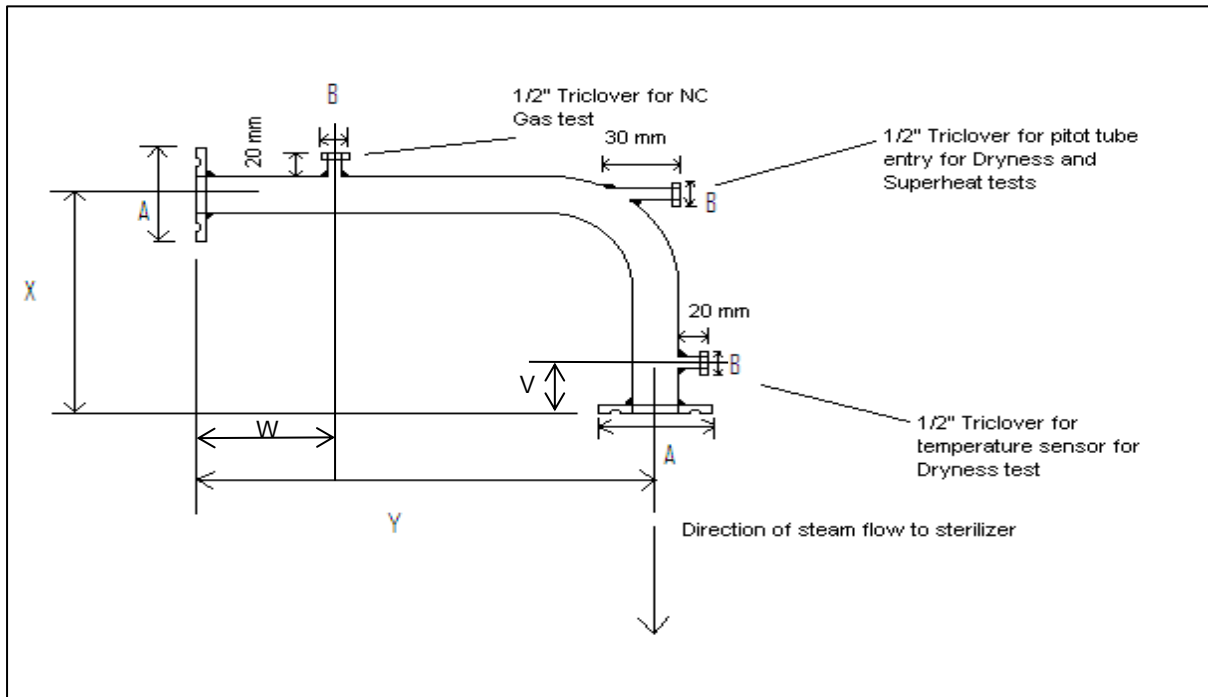


STEAM QUALITY TEST ELBOWS



Elbow Size	V	W
0.75 - 1.5"	40mm	100mm
2" or larger	50mm	100mm

Test Elbow Dimensions

Nominal size	Pipe outside diameter (inches/mm)	Pipe wall thickness (mm)	X (mm)	Y (mm)	A - Both ends (mm)	B - All sample points (mm)
*1/2" & 3/4"	3/4"/19.05	1.65	90	400	24.9	24.9
1"	1"/25.4	1.65	90	400	50.3	24.9
1 1/2"	1 1/2"/38.1	1.65	110	400	50.3	24.9
2"	2"/50.8	1.65	160	400	64	24.9
2 1/2"	2 1/2"/63.5	1.65	225	400	77.5	24.9
3"	3"/76.2	1.65	225	400	90.9	24.9
4"	4"/101.6	2.11	253	253	119	24.9

* Please note that the test elbow supplied for 1/2" applications uses 3/4" pipe, which is necessary to fit 1/2" sample connections. This does not affect the performance of the tests or the results.



Test elbows are not supplied with tri-clamps and seals as these are usually commonly available on the client's premises.

TECHNICAL SPECIFICATION

Pipework Standards

Configured to Good Manufacturing and Engineering Practices (cGMP).

Please note that the ½” ports are manually welded onto the elbow and the weld finish will not be that of an orbitally welded joint.

Material Conformance / Certification / Traceability

Supplier: Dockweiler - Registered ISO 9001.

Safetron Tube

Welded stainless steel tube manufactured from cold drawn strip. Werkstoff 1.4404/1.4435/AISI 316L, fully annealed, free from grease. Outer surface bright finish of 0.8^Um max, axial and radial inner surface roughness of RA 0.4^Um max, testing according to DIN 17457 PK2/ADW2 & TRB 100, DIN 2463 D4 T3, ASTM A270. Hardness HV180/RB80 max, ends capped and bagged copies of original mill certificates supplied.

Safetron Fittings

Fitting manufactured from welded stainless steel tube, reducers, blanks and ferrules made from solid material 316L/1.4404/1.4435, plain ends prepared suitable for orbital welding, inner surface roughness of RA less than 0.4^Um. Ends are capped, bagged and copies of original mill certificates supplied.

Welder Qualification

Manual / orbital welding would be of T.I.G. (Tungsten Inert Gas) method.

Orbital welding using an internal and external argon gas purge, using a computer controlled enclosed head orbital welding plant.

Manual / orbital welding will be carried out by operatives coded to EN 287, to procedures coded EN 288.



Welding profiles and isometric drawings will be compiled for all welds.

Pipework Inspection

100 x visual (no inclusion for NDT).

Weld Inspection Record/Isometric Drawings

For each service in the Weld Inspection Record and Isometric Drawing detailing materials, identification, welding data (print-out for each weld), finished weld conformance certificates will be recorded in compliance with FDA regulations.

Passivation

N/A

IQ Documentation

On completion issue full IQ Documentation & Isometric Weld Plan Drawings will be issued as listed below:-

- Isometric Drawings
- Weld Inspection Record (Manual / Orbital) Including Orbital Weld Tickets/Reports
- Weld Procedures (Manual/Orbital)
- Welder Qualifications
- All Identification Numbers/Calibration Certificate of Welding Equipment/Manufacturers
- Purge Gas (Certificate of Conformity)
- Material Test Report / Conformity & Approved Certificates, 3.1b Certificates



Elbow Orientation

The test elbows are available in four orientations:

“Standard”, “Left Hand”, “Right Hand” and “Vertical” as detailed in Appendices 1 to 4 below.

Unless specified to the contrary, elbows will be supplied in the “Standard” orientation as shown in Appendices.

