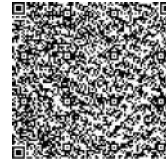




鞍钢股份有限公司  
Angang Steel Company Limited

# 产品质量证明书

## INSPECTION CERTIFICATE



中国鞍山市铁东区团结街42号 邮编 114002  
No.42 Tuanjie Street Tiedong District 114002  
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Tel 0086-8008900858 Fax 0086-0412-6728486

制造厂: 鞍钢股份有限公司鲅鱼圈中厚板厂5500线  
Manufacturer: Bayuquan Heavy Plate Plant 5500 Line of AnSteel

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|                     |                 |                          |                |                      |                |                            |              |
|---------------------|-----------------|--------------------------|----------------|----------------------|----------------|----------------------------|--------------|
| 订货单位<br>Buyer       | 鞍钢集团国际经济贸易有限公司  | 产品名称<br>Product          | 中厚板            | 合同编号<br>Contract No. | C2420062001    | 证明书编号<br>Certificate No.   | CJ2402240130 |
| 收货单位<br>Consignee   | 鞍钢股份有限公司 (外贸出口) | 客户名称<br>Customer         | 鞍钢集团国际经济贸易有限公司 |                      |                | 交货状态<br>Delivery Condition | 热轧           |
| 标准<br>Specification | ASTM A36/A36M   | 许可证编号<br>License No.     |                |                      |                |                            |              |
| 钢牌号<br>Grade        | A36             | 发货日期<br>Date of Delivery | 20240224       | 计重方式<br>Weight Mode  | 理论重量<br>Theory |                            |              |

| 序号<br>No. | 物料号<br>Pack No. | 熔炼号<br>Heat No. | 规格(mm)<br>Dimensions mm. | 重量(kg)<br>Weight | 件数<br>Pcs. | 化学成分 Chemical Composition (%) |       |       |       |       |       |       |  |  |  |  |  |  |  |  |  | 冷弯Bend            |                  |                  |
|-----------|-----------------|-----------------|--------------------------|------------------|------------|-------------------------------|-------|-------|-------|-------|-------|-------|--|--|--|--|--|--|--|--|--|-------------------|------------------|------------------|
|           |                 |                 |                          |                  |            | *1                            | C     | Si    | Mn    | P     | S     | Ceq   |  |  |  |  |  |  |  |  |  | 试样描述<br>p&d<br>*2 | α= 180 °<br>d=3a | 试批号<br>Batch No. |
|           |                 |                 |                          |                  |            |                               | 10 -2 | 10 -2 | 10 -2 | 10 -3 | 10 -3 | 10 -2 |  |  |  |  |  |  |  |  |  |                   |                  |                  |
| 17        | B42221952000    | 24MD1103        | 6*2440*12000             | 1379             | 1          | 0                             | 15    | 19    | 89    | 18    | 5     | 31    |  |  |  |  |  |  |  |  |  | T111              | 合格               | 4P6017527500     |
| 18        | B42221953000    | 24MD1103        | 6*2440*12000             | 1379             | 1          | 0                             | 15    | 19    | 89    | 18    | 5     | 31    |  |  |  |  |  |  |  |  |  | T111              | 合格               | 4P6017527500     |
| 19        | B42221981000    | 24MD1103        | 6*2440*12000             | 1379             | 1          | 0                             | 15    | 19    | 89    | 18    | 5     | 31    |  |  |  |  |  |  |  |  |  | T111              | 合格               | 4P6017527500     |
| 20        | B42221982000    | 24MD1103        | 6*2440*12000             | 1379             | 1          | 0                             | 15    | 19    | 89    | 18    | 5     | 31    |  |  |  |  |  |  |  |  |  | T111              | 合格               | 4P6017527500     |
| 21        | B42221983000    | 24MD1103        | 6*2440*12000             | 1379             | 1          | 0                             | 15    | 19    | 89    | 18    | 5     | 31    |  |  |  |  |  |  |  |  |  | T111              | 合格               | 4P6017527500     |
| 22        | B42221992000    | 24MD1103        | 6*2440*12000             | 1379             | 1          | 0                             | 15    | 19    | 89    | 18    | 5     | 31    |  |  |  |  |  |  |  |  |  | T111              | 合格               | 4P6017527500     |
| 23        | B42221993000    | 24MD1103        | 6*2440*12000             | 1379             | 1          | 0                             | 15    | 19    | 89    | 18    | 5     | 31    |  |  |  |  |  |  |  |  |  | T111              | 合格               | 4P6017527500     |
| 24        | B42222031000    | 24MD1103        | 6*2440*12000             | 1379             | 1          | 0                             | 15    | 19    | 89    | 18    | 5     | 31    |  |  |  |  |  |  |  |  |  | T111              | 合格               | 4P6017527500     |
| 合计Total   |                 |                 |                          | 11032            | 8          |                               |       |       |       |       |       |       |  |  |  |  |  |  |  |  |  |                   |                  |                  |

