

Grouted Tee™ Connection

a complete solution for pipeline live intervention

Grouted Tee provides the answer

The Grouted Tee is a high quality alternative to traditional welded or mechanical tees. It does not require any site welding and therefore full flow can be maintained during installation and hot tapping. The Grouted Tee construction is much simpler than existing mechanical fittings and can accommodate much larger ovality of the main pipeline. Installation is carried out with minimal pipe preparation



Hot tapping using Grouted Tee connection

Benefits

- Zero welding to main pipeline
- Simple installation procedure
- Maintains maximum flow during hot-tapping
- Removes pipe ovality problems
- Installation possible on thin wall pipe
- Only requires grit blast surface finish preparation on main pipeline
- Metallurgical independence between main pipeline and connection
- Zero damage to main pipeline during installation



A 12" Grouted Tee fully installed



Installation of double branch Grouted tee



Hot tap field installation

Whether for new pipeline developments, branch pipelines, pipeline repairs, valve bypass/replacements and/or removal of blockages, the Grouted Tee enables connections to be made to existing pipelines in any location.

Rival Hot Tap technologies are limited and costly:

Welded Tee Connection:

- Welding onto the pipeline can create safety issues
- Reduction of flow required
- Highly skilled welders required

Bolt-on Mechanical Tee:

- Highly complex sealing system
- High cost parts and installation



A 36" Grouted Tee fully installed

Technical Data

Operating Temperature Range: -50oC TO +125oC

Operating Pressure Rating: ANSI Class 600

Available Pipe Sizes: Up to 56" dia

Branch Sizes: Full range from small diameter take-offs to equal Tees

Piggability: Can be fitted with insertable pigging bars to accommodate all types of pigging operations

Design Codes: **British Standard**

- BS 8010

European Standard

- prEN 1594

American Standard

- ANSI/ASME B31.8

International Standards

- ISO CD 13623

Institution of Gas Engineers

- IGE/TD1 & IGE/TD12

Third Party Verification: Det Norske Veritas (DNV)

Design Life: Up to 40 years

The above technical specification is subject to operating conditions and the pipeline product under consideration.

Other operating conditions requested by customers can be discussed on an individual basis as required



2" stopple Grouted Tee

GL Industrial Services

Holywell Park, Ashby Road, Loughborough

Leicestershire LE11 3GR, UK

Phone: +44 1509 282000

Fax: +44 1509 282525

oilandgas@gl-group.com · www.gl-group.com/oil-and-gas

Germanischer Lloyd does not warrant or assume any kind of liability for the up-to-date nature, accuracy, completeness or quality of the information provided. Liability claims against Germanischer Lloyd arising out of or in connection with material or non-material loss or damage caused by the use or non-use of information provided, including the use of incorrect or incomplete information, are excluded unless such loss or damage is caused by the proven wilful misconduct or grossly negligent conduct of Germanischer Lloyd. All offers are subject to alteration and are non-binding. Germanischer Lloyd expressly reserves the right without notice to change, supplement or delete parts of the pages or the entire offer or to stop the publication temporarily or definitively.
© GL Industrial Services UK Ltd 2009. All rights reserved