



Pool Liners

The Darchem system for fabricating pool liners ensures that they will be leak proof for their complete life.

The pool liners methodology for assembly has been achieved by close co-operation between Darchem design and manufacturing engineers, the result of this is a modular approach thereby enabling thorough NDT of all welds and reduced site installation time. This modular approach also allows a high degree of automation providing a cost effective solution.

Key Features

- Pool integrity for lifetime
- Reduced site installation time

Darchem can provide fuel storage racks and other pool furniture.



Introduction to Darchem Nuclear Systems

Darchem has held a leading position in the design, manufacture and installation of thermal insulation systems for nuclear steam raising plant for over forty years.

Involvement with the nuclear industry has been extended over that period into passive fire protection systems and major fabrications such as pool liners.

Backed by the Esterline Corporation, Darchem's parent company, investment and continuing product developments have allowed the company to remain at the forefront of providing thermal insulation and high integrity fabrication to the nuclear industry.

Nuclear Experience

- Over 160 reactors worldwide in 18 countries.
- Proven products developed utilising our 40years of experience in nuclear power stations
- Experts in ensuring rapid access to areas required for in service inspection
- Highly responsive and flexible team including classified radiation workers
- High degree of awareness to quality and safety standards within the nuclear industry

Quality and Environmental Accreditation's

Darchem holds BS EN ISO 9000 together with a wide range of specific company approvals from our worldwide customer base. These include Rolls Royce, AREVA, Westinghouse, EDF, CFHI, KHNP (Korean Hydro Nuclear Power) DSME, Daewoo E & C, and HHI (Hyundai Heavy Industries).

The company is environmentally accredited to BS EN ISO 1400 at both its facilities and is committed to continuous improvement in preventing and reducing pollution together with minimising the environmental impact of our activities, processes and services.



**Darchem Engineering
Engineered Materials
Esterline Corporation
Ironmasters Way
Stillington, Stockton-on-Tees
TS21 1LB United Kingdom**

