



Advanced Nuclear provides safe, cost-effective, QA/QC compliant results in planning, scheduling & application of mechanical insulation, asbestos/ lead abatement, energy appraisals, reflective metallic insulation (RMI) & fire protection services to Nuclear facilities throughout North America.

I-Star Energy Solutions offers a wide range of Passive Fire Protection & Radiant Heat Shielding solutions for the Oil & Gas and Petrochemical industries.

Advanced Nuclear / I-Star Energy Solutions, both part of the Irex Contracting Group, have partnered with Darchem, a division of Esterline Corporation. As Darchem's USA partner, please contact us to learn how we can provide exceptional safe, quality, products & services.

Below please find a brief description of Darchem products available through Advanced Nuclear and I-Star Energy Solutions;



Darmatt <sup>™</sup> - a unique flexible, passive fire protection system that can meet 180 minutes blast protection up to 0.43 bar, protecting personnel and providing asset protection. DARMATT provides protection for valves, actuators, cable routes, conduits signal lines, junction boxes, solenoid stations, air receivers, process vessels and other equipment applications requiring fire protection.

Jetfire Darmatt<sup>™</sup> system offers blast protection up to 1.62 bar. The design specification of this product includes limiting temperatures, per project requirements, with Lloyds approved Offtranp software calculations issued to clients for each item of equipment protected.





Darshield<sup>TM</sup> - rigid and compact engineered enclosures with up to 3 hrs of protection against flame temperatures in excess of  $1100^{\circ}$ C.



Darscreen<sup>TM</sup> - radiant heatshield system can be used as a horizontal heatshield directly below the flare tip, but is commonly used for vertical heatshield protecting critical plant equipment, steelwork and personnel.

Darflare<sup>™</sup> - radiant heatshields that are lightweight, maintenance free, self draining, suitable for severe conditions and have been installed for more than 20 years without deterioration.





Darmatt KM1<sup>TM</sup> - is a fire protection barrier system developed for the protection of critical & safety electrical equipment in the nuclear & industrial markets.

Darmet<sup>TM</sup> - is a **R**eflective Metal Insulation is of modular design that can incorporate removable panels for inspections. It is used in areas to avoid introduction of fibrous materials, such as the case in nuclear application in Reactor vessel containment areas. It has excellent thermal properties. Available as insulation for pressure vessels, pumps, valves & piping. It is custom manufactured to designed thickness & thermal specifications.



Through Advanced Nuclear / I-Star Energy Solutions, Darchem provides a full line of Engineering Support Services that include 3D modeling for any application of Thermal Protection needed. Our systems have been embraced worldwide for over 25 years as the best, most cost effective systems in the Industry.

Detailed info of above products can be viewed at: http://www.esterline.com/Portals/8/Darchem/PDF/DTP\_Brochure.pdf

James A. Petrides, CEM, CIEA, CIT Director, Energy Services 317.947.8167 jpetrides@irexcorp.com Kevin G. Fenimore Director, Insulation Services 706.691.6662 <u>kfenimore@irexcorp.com</u>