**廉金属热电偶校准过程控制图**

一、测量数据

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 单位 | | 计量中心 | | | | 组数大小 | 10 | |
| 被测参数名称 | | 铜凝固点（mV） | | | | 总组数 | 5 | |
| 2020.1.15～2021.3.18 | | 1 | 2 | 3 | 4 | 5 |  | |
| 测量值 | 1 | 10.5761 | 10.5751 | 10.5738 | 10.5752 | 10.5746 | UCL:粉红  CL:黄色  LCL:青绿 | |
| 2 | 10.5762 | 10.5743 | 10.5737 | 10.5766 | 10.5744 |
| 3 | 10.5758 | 10.5753 | 10.5744 | 10.5764 | 10.5763 |
| 4 | 10.5746 | 10.5745 | 10.5745 | 10.5753 | 10.5736 |
| 5 | 10.5749 | 10.5746 | 10.5728 | 10.5766 | 10.5737 |
| 6 | 10.5753 | 10.5739 | 10.5737 | 10.5755 | 10.5746 |
| 7 | 10.5755 | 10.5752 | 10.5723 | 10.5754 | 10.5748 |
| 8 | 10.576 | 10.5746 | 10.5729 | 10.5763 | 10.5766 |
| 9 | 10.5758 | 10.5753 | 10.5734 | 10.5737 | 10.5735 |
| 10 | 10.5749 | 10.5744 | 10.5745 | 10.5738 | 10.5758 | 平均值 | |
|  | | 10.576 | 10.575 | 10.574 | 10.575 | 10.575 |  | 10.575 |
| R | | 0.002 | 0.001 | 0.002 | 0.003 | 0.003 |  | 0.002 |
| 控制 | | X图 | | R图 | | 系数 | | |
| 上限 UCL | | 10.576 | | 0.004 | | A2 | 0.308 | |
| 中心限CL | | 10.575 | | 0.002 | | D3 | 0.223 | |
| 下限 LCL | | 10.574 | | 0.000 | | D4 | 1.777 | |

二、控制图

图

R图