



PIANO DI CONTROLLO QUALITA' E ISPEZIONE INSPECTION AND TEST CONTROL PLAN

DOCUMENTO NO.
Document Number

| | | | |
|------|---------|------|---|
| QCP_ | 800302A | REV. | 1 |
|------|---------|------|---|

RIFERIMENTI
References

SCOPO DELLA FORNITURA
Scope of Supply

| | |
|-----------------------|--------------------------------|
| CLIENTE Customer | DELTA GMBH |
| ORDINE No. P.O. No | DELTA-PETROLVALVES-2024-PO-200 |
| COMMESSA Job | 800302A |
| PROGETTO Project | BOC |
| END USER | DELTA GMBH |

N.1 VALVE MODEL G-STREAM DN 1" CLASS 300 RF A216 LCB/LCC TAG LCV-RU0001A-01
N.1 VALVE MODEL G-STREAM DN 1" CLASS 300 RF A216 LCB/LCC TAG LCV-RU0001B-01

CODICI DI INTERVENTO - Intervention Codes

ENTI ISPETTIVI - Inspection parties

| # | CODICE | DESCRIZIONE | #RIF! | ENTE |
|--|--|---|-------|---------------------------|
| M | MONITORAGGIO - Monitoring | ATTIVITA' DI SORVEGLIANZA INCLUSO IL REVIEW DELLA DOCUMENTAZIONE Q.C. surveillance activity including review of documentation. | | Manufacturer VSI Controls |
| R | VERIFICA DOCUMENTI - Review | VERIFICA DELLA DOCUMENTAZIONE DA PARTE DELL'ENTE ISPETTIVO A review of quality documentation by the inspection group. | A | DELTA GMBH |
| W | PRESENZA - Witness | NOTIFICA ALL'ENTE ISPETTIVO. IN CASO DI RINUNCIA SI PROSEGUIRA' NEL LAVORO Inspection Request to inspection group. If they do not attend work may proceed. | B | |
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| NOTIFICA RICHIESTA: Notification period: | | <u>14 CALENDARY DAYS</u> | | |

INDICE DI REVISIONE - Revision Index

| REV. Rev. | DATA Date | PREPARATO DA Prepared by | VERIFICATO DA Verified by | APPROVATO DA Approved by | DESCRIZIONE Description |
|--------------|--------------|-----------------------------|------------------------------|-----------------------------|---------------------------------|
| 0 | 20/09/2024 | A. LUISE | L. FORNARO | L. FORNARO | FISRT ISSUE-FOR APPROVAL |
| 1 | 02/10/2024 | A. LUISE | L. FORNARO | L. FORNARO | REVISED AFTER CUSTOMER COMMENTS |



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| Pos. | DESCRIZIONE ATTIVITA' Activity Description | ESTENSIONE DEL CONTROLLO Extent of activity | DOCUMENTI DI RIFERIMENTO Reference Document | CRITERIO DI ACCETTABILITA' Acceptance Criteria | DOCUMENTAZIONE Documentation | | CODICI DI INTERVENTO Intervention Codes | | | | | NOTE Notes |
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| | | | | | DOCUMENTO DI VERIFICA Reporting Document | BOOK FINALE into MRB / QC BOOK | VSI | DELTA GMBH | | | | |
| 1 | PRE-MANUFACTURING ACTIVITIES | | | | | | | | | | | |
| 1.1 | Review of Purchase Order, Contract review and P.O acknowledgment | - | P.O. Requirements Specifications | P.O. Requirements Specifications | P.O. Acknowledgment | No | H | R | | | | |
| 1.2 | Writing up of Quality Plan and Procedure | - | Internal Quality System Procedure and SDRL | Compliance to P.O. Requirements and Specifications | - | No | H | A | | | | |
| 1.3 | Production of drawings and other Technical documents | - | Internal Quality System Procedure and SDRL | Compliance to P.O. Requirements and Specifications | - | No | H | A | | | | |
| 1.4 | Issue of Purchase Orders to SubSuppliers | - | P.O. Requirements Specifications | Compliance to P.O. Requirements and Specifications | - | No | H | - | | | | |
| 2 | BODY AND BONNET | | | | | | | | | | | |
| 2.1 | Chemical analysis Heat treatment Mechanical properties Impact test | All | NACE MR 0175 (where applicable) Internal Material data sheet Applicable ASTM | NACE MR 0175 (where applicable) Internal Material data sheet Applicable ASTM | Certificates EN 10204 3.1 | Yes | H | R | | | | |
| 2.2 | Incoming inspection: Visual & Dimensional check Review of material test certificates for Mechanical and Chemical test results Marking of Material Traceability of Material | All | Drawings Internal Quality System Procedure | Drawings Internal Quality System Procedure | Internal quality records | No | H | R | | | | |
| 2.3 | Visual examination (VT) of raw body casting | All castings | MSS SP-55 ASME B16.34 | MSS SP-55 / DECLARATION OF SATISFACTORY RESULTS ON THE RELATIVE EN 10204 3.1 | VT certificate | Yes | H | R | | | | |



