

STEEL GRADE	CHEMICAL COMPOSITION (%) DETAILS						PHYSICAL COMPOSITION DETAILS		
	C	Si	Mn	S	P	Alk	YIELD STRENGTH	TENSILE STRENGTH	ELONGATION
							MPA	MPA	(%)
SPHC	≤0.15	≤0.15	≤0.60	≤0.035	≤0.035	≥0.010	-----	≥270	≥27
SPCC	≤0.15	-----	≤0.60	≤0.025	≤0.10	-----	-----	≥270	≥25
S112(DCO1)	≤0.10	-----	≤0.50	≤0.025	≤0.035	≥0.015	140~280	≥270	≥24
DC04	≤0.08	-----	≤0.40	≤0.020	≤0.025	≥0.015	130~210	≥270	≥34
S137-2G	≤0.17	-----	≤1.00	≤0.030	≤0.035	≥0.015	≥215	360~510	≥20
S144-3G	≤0.20	-----	≤1.30	≤0.030	≤0.035	≥0.015	≥245	430~580	≥18
S152-3G	≤0.20	-----	≤1.60	≤0.030	≤0.035	≥0.015	≥325	510~680	≥16
S8330	≤0.15	≤0.30	≤0.95	≤0.035	≤0.035	-----	≥205	330~430	≥26
S8400	≤0.21	≤0.30	≤1.40	≤0.035	≤0.035	-----	≥245	400~510	≥21
S133	-----	-----	-----	≤0.040	≤0.040	-----	≥185	310~540	≥10
S235JR (S137-2)	≤0.17	≤0.35	≤1.40	≤0.035	≤0.035	-----	≥235	360~510	≥17
S355JR (S152-3)	≤0.20	≤0.55	≤1.60	≤0.030	≤0.030	-----	≥355	510~680	≥14
SPHT1	≤0.10	≤0.35	≤0.50	≤0.035	≤0.035	-----	-----	≥270	≥30
SPHT2	≤0.18	≤0.35	≤0.60	≤0.035	≤0.035	-----	-----	≥340	≥25
SPHT3	≤0.25	≤0.35	0.30~0.90	≤0.035	≤0.035	-----	-----	≥410	≥20
Q195	≤0.12	≤0.30	≤0.50	≤0.040	≤0.035	-----	≥195	315~430	≥33
Q215A	≤0.15	≤0.35	≤1.20	≤0.050	≤0.045	-----	≥215	335~450	≥31
Q215B	≤0.15	≤0.35	≤1.20	≤0.050	≤0.045	-----	≥215	335~450	≥31
Q235A	≤0.22	≤0.35	≤1.40	≤0.050	≤0.045	-----	≥235	370~500	≥26
Q235B	≤0.20	≤0.35	≤1.40	≤0.045	≤0.045	-----	≥235	370~500	≥26
Q235C	≤0.17	≤0.35	≤1.40	≤0.040	≤0.040	-----	≥235	370~500	≥26
SAE 1006	≤0.06	≤0.35	≤0.45	≤0.020	≤0.020	-----	385	180	30
SAE1008	≤0.10	≤0.15	≤0.50	≤0.020	≤0.020	-----	450	275	24
SAE1010	0.08~0.13	-----	0.30~0.60	≤0.035	≤0.035	-----	180Mpa HOT ROLLED/300Mpa COLD DRAW	320Mpa HOT ROLLED/370Mpa COLD DRAW	28% HOT ROLLED/30% COLD DRAW
SAE1020	0.18~0.23	-----	0.30~0.60	≤0.030	≤0.050	-----	210Mpa HOT ROLLED/350Mpa COLD DRAW	380Mpa HOT ROLLED/460Mpa COLD DRAW	25% HOT ROLLED/18% COLD DRAW
SAE1022	0.18~0.23	≤0.15	0.70~1.00	≤0.025	≤0.030	-----	≥450	≥360	27%
10	0.07~0.13	0.17~0.37	0.35~0.65	≤0.035	≤0.035	-----	-----	360~460	≥20
20	0.17~0.23	0.17~0.37	0.35~0.65	≤0.035	≤0.035	-----	-----	420~530	≥24
45	0.42~0.45	0.17~0.37	0.50~0.80	≤0.035	≤0.035	-----	-----	≥550	≥14
Q345B (16Mn)	≤0.20	≤0.50	≤1.70	≤0.035	≤0.035	-----	≥345	470~630	≥24
Q345C (16MnA)	≤0.20	≤0.50	≤1.70	≤0.030	≤0.030	≥0.015	≥345/450	470~630	≥24