| 序号<br>No. | 物料号<br>Pack No. | 拉伸Tension         |              |            |             |             |                        |                  | 冲击Charpy          |          |             |    |    |    |     |   |   |   |                  |                   |     | 硬度Hardness |  |  |                  |                   |   | 厚度方向性能(Z) |   |     |                  |  |  |  |  |  |
|-----------|-----------------|-------------------|--------------|------------|-------------|-------------|------------------------|------------------|-------------------|----------|-------------|----|----|----|-----|---|---|---|------------------|-------------------|-----|------------|--|--|------------------|-------------------|---|-----------|---|-----|------------------|--|--|--|--|--|
|           |                 | 试样描述<br>p&d<br>*2 | 屈服<br>Y.S.   | 抗拉<br>T.S. | 伸长率<br>El % | 收缩率<br>Sh % | 屈强比<br>Y.S./<br>T.S. % | 试批号<br>Batch No. | 试样描述<br>p&d<br>*2 | 温度<br>C° | 10*5*55mm J |    |    |    |     |   |   |   | 试批号<br>Batch No. | 试样描述<br>p&d<br>*2 |     |            |  |  | 试批号<br>Batch No. | 试样描述<br>p&d<br>*2 | 1 | 2         | 3 | Ave | 试批号<br>Batch No. |  |  |  |  |  |
|           |                 |                   | Rp0.2<br>MPa | MPa        | KV2         |             |                        |                  |                   |          | 纤维率 SA %    |    |    |    |     |   |   |   |                  |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
|           |                 |                   |              |            | 1           | 2           | 3                      |                  |                   |          | Ave         | 1  | 2  | 3  | Ave | 1 | 2 | 3 |                  |                   | Ave |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
|           |                 |                   |              |            |             |             |                        |                  |                   |          |             |    |    |    |     |   |   |   |                  |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
| 17        | B42221952000    | T131              | 339          | 488        | 39.5        |             | 0.69                   | 4P1035814000     | T216              | 20       | 72          | 73 | 78 | 74 |     |   |   |   | 4P7031709400     |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
| 18        | B42221953000    | T131              | 339          | 488        | 39.5        |             | 0.69                   | 4P1035814000     | T216              | 20       | 72          | 73 | 78 | 74 |     |   |   |   | 4P7031709400     |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
| 19        | B42221981000    | T131              | 339          | 488        | 39.5        |             | 0.69                   | 4P1035814000     | T216              | 20       | 72          | 73 | 78 | 74 |     |   |   |   | 4P7031709400     |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
| 20        | B42221982000    | T131              | 339          | 488        | 39.5        |             | 0.69                   | 4P1035814000     | T216              | 20       | 72          | 73 | 78 | 74 |     |   |   |   | 4P7031709400     |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
| 21        | B42221983000    | T131              | 339          | 488        | 39.5        |             | 0.69                   | 4P1035814000     | T216              | 20       | 72          | 73 | 78 | 74 |     |   |   |   | 4P7031709400     |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
| 22        | B42221992000    | T131              | 339          | 488        | 39.5        |             | 0.69                   | 4P1035814000     | T216              | 20       | 72          | 73 | 78 | 74 |     |   |   |   | 4P7031709400     |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
| 23        | B42221993000    | T131              | 339          | 488        | 39.5        |             | 0.69                   | 4P1035814000     | T216              | 20       | 72          | 73 | 78 | 74 |     |   |   |   | 4P7031709400     |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |
| 24        | B42222031000    | T131              | 339          | 488        | 39.5        |             | 0.69                   | 4P1035814000     | T216              | 20       | 72          | 73 | 78 | 74 |     |   |   |   | 4P7031709400     |                   |     |            |  |  |                  |                   |   |           |   |     |                  |  |  |  |  |  |

|                   |                                                                                                                                                                                                                                                                                                                                                                              |           |                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------|
| 探伤NDT             | 标准Standard :                                                                                                                                                                                                                                                                                                                                                                 | 级别Class : | 结果Result :                                                 |
| 注释<br>Notes       | *1化学成分: 0:熔炼分析 Heat Analysis; 1:产品分析Product Analysis; *2试样描述: 大样位置-T:头部Head、B:尾部Tail + 试验方向-1:横向 Transverse、2:纵向Longitudinal、3:Z向 + 取样位置- 1:板宽1/4、2:板宽*2/3、3:板边0.4角部 + 厚度方向位置- 1、原厚、2、表面下2mm、3、厚度1/2、4、厚度1/3、5、保留一个轧制面、6、表面下小于2mm、7、厚度1/3 + 试样热处理前后区分-0:交货态Delivery Condition、1:模拟焊后 PWHT、2:最大模拟焊后热处理 Max PWHT、3:最小模拟焊后热处理 Min PWHT。<br>1、CEV=C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15。 |           |                                                            |
| 备注<br>Remarks     | 上述元素仅列出参与复合公式的有意添加元素, 但复合元素结果是严格按公式计算得出。The above elements only list the intentionally added elements that participate in the composite formula, but the composite element results are strictly calculated according to the formula.                                                                                                                                         |           |                                                            |
| 说明<br>Description | 本产品已按上述标准制造和检验, 其结果符合要求。特此证明。贵方如查询有关问题, 请与我公司联系。<br>We hereby certify that material described herein has been manufactured and tested with satisfactory results in accordance with requirements of the above material specification. If you have any questions, please contact our company.                                                                                  |           | 质量保证负责人<br>Quality Manager<br>CHINA<br>鞍钢股份有限公司<br>产品质量专用章 |