# INSPECTION CERTIFICATE

| | |
|---|---|
| MESSRS | UNIMECH ENGINEERING (M) SDN. BHD. |
| DELIVER To | |
| JOB NAME | |
| JOB No. | |
| P.O.No. | APO-2004-007 |
| PRODUCT CODE | (TR)TK<ZOPO2>11/4 |
| | |

Certificate No.
1020329222-011-01-01

Date : 2020/07/21

KITZ

**SPECIFICATION**

| | |
|---|---|
| Manuf No. | 1020329222-011 |
| Description | TYPE 600 FORGED BRASS BALL VALVE SCREWED ENDS |
| Figure | TK<ZOPO2>11/4 |
| Size | 11/4 inch(B) |
| Quantity | 16 |
| Valve No. | |
| Item No. | 13 |
| Kiki No. | |

**MAIN PARTS**

| No. | Name of parts | Material |
|---|---|---|
| 001 | BODY | C 3771 BE |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

**TEST**

| Pressure test | Judge. | Inspection fluid and pressure | | |
|---|---|---|---|---|
| Shell | Good | Hydro | 6.18 | MPa |
| | Good | Air | 0.6 | MPa |
| Seat | | Hydro | - | |
| | Good | Air | 0.6 | MPa |
| Back seat | | Hydro | - | |
| | | Air | - | |
| | | | | |
| | | | | |
| | | | | |

| Item | Judge. | Attached sheet |
|---|---|---|
| Material | Good | Material Test Result |
| Dimension | Good | |
| Visual | Good | |
| Operation | Good | |
| | | |
| | | |
| | | |
| | | |
| | | |

**NONDESTRUCTIVE EXAMINATION**

| Type of examination and judgement | Attached sheet |
|---|---|
| | |

**REMARKS**

REPRESENTATIVE TEST BY HYDRAULIC SHELL TEST HAS BEEN PERFORMED

Witnessed by

K. Kawate
KITZ CORPORATION
QC Manager

We hereby certify that the articles listed above are satisfactory in accordance with the requirements of the standard and purchase order.

# MATERIAL TEST RESULT

| | |
|---|---|
| MESSRS | UNIMECH ENGINEERING (M) SDN. BHD. |
| JOB NAME | |
| JOB No. | |
| P.O.No. | APO-2004-007 |
| PRODUCT CODE | (TR)TK<ZOP02>11/4 |
| | |

Certificate No.
1020329222-011-01-01-Z1

Date : 2020/07/21

KITZ

| | | | |
|---|---|---|---|
| Figure | TK<ZOP02>11/4 | Valve No. | |
| | Material JIS H 3250 C 3771 BE | Item No. | 13 |

| № | Charge No. | Display No. | Name of Parts |
|---|---|---|---|
| 1 | 270219 | | BODY |
| 2 | | | |
| 3 | | | |
| 4 | | | |

**CHEMICAL COMPOSITION %**

| Element | Cu | Pb | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spec. / № | 57.0<br>61.0 | 1.0<br>2.5 | | | | | | | | | | | | | | | |
| 1 | 59.0 | 1.8 | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |

| Element | Fe+Sn | Zn | | | |
|---|---|---|---|---|---|
| Spec. / № | Max<br>1.0 | Remainder | | | |
| 1 | 0.3 | REM. | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |

**TENSION TEST** **IMPACT TEST**

| Item | | | Tensile str. | | Elongation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Unit | | | N/mm2 | | % | | | | | |
| Spec. / № | | | Min<br>315 | | Min<br>15 | | | | | |
| 1 | | | 434 | | 33 | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |

| Item | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Unit | | | | | | | | | | |
| Spec. / № | | | | | | | | | | |
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |

**HEAT TREATMENT °C**

| № | Spec. | | |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |

N:Normalizing A:Annealing T:Tempering Q:Quenching AC:Air Cooling
WQ:Water Quenching OQ:Oil Quenching WC:Water Cooling FC:Furnace Cooling ST:Solution Treatment

**REMARKS**

JIS G 0415 2.2

Reviewed by

K. Kawate
KITZ CORPORATION
QC Manager

We hereby certify that the articles listed above are satisfactory in accordance with the requirements of the standard and purchase order.