Introduction to
Darchem Thermal Protection

Darchem Thermal Protection is world renowned for the design, manufacture and installation of bespoke Passive Fire Protection systems and Radiant Heat Shielding solutions for the Oil & Gas and Petrochemical industries.

As a strategic division within Darchem Engineering, Thermal Protection is a preferred supplier to Operators, EPC contractors, and Flow and Process Control OEMs for Offshore and Onshore installations worldwide.

Where specifications call for Jet Fire protection for offshore production platforms and FPSOs, or Hydrocarbon Pool fire protection for refineries, Darchem can offer Lloyds Type Approval certified solutions to protect critical safety systems and allow a controlled plant shutdown in the event of fire or explosion.

Applications include protection of valves, actuators, and associated instrumentation located within designated fire zones; as well as large process vessels, pipe lines and cable trays. Radiant Heat and Weather Shielding is employed to protect plant structures, equipment, and personnel from sources of high heat flux or wind effects.

Oil and Gas experience

• More than 25 years supply of Fire Protection and Heat Shielding solutions to Offshore and Onshore locations worldwide
• Jet Fire protection systems for Flow & Process control equipment installed on platforms and FPSOs located throughout all major Offshore sectors
• Hydrocarbon Pool Fire protection solutions supplied to all major Operators, EPCs and OEMs, for Oil Refineries, Gas Plants and other Petrochemical installations
• Highly responsive and flexible Design, Engineering & Site teams with extensive industry experience
• High degree of awareness to quality and safety standards within the Oil & Gas and Petrochemical industries
Darchem Thermal Protection offers a range of Passive Fire Protection and Radiant Heat Shielding solutions to meet the stringent demands for personnel safety and asset protection on Offshore Oil & Gas platforms and FPSOs. Due to space restrictions and high flow pressures, fire scenarios often call for Jet Fire protection up to 120 minutes for critical flow and process control systems to allow a controlled plant shutdown in the event of fire or explosion.

**DARMATT™ AND JETFIRE DARMATT™ -** Flexible Jacket systems offering up to 180 mins Lloyds Type Approval certified protection against Hydrocarbon Pool Fire (UL1709) and Jet Fire (ISO 22899-1 and OTI 95 634) conditions.

Applications include: Actuators - Valves - Process Vessels - Pipe Lines and Flanged Couplings - Cable trays - Junction Boxes and Control Panels

BP West Azeri platform, Azerbaijan – Darmatt, Darshield and Darflare installed (Image © BP plc)
DARSHIELD™ - Rigid Stainless Steel Enclosure systems offering up to 120 mins Lloyds Type Approval certified protection against Hydrocarbon Pool Fire and Jet Fire conditions.

Applications include: Electrical & Pneumatic Actuators - Valves - Junction Boxes and Control Panels

DARSPLASH™ - Rigid Stainless Steel Enclosure systems providing up to 120 mins Lloyds Type Approval certified Passive Fire Protection for Rigid Production Risers and associated Structural Supports against Hydrocarbon Pool Fire and Jet Fire conditions.

RADIANT HEAT & WIND SHIELDING - DARFLARE™ Horizontal Heat Shielding for protection of plant equipment and personnel from high heat flux from flare stacks; and DARScreens™ woven mesh vertical shields protecting personnel and plant equipment against high heat radiation and inclement weather conditions.
Refineries & Petrochemical Plants


DARMATT™ - Flexible Jacket systems for fire protection up to 180 mins; and DARSHIELD™ rigid Stainless Steel enclosures providing up to 120 mins. Both solutions are covered by Lloyds Type Approval certification.

RADIANT HEAT & WIND SHIELDING - DARFLARE™ Horizontal Heat Shielding for protection of plant equipment and personnel from high heat flux from flare stacks; and DARSSCREEN™ woven mesh vertical shields for protection against high heat radiation and inclement weather conditions.
Fire Test Certification
Darchem Passive Fire Protection solutions are certified by Lloyd’s Register, and approved by other certifying authorities such as DNV and ABS. Darmatt and Darshield systems have been tested to simulate real-life installations, and using Lloyd’s validated design software, offer Type Approval Enclosure Certification for Hydrocarbon Pool Fire (UL1709) and Jet Fire (ISO 22899-1 & OTI 95-634) for periods up to 180 minutes.

Engineering and Site Services
Thermal Protection’s Design and Engineering teams are trained in the latest design methods and software packages. Their experience and knowledge of flow and process control equipments, and oil field environments, enables Darchem to offer a deep level of understanding of customer fire protection and heat shielding requirements. We offer a complete package to our customers, from detailed drawings to Product Manuals and Installation Procedures. Our Site Engineers are available to attend any location worldwide to conduct surveys, to supervise or undertake installation, and to make final walk-down inspections. Darchem Engineers are supported by local licensee and representative personnel trained in the installation of our Passive Fire Protection solutions.

DARCHEM THERMAL PROTECTION GLOBAL OPERATIONS

For further contact details - please visit www.darchem.co.uk