

Shielded metallic reflective insulation

DARMET SMRI provides integral radiation protection with engineered insulation. The product is a development of the well proven DARMET all metallic stainless steel thermal insulation system also produced by Darchem Thermal Protection.

Principle Features of SMRI

- Radiation reduction Exposure
- Maintains Ease of removability
- Purpose designed
- Maintains Thermally efficiency
- Designed to satisfy Seismic and LOCA criteria
- Designed to be Dust free

Reduction in Operational Time and Radiation Exposure

The introduction of DARMET SMRI significantly impacts the access time for maintenance and

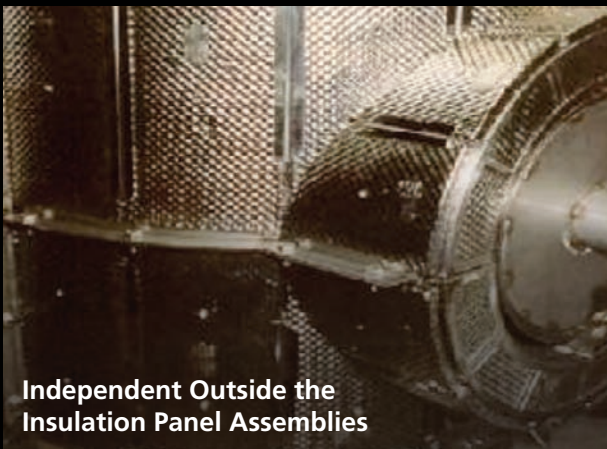
operational staff by permanently reducing radiation levels. Previously declared "restricted" levels can become readily accessible thus improving quality time within containment, saving at least 25-50% of dosage pick up time. Dose Reduction Feedback

Site Feedback from operational plants with DARMET SMRI fitted has shown that the dosage pick up can be reduced by 50%.

Criteria for Design

- Weight limitation due to existing supports.
- Operating Temperature of pipeline / Equipment.
- Location of Shielding within insulation.
- Environmental clashes, restrictive access.
- Thermal Performance and properties of Shielding
- Shine path limitations.
- Shield Thickness to be applied
- Shield material type

Shield Location Options



Integral within Insulation Assemblies



Encapsulated fibre insulation Nuclear Industries

DARMET ENCAPSULATED Thermal Insulation System is specifically designed to minimise heat loss in various applications.

This product is installed where the requirement of LOCA (Loss of Coolant Accident) is not as stringent. The form of insulation varies from Mineral Wool to high performance insulations like micro-porous insulation. The insulation can be encapsulated in a stainless steel Panel design which will form part of an assembly encompassing the component. Alternatively the insulation can be encapsulated

in a High Temperature resistant cloth material forming a mattress panel design which will form part of an assembly encompassing the component. This assembly is then covered in a thin gauge austenitic stainless steel cladding skin offering the necessary operational protection. Both systems provide simple installation and removability characteristics. Each application is designed to suit the customer specification with respect to thermal and mechanical requirements.

