

From Ship to Shore Pipe Joining Solutions For the Marine Industry

Mechanical Piping Systems for construction and retrofitting a full range of marine vessels

Contractors, engineers and distributors require faster, more cost-effective tools for joining pipe that traditional methods just can't deliver.

GRINNELL Mechanical Products, a premium brand of Tyco Fire Protection Products, offers innovative grooved pipe joining technology eliminating welding or flanging needs, which reduces down time and maximizes space and safety. In addition, GRINNELL Mechanical Products offers a 10-year warranty, an unrivaled customer service and technical support, and GRINNELL Mechanical Services (GMS) design and planning services to create cost-effective and time-efficient piping systems. Quality piping applications are available for a wide variety of marine industry applications including container ships, passenger ships, work boats, drill ships, tankers and cargo ships. GRINNELL Mechanical Products can be installed in systems such as ballast and cooling water pipes, bilge systems, fire suppression systems, deck drains and fuel systems. GRINNELL Mechanical Products include couplings, fittings, mechanical tees, valves, and accessories as well as complete systems for joining copper, stainless steel, plain end, HDPE, G-PRESS Press-fit, and G-MINE PVC components.

Designed for Ease of Installation and Maintenance

Grooved pipe joining technology allows for easy and fast installation. The small foot print of GRINNELL Mechanical Products increases space savings by enabling installation closer to the wall, floor or ceiling, making this the ideal solution for shipbuilding or retrofitting. Convenient access to service or change equipment helps reduce down time.

Couplings are available in rigid and flexible designs. Rigid couplings are used in areas such as manifolds and valves to accommodate easier access for replacement needs. Rigid couplings also provide axial and radial rigidity comparable to flanged or welded joints. Flexible couplings offer an advantage in applications where movement between the pipe and supporting structure is anticipated as well as movement due to pipe thermal expansion or vibration. Grooved flexible couplings can accommodate pipe displacement in the form of axial movement or angular deflection. Both types of couplings provide the benefit of noise and vibration attenuation.



Substantially Minimize Weight and Maximize Safety

The use of GRINNELL grooved pipe couplings instead of flanges achieves significant weight reductions across a range of pipe sizes. Reducing the weight of the piping system helps ultimately reduce vessel weight, potentially saving on fuel costs. The GRINNELL grooved technology system involves no welding, which requires an open flame and increases the risk of fire, an added hazard for vessels on open water. Due to the superior design of the pipe, gasket, and housings, the mechanical joint creates a triple seat that is enhanced when the system is pressurized.

For information on pressure ratings, agency listings and approvals, and how GRINNELL Mechanical Products pipe joining systems can become your solution, visit www.grinnell.com.





GRINNELL Mechanical Grooved Products

Coupling

Type 577

Size Range: 1-1/4" to 8"

Type 705, 707, 772

Size Range: 1-1/4" to 12"

Type 716

Size Range: 2" x 1-1/2" up to 8" x 6"

Pipe couplings are approved for use in a range of piping systems in applications:

- Bilge and Ballast lines, Fuel and Oil lines, Fresh and Seawater cooling lines
- Fire main, Deckwash lines, Steam lines, Cargo Oil lines, Vent, -Fill and Sounding pipes, Sanitary Discharge lines, Inert Gas lines on open deck
- Discharge lines from Inert Gas Washers and Deckwater seals

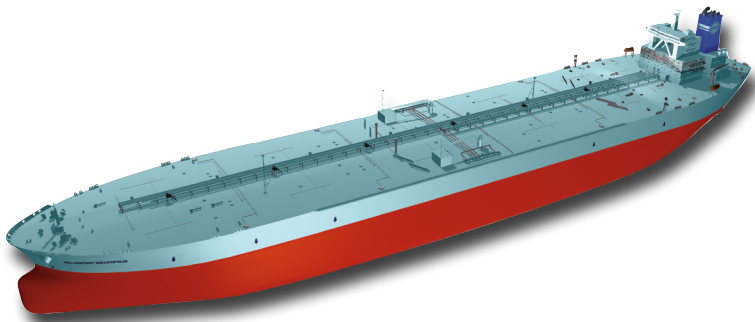
Materials:

Housing: Ductile iron castings according to ASTM A-536 Grade 65-45-12

Sealing: EPDM (Green), NBR (Orange)

M.A.W.P.: 25 [bar]

M.A.W.T.: -10°C up to +82°C NBR / + 110°C EPDM



Germanischer Lloyd

About the American Bureau of Shipping

Since its founding in 1862, promoting maritime safety has been the core commitment of the American Bureau of Shipping (ABS). With offices throughout the world, ABS develops "Rules" for building and classing that cover a range of vessels, from offshore mobile drilling units to concrete vessels and sophisticated research and mining ships. ABS establishes "Rules" for classification concerned with the periodic survey of these vessels, assuring fitness for their intended service. The information in ABS publications reflects current technology as established and updated by the Bureau's Technical Committees.



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