

供应商名称 Supplier  
江苏泰伯铸造有限公司  
Jiangsu Taibo casting co.,Ltd

材质合格证书  
MATERIAL TEST CERTIFICATE  
EN 10204-2004-3.1

证书编号:  
TB201706004  
CERT NO.

顾客 Customer  
维萨阀门有限公司  
VIZA VALVE CO., LTD

材料 Material  
WCB  
标准和版本号 Specification

ASTM A216-16  
原材料炉号 Heat No. (Report No.) of raw material

| 订单号 PO No     | 名称规格 Specification  | 数量 Qty | 炉号 Heat No | 材质 Material | 规格 | 标准   | 化学成分 (Max.) Chemical Composition |       |       |        |       |       |       |       |       |       |    |    |    | 机械性能 (Min.) Mechanical Properties |                       |                              |      | 硬度 Hardness (HB) | 冲击试验 Impact Test | 备注 Remark |     |       |      |
|---------------|---------------------|--------|------------|-------------|----|------|----------------------------------|-------|-------|--------|-------|-------|-------|-------|-------|-------|----|----|----|-----------------------------------|-----------------------|------------------------------|------|------------------|------------------|-----------|-----|-------|------|
|               |                     |        |            |             |    |      | C                                | Si    | Mn    | P      | S     | Cu    | Ni    | Cr    | Mo    | V     | NS | TS | TS | 屈服强度 Yield Strength (MPa)         | 伸长率 Elongation (E)(%) | 收缩率 Reduction of Area (R)(%) |      |                  |                  |           |     |       |      |
| PO17053159594 | 8TTC6-Body/Adapter  | 1/1    | X00667     | WCB         |    | ASTM | ≤0.30                            | ≤0.60 | ≤1.00 | ≤0.035 | ≤0.30 | ≤0.50 | ≤0.50 | ≤0.20 | ≤0.03 |       |    |    |    |                                   |                       | 485-565                      | ≥250 | ≥22              | ≥35              |           |     | OE    |      |
| PO17053159594 | 12TTC1-Body/Adapter | 1/1    | X00668     | WCB         |    | VZA  | ≤0.23                            | ≤0.60 | ≤1.28 | ≤0.035 | ≤0.30 | ≤0.50 | ≤0.50 | ≤0.20 | ≤0.03 |       |    |    |    |                                   |                       | 485-565                      | ≥250 | ≥22              | ≥35              |           |     | ≤0.42 |      |
| PO17053159594 | 16TTC3-Body/Adapter | 1/1    | X00669     | WCB         |    |      | 0.205                            | 0.480 | 1.010 | 0.027  | 0.012 | 0.038 | 0.116 | 0.015 | 0.005 |       |    |    |    |                                   |                       | 510                          | 299  | 26               | 52               | 152       | 155 | 0.40  |      |
| PO17053159594 | 8TTC3-Body/Adapter  | 1/1    | X00669     | WCB         |    |      | 0.211                            | 0.460 | 1.090 | 0.027  | 0.011 | 0.022 | 0.030 | 0.076 | 0.010 | 0.004 |    |    |    |                                   |                       |                              | 536  | 324              | 29               | 51        | 150 | 163   | 0.41 |
| PO17053159594 | 16TTC3-Body/Adapter | 1/1    | X00669     | WCB         |    |      | 0.211                            | 0.430 | 1.010 | 0.025  | 0.013 | 0.017 | 0.034 | 0.118 | 0.011 | 0.004 |    |    |    |                                   |                       |                              | 509  | 287              | 28               | 53        | 153 | 156   | 0.41 |
