

Low alloy steels **Part 1**

Stooss specification	DIN material no.	Short specification according to DIN	EN specification	GB	USA		F	J	Chemical analysis in weight per cent Upper and lower range										
					Type	UNS			C	Si	Mn	P	S	Cr	Ni	Mo	V	Al	Nb

Low alloy hardened steels

16 MnCr 5	1.7131	16 MnCr 5	16MnCr5	527M17	SAE 5115	H51150	16MC5		min.	0.14	0.15	1.00			0.80										
	DIN 17210 / EN 10084 / Machine and automobile construction / gearwheels, shafts, bolts																								
20 MnCr 5	1.7147HL	20 MnCr 5 HL	20MnCr5		AISI 5120H	H51200	20MC5	SMnC 21 H	min.	0.18	0.15	1.10		0.015	1.00				0.020						Cu max. 0.25
	DIN 17210 / EN 10084 / Machine and automobile construction / gearwheels, shafts, bolts																								
15 CrNi 6	1.5919	15 CrNi 6	14CrNi6		AISI 4320	H43200	16NC6		min.	0.14	0.15	0.40			1.40	1.40									
	DIN 17210 / EN 10084 / Machine and automobile construction / higher stressed gear parts																								
17 CrNiMo 6	1.6587HH	17 CrNiMo 6 HH	18CrNiMo7-6				18NCD6		min.	0.17	0.15	0.50			1.50	1.40	0.25		0.020						Cu max. 0.25 Ti max. 0.003 N 0.008-0.018
	DIN 17210 / EN 10084 / Machine and automobile construction / higher stressed gear parts, driving pinions, ring gears																								
17 CrNiMo 6 M1	1.6587HH	17 CrNiMo 6 HH	Modified analysis						min.	0.15	0.15	0.40			1.50	1.40	0.25		0.020						Cu max. 0.20 Ti max. 0.003 O max. 0.0020 N 0.008-0.018
	DIN 17210 / EN 10084 / Machine and automobile construction / higher stressed gear parts, driving pinions, ring gears																								
17 NiCrMo 14	1.3533	17 NiCrMo 14 HH	18 NiCrMo14						min.	0.15	0.15	0.40			1.30	3.25	0.15		0.020						Cu max. 0.30 Ti max. 0.003 O max. 0.0020
	DIN 17230 / Roller bearing steel																								
PS 55					PS 55				min.	0.12	0.20	0.70			0.45	1.65	0.65		0.020						
	SAE J 1081 / Automobile industry / nutrition industry / dies																								
LF 3	(1.5637)	10Ni14	12Ni14	503LT	ASTM A350 LF3		3,5Ni	SL 3 N 26	min.		0.20					3.25									Cu max. 0.40
	ASTM A350																								
AISI 3310	(1.5752)	14NiCr14	15NiCr13	655 M13		G33106	16 NC 12	SNC 22	min.	0.08	0.20	0.45			1.40	3.25									
	ASTM A837-91 / Roller bearing special steel																								

Low alloy tempering steels

25 CrMo 4	1.7218	25 CrMo 4	25 CrMo 4	708A25	AISI 4130	H41300	25CD4	SCCr M1	min.	0.22	0.15	0.60			0.90		0.15								Cu max. 0.20	
	DIN 17201 / EN 10083-1 / Vehicle and automobile construction / steering knuckle, axle shafts																									
25 CrMo 4 M1	1.7218	25 CrMo 4	Modified analysis						min.	0.25	0.15	0.60			0.90		0.15									Cu max. 0.20 Ti max. 0.060
	DIN 17201 / EN 10083-1 / Vehicle and automobile construction / steering knuckle, axle shafts																									
25 CrMo 4 M2	1.7218	25 CrMo 4	Modified analysis						min.	0.20	0.15	0.60			0.90		0.15									Cu max. 0.20
	DIN 17201 / EN 10083-1 / Vehicle and automobile construction / steering knuckle, axle shafts																									
34 CrMo 4	1.7220	34 CrMo 4	34 CrMo 4	708A30	AISI 4135		34CD4	SCCr M3	min.	0.33	0.15	0.70			0.90		0.15									Cu max. 0.35
	ASTM A29 / General machine construction																									
42 CrMo 4	1.7225	42 CrMo 4 HH	42 CrMo 4	708M40	AISI 4140	H41400	42CD4	SCM 4	min.	0.41	0.15	0.60		0.008	1.00		0.20									
	DIN 17201 / EN 10083-1 / Vehicle and automobile construction / axles, piston rods																									
42 CrMo 4 M1	1.7225	42 CrMo 4 HH	Modified analysis						min.	0.41	0.15	0.60		0.010	0.90		0.15		0.005							O max. 0.0020 Ti max. 0.0030
50 CrV 4	1.8159	50 CrV 4	50CrV4	735H51	AISI 6150	H61500	50CV4	SUP 10	min.	0.50		0.70		0.020	0.90			0.10								
	DIN 17221 / EN 10083-1 / Automobile and gear construction / toothed wheels, driving pinions, springs																									
58 CrMoV 4	1.7792	58 CrMoV 4							min.	0.55	0.15	0.70			0.90		0.15	0.05								
	Automobile and gear construction / propeller shafts, pinions, springs, abrasionproof parts																									
34 CrNiMo 6	1.6582HH	34 CrNiMo 6 HH	34 CrNiMo 6	817M40			34 CrNiMo 6	SNC M9	min.	0.32	0.15	0.50			1.40	1.40	0.15								Cu max. 0.20 Sn max. 0.025	
	DIN 17201 / SEW 550 / EN 10083-1 / General machine and gear construction																									
34 CrNiMo 6 M2	1.6582HH	34 CrNiMo 6 HH	Modified analysis						min.	0.32	0.15	0.50		0.010	1.40	1.40	0.15									Cu max. 0.20 Sn max. 0.025
	DIN 17201 / SEW 550 / EN 10083-1 / General machine and gear construction																									

The chemical analysis conform to STOOSS purchasing specifications. The comparative national designations may differ from the STOOSS analysis and are purely for information purposes.

Details on material application are for description purposes only. They are provided to the best of our knowledge, but without any guarantee. Special agreements in writing are always required.