

Material specification sheet

Saarstahl - 17NiCrMo6-4 (18NiCrMo6-4) - 17NiCrMoS6-4 - 20NiCrMoS6-4

Material No.:	Former brand name:	International steel grades:
1.6566		BS: 17NiCrMo6-4
1.6569		AFNOR: 17NiCrMo6-4
1.6571		SAE:

Material group: Case hardening steels according to DIN EN 10084

Chemical composition: (Typical analysis in %)	C	Si	Mn	P	S	Cr	Mo	Ni
	0,14 0,20	<0,40	0,60 0,90	<0,035	<0,035	0,80 1,10	0,15 0,25	1,20 1,50

Application: Alloyed case hardening steel.

Hot forming and heat treatment:	Forging or hot rolling:	1100 - 850°C
	Normalising:	830 - 870°C
	Soft annealing:	650 - 700°C
	Carburising:	880 - 980°C
	Core hardening:	830 - 870°C
	Intermediate annealing:	650 - 700°C
	Case hardening:	780 - 820°C
	Tempering:	150 - 200°C

Mechanical Properties:	Treated for cold shearability, +S:	max. 255 HB
	Soft annealed, +A:	max. 229 HB
	Treated for strength, +TH:	179 - 229 HB
	Treated for ferrite and pearlite structure and hardness range, +FP:	149 - 201 HB

after hardening and tempering at 200°C:

Diameter d [mm]	d ≤ 16	16 < d ≤ 40	40 < d ≤ 100
Tensile strength R _m [N/mm ²]	min. 1200	min. 1000	min. 900