| PO17053159594 | 16TTC3-Body/Adapter | 1/1    | X00670     | WCB         |    |      | 0.215                            | 0.450 | 1.020 | 0.026  | 0.013 | 0.022 | 0.023 | 0.107 | 0.012 | 0.004 |    |    |    |                                   |                       |                              | 509  | 267              | 28               | 53        | 153 | 156   | 0.41 |
| PO17053159594 | 12TTC3-Body/Adapter | 1/1    | X00670     | WCB         |    |      | 0.215                            | 0.450 | 1.020 | 0.026  | 0.013 | 0.022 | 0.023 | 0.107 | 0.012 | 0.004 |    |    |    |                                   |                       |                              | 513  | 292              | 27               | 56        | 152 | 154   | 0.41 |
| PO17053159594 | 14TTC3-Body/Adapter | 1/1    | X00671     | WCB         |    |      | 0.220                            | 0.430 | 1.010 | 0.025  | 0.013 | 0.023 | 0.081 | 0.092 | 0.012 | 0.005 |    |    |    |                                   |                       |                              | 522  | 298              | 26               | 45        | 151 | 153   | 0.41 |
| PO17052359340 | 3TTC1-Body/Adapter  | 3/3    | A20671     | WCB         |    |      | 0.209                            | 0.400 | 0.940 | 0.023  | 0.009 | 0.023 | 0.022 | 0.061 | 0.006 | 0.003 |    |    |    |                                   |                       |                              | 530  | 281              | 30               | 54        | 152 | 155   | 0.38 |
| PO17052359340 | 4TTC1-Body/Adapter  | 4/4    | A20671     | WCB         |    |      | 0.209                            | 0.400 | 0.940 | 0.023  | 0.009 | 0.023 | 0.022 | 0.061 | 0.006 | 0.003 |    |    |    |                                   |                       |                              | 530  | 281              | 30               | 54        | 152 | 155   | 0.38 |
| PO17052359340 | 4TTC3-Body/Adapter  | 6/6    | A20671     | WCB         |    |      | 0.209                            | 0.400 | 0.940 | 0.023  | 0.009 | 0.023 | 0.022 | 0.061 | 0.006 | 0.003 |    |    |    |                                   |                       |                              | 530  | 281              | 30               | 54        | 152 | 155   | 0.38 |
| PO17053159594 | 10TTC3-Body/Adapter | 1/1    | X00672     | WCB         |    |      | 0.210                            | 0.420 | 1.010 | 0.024  | 0.013 | 0.023 | 0.051 | 0.140 | 0.018 | 0.005 |    |    |    |                                   |                       |                              | 525  | 313              | 26               | 49        | 149 | 153   | 0.42 |
| PO17053159594 | 12TTC6-Body/Adapter | 1/1    | X00672     | WCB         |    |      | 0.210                            | 0.420 | 1.010 | 0.024  | 0.013 | 0.023 | 0.051 | 0.140 | 0.018 | 0.005 |    |    |    |                                   |                       |                              | 525  | 313              | 26               | 49        | 149 | 153   | 0.42 |
| PO17052359340 | 4TTC6-Body/Adapter  | 8/8    | X00672     | WCB         |    |      | 0.198                            | 0.450 | 0.980 | 0.025  | 0.009 | 0.028 | 0.240 | 0.148 | 0.011 | 0.005 |    |    |    |                                   |                       |                              | 517  | 266              | 30               | 53        | 151 | 153   | 0.41 |

