect your maritime assets.

80% of the world's commercial vessels and naval fleets are protected by Tyco

Global Turnkey Solution

Manufacturing & Product Development

 ISO 9001:2008 Standards at our 36 manufacturing facilities and 14 Research and Development (R&D) centres.

Application Engineering

 Customer focused approach in developing innovative solutions.

Project Management

 Multi-disciplined teams co-ordinated across countries with a single point of contact.

Installation & Commissioning

- In port, at sea or in the shipyards.
- Post Sales remote servicing facility providing after sales support.



Complete Fixed Fire Fighting Solutions

Tyco has an unrivalled fixed fire fighting solution fully supported from manufacture to commissioning of the systems.

Local Application Watermist

- Low pressure watermist technology for reduced costs
- · Simple, long-term maintenance
- No detrimental effect on electrical machinery

Watermist for Class A Machinery (TF) & Accommodation Spaces

 Low pressure, small bore pipe and less water usage

CO, Systems

- Traditionally used for total flooding of fires in unmanned areas
- Suppresses fires without damaging sensitive equipment
- High pressure cylinder systems and low pressure tank systems for engine rooms, pump rooms and machinery spaces

Foam and Dry Powder

- Specialist R&D to provide solutions for unique problems
- Full range of monitors, applicators and hand hose lines data signals.

Hot Foam for Machinery Spaces Total Flood

 Cost effective alternative to CO₂ systems and total flood High Pressure watermist systems

Hi-Expansion

 Our commitment to the development of 'best practice' foam system design ensures the most rapid fire 'knockdown' using the minimum amount of water

Clean Agent Gas Flooding System INERGEN®

- Flexibility allows existing storage space to be utilised
- Non fogging, so as to not obscure escape routes
- Environmentally friendly and sustainable gaseous fire suppression

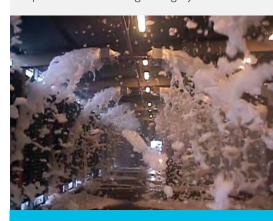
NovecTM 1230 Gas Suppression

- An advanced, "next generation" halon replacement
- Low toxicity and has a boiling point of 49 degrees C, thus exists as a liquid at room temperature
- NovecTM 1230 fluid is noncorrosive, non-conductive and evaporates rapidly, so it will not harm delicate electronic, radar, navigation and other equipment. And, unlike foams and powders, it leaves no messy residue to clean up, so systems can remain operational





Specialist Foam Extinguishing System



Fire Detection

- Rapid response to all types of fire to reduce major damage
- Minimal false/unwanted alarms
- SIL 2 rated detectors
- Situational awareness
- Flexibility saves installation and cabling costs

For Offshore Applications

 Multi-channel flame detection to provide image and location of multiple fires







Product Supply

Products from Tyco have been developed not only to meet the needs today, but also to comply with evolving marine requirements, including environmental issues, port state regulations and more.

We have an unrivalled product portfolio fully supported by a comprehensive stockholding to meet client's needs. We appreciate the demanding schedules our clients operate under and we constantly review our stock profile to reflect this.

Our range of products include:

- Fire Suits
- Breathing Apparatus
- Extinguishers
- · Fire hoses & hose reels
- Safety lamps



From manufacture of fire detection products to the commissioning of full fixed fire safety systems





Security

Monitoring & Surveillance

Tyco offers experience in creating end-to-end solutions that address your unique requirements. Tyco provides smart solutions to help you create safer workplaces and better processes.

Video Surveillance

- Explosion-proof equipment for hazardous areas on tankers and offshore vessels
- Cost effective, web-based systems
- Digital video recording to demonstrate ISPS compliance

Access Control

- Smart cards and biometrics for ease of use and enhanced security
- Less labour-intensive remote gangway control

Intruder Detection

- Electro Net to detect and delay intruders from boarding
- Dual sensors to reduce false alarms
- · Flexible options to reduce

Life Safety

Gas Detection

- Specialist gas detection solutions for mandatory monitoring
- Fixed systems or portable hand-held units

General Alarm

- Very high availability of the system due to speaker monitoring and redundant paths
- · Speech intelligibility evaluation
- · Digital network

Hospitals/Healthcare

 Complete theatre fit-out and onboard hospital facilities

Other Solutions

- SIL 2 approved integrated fire, gas and emergency shutdown systems
- Portable and mobile fire extinguishers
- Self-contained breathing apparatus
- · Range of breathing devices
- Fire door, damper and sprinkler monitoring and control
- Integrated safety command and control

Communications

Digital Networking

- · Video streaming television
- · Public address and background music
- Passenger information displays
- Care Communications
- Talk back and intercom systems





Our Marine Service Team Global reach. Local delivery.

Our mission is to get equipment operating with minimal disruption to a vessel's schedule. We achieve this by using our local network or by deploying engineers and parts by next day air delivery directly to a vessel to save both time and expense and to improve efficiency.

Crucial onboard equipment is constantly subjected to changes in climate, temperature and vibration that can cause equipment to unexpectedly breakdown. Our Remote Servicing System can be integrated or co-ordinated with yours in order to improve efficiency.

How we operate

- Manufacturing and product development to ISO 9001:2000 Standards
- Application engineering develops innovative solutions with a customer focused approach
- Our multi-disciplined marine consultants and project management teams are co-ordinated across countries with a single point of contact
- Installation and commissioning is performed in port, at sea or in the shipyards
- Our service and maintenance strategy is based on support from people and 24 hour parts warehouses located at strategic points around the world to provide assistance when needed
- We have a large number of Marine Distributors and Service Partners located throughout the world















01 Container Vessels

- · COSCO China
- · NOL Singapore
- P&O Nedlloyd LtdNetherlands

02 Military Naval Vessels

- China
- Germany
- Italy
- · United Kingdom
- · United States of America

03 Cruise Vessels & Ferries

- · Carnival Cruise Lines USA
- · Costa Crociere Italy
- · Holland America Lines USA
- Princess Cruises USA
- DFDS Tor Line AS Denmark
- Moby Lines Italy
- · Sea France France

04 Super Yachts

- Shipyard C. Van Lent
 Netherlands
- · Nigel Burgess UK

05 FPSO's

- · CNOOC China
- · Petrobras Brazil
- Prosafe Production
 Pte. Ltd Singapore
- Single Buoy Mooring (IHC Caland Group)
 - Netherlands
- · Woodside Energy Ltd
 - Australia

06 Inland Waterways

- · Cambridge Lines UK
- Deutch Lines Germany
- · Sienne Lines France
- Positano Lines Italy

07 Offshore Support

- Mitsui O.S.K. Line Japan
- National Gas Shipping
 Co. Ltd Abu Dhabi
- NYK Line Japan

08 Tankers

- · Petronas Tankers Malaysia
- · Pertamina Indonesia
- Knutsen OAS Shipping AS – Norway

09 LNG Vessels

- Mitsui O.S.K. Line Japan
- National Gas Shipping
 Co. Ltd Abu Dhabi
- NYK Line Japan



Global Strength

Local Expertise. At your service.

Service & Maintenance

Tyco is fully committed to through life support of assets. Our systems are designed, installed and serviced to the highest standards to provide robust solutions for vessels around the world 24/7, 365 days of the year.

- Service
- Annual safety certification
- Spare parts
- Small works/Retro Re-fit
- Certification & Endorsement Regulatory Influence (IMO)
- Accreditation

Marine Locations

- Europe
 - United Kingdom
 - France
 - Germany
 - Holland
 - Italy
 - Norway
- Asia
 - Hong Kong
 - Korea
 - China
 - Singapore
- Pacific
 - Australia

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