

## Test Procedures

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### Introduction

**The following is only a guidance to complement** current codes of practice, It is recommended that anyone testing follows the current codes of Practice guidelines (EN8010) and the local utilities self lay guidelines.

All pipelines should be tested before being brought into service to check for:

- Leaktightness
- Soundness of any construction work, with particular to any anchorage

Tests can be either Hydrostatic or Pnuematic, Hydrostatic is the test generally recommended.

### Hydrostatic Testing

It is recommended that testing is carried out in accordance with EN8010 part 2 – Codes of Practice for Design Construction of Pipelines on Land, Section 2.1 Ductile Iron.

This standard specifies that the test pressure for ductile iron pipes, fittings and flanged joints should not be less than the greater of:

- Working pressure + 5 bar
- Maximum pressure under surge conditions

The maximum test pressure on flange fittings should not exceed 1.5 times the flange rating.

Anchor gaskets have a restricted working pressure rating depending on the diameter and are subject to a maximum test pressure of working pressure + 5 bar .

Before carrying out a hydrostatic test the following should be checked:

- All anchorage is in position and the section of pipe to be tested is properly blanked off.
- All concrete should have adequate strength to withstand the test
- All air has been released from the pipeline
- Where joints are left uncovered for the test, ensure that sufficient backfill has been placed over the barrel of the pipe to prevent movement
- Where unrestrained closure pieces are used, adequate temporary restraint should be put in place to prevent movement at any exposed joints
- Where a restraint type fitting is used for a closure piece, then care must be taken to ensure all personnel are kept at a safe distance away from the section being tested
- Sufficient time is allowed after the pipeline is filled for absorption of water into cement mortar linings. (A minimum of 24 hours is recommended)

Please contact the office if more information is required, We have a number of companies we can put you in contact with that can carry out testing.