

WHY SPLIT VALVE TECHNOLOGY???

Due to increase potency of drug development in recent years, has resulted in the need of striking change in design of facility & process, by using compact containment technology to ensure high containment level (OEL) & to achieve protection over contamination bet between "PRODUCTS, OPERATOR & ENVIRONMENT".

GroyneTech introduces "Split Butterfly Valve" Technology for transfer of drugs from one process to other maintaining the containment level.

GroyneTech valve designed to achieve containment level of 1 - 10 microgram/m³ (** Depends on frequency of operation & density of product with handling of valve)

TYPICAL APPLICATION:

- IBC CHARGING
- VESSEL CHARGING
- REACTOR CHARGING
- GLOVE BOX CHARGING
- BAG TRANSFER
- CAINSTER CHARGING
- CLOSE LOOP MATERIAL TRANSFER SYSTEM



| DET NORSE VERITAS AS INSPECTION REPORT | | Report no.: FMN879/10/0202/0149 | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------------------------------|---|---|---|---------------------------------------|----------------------------------|--|--|---------------------------------------|-----------------------|--|--|---------------------------------------|-----------------------------------|---|--|---------------------------------------|-----------------------------------|--|--|---------------------------------------|----------------------|--|--|---|--|
| Item(s) inspected: Split Butterfly valve(Model : GMP-GSBF and S.No.SV02 TO SV05)-----04Nos. (Actuator Operated-----3 Nos. and Hand Operated-----1 Nos.) | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Supplier/Manufacturer: M/s GroyneTech, Palghar, Thane | Manufacturer's order no. NIL | | | | | | | | | | | | | | | | | | | | | | | | | |
| Purchaser: M/s _____ | Purchaser's order no. NIL | | | | | | | | | | | | | | | | | | | | | | | | | |
| M/A _____ Destination/ Supplementary information | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPECIFICATIONS/ STANDARDS Reference: GroyneTech Document no GT-GSBF-ITP-001 Rev 0 DT 10-08-2010 / Inspection & Test Requirements- QAP-GT-GSBF-01 Any additional requirements | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAWINGS Drawing : GROSTRBFV/GA/01 Rev.00 Date:09/08/2010 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| INSPECTION/ TEST RESULTS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Inspection and test as indicated were carried out: | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="0"> <tr> <td><input checked="" type="checkbox"/> A</td> <td>Internal condition (checked)</td> <td><input checked="" type="checkbox"/> LP and MT records</td> <td><input checked="" type="checkbox"/> Check Test for Physical</td> </tr> <tr> <td><input checked="" type="checkbox"/> B</td> <td>Welding procedure qualifications</td> <td><input checked="" type="checkbox"/> UT records</td> <td><input checked="" type="checkbox"/> Chemical 'C'</td> </tr> <tr> <td><input checked="" type="checkbox"/> C</td> <td>Welder qualifications</td> <td><input checked="" type="checkbox"/> Heat treatment records</td> <td><input checked="" type="checkbox"/> Identification</td> </tr> <tr> <td><input checked="" type="checkbox"/> A</td> <td>Visual inspection -Witnessed 100%</td> <td><input checked="" type="checkbox"/> Air Pressure test for seat at 4bar - witnessed 100%</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> A</td> <td>Dimensional check- Witnessed 100%</td> <td><input checked="" type="checkbox"/> Functional Test - witnessed 100%</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> A</td> <td>RT films and records</td> <td><input checked="" type="checkbox"/> Markings</td> <td></td> </tr> </table> | <input checked="" type="checkbox"/> A | Internal condition (checked) | <input checked="" type="checkbox"/> LP and MT records | <input checked="" type="checkbox"/> Check Test for Physical | <input checked="" type="checkbox"/> B | Welding procedure qualifications | <input checked="" type="checkbox"/> UT records | <input checked="" type="checkbox"/> Chemical 'C' | <input checked="" type="checkbox"/> C | Welder qualifications | <input checked="" type="checkbox"/> Heat treatment records | <input checked="" type="checkbox"/> Identification | <input checked="" type="checkbox"/> A | Visual inspection -Witnessed 100% | <input checked="" type="checkbox"/> Air Pressure test for seat at 4bar - witnessed 100% | | <input checked="" type="checkbox"/> A | Dimensional check- Witnessed 100% | <input checked="" type="checkbox"/> Functional Test - witnessed 100% | | <input checked="" type="checkbox"/> A | RT films and records | <input checked="" type="checkbox"/> Markings | | Data: inspection and test results attached are shown overlaid. Refer DNV cert. visit dnv.com/inspection/01/01/2010-08-11 attached. | |
| <input checked="" type="checkbox"/> A | Internal condition (checked) | <input checked="" type="checkbox"/> LP and MT records | <input checked="" type="checkbox"/> Check Test for Physical | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> B | Welding procedure qualifications | <input checked="" type="checkbox"/> UT records | <input checked="" type="checkbox"/> Chemical 'C' | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> C | Welder qualifications | <input checked="" type="checkbox"/> Heat treatment records | <input checked="" type="checkbox"/> Identification | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> A | Visual inspection -Witnessed 100% | <input checked="" type="checkbox"/> Air Pressure test for seat at 4bar - witnessed 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> A | Dimensional check- Witnessed 100% | <input checked="" type="checkbox"/> Functional Test - witnessed 100% | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> A | RT films and records | <input checked="" type="checkbox"/> Markings | | | | | | | | | | | | | | | | | | | | | | | | |
| DNV Order complete: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes DNV Order Completion date: 2010-08-11 Continued on separate attachment: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Marking: The item(s) were inspected and tested in the condition and are found to be in accordance with the above specification/ standard. The stamping is placed on active and passive housing as EP No: EP029022 Mumbai 2010-08-11 Date NITIN H. MOHABE Surveyor's sign / stamp | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DNV's member certificate validity shall be limited to an amount equal to the amount paid to DNV by the customer under the contract or 100,000 USD whichever is the lesser. Form no. GP-C5-85-7-3, rev. 3, 2010-06-03 Page 1 of 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |

TECHNICAL FEATURES : DESCRIPTIONS

- Material of construction** : Valve Body SS 316L (Optional SS 304)
- FLAP** : SS 316L
- Sealing** : Gasket Silicone Food Grade (Optional -EPDM & VITON)
- Actuation** : Manual Override (Optional - Pneumatic Actuator)
- Medium Finishing** : Powder & Granules
- End Connection Size** : Internal: 0.5Ra, External:0.8Ra (Optional - Electro Polish)
- Documentation** : TC End & Flange End : 2", 4" & 8"
: Functional design Specification (FDS) & Installation Qualification & Operational Manual (IQOM).

