



## Steel Grade Equivalency Table (EN, SAE/AISI, UNS, DIN, BS, UNI, JIS)

The table depicted below compares common grades of materials from various international specifications.  
Note: Materials compared, are to the nearest available grade and may have slight variations in actual chemistry.

### Comparison of steel grades by chemistry

| EN #                    | EN name     | SAE       | UNS    | DIN         | BS 970        | UNI            | JIS        |
|-------------------------|-------------|-----------|--------|-------------|---------------|----------------|------------|
| <b>Carbon steels</b>    |             |           |        |             |               |                |            |
| 1.1141                  | C15D        | 1018      |        | CK15        | 040A15        | C15            | S15        |
| 1.0401                  | C18D        |           |        | C15         | 080M15        | C16            | S15CK      |
| 1.0453                  |             |           |        | C16.8       | 080A15        | 1C15           | S15C       |
|                         |             |           |        |             | EN3B          |                |            |
| 1.0503                  | C45         | 1045      |        | C45         | 060A47        | C45            | S45C       |
| 1.1191                  |             |           |        | CK45        | 080A46        | 1C45           | S48C       |
| 1.1193                  |             |           |        | CF45        | 080M46        | C46            |            |
| 1.1194                  |             |           |        | CQ45        |               | C43            |            |
| 1.0726                  | 35S20       | 1140/1146 |        | 35S20       | 212M40        |                |            |
| 1.0727                  | 45S20       |           |        | 45S20       | En8M          |                |            |
| 1.0715                  | 11SMn37     | 1215      |        | 9SMn28      | 230M07        | CF9SMn28       | SUM 25     |
| 1.0736                  |             |           |        | 9SMn36      | En1A          | CF9SMn36       | SUM 22     |
| 1.0718                  | 11SMnPb30   | 12L14     |        | 9SMnPb28    | 230M07 Leaded | CF9SMnPb29     | SUM 22L    |
| 1.0737                  | 11SMnPb37   |           |        | 9SMnPb36    | En1A Leaded   | CF9SMnPb36     | SUM 23L    |
|                         |             |           |        |             |               |                | SUM 24L    |
| <b>Alloy steels</b>     |             |           |        |             |               |                |            |
| 1.7218                  |             | 4130      |        | 25CrMo4     | 708A30        | 25CrMo4 (KB)   | SCM 420    |
|                         |             |           |        | GS-25CrMo4  | CDS110        | 30CrMo4        | SCM 430    |
|                         |             |           |        |             |               |                | SCCrM1     |
| 1.7223                  | 42CrMo4     | 4140/4142 |        | 41CrMo4     | 708M40        | 41CrMo4        | SCM 440    |
| 1.7225                  |             |           |        | 42CrMo4     | 708A42        | 38CrMo4 (KB)   | SCM 440H   |
| 1.7227                  |             |           |        | 42CrMoS4    | 709M40        | G40 CrMo4      | SNB 7      |
| 1.3563                  |             |           |        | 43CrMo4     | En19          | 42CrMo4        | SCM 4M     |
|                         |             |           |        |             | En19C         |                | SCM 4      |
| 1.6582                  | 34CrNiMo6   | 4340      |        | 34CrNiMo6   | 817M40        | 35NiCrMo6 (KB) | SNCM 447   |
| 1.6562                  |             |           |        | 40NiCrMo8-4 | En24          | 40NiCrMo7 (KB) | SNB24-1-5  |
| 1.6543                  | 20NiCrMo2-2 | 8620      |        | 21NiCrMo22  | 805A20        |                |            |
| 1.6523                  |             |           |        | 21NiCrMo2   | 805M20        |                |            |
| <b>Stainless steels</b> |             |           |        |             |               |                |            |
| 1.431                   | X10CrNi18-8 | 301       | S30100 |             |               |                |            |
| 1.4318                  | X2CrNi18-7  | 301LN     |        |             |               |                |            |
| 1.4305                  | X8CrNi18-9  | 303       | S30300 | X10CrNi18-9 | 202S 21       | X10CrNi18-09   | SUS 303    |
|                         |             |           |        |             | En58M         |                |            |
|                         | X2CrNi19-11 | 304       |        | X5CrNi18-9  | 304S 15       |                | SUS 304    |
|                         | X2CrNi18-10 |           |        | X5CrNi18-10 | 304S 16       |                | SUS 304CSP |
|                         |             |           |        | XCrNi19-9   | 304S 18       |                |            |
|                         |             |           |        |             | 304S 25       |                |            |