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| | | | | | DOCUMENTO DI VERIFICA Reporting Document | BOOK FINALE into MRB / QC BOOK | VSI | DELTA GMBH | | | | |
| 2.4 | Magnetic test (MT) of body (Carbon steel material) in final/fully machining conditions | All | MT procedure ASME V Article 7 | ASME B16.34 Appendix II | MT Certificate | Yes | H | R | | | | |
| 2.5 | Machining and traceability of components Inspection of machined components: - visual, dimensional; - marking, traceability | All | Drawings Internal Quality System Procedure | Drawings Internal Quality System Procedure | Internal quality records | No | H | R | | | | |
| 2.6 | PT Examination on body-bonnet and bonnet flange | All | PT procedure ASME V Art. 6 | ASME B16.34 Appendix III | PT certificate | Yes | H | R | | | | |
| 3 | SEAT, PLUG, STEM AND BOLTINGS | | | | | | | | | | | |
| 3.1 | Chemical analysis Heat treatment Mechanical properties | All | NACE MR 0175 (where applicable) Internal Material data sheet Applicable ASTM | NACE MR 0175 (where applicable) Internal Material data sheet Applicable ASTM | Certificates EN 10204 3.1 | Yes | H | R | | | | |
| 3.2 | Incoming inspection: Visual & Dimensional check Review of material test certificates for Mechanical and Chemical test results Marking of Material Traceability of Material | All | Drawings Internal Quality System Procedure | Drawings Internal Quality System Procedure | Internal quality records | No | H | R | | | | |
| 3.3 | Machining and traceability of components Inspection of machined components: - visual, dimensional; - marking, traceability | All | Drawings Internal Quality System Procedure | Drawings Internal Quality System Procedure | Internal quality records | No | H | R | | | | |
| 3.4 | Penetrant test (PT) on Seat, plug and stem | All | PT procedure ASME V Art. 6 | ASME B16.34 Appendix III | PT certificate | Yes | H | R | | | | |



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| 4 | GASKET | | | | | | | | | | | |
| 4.1 | Gasket material: - Visual and Dimensional - Hardness | All | Drawings Internal Quality System Procedure | Drawings Internal Quality System Procedure | Declaration of conformity EN 10204 2.1 | Yes | H | R | | | | |
| 5. | VALVE ASSEMBLY | | | | | | | | | | | |
| 5.1 | Assembly and marking | - | Approved GAD | Approved GAD | - | No | H | R | | | | |
| 6. | TESTING | | | | | | | | | | | |
| 6.1 | Hydrostatic body Test | All | SPP_001 Test procedure | ANSI B16.34 | Pressure Test Certificate | Yes | H | R | | | | Water used for testing shall be Maximum Chloride content 30 ppm. |
| 6.2 | Seat leakage Test | All | SPP_002 Test procedure | FCI 70-2 Class IV | Seat leakage Certificate | Yes | H | W | | | | |
| 6.3 | Functional Test | All | SPP_003 Test procedure | IEC 60534-4 | Functional Test Certificate | Yes | H | W | | | | |
| 6.3 | Visual and dimensional check after valve assembling | All | Approved drawing | Approved drawing | Dimensional inspection report | Yes | H | R | | | | |
| 7. | PAINTING | | | | | | | | | | | |



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| 7.1 | Painting check of valves and Actuator - Visual check of painting - Final color check - Dry film thickness check - Final color: Valve RAL 7038 Actuator RAL 5015 | - | Painting procedure doc. no. 800302A | Painting procedure doc. no. 800302A | Painting Report | Yes | H | R | | | | |
| 8 | MARKING & TAGGING | | | | | | | | | | | |
| 8.1 | Nameplates to standard dwg | - | Nameplate dwg MSS SP 25 P.O. requirements | Nameplate dwg MSS SP 25 P.O. requirements | - | No | H | R | | | | |
| 9. | PREPARATION FOR SHIPMENT AND PACKING - FINAL INSPECTION | | | | | | | | | | | |
| 9.1 | Preservation of valves and actuators | - | Procedure SPP_ 800302A | ISPM 15 Procedure SPP 800302A | - | No | H | W | | | | |
| 9.2 | Preparation for shipment and packing | - | Procedure SPP_ 800302A | ISPM 15 Procedure SPP 800302A | - | No | H | W | | | | |
| 10. | FINAL INSPECTION AND REVIEW OF CERTIFICATES | | | | | | | | | | | |
| 10.1 | Review of: MTC, NDE certificates, Test certificates, Painting certificate, ATEX Declaration, PED Declaration | All | P.O. Requirements Specifications | P.O. Requirements Specifications | - | No | H | R | | | | |
| 11. | RELEASE AND SHIPMENT | | | | | | | | | | | |
| 11.1 | Issue of Release Note after final inspection | - | - | - | IRN | Yes | H | H | | | | |



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| 12. | QC BOOK | | | | | | | | | | | |
| 12.1 | Preparation of QC Book | - | QC Book | QC Book | QC Book | - | H | R | | | | |