

Pressure Testing (either Hydrostatic or Pneumatic) of pipelines is used to identify leaks or cracks by means of pressuring the pipeline using either water or gas and monitoring for leaks and or pressure loss.

Testing parameters must be established according to the standard under which the testing is to be carried out. For hydro testing the test pressure is generally 1.5 times design pressure and for pneumatic testing it is 1.1 times design pressure. Pressure is gradually increased and maintained for several minutes before further pressure increase is applied.

Correct preparation of the line must be made which includes removing or clamping pressure relief devices, and removing other appurtenances such as gauge glasses and pressure gauges. Correct vents must be installed to remove air traps and additional support may be required to allow for water weight.

As the consequences of a rupture during pressure testing are significant, strict safety measures must be adhered to.



Advantages and Usage

- Cost effective first scan for leaks or cracks.
- Minimum impact if using water.
- Complies with ASME standards.
- Standard process can be handled by most operators.
- Immediate onsite results.
- Mainly used on above ground pipelines where defects can be seen.
- No technically advanced equipment required

Tools and Equipment

- Pumps
- Pump hoses
- Clamps or similar for closing Pressure Relief Devices
- Pressure gauges
- Adequate water supply
- Electrical supply
- Blind flanges as needed.