High alloy steels | **Ferritic / martensitic steels**

Stooss specification	DIN material no.	Short specification according to DIN	EN specification	GB	USA Type	USA UNS	F	J		Chemical analysis in weight per cent Upper and lower range C	Si	Mn	P	S	Cr	Ni	Mo	V	Al	Nb	Other
High alloy tempering steels																					
2343	1.2343	X 38 CrMoV 5 1	X 38 CrMoV 5 1	BH11	6437E(AMS)		X38CrMoV5	SKD 6	min.	0.36	0.90	0.30			4.80		1.10	0.25			
									max.	0.42	1.20	0.50	0.030	0.030	5.50		1.40	0.50			
	DIN 17350 / Tool steel / diecasting moulds																				
2344	1.2344	X 40 CrMoV 5 1	X 40 CrMoV 5 1	BH13	6408A (AMS)		X40CrMoV5	SKD 61	min.	0.37	0.90	0.30			4.80		1.20	0.90			
									max.	0.43	1.20	0.50	0.030	0.030	5.50		1.50	1.10			
	DIN 17350 / Tool steel / diecasting moulds																				
2379	1.2379	X 155 CrMoV 12 1	X 160 CrMoV 12	BD2	ASTM A681		X160CrMoV12	SKD 11	min.	1.50	0.10	0.15			11.00		0.60	0.90			
									max.	1.60	0.40	0.45	0.030	0.030	12.00		0.80	1.10			
	DIN 17350 / Tool steel / milling cutters, thread rolling dies																				
AISI 440 B	(1.4112)	X 90 CrMoV 18	X 90 CrMoV 18	X 90 CrMoV 18	AISI 440 B	S44003	X90CrMoV18	SUS 4408	min.	0.75					16.00						
									max.	0.95	1.00	1.00	0.035	0.030	18.00		0.750				
	ASTM A276 / Rustproof, acidproof and heat resistant steel / matrixes for fodder production																				
4006	1.4006	X 10 Cr 13	X 12 Cr 13	410S21	AISI 410	S41000	X12Cr13	SUS 410	min.	0.12					12.00						
									max.	0.15	1.00	1.00	0.025	0.020	13.50	0.50	0.500				Cu max. 0.50 N max. 0.090
	DIN 17440 / EN 10088-1 / Rustproof steel / parts for pressure vessels																				
4021	1.4021	X 20 Cr 13	X 20 Cr 13	420S37	AISI 420	S42010	Z20C13Cl	SUS 420 J1	min.	0.17	0.20	0.30			12.00	0.30					W max. 0.05 Cu max. 0.20 Co max. 0.20
									max.	0.20	0.50	0.80	0.020	0.010	13.50	0.50	0.200	0.05	0.030	0.05	Ti max. 0.005
	DIN 17440 / EN 10088-1 / Rustproof steel / valve needles, axles, shafts, piston rods / compressor blades																				
4034	1.4034	X 46 Cr 13	X 46 Cr 13	X 46 Cr 13			Z44C14Cl		min.	0.42	0.20	0.70		0.020	12.50						
									max.	0.48	0.40	1.00	0.030	0.030	14.00						
	DIN 17440 / EN 10088-1 / Rustproof steel / nutrition industry / pellet dies																				
4057	1.4057	X 20 CrNi 17 2	X 17 CrNiMo 16 2	431S29	AISI 431	S43100	Z15CN16,02Cl	SUS 431	min.	0.16					15.50	2.00					
									max.	0.20	1.00	1.00	0.025	0.010	17.00	2.50					
	DIN 17440 / EN 10088-1 / Rustproof steel / foodstuffs industry / pressure vessel construction																				
4116	1.4116	X 45 CrMoV 15	X 50 CrMoV 15	X 50 CrMoV 15			X50CrMoV15		min.	0.45				0.015	14.00		0.50	0.10			
									max.	0.50	1.00	1.00	0.030	0.030	15.00		0.60	0.15			
	DIN 17440 / EN 10088-1 / Rustproof steel / medical technology / high grade cutlery																				
4122	1.4122	X 35 CrMo 17	X 39 CrMo 171	X 39 CrMo 171			Z38CD16.1Cl		min.	0.34	0.30	0.30			16.00	0.30	0.90				
									max.	0.38	0.60	0.60	0.025	0.018	17.00	0.65	1.10	0.05			
	DIN 17440 / EN 10088-1 / SEW 400 / Rustproof steel / valves to 600°c. / pistons / dies for briquetting and compacting equipment																				
AISI 410	(1.4006)	X 12 Cr 13	X 12 Cr13	410S21	AISI 410	S41000	X12Cr13	SUS 410	min.	0.12	0.30	0.60			11.50	0.30	0.15				
									max.	0.15	0.50	1.00	0.040	0.020	12.50	0.50	0.30				Cu max. 0.30 N 0.050–0.080
	ASTM A276 / SAE 240 / Rustproof steel																				
Other chrome steels																					
4926	1.4926	X 21 CrMoV 12 1							min.	0.20	0.10	0.50			11.00	0.40	0.90	0.25			
									max.	0.23	0.20	0.70	0.020	0.005	11.50	0.80	1.10	0.35	0.015	0.05	W max. 0.60 Cu max. 0.30 N 0.040–0.080
	SEW 555 / High temperature steel / parts for turbines and generators																				
4903	1.4903	X 10 CrMoVNb 91			P91	K91560			min.	0.08	0.20	0.30			8.00		0.85	0.18		0.06	
									max.	0.12	0.50	0.60	0.020	0.010	9.50	0.40	1.05	0.25	0.040	0.10	N 0.030–0.070
	Vd TÜV Bl. 511-3 / ASTM A355 / High temperature steel / parts for turbines and generators																				

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.