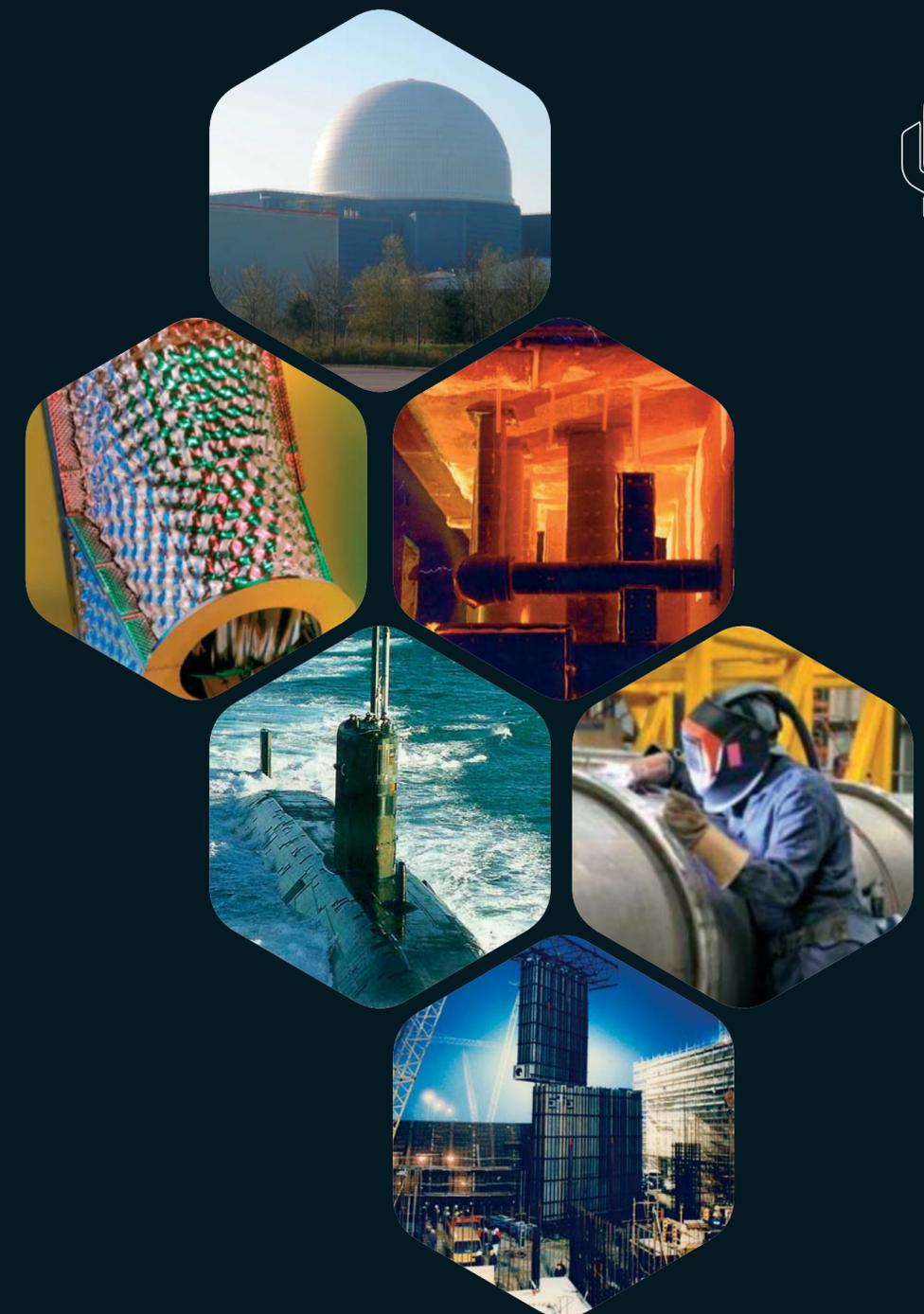


Stillington,
Stockton-on-Tees
60,000m²

**Darchem Engineering
Engineered Materials
Esterline Corporation
Eastbrook Road
Eastern Avenue, Gloucester
GL4 3DB United Kingdom**



Gloucester
5,000m²



Darchem Nuclear Systems



"Taking the heat out of your problems"

www.darchem.co.uk



Encapsulated Thermal Insulation

Darchem has an excellent reputation in the supply of thermal insulation systems, to nuclear power plants spanning from the earliest Magnox Stations in the UK to the latest designs of reactors and now has the experience on over 160 reactors worldwide.

Darmet®

With a commanding expertise in the design, comprehensive testing of systems, manufacturing and installation of thermal insulation Darchem satisfies customers insulation requirements with its Darmet range of products.

Key Features

- LOCA compliant (Loss of Coolant Accident)
- Darmet® system designed to avoid introducing fibrous insulation
- Excellent thermal insulation properties
- Lightweight system that can incorporate removable panels to allow ease of inspection
- Designed as a modular system to allow installation in confined spaces
- Recyclable metallic system
- Available to insulate pressure vessels, pumps, valves and pipe work.
- Options include incorporating radioactive shielding (SRMI)

KM1 Cable Protection

The Darchem KM1 system of fire protection for cable trays and cables was developed specifically to meet the challenges of fire hazards in nuclear power plant. Available to provide fire protection for between one and three hours, its novel design enables existing cabling to continue to be operated without amperage derating.

Extensively supplied and fitted to over 30 nuclear power plant in USA and Korea, KM1 provides the customer with a proven system of fire protection.

Key Features

- Avoids derating of electrical power cables as KM1 only develops its fire protection and insulation protection when under a fire scenario
- Lightweight and easy to install
- Can be designed for fast removal in areas of high maintenance
- Can be configured to meet the requirements of specific site configurations

Darshield®

The Darshield® is a robust passive fire protection unit providing fire protection for emergency shutdown valves, actuators and control cabinets.

The Darshield® design has evolved in the petrochemical industry and therefore has a proven reputation to accommodate the most demanding of environments.

Key Features

- Robust and durable ideally situated to withstand extremes in environmental conditions
- Comprehensively tested to 1300°C for 120minutes and with certification from Lloyds, ABS and DNV
- Access doors can be designed in the system to provide easy access to equipment requiring inspection
- The latest Darshield® designs incorporate "inservice" experience gained over 30 years

Darmatt®

Darmatt® provides similar protection levels to Darshield®, however is available as a flexible close fitting passive fire protection system. Ideally for use in areas with tight space constraints.



Fire Protection



High Grade Fabrications

High Grade Fabrications

The company has extensive experience in providing design and manufacturing solutions for our customers high grade fabrications. Manufacturing is undertaken at our UK site and utilises the latest manufacturing techniques to provide cost effective solutions.

Fabrication capabilities include utilising stainless steel, Nimonic, nickel and titanium alloys.

Waste Containers

Darchem offers a manufacturing and production engineering capability that is ideal for the supply of medium volume waste containers. A manufacturing cell with appropriate automation provides consistent quality and cost effective production.

Piping Systems

Complex and demanding piping systems are ideally suited to Darchem's manufacturing capability. The company is able to offer design, manufacture and installation of these systems with a proven track record.

Honeycomb Crush Pads

The company designs and manufactures a wide range of energy absorbing crush pads and pipe whip restraints to prevent damage both to equipment and surfaces. The use of crush pads significantly lower the risk associated with the movement of critical loads. Darchem can design crush pads to meet specific customer requirements based on precise energy absorption criteria.

