**Международные стандарты стали**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Materials | America | China | Chemical Requirements | | | | | | | | | | Min/Max temp, °C |
| ASTM/AISI/ SAE/ASME | GB | С | Mn | Si | p | s | Cr | Ni | MO | Си | V |
| Cast Steel | | | Nominal or Maximum, % | | | | | | | | | | |
| Carbon Steel | ASTM A216-WCA | WCA | 0.25 | 0.70 | 0.60 | 0.040 | 0.045 | 0.50 | 0.50 | 0.20 | 0.30 | 0.03 | -29...+425 |
| ASTM A216-WCB | WCB | 0.30 | 0.70 | 0.60 | 0.040 | 0.045 | 0.50 | 0.50 | 0.20 | 0.30 | 0.03 | -29...+425 |
| ASTM A216-WCС | WCC | 0.25 | 1.20 | 0.60 | 0.040 | 0.045 | 0.50 | 0.50 | 0.20 | 0.30 | 0.03 | -29...+425 |
| Cast Steel | | |  | | | | | | | | | | |
| Crome-Moliybdenium Steel | ASTM A217-WC1 | ZG20Mo | 0.25 | 0.50-0.80 | 0.60 | 0.040 | 0.045 | 0.35 | 0.45-0.65 | 0.45-0.65 | 0.50 | **-** | -29...+425 |
| ASTM A217-WC6 | 15СrМo | 0.05-0.20 | 0.50-0.80 | 0.60 | 0.040 | 0.045 | 1.00-1.50 | 0.50 | 0.45-0.65 | 0.50 | **-** | -29...+593 |
| ASTM A217-WC9 | 12Cr1Mo1V | 0.05-0.18 | 0.40-0.70 | 0.60 | 0.040 | 0.045 | 2.00-2.75 | 0.50 | 0.90-1.20 | 0.50 | - | -29...+593 |
| ASTM A217-C5 | 1Сr5Мo | 0.20 | 0.40-0.70 | 0.75 | 0.040 | 0.045 | 4.00-6.50 | 0.50 | 0.45-0.65 | 0.50 | - | -29...+649 |
| ASTM A217-C12 | 9Сr1Мo | 0.20 | 0.35-0.65 | 1.00 | 0.040 | 0.045 | 8.00-10.0 | 0.50 | 0.90-1.20 | 0.50 | **-** | -29...+649 |
| Cast Steel | | |  | | | | | | | | | | |
| Stainless Steel | ASTM A351-CF8 | 0Cr18Ni9 | 0.08 | 1.50 | 2.00 | 0.040 | 0.040 | 18.0-21.0 | 8.0-11.0 | 0.50 | **-** | **-** | -29...+593 |
| ASTM A351-CF8M | 1Cr18Ni12Mo2Ti | 0.08 | 1.50 | 1.50 | 0.040 | 0.040 | 18.0-21.0 | 9.0-12.0 | 2.0-3.0 | **-** | **-** | -29...+593 |
| ASTM A351-CF3 | 00Cr18Ni10 | 0.03 | 1.50 | 2.00 | 0.040 | 0.040 | 17.0-21.0 | 8.0-12.0 | 0.50 | - | - | -29...+425 |
| ASTM A351-CF3M | 00Cr17Ni14Mo2 | 0.03 | 1.50 | 1.50 | 0.040 | 0.040 | 17.0-21.0 | 9.0-13..0 | 2.0-3.0 | **-** | **-** | -29...+454 |
| ASTM A351-CN7M |  | 0.07 | 1.50 | 1.50 | 0.040 | 0.040 | 19.0-22.0 | 27.5-30.35 | 2.0-3.0 | 3.0-4.0 | **-** | -29...+425 |
| Cast Steel | | |  | | | | | | | | | | |
| Carbon Steel | ASTM A352-LCB | LCB | 0.30 | 1.00 | 0.60 | 0.040 | 0.045 | 0.50 | 0.50 | 0.20 | 0.30 | 0.03 | -46...+425 |
| ASTM A352-LCC | LCC | 0.25 | 1.20 | 0.60 | 0.040 | 0.045 | 0.50 | 0.50 | 0.20 | 0.30 | 0.03 | -46...+425 |
| ASTM A352-LC1 |  | 0.25 | 0.50-0.80 | 0.60 | 0.040 | 0.045 | **-** | **-** | 0.45-0.65 | - | **-** | -59...+425 |
| ASTM A352-LC2 | ZGOCrMnVA1 | 0.25 | 0.50-0.80 | 0.60 | 0.040 | 0.045 | **-** | 2.00-3.00 | **-** | **-** | **-** | -73...+425 |
| ASTM A352-LC3 |  | 0.15 | 0.50-0.80 | 0.60 | 0.040 | 0.045 | **-** | 3.00-4.00 | **-** | **-** | **-** | -101...+425 |
| Forged Steel | | |  | | | | | | | | | | |
| Carbon Steel | ASTM A105 | 25 | 0.35 | 0.60-1.05 | 0.35 | 0.040 | 0.050 | 0.30 | 0.40 | 0.12 | 0.40 | 0.03 | -40...+425 |
| ASTM A350-LF1 |  | 0.30 | 1.35 | 0.15-0.30 | 0.035 | 0.040 | 0.30 | 0.40 | 0.12 | 0.40 | 0.03 | -29...+343 |
| ASTM A350-LF2 |  | 0.30 | 1.35 | 0.15-0.30 | 0.035 | 0.040 | 0.30 | 0.40 | 0.12 | 0.40 | 0.03 | -46...+425 |
| ASTM A350-LF3 |  | 0.20 | 0.90 | 0.20-0.35 | 0.035 | 0.040 | 0.30 | 3.25-3.7 | 0.12 | 0.40 | 0.03 | -101 +425 |
| ASTM A350-LF9 |  | 0.20 | 0.40-1.06 | **-** | 0.035 | 0.040 | 0.30 | 1.60-2.24 | 0.12 | 0.75-1.25 | 0.03 | -73 +425 |
| Forged Steel | | |  |  |  |  |  |  |  |  |  |  |  |
| Stainless Steel | ASTMA182-F304 | 0Cr18Ni9 | 0.08 | 2.00 | 1.00 | 0.040 | 0.030 | 18.0-20.0 | 8.0-11.0 | **-** | **-** | **-** | -29...+593 |
| ASTM A182-F3016 | 0Cr17Ni12Mo2 | 0.08 | 2.00 | 1.00 | 0.040 | 0.030 | 16.0-18.0 | 10.0-14.0 | 2.0-3.0 | **-** | **-** | -29...+593 |
| ASTM A182-F304L | 00Cr18Ni10 | 0.03 | 2.00 | 1.00 | 0.045 | 0.030 | 18.0-20.0 | 8.0-13.0 | **-** | **-** | - | -29...+425 |
| ASTM A182-F316L | 00Cr17Ni14Mo2 | 0.03 | 2.00 | 1.00 | 0.045 | 0.030 | 16.0-18.0 | 10.0-15.0 | 2.0-3.0 | - | - | -29...+425 |