

## Alloy Steel Chemical Composition

GB	ASTM	JIS	EN	C	Si	Mn	P	S	Cr	Ni	Cu	Mo	V	Ti	Al
20Mn2	1524	SMn420	—	0.17~0.24	0.17~0.37	1.40~1.80	≤0.025	≤0.025	≤0.30	≤0.30	≤0.25	—	—	—	—
50Mn2	—	—	—	0.47~0.55	0.17~0.37	1.40~1.80	≤0.025	≤0.025	≤0.30	≤0.30	≤0.25	—	—	—	—
27SiMn	—	—	—	0.24~0.32	1.10~1.40	1.10~1.40	≤0.035	≤0.035	≤0.30	≤0.30	≤0.3	≤0.15	—	—	—
35SiMn	—	—	—	0.32~0.40	1.10~1.40	1.10~1.40	≤0.035	≤0.035	≤0.30	≤0.30	≤0.3	—	—	—	—
20Cr	5120	SCr420	17Cr3(1.7016)	0.18~0.24	0.17~0.37	0.50~0.80	≤0.035	≤0.035	0.7~1.00	≤0.30	≤0.3	≤0.15	—	—	—
40Cr	5140	SCr440	41Cr4(1.7035)	0.37~0.44	0.17~0.37	0.50~0.80	≤0.035	≤0.035	0.80~1.10	≤0.30	≤0.03	≤0.10	—	—	—
38CrSi	—	—	—	0.35~0.43	1.00~1.30	0.30~0.60	≤0.035	≤0.035	1.30~1.60	≤0.030	0.03	—	—	—	—
12CrMo	—	—	—	0.10~0.15	≤0.30	0.60-0.90	≤0.025	≤0.025	0.90-1.20	≤0.025	≤0.25	0.15~0.25	—	—	—
15CrMo	—	SCM415	18CrMo4(1.7243)	0.12~0.18	0.17~0.23	0.40~0.70	≤0.035	≤0.035	0.80~1.10	≤0.030	≤0.030	0.4~0.55	—	—	—
20CrMo	4118	SCM420	18CrMo4(1.7243)	0.17~0.23	0.17~0.37	0.40~0.70	≤0.035	≤0.035	0.80~1.10	≤0.030	≤0.030	0.15~0.25	—	—	—
30CrMo	4130	SCM430	25CrMo4(1.7218)	0.26~0.34	0.17~0.37	0.40~0.70	≤0.035	≤0.035	0.80~1.10	≤0.030	≤0.030	0.15~0.25	—	—	—
35CrMo	4135	SCM435	34CrMo4(1.7220)	0.32~0.40	0.17~0.37	0.40~0.70	≤0.035	≤0.035	0.80~1.10	≤0.30	≤0.30	0.15~0.25	—	—	—
42CrMo	4142	SCM440	42CrMo4(1.7225)	0.38~0.45	0.17~0.37	0.50~0.80	≤0.035	≤0.035	0.90~1.20	≤0.30	≤0.30	0.15~0.25	—	—	—
12CrMoV	—	—	—	0.08~0.15	0.17~0.37	0.40~0.70	≤0.035	≤0.035	0.30~0.60	≤0.030	≤0.030	0.25-0.35	0.15-0.30	—	—
12Cr1MoV	—	—	—	0.08~0.15	0.17~0.37	0.40~0.70	≤0.035	≤0.035	0.90~1.20	≤0.30	≤0.25	0.25~0.35	0.15~0.30	—	—
38CrMoAl	—	—	—	0.35~0.42	0.20~0.45	0.30~0.60	≤0.035	≤0.035	1.35~1.65	≤0.30	≤0.30	0.15~0.25	—	—	0.70~1.10
20CrMnMo	—	SCM421	—	0.17~0.23	0.17~0.37	0.90~1.20	≤0.035	≤0.035	1.10~1.40	≤0.030	≤0.030	0.20~0.30	—	—	—
20CrMnTi	—	—	—	0.17~0.23	0.17~0.37	0.80~1.10	quality steel ≤0.030 High quality steel ≤0.020 Super high quality steel ≤ 0.020	quality steel ≤0.030 High quality steel ≤0.020 Super high quality steel ≤ 0.010	1.00~1.30	≤0.30	quality steel ≤0.30 High quality steel ≤0.25 Super high quality steel ≤ 0.25	—	—	0.04~0.10	—