



Marine Fenders International, Inc.

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Marine Fenders International, Inc.'s *Ocean Guard*[™] netless foam filled fenders modernizes B street Cruise Ship Terminal in San Diego.

The number of cruise ship calls in San Diego increased from 100 in 2000 to 191 in 2004. For 2005, expected cruise ship calls already number 211 and more are likely. San Diego has the potential to triple its passengers in the next fifteen years from the current 328,000 passengers to close to million passengers per year, based on the expansion of the existing terminal. This necessitated The San Diego Unified Port District to modernize and expand the B Street Cruise Ship Terminal.

An important aspect of this modernization program required the upgrading of the marine fendering systems. The existing terminal and marine fendering systems were no longer adequate to accommodate the new generation of cruise ships, many of which carry more than 3,000 passengers.

The San Diego Unified Port District selected Marine Fenders International, Inc.'s *Ocean Guard*[™] netless foam filled fenders to modernize their B street Cruise Ship Terminal.

Twelve 10 ft diameter x 16 ft long *Ocean Guard*[™] Extra High Capacity Netless foam filled marine fenders procured as the fendering system on both sides of the terminal.

The rated performance of these fenders is 2,054 ft-kips of Energy Absorption with a Reaction Force of 764 kips at 60% compression.

The performance features of these fenders include:

- High Energy Absorption Low Reaction Force
- Smooth Safe Berthing (*The energy dissipation of the foam core construction allows for a gentler recovery after compression. This virtually eliminates the rebound effect vessels experience from other types of fendering systems such as hard rubber fenders, pile fenders, pneumatic fenders and panel fendering systems*). Non Marking construction (reinforced urethane skin will not mark Cruise ship hulls).
- Hull conforming capabilities (flexible construction conforms to Cruise Ship rub rails).
- Unsinkable And Safe
Because of the closed-cell foam core construction in the foam-filled Ocean Guard[™] Netless Fender design, it is unsinkable and will not explode.
- All tide fendering (*The Ocean Guard[™] foam filled fender is a floating fender, and when installed as such will self adjust with tidal fluctuations providing optimal fendering*).

ENGINEERED FOR EXCELLENCE