

|                               |                   |                        |                |                         |                       |
|-------------------------------|-------------------|------------------------|----------------|-------------------------|-----------------------|
| 订货单位<br>Purchaser             |                   | 订货单位代码<br>Customer No. | 018882         | 记录号<br>Record No.       | DLZJC-03-0            |
| 合同号<br>Contract No.           | C23AA0026D        | 品名<br>Name             | 碳素结构钢          | 证明书号<br>Certificate No. | W2312-0951886         |
| 生产号<br>Production No.         | C23AA0026DQ010    | 形状<br>Shape            | 圆钢(小棒)         | 入库票号<br>Into Depot No.  | E51173891             |
| 牌号<br>Steel Grade             | S45C              | 图纸号<br>Drawing No.     |                | 重量(T)<br>Weight         | 2.799吨                |
| 技术条件<br>Specification         | QJ/DTC2.0281-2021 | 冶炼方法<br>Melting Method | 按标准            | 规格(mm)<br>Size          | φ32                   |
| 加工用途<br>Designated Further    | 热压力加工             | 炉号<br>Heat No.         | 2310510642     | 长度(mm)<br>Length        | fixed length:<br>6000 |
| 交货状态<br>Condition of Delivery | 热轧                | 许可证号<br>License No.    |                | 件/盘数<br>Bundle Number   | 1                     |
| 热处理号<br>Heat Treatment No.    |                   | 签发日期<br>Date of Issue  | 20231218095709 | 支数<br>Piece Number      | 73                    |

一、化学成分(%) Chemical Composition (%)

|         |                 |           |           |           |           |           |           |           |
|---------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1. 熔炼成分 | C   0.47        | Si   0.25 | Mn   0.65 | P   0.018 | S   0.002 | Cr   0.20 | Ni   0.03 | Cu   0.03 |
|         | Cr+Ni+Mo   0.26 |           |           |           |           |           |           |           |

二、力学性能 Mechanical Property

|                                       |      |    |
|---------------------------------------|------|----|
| 1. 拉伸 Ult-Tensile-Strength            |      |    |
| 屈服强度1(N/mm2) Yield Strength(N/mm2)    | 423  |    |
| 抗拉强度(N/mm2) Tensile Strength(N/mm2)   | 701  |    |
| 断后伸长率(%) Elongation(%)                | 26.0 |    |
| 断面收缩率(%) Reduction of Area(%)         | 51   |    |
| 2. 冲击 Impace                          |      |    |
| 冲击吸收功1-1(J) Impact Absorbed Energy(J) | 42   | 37 |

三、微观检验 Microstructure Examination

|                                   |                          |     |
|-----------------------------------|--------------------------|-----|
| 1. 晶粒度 Grain Size                 | 晶粒度(级) Grain Size(Grade) | 7.5 |
| 2. 非金属夹杂物 Non-metallic Inclusions |                          |     |
| A粗(级) A(Thick)(Grade)             | 1.0                      | 1.0 |
| A细(级) A(Thin)(Grade)              | 1.0                      | 1.0 |
| B粗(级) B(Thick)(Grade)             | 1.0                      | 1.0 |
| B细(级) B(Thin)(Grade)              | 1.0                      | 1.0 |
| C粗(级) C(Thick)(Grade)             | 0.0                      | 0.0 |
| C细(级) C(Thin)(Grade)              | 0.0                      | 0.0 |
| D粗(级) D(Thick)(Grade)             | 0.5                      | 0.5 |
| D细(级) D(Thin)(Grade)              | 0.5                      | 0.5 |
| B+C+D细系                           | 1.5                      | 1.5 |
| B+C+D粗系                           | 1.5                      | 1.5 |

四、宏观检验 Macrostructure Examination

|                      |     |
|----------------------|-----|
| 1. 低倍 Macrostructure |     |
| S(级) S(Grade)        | 1.0 |
| R(级) R(Grade)        | 1.0 |
| C(级) C(Grade)        | 1.0 |

五、其它

|             |    |
|-------------|----|
| 1. 其他 Other | 合格 |
| 逐支防混合放射性    | 合格 |
| 2. 其他 Other | 合格 |
| 残磁          | 合格 |

备注: Note 表面质量: 合格 尺寸外形: 合格 探伤: 合格

声明: Statement

经检验与试验,本产品符合合同及标准之规定  
Through inspection and testing, the quality of product conforms to the stipulations of the related contract and standards.

质量判定人: Quality Judge: 邱飞玉

质量负责人: Quality Manager: 李红明

