

1.0 ASSEMBLY DEPARTMENT PROCEDURE FOR NEEDLE VALVES

1.1 PURPOSE

1.1.1 Use this procedure for all standard needle valves unless otherwise stipulated on the register face or in the work instructions for a specific order.

1.2 ASSEMBLY

1.2.1 Accumulate all needle valve components in the Assembly Department from either stores or directly from manufacturing.

1.2.2 As a minimum, check all components for the following:

- (A) Cleanliness
- (B) Identification
(Ref: applicable assembly drawing)

Note: Report all non-conformities to the Quality Control Department.

1.2.3 Assemble all needle valves in accordance with the latest applicable assembly drawing.

1.2.4 Lubricate all valve components requiring lubrication with "Moly-Lit" as follows:

- (A) THRUST WASHERS - lubricate on both surfaces.
- (B) PACKING GLAND - lubricate on the first three (3) external threads of the threaded end and on the face that comes in contact with the top packing washer. Also, lubricate the internal threads as best you can.
- (C) STEM SLEEVE - Lubricate all threads.
- (D) REPLACEABLE SEAT - Lubricate on both sealing surfaces.
- (E) REPLACEABLE SEAT RETAINER GLAND - Lubricate on the first three (3) external threads of the threaded end.

Note: Other lubricants such as Triolube 16 or Neolube, or as specified, may be used.

1.2.5 Use packing gland torque per current engineering specifications.

1.2.6 Assemble valve actuator in accordance with the latest

applicable assembly drawing.

1.3 TESTING

1.3.1 SAMPLING

(1) Pressure test 10% of all assembled needle valves of a specific LOT.

(2) A LOT is the amount of needle valves with the same characteristics required for a specific order.

Note: If 10% of the sample lot is not in accordance with specifications, test 100% of the remaining assemblies required for the order.

(3) Test 100% of all valve assemblies that include valve actuators.

1.3.2 STRUCTURAL INTEGRITY TEST

(1) With the stem in the closed position, pressurize the valve through the upper port to the maximum allowable working pressure as specified on the latest applicable assembly drawing.

Note: Hold the test pressure for a minimum of one (1) minute.

(2) Any leaking or weeping through the pressure containing parts is cause for rejection.

(3) Any permanent deformation is cause for rejection.

1.4 VALVE TEST REPORT

(1) Furnish a BuTech Pressure Systems Valve Test Report only if required by customer order, or Engineering or QC request.

(2) When required, witness of the testing will be specified in the work instructions.

Note: Distribute the Valve Test Report as specified on the Register Face.