

HOT ROLLED MATERIAL
COMPOSITION REFERENCE TABLE

Contact Us: +8613652091506 sales01@royalsteelgroup.com www.royalsteelgroup.com

Types	Steel Grade	Chemical Composition(%)								
		C	Si	Mn	S	P	Cr	Mo	Ni	其他元素 Other Elements
Carbon Steel for Machine Structure	S10C	0.08~0.13	0.15~0.35	0.3~0.60	0.015max	0.025max				
	S15C	0.13~0.18	0.15~0.35	0.3~0.60	0.015max	0.025max				
	S20C	0.18~0.23	0.15~0.35	0.30~0.60	0.015max	0.025max				
	S35C	0.32~0.38	0.15~0.35	0.60~0.90	0.015max	0.025max				
	S45C	0.42~0.48	0.15~0.35	0.60~0.90	0.015max	0.025max				
	S50C	0.47~0.53	0.15~0.35	0.60~0.90	0.015max	0.025max				
	S55C	0.52~0.58	0.15~0.35	0.60~0.90	0.015max	0.025max				
	SAE1018	0.14~0.20	0.15~0.30	0.60~0.90	0.015max	0.025max				
	SAE1020	0.17~0.23	0.15~0.30	0.30~0.60	0.015max	0.025max				
	SAE1035	0.31~0.3	80.15~0.30	0.60~0.90	0.015max	0.025max				
	SAE1045	0.42~0.50	0.15~0.30	0.60~0.90	0.015max	0.025max				
	SAE1050	0.47~0.55	0.15~0.30	0.60~0.90	0.015max	0.025max				
	SAE1055	0.52~0.60	0.15~0.30	0.60~0.90	0.015max	0.025max				
	SAE1070	0.65~0.80	0.15~0.30	0.60~0.90	0.015max	0.025max				
Carbon Tool Steel	SAE1078	0.72~0.86	0.15~0.30	0.30~0.60	0.015max	0.025max				
	SK5	0.80~0.90	0.35max	0.50max	0.015max	0.025max				
Alloy Steel for Structural Use	15Cr	0.12~0.18	0.17~0.37	0.40~0.70	0.015max	0.025max	0.70~1.00			
	20Cr	0.18~0.24	0.17~0.37	0.40~0.70	0.015max	0.025max	0.70~1.00			
	40Cr	0.37~0.44	0.17~0.37	0.50~0.80	0.015max	0.025max	0.80~1.10			
	15CrMo	0.12~0.18	0.17~0.37	0.40~0.70	0.015max	0.025max	0.80~1.10	0.40~0.55		
	20CrMo	0.17~0.24	0.17~0.37	0.40~0.70	0.015max	0.025max	0.80~1.10	0.15~0.25		
	30CrMo	0.26~0.34	0.10~0.30	0.40~0.70	0.015max	0.025max	0.80~1.10	0.15~0.25		
	35CrMo	0.32~0.40	0.17~0.37	0.40~0.70	0.015max	0.025max	0.80~1.10	0.15~0.25		
	34CrMo4	0.30~0.37	0.40max	0.60~0.90	0.015max	0.025max	0.90~1.20	0.15~0.30		
	42CrMo4	0.38~0.45	0.40max	0.60~0.90	0.015max	0.025max	0.90~1.20	0.15~0.30		
	SNCM220	0.17~0.23	0.15~0.35	0.60~0.90	0.015max	0.025max	0.40~0.65	0.15~0.30	0.40~0.70	
	H42B	0.37~0.45	0.17~0.37	0.70~1.00	0.015max	0.025max	0.25max		0.20max	
	20MnB5	0.17~0.23	0.40max	1.10~1.40	0.015max	0.025max			0.20max	0.0008~0.0050 (B)
	26MnB5	0.23~0.28	0.40max	1.10~1.40	0.015max	0.025max	0.10~0.20		0.20max	0.0008~0.0050 (B)
	27MnCrB5	0.24~0.30	0.40max	1.10~1.40	0.015max	0.025max	0.40max		0.20max	0.0008~0.0050 (B)
	40MnB	0.37~0.44	0.17~0.37	1.10~1.40	0.015max	0.025max				0.0008~0.0050 (B)
	16MnCr5	0.14~0.19	0.40max	1.00~1.30	0.015max	0.025max	0.80~1.10			
	20CrMnTi	0.17~0.23	0.17~0.37	0.80~1.10	0.015max	0.025max	1.10~1.30			0.04~0.10 (Ti)
	40CrMn	0.37~0.45	0.17~0.37	0.90~1.20	0.015max	0.025max	0.90~1.20			
	50Mn2V	0.48~0.57	0.30max	1.40~1.80	0.015max	0.025max	0.30max			0.08~0.16 (V)
Alloy Tool Steel	75Cr1	0.72~0.80	0.20~0.45	0.60~0.90	0.015max	0.025max	0.30~0.60			
	8CrV/80CrV2	0.75~0.85	0.20~0.40	0.30~0.60	0.015max	0.025max	0.40~0.70			0.15~0.25 (V)
Spring Steel	50CrV4	0.47~0.55	0.40max	0.70~1.10	0.015max	0.025max	0.90~1.20			0.10~0.25 (V)
	58CrV4	0.55~0.62	0.15~0.35	0.75~0.95	0.015max	0.025max	0.90~1.20			0.10~0.16 (V)
	65Mn	0.62~0.70	0.17~0.37	0.90~1.20	0.015max	0.025max	0.30max			
	SUP6	0.56~0.64	1.5~1.8	0.7~1.0	0.015max	0.025max				
	SUP10	0.47~0.55	0.15~0.35	0.65~0.95	0.015max	0.025max				
	60Si2MnA	0.56~0.64	1.60~2.00	0.70~1.00	0.015max	0.025max				
	C67S	0.65~0.72	0.15~0.35	0.60~0.90	0.015max	0.025max				