

PROJECT REFERENCE

T-AKE DRY CARGO / AMMUNITION SHIPS

NH/Armaflex[®], Armafix NH[®]



- **Summary**

With the launch of USNS William McLean in April and final delivery in September 2011, the General Dynamics National Steel and Shipbuilding Company (GD NASSCO) completed the twelfth of fourteen new naval cargo ships for the US Navy. The T-AKE cargo ships in the Lewis and Clark class replace the ships of the Kilauea (T-AE 26) and Mars (T-AFS 1) series, which are gradually being taken out of service. The priority objective of the T-AKE programme is to develop ships which ensure that the fleet is supplied efficiently while life cycle costs are kept as low as possible.

- **Place**

GD NASSCO Shipyard, San Diego, California

- **Contractor**

Performance Contracting Inc. (PCI)

- **Market segment**

Marine and Transport

- **Application**

HVAC systems

- **Insulation systems used**

NH/Armaflex, Armafix NH pipe support

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Apart from the HVAC systems for the crew, the ships also have large refrigeration and freezer units for storing foodstuffs. When selecting the insulation materials, not only the diverse operating temperatures had to be taken into account, but also the regulatory requirements of the US Navy, which stipulate that the construction materials used must have low flame spread and low smoke, gas and toxic emissions.

The insulation specialists Performance Contracting Inc. (PCI) were commissioned to specify and install the technical insulation materials. PCI specified mainly NH/Armaflex, the proven elastomeric insulation material. The product does not contain chlorides, bromides or PVC. It has low smoke emissions and displays good practical fire behaviour. NH/Armaflex is FM- and UL-approved, IMO-certified and fulfils the strict requirements of the US Navy's EB 4013 specification.

Apart from their good technical properties, Armaflex insulation materials are characterized by their unrivalled ease of installation, which is an enormous benefit particularly in confined spaces. Installation is even faster with self-adhesive materials. Using the self-adhesive NH/Armaflex sheets enables PCI to stay within the narrow timeslot allocated for insulation work in the building schedule. PCI now uses mainly NH/Armaflex for mechanical installations in many projects as a system solution, combined with the Armafix NH pipe hanger.

The pipe support for cold applications, which is aligned with the NH/Armaflex range, provides optimum insulation of the sensitive area of the pipe bracket. Armafix thermally isolates the pipe from the bracket and thus prevents thermal bridges and condensation. The Armafix pipe support consists of Armaflex in which compression-proof PUR/PIR segments are embedded. PCI has used several hundred Armafix NH pipe supports on various cold lines on the T-AKE cargo ships.



NH/Armaflex has been used on the majority of the technical insulation on the T-AKE ships.



On the T-AKE ship USNS William McLean PCI used several hundred Armafix NH pipe supports on various cold lines.

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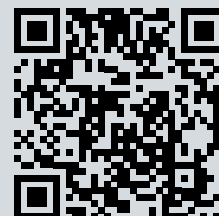
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