

HOT ROLLED MATERIAL COMPOSITION REFERENCE TABLE

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| 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 | | | | |