

Material specification sheet

Saarstahl - 100Cr6

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| Material No.: | Former brand name: | International steel grades: |
| 1.3505 | RW3 | BS: 2S135, 535A99 AFNOR: 100C6 SAE: 52100 |

Material group: Ball and roller bearing steel according to EN ISO 683-17

| Chemical composition: (Typical analysis in %) | C | Si | Mn | Cr | other |
|--|------|------|------|------|-------|
| | 1,00 | 0,25 | 0,35 | 1,50 | - |

Application: Ball and roller bearing steel for balls and rollers of any dimension, rings and discs up to 30 mm effective thickness.

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|--|-------------------------|---------------------|
| Hot forming and heat treatment: | Forging or hot rolling: | 1100 - 850°C |
| | Normalising: | 870 - 900°C/air |
| | Soft annealing: | 780 - 800°C/furnace |
| | Hardening: | 800 - 830°C/water |
| | Hardening: | 830 - 870°C/oil |
| | Tempering: | 150 - 180°C |

Mechanical Properties: Soft annealed +A: max. 207 HB

Heat treatment condition: Hardened and tempered

Surface hardness [HRC]: ca. 62