

# HAYNES<sup>®</sup> 230<sup>®</sup> alloy

## Tensile Properties

**Tensile Properties of 230<sup>®</sup> Sheet**

| Test Temperature |      | 0.2% Yield Strength |     | Ultimate Tensile Strength |     | Elongation |
|------------------|------|---------------------|-----|---------------------------|-----|------------|
| °F               | °C   | ksi                 | MPa | ksi                       | MPa | %          |
| 70               | 21   | 60.4                | 417 | 121.4                     | 837 | 47.3       |
| 1000             | 538  | 42.6                | 294 | 100.1                     | 690 | 51.7       |
| 1200             | 649  | 42.2                | 291 | 96.6                      | 666 | 56.9       |
| 1400             | 760  | 45.1                | 311 | 78.0                      | 538 | 59.5       |
| 1600             | 871  | 34.2                | 236 | 44.6                      | 308 | 74.2       |
| 1800             | 982  | 17.8                | 123 | 24.5                      | 169 | 54.1       |
| 2000             | 1093 | 10.0                | 69  | 13.1                      | 90  | 37.0       |

**Tensile Properties of 230<sup>®</sup> Plate**

| Test Temperature |      | 0.2% Yield Strength |     | Ultimate Tensile Strength |     | Elongation |
|------------------|------|---------------------|-----|---------------------------|-----|------------|
| °F               | °C   | ksi                 | MPa | ksi                       | MPa | %          |
| 70               | 21   | 55.5                | 383 | 123.6                     | 852 | 46.0       |
| 1000             | 538  | 38.1                | 263 | 102.5                     | 706 | 53.2       |
| 1200             | 649  | 38.7                | 267 | 98.2                      | 677 | 53.0       |
| 1400             | 760  | 37.7                | 260 | 77.2                      | 533 | 68.0       |
| 1600             | 871  | 33.9                | 234 | 45.1                      | 311 | 94.0       |
| 1800             | 982  | 16.8                | 116 | 24.3                      | 168 | 91.2       |
| 2000             | 1093 | 9.1                 | 63  | 13.2                      | 91  | 92.1       |

**Comparison of Yield Strengths (Plate)**