|                    |                    |       |        |                 |         |                 |          |
|--------------------|--------------------|-------|--------|-----------------|---------|-----------------|----------|
| 1.4301             |                    |       | S30400 |                 | En58E   | X5CrNi18-10     |          |
| 1.4306             | X2CrNi19-11        | 304L  | S30403 |                 | 304S 11 |                 | SUS304L  |
| 1.4311             | X2CrNiN18-10       | 304LN | S30453 |                 |         |                 |          |
| 1.4948             | X6CrNi18-11        | 304H  | S30409 |                 |         |                 |          |
| 1.4303             | X5CrNi18-12        | 305   | S30500 |                 |         |                 |          |
| 1.4401             | X5CrNiMo17-12-2    | 316   | S31600 | X5CrNiMo17 12 2 | 316S 29 | X5CrNiMo17 12   | SUS 316  |
| 1.4436             | X5CrNiMo18-14-3    |       |        | X5CrNiMo17 13 3 | 316S 31 | X5CrNiMo17 13   | SUS316TP |
|                    |                    |       |        | X5CrNiMo 19 11  | 316S 33 | X8CrNiMo17 13   |          |
|                    |                    |       |        | X5CrNiMo 18 11  | En58J   |                 |          |
| 1.4404             | X2CrNiMo17-12-2    | 316L  | S31603 |                 | 316S 11 |                 | SUS316L  |
| 1.4406             | X2CrNiMoN17-12-2   | 316LN | S31653 |                 |         |                 |          |
| 1.4429             | X2CrNiMoN17-13-3   |       |        |                 |         |                 |          |
| 1.4571             |                    | 316Ti | S31635 | X6CrNiMoTi17-12 | 320S 33 |                 |          |
| 1.4438             | X2CrNiMo18-15-4    | 317L  | S31703 |                 |         |                 |          |
| 1.4541             |                    | 321   | S32100 | X6CrNiTi18-10   | 321S 31 |                 | SUS321   |
| 1.4878             | X12CrNiTi18-9      | 321H  | S32109 |                 |         |                 |          |
| 1.4512             | X6CrTi12           | 409   | S40900 |                 |         |                 |          |
|                    |                    | 410   | S41000 |                 |         |                 |          |
| 1.4016             |                    | 430   | S43000 | X6Cr17          | 430S 17 |                 | SUS430   |
|                    |                    | 440A  | S44002 |                 |         |                 |          |
| 1.4112             |                    | 440B  | S44003 |                 |         |                 |          |
| 1.4125             |                    | 440C  | S44004 |                 |         |                 |          |
| 1.4104             |                    | 440F  | S44020 | X14CrMoS17      |         |                 | SUS430F  |
| 1.4539             | X1NiCrMoCu25-20-5  | 904L  | N08904 |                 |         |                 |          |
| 1.4547             | X1CrNiMoCuN20-18-7 |       | S31254 |                 |         |                 |          |
| <b>Tool steels</b> |                    |       |        |                 |         |                 |          |
| 1.2363             | X100CrMoV5         | A-2   |        | X100CrMoV51     | BA 2    | X100CrMoV5-1 KU | SKD 12   |
| 1.2379             | X153CrMoV12        | D-2   |        | X153CrMoV12-1   | BD 2    | X155CrVMo12-1   | SKD 11   |
| 1.251              |                    | O-1   |        | 100MnCrW4       | Bo 1    | 95MnWCr-5 KU    |          |