**不锈钢钢带不锈钢的标准化学成份**

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| **分类**  **标准**  **型号** | | | **标准化学成份** | | | | | | | |
| **C** | **Mn** | **Si** | **Cr** | **Ni** | **P** | **S** | **其他** |
| 奥  氏  体 | 301 | AISI | ≥0.15 | ≥2.00 | ≥0.75 | 16.00/18.00 | 6.00/8.00 | ≥0.045 | ≥0.030 | ­—— |
| 304 | AISI | ≥0.08 | ≥2.00 | ≥0.75 | 18.00/20.00 | 8.00/10.50 | ≥0.045 | ≥0.030 | N:0.010≥ |
| 304L | AISI | ≥0.03 | ≥2.00 | ≥0.75 | 18.00/20.00 | 8.00/12.00 | ≥0.045 | ≥0.030 | N:0.010≥ |
| 310S | AISI | ≥0.08 | ≥2.00 | ≥1.50 | 24.00/26.00 | 19.00/22.00 | ≥0.045 | ≥0.030 | —— |
| 316 | AISI | ≥0.08 | ≥2.00 | ≥0.75 | 16.00/18.00 | 10.00/14.00 | ≥0.045 | ≥0.030 | Mo  2.00/3.00  N:0.010≥ |
| 316L | AISI | ≥0.03 | ≥2.00 | ≥0.75 | 16.00/18.00 | 10.00/14.00 | ≥0.045 | ≥0.030 | Mo  2.00/3.00  N:0.010≥ |

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| **分类**  **型号 标准** | | | **标准化学成份** | | | | | | | |
| **C** | **Mn** | **Si** | **Cr** | **Ni** | **P** | **S** | **其他** |
| 马  氏  体 | 440A | AISI | 0.60-0.75 | 1.00 | 1.00 | 16.00/18.00 | 0.60 | 0.04 | 0.030 | —— |
| 440B | AISI | 0.75-0.95 | 1.00 | 1.00 | 16.00/18.00 | 0.60 | 0.04 | 0.030 | —— |
| 440C | AISI | 0.95-1.2 | 1.00 | 1.00 | 16.00/18.00 | 0.60 | 0.04 | 0.030 | —— |
| 410 | AISI | 0.15 | 1.00 | 1.00 | 11.50/13.50 | 0.75 | 0.04 | 0.030 | —— |
| 420 | AISI | 0.15-0.40 | 1.00 | 1.00 | 12.00/14.00 | 0.50 | 0.04 | 0.030 | —— |
| 420J1 | AISI | 0.16-0.25 | 1.00 | 1.00 | 12.00/14.00 | 0.50 | —— | —— | —— |
| 420J2 | AISI | 0.26-0.40 | 1.00 | 1.00 | 12.00/14.00 | 0.50 | —— | —— | —— |
| 440J5  (自编号) AUS41 | AISI | 0.48-0.60 | 1.00 | 1.00 | 1400/16.00 | 0.49 | 0.04 | 0.030 | —— |

**不锈钢钢带的标准化学成份**

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| **分类**  **型号 标准** | | | **标准化学成份** | | | | | | | |
| **C** | **Mn** | **Si** | **Cr** | **Ni** | **P** | **S** | **其他** |
| 铁  素  体 | 409 | AISI | ≥0.08 | ≥1.00 | ≥1.00 | 10.50/11.75 | ≥0.5 | ≥0.045 | ≥0.030 | Ti:6x6％  -0.75 |
| 430 | AISI | ≥0.12 | ≥1.00 | ≥1.00 | 16.00/18.00 | ≥0.75 | ≥0.04 | ≥0.030 | —— |

