

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	Other	

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																										
18 CrNiMo 7-6	1.6587HH	17 CrNiMo 6 HH	18CrNiMo7-6				18NCD6			min.	0.15	0.15	0.50			1.50	1.40	0.25		0.020							Cu max. 0.20
	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 H ₂ max. 0.0002
	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.	0.30	0.15	0.50			1.40	1.40	0.15									Cu max. 0.20 Sn max. 0.025 H ₂ max. 0.0002
	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.