

Guidance to SIRE 2.0 Key Points

Ref: 021

8.6.9 Manifold reducers, spool pieces and other portable pipework (NEW) / TMSA 6.1.2

8.6.9. Were the Master and officers familiar with the company procedures for the use, inspection and testing of manifold reducers, spool pieces and other portable pipework, and were these items in satisfactory condition and properly fitted when in use?

Short Question Text

Manifold reducers, spool pieces and other portable pipework

Vessel Types

LPG, LNG

ROVIQ Sequence

Cargo Control Room, Cargo Manifold

Publications

IMO: ISM Code

USCG: Code of Federal Regulations. Title 46.

ICS: Tanker Safety Guide (Gas) - Third Edition

SIGTTO/OCIMF: Recommendations for Liquefied Gas Carrier Manifolds 2nd Ed 2018

Objective

To ensure manifold reducers, spool pieces and other items of portable pipework meet the required pressure rating for the cargo transfer system and will not leak at the flange face when used.

Please refer "Recommendations for Liquefied Gas Carrier Manifolds (SIGTTO/OCIMF)" for more information.

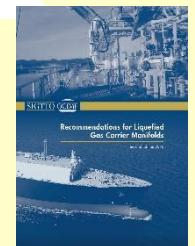
This can be purchased here,

<https://www.sigtto.org/publications/recommendations-for-liquefied-gas-carrier-manifolds/>



Potential Grounds for a Negative Observation

- There were no company procedures for the use, inspection and testing of manifold reducers, spool pieces and other portable pipework that included guidance on:
 - The correct use of manifold reducers, spool pieces and other portable pipework.
 - Provision of test certification.
 - Suitable storage arrangements, including the protection of flange faces.
 - Regular inspection.
 - Records to be maintained of inspections.
- There was no inventory of manifold reducers, spool pieces and other portable pipework.
- The accompanying officer was not familiar with the company procedures for the use and inspection of manifold reducers, spool pieces and other portable pipework.
- Test certification was not available for a manifold reducer, spool piece or other item of portable pipework.
- There were no records available for the inspection of manifold reducers, spool pieces and other portable pipework as required by company procedures.
- Inspection of the manifold reducers, spool pieces and other portable pipework indicated that the required inspections had either not been performed or were ineffective.
- A manifold reducer, spool piece or other item of portable pipework did not have the same certified rating (MAWP) as the fixed manifold piping to which it was connected.
- The position of handles or lugs on reducers in use during cargo transfer operations interfered with quick acting coupling devices or the bolting of flanges.
- More than one spool piece or reducer was fitted between the fixed manifold flange and the flange presented for connection.
- The flange face of a manifold reducer, spool piece or other item of portable pipework was visibly damaged, corroded or in an unsatisfactory condition.
- Where a long reducer or spool piece was in use, it was not properly supported to prevent undue stress.
- A manifold reducer, spool piece or other item of portable pipework in use for cargo transfer at the time of the inspection was defective in any respect.
- A manifold reducer, spool piece or other item of portable pipework in use for cargo transfer at the time of the inspection had been repaired but there was no evidence that it had been pressure tested on completion of the repairs.
- A manifold reducer, spool piece or other item of portable pipework was not made of a suitable material compatible with the minimum cargo temperature recorded in the Certificate of Fitness.



Process

Human

Process

Hardware