

QUALITY ASSURANCE DEPARTMENT

QA PLAN FOR: Butterfly and Ball valves
QA PLAN NO: QA/HG/530

PI No: _____ Date: 13/10/2017 Revision: 00

Sr. No.	Component/Assy. Operation	Characteristics	Class	Type of Check	Quantum of Check	Reference Documents	Record Format	Agency	Remarks
1.0	Raw Material								
1.1	Valve body & body Connector	Chemical & Mechanical	Major	R	One sample/Lot	Drawing / Product standard	TC	-	TC to be Verified by QIX/TPIA
1.2	Ball & Stem	Chemical & Mechanical	Major	R	One sample/Lot	Drawing / Product standard	TC	-	TC to be Verified by QIX/TPIA
1.3	Ball seal, Body seal, Seat & Stem packing	Chemical & Mechanical	Major	R	One sample/Lot	Drawing / Product standard	TC	-	TC to be Verified by QIX/TPIA
1.4	Gasket	Chemical	Major	R	One sample/Lot	Drawing / Product standard	TC	-	TC to be Verified by QIX/TPIA
1.5	Gland Packing	Chemical	Major	R	One sample/Lot	Drawing / Product standard	TC	-	TC to be Verified by QIX/TPIA
1.6	Bolts & Nuts	Chemical & Mechanical	Major	R	One sample/Lot	Drawing / Product standard	TC	-	TC to be Verified by QIX/TPIA
1.7	Other parts	Chemical	Major	R	One sample/Lot	Drawing / Product standard	TC	-	TC to be Verified by QIX/TPIA
2.0	In Process Inspection								
2.1	Heat Treatment of Body & body connector	-	Cri	R	100%	Drawing / Product standard	Record	Supplier	Record to be Verified by QIX/TPIA

Signature: _____
Name: _____
Designation: _____
Date: _____

Signature: _____
Name: _____
Designation: _____
Date: _____

Signature: _____
Name: _____
Designation: _____
Date: _____

Signature: _____
Name: _____
Designation: _____
Date: _____

6-X50

Date: 13/10/2017

Sr. No.	Component/Assy. Operation	Characteristics	Class	Type of Check	Quantum of Check	Reference Documents	Record Format	Agency	Remarks
2.2	Body / Cover	Dimensional	Major	R	100%	Drawing / Product standard	Record	Supplier	Record to be Verified by QIX/TPIA
3.0	Final Inspection & Tests								
3.1	Visual Inspection	-	Cri	W	100%	Drawing / Product standard	Supp./QC record	Supplier and QIX/TPIA	QIX/TPIA
3.2	Dimensional Checks	-	Cri	W	100%	Drawing / Product standard	Supp./QC record	Supplier and QIX/TPIA	QIX/TPIA
3.3	Hydro static test	Shell/seat/Back seat	Cri	W	100%	Drawing / Product standard	Supp./QC record	Supplier and QIX/TPIA	QIX/TPIA
4.0	Conservation, Packing, Documentation Before Dispatch								
4.1	Marking, Painting & Packing	-	Major	W	100%	Drawing / Product standard	Supp./QC record	Supplier and QIX/TPIA	QIX/TPIA

1) Raw material test Certificates of original manufacturers.

- ii) Test certificates of tests conducted on Valves as per Drawing & Product standard by the supplier. Testing from NABL approved lab is permitted.
- iii) Dimensional records.

Abbreviations:

Maj - Major, Cri - Critical, TC - Test Certificate, Supp. - Supplier, QC - Quality Control, R - Review, W - Witness, QIX - Quality Control Ancillary, TPIA - Third Party Inspection Agency.

