

Material specification sheet

Saarstahl - 28Cr4 - 28CrS4

Material No.:	Former brand name:	International steel grades:
1.7030		BS: 530A30
1.7036		AFNOR:
		SAE: 5130

Material group: Case hardening steels according to DIN EN 10084

Chemical composition: (Typical analysis in %)	C	Si	Mn	P	S	Cr
	0,24	<0,40	0,60	<0,035	<0,035	0,90
	0,31		0,90			1,20

Application: Alloyed case hardening steel

Hot forming and heat treatment:	Forging or hot rolling:	1100 - 900°C
	Normalising:	860 - 900°C
	Soft annealing:	680 - 720°C
	Carburising:	880 - 980°C
	Core hardening:	860 - 900°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. 217 HB
	Treated for strength, +TH:	166 - 217 HB
	Treated for ferrite and pearlite structure and hardness range, +FP:	156 - 207 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. 900	min. 700	min. 700