

6.1.3 Instrument Process Tubing

All impulse lines shall be run with a slope of not less than 1:12 except where otherwise stated. The slope shall be down from the tapping point for liquid and condensibles, and up from the tapping point for gases.

The CONTRACTOR shall ensure that vents are sited at the highest point of the installation and drains at the lowest.

Impulse lines shall be kept as short as possible consistent with good construction practice and accessibility and the number of joints in the impulse lines shall be kept to a minimum.

Joints made in adjoining tubing shall be such that the joints are not adjacent at the same level.

All screwed connections shall be sealed off with a sealing compound compatible with the fluid within the tubing. PTFE tape shall not be used.

Tubing shall not sag. Adequate support shall be provided at 1 m intervals. Thermally insulating spacer shall be supplied to separate the tubing from the supports.

Tubing shall run with a minimum number of changes of direction consistent with good practice and neat appearance.

Tubing shall not be supported from handrails.

Tubing shall not be supported from process lines.

Due regard shall be given to hot service installation that is subject to expansion, to ensure that sufficient flexibility is allowed for expansion.

Where stainless steel tubing with compression fittings is installed, CONTRACTOR shall ensure that the correct procedures, as specified by the fittings manufacturer, are followed. This shall include, but not be limited to, the following:

- Proper cutting of the tube. Only approved cutting tools shall be used.
- Proper installation of the ferrules.
- Checking that the tube is round and free from burrs and distortions.

6.1.4 Piping and Tubing Supports

Piping and tubing shall be kept free from vibrating structures or equipment.

Trays shall be used to support four or more tubes. The tubes shall be secured to the tray at not more than 0.5 metre intervals.

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