



# TECHNICAL RELEASE

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## Multiple-Cable Penetrations-Integrity RISE-Sealing Systems®

Offshore-platform operators in the North Sea and Gulf of Mexico have expressed concern with the stability problems related to internal water movement among spaces through failed block style multiple-cable penetrations (MCPs). The most significant case has been the listing of BP Thunderhorse following the effects of Hurricane Dennis. This specific incident is under further investigation by the U.S. Department of the Interior, Minerals Management Service, Gulf Coast Region (MMS) to determine the exact sources and causes of water influx. One initial finding is that flooding-induced MCP failure can compromise stability.

MMS Safety Alert No. 235 of December 15, 2005 reported that MCPs of a molded-block configuration experienced failure in spaces filled with blank blocks. In addition, findings indicate that the subject MCPs may have been improperly installed or pressure rated. While the final investigation is ongoing, several operators have elected to remove existing molded-block MCPs and retrofit with Rise-Sealing Systems.

- The RISE-Sealing System (RISE) is based on a proprietary thermal expanding technology (not intumescent based) that will seal off the penetration in case of fire. Shrinkage and corrosion of components or collars is eliminated with RISE.
- RISE is tested and approved for A-0 up to A-60 classification and has recently been successfully tested to 7 bar pressure. However, in the event of a leak, catastrophic failure of the entire transit is virtually impossible, unlike the block systems.
- RISE is tested and approved up to H- 120 classification for use in (2) hour rated hydrocarbon fire boundaries on Offshore Platforms and FPSO vessels. H- 120 test is an instant heat rise to 2000 degree (F) for a (2) hour duration.
- RISE is Type Approved for cable and pipe transits by ABS, BV, US Navy, China Classification Society, DNV, Germanischer Lloyd, Lloyd's Register, Korean Register of Shipping, Nippon Haji Kyokai, Registro Italiano Navale, Transport Canada, and U.S. Coast Guard. RISE holds EC Wheelmark Certificates issued by Bureau Veritas.
- RISE "Extend-a-Frame" systems allow the upgrading of any existing block-transit system to double the usable space.
- RISE Sleeves self-govern the required cable separation and ensure that the fill capacity of the transit does NOT exceed the tested and approved limit of 40% (cross sectional cable area vs. overall transit area) as governed by the requirements under IMO Resolution A.754(18) of the FTP Code..
- Cable changes require no disassembly of the entire transit. Only the area being modified in the transit is opened for insertion of additional cables. Block systems require disassembly and replacement of all transit components following any alteration for additional cable passages in pressurized applications. There is no potential for missing components.
- RISE Sealing-System installation on new or existing platforms requires 60% less labor in terms of pre-engineering, preparation, installation and test-cycle completion. Results may vary with specific application, and references are available upon request to CSD Sealing Systems–North America and/or W&O Supply, Inc.

For additional information about RISE Sealing Systems and related applications, pre-engineering, training, quality assurance, and installation certification, contact your local W&O Branch or:

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