

渗碳热处理件检验报告

PARTS OF CARBURETED HEAT TREATMENT METALLOGRAPHICAL INSPECTION REPORT

报告号/Report No. : SDT/ZL-30-1 C/0

|                               |                                       |                          |
|-------------------------------|---------------------------------------|--------------------------|
| 零件名称/ Part name:<br><u>齿轮</u> | 图号/Drawing No. :<br><u>10-50290/3</u> | 数量/Quantity:<br><u>2</u> |
|-------------------------------|---------------------------------------|--------------------------|

|                                    |                                                |
|------------------------------------|------------------------------------------------|
| 材质/Material:<br><u>18CrNiMo7-6</u> | 热处理炉号/Heat treatment No.<br><u>DYL20260107</u> |
|------------------------------------|------------------------------------------------|

|                                          |                                                    |
|------------------------------------------|----------------------------------------------------|
| 试样编号/ The sample No. :<br><u>DYL332A</u> | 试样类别/The sample category:<br><u>代表性试样/Test pin</u> |
|------------------------------------------|----------------------------------------------------|

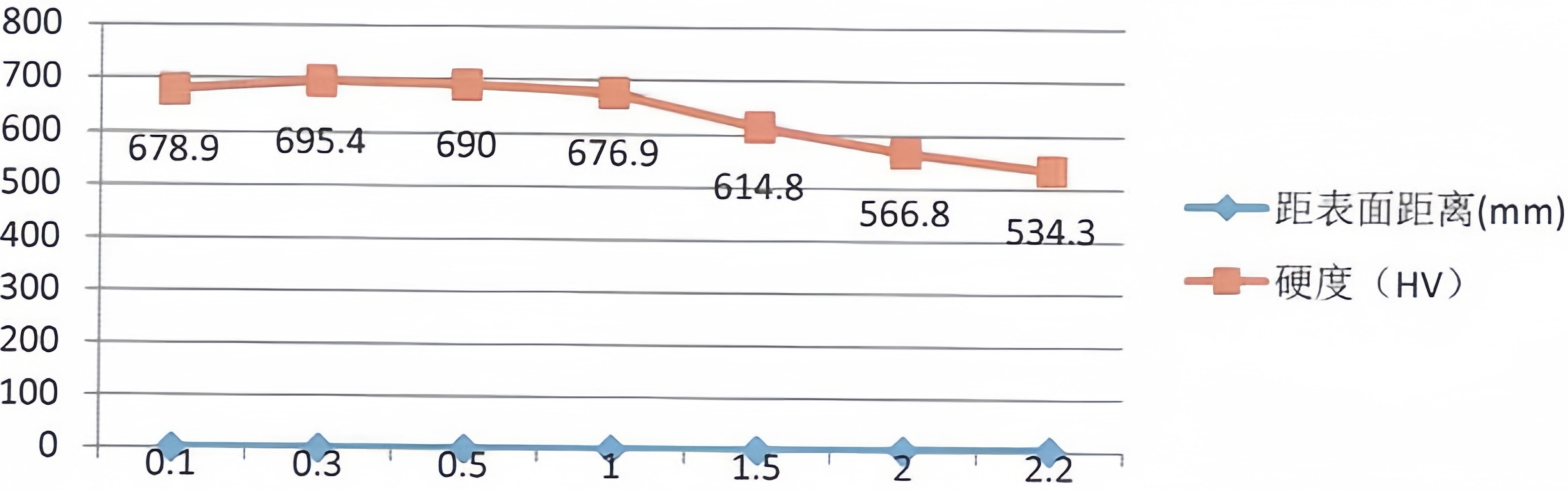
|                                         |                                            |  |  |  |  |  |  |
|-----------------------------------------|--------------------------------------------|--|--|--|--|--|--|
| 金相组织检测<br>metallographic structure test | 按“JB/T 6141.3-1992 重载齿轮 渗碳金相检验”、图纸及技术规范要求。 |  |  |  |  |  |  |
|-----------------------------------------|--------------------------------------------|--|--|--|--|--|--|

|                        |                                 |                                 |                |                       |                   |                                |                        |
|------------------------|---------------------------------|---------------------------------|----------------|-----------------------|-------------------|--------------------------------|------------------------|
| 检查项目<br>Inspected item | 有效硬化层深度<br>Effective case depth | 马氏体/奥氏体<br>Martensite/Austenite | 碳化物<br>Carbide | 芯部铁素体<br>Core ferrite | 晶粒度<br>Grain size | 内氧化<br>Intergranular oxidation | 表面碳浓度<br>C% of surface |
| 要求<br>Required         | 1.7-2.2mm                       | ≤4                              | ≤3             | ≤4                    | /                 | /                              | /                      |
| 实测<br>Achieved         | 2.1                             | 3                               | 2              | 2                     | /                 | /                              | /                      |

零件本体硬度检查/Hardness Test

|                  |                          |      |  |                                      |  |  |
|------------------|--------------------------|------|--|--------------------------------------|--|--|
| 零件编号<br>Part No. | 表面硬度/Hardness of Surface |      |  | 芯部硬度/Hardness of non-carburized area |  |  |
|                  | 要求/Required: 58-62HRC    |      |  | 要求/Required: 30-42HRC    实测: 38      |  |  |
| 001              |                          | 60.1 |  |                                      |  |  |
| 002              |                          | 60.3 |  |                                      |  |  |
|                  |                          |      |  |                                      |  |  |
|                  |                          |      |  |                                      |  |  |
|                  |                          |      |  |                                      |  |  |
|                  |                          |      |  |                                      |  |  |

|           |       |       |     |       |       |       |       |  |  |  |  |  |
|-----------|-------|-------|-----|-------|-------|-------|-------|--|--|--|--|--|
| 距表面距离(mm) | 0.1   | 0.3   | 0.5 | 1.0   | 1.5   | 2.0   | 2.2   |  |  |  |  |  |
| 硬度 (HV)   | 678.9 | 695.4 | 690 | 676.9 | 614.8 | 566.8 | 534.3 |  |  |  |  |  |



结论/Conclusion: ☒合格/Acceptable ☐让步接收/Concessive acceptance

不合格品审理单号:

|                        |                     |                        |
|------------------------|---------------------|------------------------|
| 检验员: 徐建良<br>Inspector: | 审核: 丁一致<br>Auditing | 日期: 2026.1.12<br>Date: |
|------------------------|---------------------|------------------------|