

## Material specification sheet

### Saarstahl - 100Cr6

Material No.:	Former brand name:	International steel grades:
<b>1.3505</b>	<b>RW3</b>	<b>BS:</b> 2S135, 535A99 <b>AFNOR:</b> 100C6 <b>SAE:</b> 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.

<b>Hot forming and heat treatment:</b>	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