

Methodology of performing test

Methodology of performing services

valveIT shall carry out the inspection in accordance with the drawings, technical specifications provided, OR any requirements otherwise mentioned in the contracts, EN /BS OR international standards and as per valveIT internal procedures.

Inspection will be held at manufacturer's premises to carry out the inspection. All the delivered reports/documents will be validated by internal quality system.

For the mobilization purpose, valveIT is expected to provide to Customer with the testing schedule on one week advance notice for inspection.

Deliverables:

1. Inspection reports
2. NCR [Non -conformity reports], if any
3. Sign/stamped on valveIT test reports

Note : All the language used in the report will be in English only.

Method statement as issued by valve manufacturer [valveIT srl] based on customer requirements.

- A. Material composition.
Review of material test certificates provided by valveIT.
Sign/stamp on the certificates, if found OK.
- B. Valve manufacturing compliance to the relevant standard and marking of symbols.
- C. Assembling.
Valve manufacturing /Assembly compliance certificates to be provided by valveIT as per EN/BS or applicable international standards.
Marking / nameplates to be verified
Sign /stamp on the certificates, if found OK
- D. Testing(Working pressure and test pressure etc).

REFERENCE STANDARDS: EN 12266-1

PRESSURE TESTING:

TESTS REQUIRED: One valve per size and diameter shall be pressure tested as per below

TEST PRESSURE: The applicable pressure for various tests shall be as per the appropriate relevant standards referred. Viz., EN 12266, API598, API6D, ASME B16.34, BS5351, BS6755 –I, etc.

The Shell test pressure shall be 1.5 times, and the Seat test pressure shall be 1.1 times of the maximum working pressure specified

TEST DURATION: The test shall be carried out for test duration after the valve is fully pressurized according to EN 12266, API6D, API598, BS6755-I, BS5351 etc, according to the product.

TEST PROCEDURE:

- **HYDROSTATIC SHELL TEST:** Complete assembled valve in partial/fully opened condition is clamped on the testing rig/bed and both the ends are closed. Hydrostatic pressure is applied from one end to the rated pressure. This test is carried to detect the leakage / seepage from the boundary of walls of body, bonnet/ cover, body- bonnet joint, gasket joints. Any leakage / seepage from the body, bonnet/ cover will be cause of rejection and no leakages are acceptable.
- **HYDROSTATIC SEAT [CLOSURE] TEST:** This test is conducted to ensure the integrity of mating/ sealing part/component. The valve shall be kept in fully opened condition and is to be evacuated/ purged. After purging valve is fully closed and one end of the valve is blocked from where rated pressure is applied. After pressurizing ensure the body cavity is also pressurized with test fluid. Check for leakage. Repeat the Test from other end in case of bi-directional valves. Leakage is not acceptable in case of soft seated valves and leakage shall not exceed the requirements in case of metal seated valves as per appropriate standards. Test pressure shall be applied for unidirectional valves according to the flow directional marked.
Note: Seat leakage/rate is compared with appropriate standards and client requirement for acceptance criteria.

E. Packing, storing and shipping

HANDLING:

All incoming materials come under the responsibility of the Material Controller/Warehouse Supervisor, who shall ensure that all personnel are aware of the handling requirements of the materials received, retained and issued in the storage area. Materials are handled by fork lift and manually. During handling the material/product, utmost care will be taken to prevent damage or deterioration.

CLEANING:

The Material Controller/Warehouse Supervisor shall ensure that adequate methods are used to ensure that products are cleaned and free from debris and contamination.

STORAGE:

The Material Controller shall ensure that all materials are held in the designated area. These locations have been accepted by the Management as being suitable for the materials concerned and shall comply with the material supplier if applicable.

The Material Controller shall perform periodic inspection of any product which may deteriorate and shall perform stock rotation where this is required.

Material Controller / Warehouse supervisor shall assess periodically as required for each item of the product or constituent parts.

The Material Controller is responsible for receiving goods into, and issuing out of the storage areas and control of documentation.

PACKAGING:

Material Controller shall be responsible for all packaging activities. All packaging shall be carried out as per the relevant customer requirements or product specification if any.

PRESERVATION:

All finished product or constituent parts throughout job execution is segregated packed and preserved by appropriate proven method, which suitably protect the product from damage and deterioration.

DELIVERY

Wherever contractually agreed, the Protection of packed product is extended to Delivery to Destination. Product release shall not proceed to the customer unless a planned arrangement such as customer's premises are ready to receive the product, planned delivery time is acceptable by customer or the product is approved by a relevant authority by the customer etc. are met up to the customer satisfaction. Records are maintained to enable identification of the individual releasing the product.