20-000004
13/10/17
ILA YADAV
HGE Sr. Design Engr

11/13/10
 Grandpa
 (PK)

QHG / Narendra Agrawal

वरिष्ठ अभियंता / Sr. Engineer.
वरिष्ठ अभियंता / Q.E.M. Division
वरिष्ठ अभियंता / EHEL, BHOPAL
वरिष्ठ अभियंता / EHEL, BHOPAL

1. Mr. Ravi Kumar
 2. Mr. Ravi Kumar
 3. Mr. Ravi Kumar
 4. Mr. Ravi Kumar
 5. Mr. Ravi Kumar
 6. Mr. Ravi Kumar
 7. Mr. Ravi Kumar
 8. Mr. Ravi Kumar
 9. Mr. Ravi Kumar
 10. Mr. Ravi Kumar
 11. Mr. Ravi Kumar
 12. Mr. Ravi Kumar
 13. Mr. Ravi Kumar
 14. Mr. Ravi Kumar
 15. Mr. Ravi Kumar
 16. Mr. Ravi Kumar
 17. Mr. Ravi Kumar
 18. Mr. Ravi Kumar
 19. Mr. Ravi Kumar
 20. Mr. Ravi Kumar
 21. Mr. Ravi Kumar
 22. Mr. Ravi Kumar
 23. Mr. Ravi Kumar
 24. Mr. Ravi Kumar
 25. Mr. Ravi Kumar
 26. Mr. Ravi Kumar
 27. Mr. Ravi Kumar
 28. Mr. Ravi Kumar
 29. Mr. Ravi Kumar
 30. Mr. Ravi Kumar
 31. Mr. Ravi Kumar
 32. Mr. Ravi Kumar
 33. Mr. Ravi Kumar
 34. Mr. Ravi Kumar
 35. Mr. Ravi Kumar
 36. Mr. Ravi Kumar
 37. Mr. Ravi Kumar
 38. Mr. Ravi Kumar
 39. Mr. Ravi Kumar
 40. Mr. Ravi Kumar
 41. Mr. Ravi Kumar
 42. Mr. Ravi Kumar
 43. Mr. Ravi Kumar
 44. Mr. Ravi Kumar
 45. Mr. Ravi Kumar
 46. Mr. Ravi Kumar
 47. Mr. Ravi Kumar
 48. Mr. Ravi Kumar
 49. Mr. Ravi Kumar
 50. Mr. Ravi Kumar
 51. Mr. Ravi Kumar
 52. Mr. Ravi Kumar
 53. Mr. Ravi Kumar
 54. Mr. Ravi Kumar
 55. Mr. Ravi Kumar
 56. Mr. Ravi Kumar
 57. Mr. Ravi Kumar
 58. Mr. Ravi Kumar
 59. Mr. Ravi Kumar
 60. Mr. Ravi Kumar
 61. Mr. Ravi Kumar
 62. Mr. Ravi Kumar
 63. Mr. Ravi Kumar
 64. Mr. Ravi Kumar
 65. Mr. Ravi Kumar
 66. Mr. Ravi Kumar
 67. Mr. Ravi Kumar
 68. Mr. Ravi Kumar
 69. Mr. Ravi Kumar
 70. Mr. Ravi Kumar
 71. Mr. Ravi Kumar
 72. Mr. Ravi Kumar
 73. Mr. Ravi Kumar
 74. Mr. Ravi Kumar
 75. Mr. Ravi Kumar
 76. Mr. Ravi Kumar
 77. Mr. Ravi Kumar
 78. Mr. Ravi Kumar
 79. Mr. Ravi Kumar
 80. Mr. Ravi Kumar
 81. Mr. Ravi Kumar
 82. Mr. Ravi Kumar
 83. Mr. Ravi Kumar
 84. Mr. Ravi Kumar
 85. Mr. Ravi Kumar
 86. Mr. Ravi Kumar
 87. Mr. Ravi Kumar
 88. Mr. Ravi Kumar
 89. Mr. Ravi Kumar
 90. Mr. Ravi Kumar
 91. Mr. Ravi Kumar
 92. Mr. Ravi Kumar
 93. Mr. Ravi Kumar
 94. Mr. Ravi Kumar
 95. Mr. Ravi Kumar
 96. Mr. Ravi Kumar
 97. Mr. Ravi Kumar
 98. Mr. Ravi Kumar
 99. Mr. Ravi Kumar
 100. Mr. Ravi Kumar

10%. witness or minimum
1 each type whichever is
more.

B.K. Singh
बृजेश कुमार सिंह / B. K. SINGH
उप प्रबंधक (अभिकल्प) / Dy. Manager (Design)
एच.जी.ई. प्रभाग / HGE Division
बी.एच.ई.एल., भोपाल / BH&L, Bhopal

13/05/18
 Ritish Rajthiya
 Sr. mgr. (KHE)