热处理的 Heat Treatment: 正火 (Normalized)  
 热处理的 Heat Treatment: 920°C  
 冷却方式 Cooling: Air Cooling  
 保温时间 Hold time: 3.5小时  
 温度 Temp: 920°C

SGS-CSTC STANDARDS TECHNICAL SERVICES CO. LTD. INDC07  
 NOTED FOR INFORMATION ONLY  
 2017-06-26

检验员 Inspector(QA/QC): Bai Jinian  
 批准 Approved (QA/QC): Shi Wujun  
 日期 Date: 2017-6-26

维萨阀门有限公司  
 WIZA VALVE CO., LTD.  
 2018.7.1

我们已按照客户要求完成了材料测试，并符合所有要求。特此证明。  
 We hereby certify that the material was manufactured in accordance with the requirements, and was found to meet the requirements.  
 2018.7.1

# 苏州市盛源锻造厂

Suzhou ShengYuan forging factory

## 锻件产品合格证

Forging Eligibility Certificate(EN10204:2004-3.1)

编号No: SYA-0194

订货单位:

制造单位:

Customer: VIZA VALVE

Manufactory: Suzhou ShengYuan forging factory

| 订单号<br>Order No | 订单日期<br>Order Time | 锻件炉号<br>Forging No | 名称规格<br>Forging Name   | 材料<br>Material | 数量 Q'ty | 原材料炉号<br>Heat No.<br>Raw material |
|-----------------|--------------------|--------------------|------------------------|----------------|---------|-----------------------------------|
| PO17060959865   | 17.07.01           | SYA-0194           | Body 8TT9R_R3          | ASTM A105      | 2       | 11702057C                         |
| PO17060959865   | 17.07.01           | SYA-0194           | Endadapter<br>16TT9_R3 | ASTM A105      | 2       | 11702057C                         |
|                 |                    |                    |                        |                |         |                                   |
|                 |                    |                    |                        |                |         |                                   |
|                 |                    |                    |                        |                |         |                                   |
|                 |                    |                    |                        |                |         |                                   |
|                 |                    |                    |                        |                |         |                                   |
|                 |                    |                    |                        |                |         |                                   |
|                 |                    |                    |                        |                |         |                                   |
|                 |                    |                    |                        |                |         |                                   |
|                 |                    |                    |                        |                |         |                                   |



| 标准和版本号<br>Specification          | 化学成分 Chemical |          |          |       |        |       |       |       |       |       |       |
|----------------------------------|---------------|----------|----------|-------|--------|-------|-------|-------|-------|-------|-------|
|                                  | C             | Mn       | Si       | S     | P      | Cr    | Ni    | Mo    | Cu    | V     |       |
| ASTM A105/A105N-2014             | ≤0.35         | 0.6-1.05 | 0.1-0.35 | ≤0.04 | ≤0.035 | ≤0.30 | ≤0.40 | ≤0.12 | ≤0.40 | ≤0.08 |       |
| VIZA WI 2020                     | 0.19~0.23     | 0.9-1.2  | 0.15-0.3 | ≤0.02 | ≤0.025 | ≤0.30 | ≤0.40 | ≤0.12 | ≤0.40 | ≤0.05 |       |
| 原材料炉号<br>Heat No<br>Raw material | 11702057C     | 0.210    | 0.960    | 0.220 | 0.009  | 0.014 | 0.070 | 0.027 | 0.002 | 0.023 | 0.001 |
| 锻件炉号<br>Forging No               | SYA-0194      | 0.210    | 0.960    | 0.220 | 0.009  | 0.014 | 0.070 | 0.027 | 0.002 | 0.023 | 0.001 |

| 锻件炉号<br>Forging NO | Acc. to | 机械性能 Product Mechanical Test Results |                      |      |      |             |           |             |               |      |  |
|--------------------|---------|--------------------------------------|----------------------|------|------|-------------|-----------|-------------|---------------|------|--|
|                    |         | σ <sub>b</sub> (Mpa)                 | σ <sub>s</sub> (Mpa) | δ(%) | ψ(%) | Impact Test |           |             | Hardness (HB) |      |  |
|                    |         |                                      |                      |      |      | Dir.        | Size (mm) | Akv(J) (°C) |               |      |  |
|                    |         | ASTM                                 | ≥485                 | ≥250 | ≥22% | ≥30%        |           |             |               | ≤187 |  |
| VIZA               | ≥485    | ≥250                                 | ≥22%                 | ≥30% |      |             |           | 137~187     |               |      |  |
| SYA-0194           |         | 505                                  | 305                  | 35   | 74   | TAN         | 10*10*55  |             | 145           | 147  |  |

Heat Treatment Method: Normalizing

| 外观质量<br>Appearance<br>Quality | 锻件采购技术规范 Forging purchasing specification W12020 |  | 检验结论 Conclusion |    |
|-------------------------------|--|--|-----------------|----|
|                               | 锻件外观表面检验 Inspection For Surface Defects          |  |                 | OK |
|                               | 形状, 尺寸表面质量满足图样要求 Dimensional Inspelction         |  |                 | OK |

兹证明材料已按标准和顾客要求进行了制造、抽样、检验和试验, 试验结果材料符合要求。试验按照ASTM A370-17标准执行。  
 We hereby certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification, customer Po requirements, and the requirements of CSA Z245.15, 2013. NACE-MR 0175, MACE-MR 0103.

The test results were met the requirements mentioned above.  
 The tests are in accordance with ASTM A370-17.

质量检验员 Signature of QA Tian Yisong

质量检验员 Stamp of QA Zhy Yongxin

日期 2017.08.25