**不锈钢钢带厚度允许偏差**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **宽度**  厚度 | | **J I S 4 3 0 5 (ET)** | | | | **A S T M A 4 8 0 M** | | | | **G B / T 4239** | | | |
| 160mm | 160-  250mm | 250-  400mm | 400-  600mm | 5-  25mm | 25-  76mm | 76-  150mm | 150-  300mm | 20-  150mm | 150-  250mm | 250-  400mm | 400-  600mm |
| ≤0.10 | | ±0.01 | ±0.020 | —— | —— | ±10％ | ±10％ | ±10％ | ±10％ | ±0.010 | ±0.010 | ±0.010 | —— |
| ≤  0.10-0.16 |  | ±0.015 | ±0.020 | —— | —— | ±10％ | ±10％ | ±10％ | ±10％ | ±0.010 | ±0.010 | ±0.010 | —— |
| ≤0.16-0.25 |  | ±0.020 | ±0.025 | ±0.030 | ±0.030 | ±0.04 | ±0.04 | ±0.04 | ±0.040 | ±0.010 | ±0.010 | ±0.010 | —— |
| ≤0.25-0.40 |  | ±0.025 | ±0.030 | ±0.035 | ±0.035 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.020 | ±0.020 | ±0.020 | ±0.020 |
| ≤0.40-0.60 |  | ±0.035 | ±0.040 | ±0.040 | ±0.040 | ±0.06 | ±0.06 | ±0.06 | —— | ±0.020 | ±0.020 | ±0.020 | ±0.030 |
| ≤0.60-0.80 |  | ±0.040 | ±0.045 | ±0.045 | ±0.045 | ±0.06 | ±0.06 | ±0.06 | ±0.09 | ±0.030 | ±0.030 | ±0.030 | ±0.040 |

**不锈钢钢带宽度允许偏差**

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| --- | --- | --- | --- | --- | --- | --- |
| **宽度**  **厚度** | **J I S 4305 (EW)** | | **A S T M A480M** | | **GB/ T 4239** | |
| 160mm | 0.06-1.00mm | 0.38mm | 0.38-1.00mm | 0.50mm | 050-1.00mm |
| ≤10 | —— | —— | —— | —— | —— | —— |
| ≥10-80 | ±0.15 | ±0.20 | ±0.127 | ±0.127 | ±0.15 | ±0.20 |
| ≥80-160 | ±0.15 | ±0.20 | ±0.127 | ±0.127 | ±0.20 | ±0.25 |
| ≥160-280 | ±0.20 | ±0.25 | ±0.254 | ±0.254 | ±0.20 | ±0.25 |
| ≥260-400 | ±0.25 | ±0.25 | ±0.254 | ±0.254 | ±0.25 | ±0.30 |
| ≥400-600 | ±0.30 | ±0.30 | ±0.406 | ±0.406 | ±0.30 | ±0.30 |

**不锈钢钢带常用牌号材料用途一览表**

|  |  |  |
| --- | --- | --- |
| **牌号** | **性能** | **用途** |
| 301 | 经冷加工有高的强度，塑性好 | 用于弹簧，金刚石内圆刀片，纺织钢筘  和外科手术用具 |
| 302 | 经冷加工有高的强度，耐蚀性好，  塑性比301较差 | 用于制作波纹管，照相机零件，医院  标志带，热处理保护罩 |
| 304 | 抗腐蚀性，耐热性及焊接性能极佳且  匀称，具有良好拉拔性能，耐蚀性比  302略好 | 适用于制造冲压成型部件，如电子元件，汽缸垫，注射针头，精细焊管，金属软管等 |
| 304L | 含碳量较低，有更好的抗晶间腐蚀能力 | 用于焊接而不能随后退火的零件，如波纹管和各种电子组件等 |
| 305 | 与302有同样好的耐蚀性，加工硬化率小的多，并且变形后无磁性 | 用于制作钢笔笔套，深冲的罩壳，打孔零件及无磁环境 |
| 309  310 | 较高的镍铬含量，高温时比302.304有更好的耐蚀性和抗氧化性 | 用于制作发电厂的隔热板及熔炉部件 |
| 316 | 比302.304有更好的抗点腐蚀和化学腐蚀能力，蠕变强度.应力断裂强度和高温抗拉强度很好 | 用于制造船舶用零件.化工厂管道外套.心脏起搏器外壳等 |
| 316L | 含碳量更低，抗晶间腐蚀性比316更好 | 用于波纹焊管.化工用的热交换器和仪表膜片等 |
| 321  347 | 在430-820℃碳化物析出温度范围内或在这些温度下保温后再在较低温度下进行的作业有较好的抗晶间腐蚀性能 | 用途有制作喷气发动机的隔热层.发动机的密封圈.波纹管.蜂窝结构材料和填片等.不适合表面要引人注目的产品 |
| 410 | 比较廉价的马氏体型不锈钢，通过热处理可获得范围很宽的机械性能 | 用于制作刃具和计算机打孔带等 |
| 马氏体 | 通过热处理可获得范围很宽的机械性能 | 用于刮胡刀片.各种医用刀.家用刀具.工具.尺子.照相机用光圈.缝纫机部件等 |
| 430 | 在高温下有一定的耐蚀性和抗氧化性，塑性较好，易冷加工 | 用于制作汽车和建筑物上的装饰件.纽扣电池以及盛装食物的器皿 |