



MATERIAL TEST CERTIFICATE (EN: 10204/3.1)

CUSTOMER : AL ZERWA TRADING

SIZE : 1-1/2"

VALVE TYPE : BALL VALVE

CERTIFICATE NO : 22018MTSE 053

PRESSURE : 300#

PROJECT : 22018MTSE

DATE OF CERTIFICATION : 10th Oct 2018

ENDS : Flanged

VALVE ID : AMS1809 053

QUANTITY : 50pcs

| HYDRO TEST DATA | | SHELL TEST* | | H.P CLOSURE*,** | | L.P(AIR) TEST** | | BACK SEAT* | | TEST STD | | VISUAL INSPECTION | | | | SPECIAL TESTS | | | | | | | | |
|-------------------|------------|-------------------|--------|------------------|---------|------------------|--------------|------------------|--------------|---------------|---|---------------------|----|--------|-----|--------------------------|--------|---------|----|----|-------------|--|--|--|
| PRESSURE(Mpa) | | 6.0 | | 4.4 | | 0.6 | | / | | API 598 | | MSS SP25/55 | | | | Anti-static : passed | | | | | | | | |
| DURATION(Min) | | 15S | | 15S | | 15S | | / | | | | ACCEPTED | | | | Cavity Relief : passed | | | | | | | | |
| DESIGN PARAMETERS | | FACE TO FACE | | END CONNECTION | | DESIGN STANDARD | | FIRE SAFE DESIGN | | SOUR SPEC | | Painting : passed | | | | | | | | | | | | |
| STANDARDS | | ASME B16.10 | | ASME B16.5 | | ASME B16.34 | | / | | NACE MR-01-75 | | / / | | | | | | | | | | | | |
| RESULT | | Within Tolerance | | Within Tolerance | | Within Tolerance | | / | | Complied | | / / | | | | | | | | | | | | |
| PARTS | | BODY ADAPTOR | | BALL/PLUG/DISC | | STEM/HINGE | | OPERATOR | | SEAT RING | | SOFT SEAT | | SPRING | | GASKET | | PACKING | | | | | | |
| MATERIAL GRADE | | CF8M | | CF8M | | 316 | | SS201 | | PTFE | | PTFE | | / | | PTFE | | PTFE | | | | | | |
| COATING | | | | | | | | | | | | | | | | | | | | | | | | |
| DESCRIPTION | | CHEMICAL ANALYSIS | | | | | | | | | | | | | | MECHANICAL ANALYSIS | | | | | IMPACT TEST | | | |
| PART | HEAT/BATCH | C | Mn | P | S | Si | Cr | Mo | Ni | Cu | V | Nb | Al | Oth | Oth | T.S. | Y.P | EL | RA | BH | J | | | |
| | | ≤ 0.08 | ≤ 1.50 | ≤ 0.04 | ≤ 0.04 | ≤ 1.50 | 18.0 21.0 | 2.00 3.00 | 9.0 12.0 | | | | | | | ≥485 Mpa | ≥ 205h | ≥ 30% | | | (-Deg C) | | | |
| BODY | 4004 | 0.052 | 0.76 | 0.024 | 0.008 | 0.75 | 18.31 | 2.19 | 9.43 | | | | | | | 510 | 217 | 34 | | | | | | |
| BALL | | 0.047 | 0.81 | 0.019 | 0.007 | 0.76 | 18.25 | 2.23 | 9.54 | | | | | | | | | | | | | | | |
| STEM | | ≤ 0.08 | ≤ 2.00 | ≤ 0.045 | ≤ 0.030 | ≤ 1.00 | 16.0 18.0 | 2.00 3.00 | 10.0 14.0 | | | | | | | ≥515 Mpa | | | | | | | | |
| | | 0.049 | 0.92 | 0.027 | 0.013 | 0.65 | 16.54 | 2.16 | 10.31 | | | | | | | 526 | | | | | | | | |

Notes: "Hydrostatic medium is water, ** Seat test is conducted on both sides for bi-directional valves.

We here by confirm that the valves referred in this certificate is confirmed to meet the referred data and approved for release to customer.

Check Witnessed

Jack

Quality Manager

