SteelEquivalents.com

Material datasheet
As of Aug 20, 2026

MATERIAL NUMBER 1.0736 · CLASS 1.0

# 12SMn35

## Material no. 1.0736

also listed as 11 SMn 37

Chemical composition, mechanical and physical property values, and 23 standard designations from 11 regions.

| DENSITY | OTHER DESIGNATIONS | PROPERTY VALUES |
|---|---|---|
| 7.85 g/cm³ | 23 in 11 regions | 6 on file |

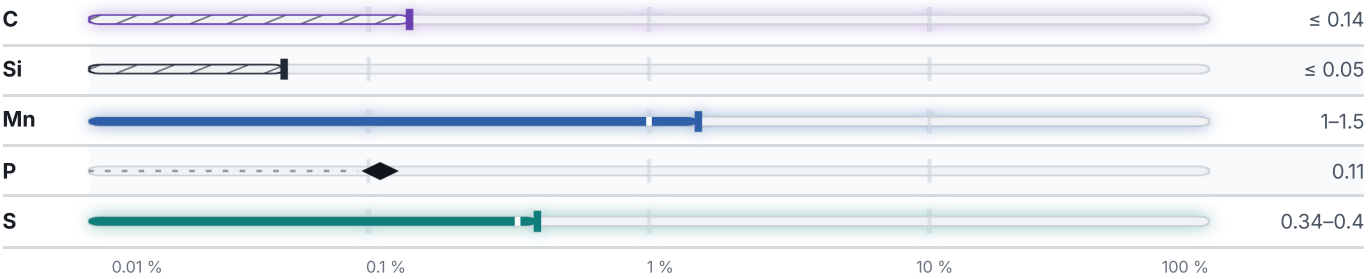
## Chemical composition

Mass fraction in %

What this alloy is


Iron — the balance, never listed by a standard — 98.1 % · Mn — 1.3 % · S — 0.4 % · C — 0.1 % · Traces & impurities · 0.2 %

Logarithmic scale, 0.01 % to 100 % — every value here compares directly, decade by decade.




The scale is logarithmic, not the element's raw share of the alloy — the only honest way to fit 0.01 % and 100 % in one picture, and it means every value here can be compared with every other.

## Predicted transformation temperatures

Not enough recorded composition to predict a transformation temperature for this grade — missing: Ni, Cr, Mo.

## Mechanical properties

11 values across 2 conditions

| COLD DRAWN / HARD | RM N/mm² | A % |
|---|---|---|
| 5 – 10 | 510–810 | 6 |

| COLD DRAWN / HARD | RM N/mm² | A % |
|---|---|---|
| 10 – 16 | 490–760 | 7 |
| 16 – 40 | 460–710 | 8 |
| 40 – 63 | 400–650 | 9 |
| 63 – 100 | 360–630 | 9 |

| AS ROLLED AND TURNED | HB |
|---|---|
| As rolled and turned | 107–169 |

## Physical properties

1 values

| PROPERTY | VALUE | UNIT |
|---|---|---|
| Density | 7.85 | g/cm³ |

## Designations across standards

23 designations · 6 documented as identical

### United Kingdom (6)

| | |
|---|---|
| 1B | bs |
| 230M07 | bs |
| 240M07 | bs |
| 240M07EN | bs |
| 240M07EN 1B | bs |
| EN1B | bs |

### Europe (3)

| | |
|---|---|
| 1.0736 | din-en |
| 11 SMn 37 This grade's own name | din-en |
| 9 SMn 36 This grade's own name | din-en |

### Spain (3)

| | |
|---|---|
| 12SMn35 | une |
| F.2113 | une |
| F.2113-12 SMn 35 | une |

### Japan (3)

| | |
|---|---|
| 12SMn35 This grade's own name | jis |
| SUM23 | jis |
| SUM25 | jis |

### United States (2)

| | |
|---|---|
| G12150 This grade's own name | uns |
| 1215 This grade's own name | aisi-sae |

### France (1)

| | |
|---|---|
| S300 | afnor |

### China (1)

| | |
|---|---|
| Y13 | gb |

### Russia / CIS (1)

| | |
|---|---|
| A12 | gost |

### Italy (1)

| | |
|---|---|
| CF9SMn36 | uni |

### Latin America (1)

| | |
|---|---|
| 1215 | copant |

### South Korea (1)

| | |
|---|---|
| SUM25 This grade's own name | ks |

**Note on use.** The data is compiled to the best of our knowledge from publicly available standards and manufacturer documentation. It replaces neither material testing nor an inspection document to EN 10204. Please request a mill certificate to EN 10204 2.1, 3.1 or 3.2 together with your enquiry. The standard in its current valid edition always prevails.

## Enquiry about 12SMn35

Quotation, availability, mill certificate or a technical question — directly on the material page.

Start an enquiry

| DATASHEET ONLINE | GRADE SEARCH | MATERIAL NO. | ISSUED |
|---|---|---|---|
| View the material page | Search all grades | 1.0736 | Aug 20, 2026 |