

Material Technical Data Sheet

WixSteel Industrial – 61SiCr7

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| Material No.: | Former brand name: | International steel grades: |
| 1.7108 | 60SiCr7 | China GB: 60Si2Mn JIS: SUP 7 SAE: 9262 |

Material group: Hot rolled steel for springs suitable for quenching and tempering according to DIN 17221

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|---|---------------|---------------|---------------|------------|------------|-----------|-----------|-----------|
| Chemical Composition: (Typical analysis in %) | C | Si | Mn | S | P | Cr | Ni | Cu |
| | 0.57~ 0.65 | 1.60~ 2.00 | 0.70~ 1.00 | ≤0.02 5 | ≤0.02 5 | ≤0.45 | ≤0.35 | ≤0.25 |

Application: Hot rolled steel for springs suitable for quenching and tempering, as leaf springs, helical springs, stabiliser at rail-traffic vehicle, torsion bars.

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| Hot forming and heat treatment: | Hot forming: | 1050 - 850°C |
| | Hot deformation: | 900 - 830°C |
| | Normalising: | 850 - 880°C |
| | Soft annealing: | 640 - 680°C |
| | Hardening: | 830 - 860°C/oil |
| | Tempering: | 350 - 550°C |

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| Mechanical Properties: | Treated for cold shearability +S: | max. 280 HB |
| | Soft annealed +A: | max. 248 HB |
| | Spheroidized annealed - GKZ (+AC) | max. 230 HB |
| | Core hardness after quenching: | min. 54 HRC |
| | Tensile strength σ_b (MPa): | ≥1274(130) |
| | Yield strength σ_s (MPa): | ≥1176(120) |
| | Elongation δ_{10} (%): | ≥5 |
| | Reduction of area ψ (%): | ≥25 |