

## MATERIAL NUMBER 1.0405 · CLASS 1.0

## 1.0405

Chemical composition, mechanical and physical property values, and 13 standard designations from 3 regions.

## DENSITY

**7.85** g/cm<sup>3</sup>

## OTHER DESIGNATIONS

**13** in 3 regions

## PROPERTY VALUES

**6** on file

## Chemical composition

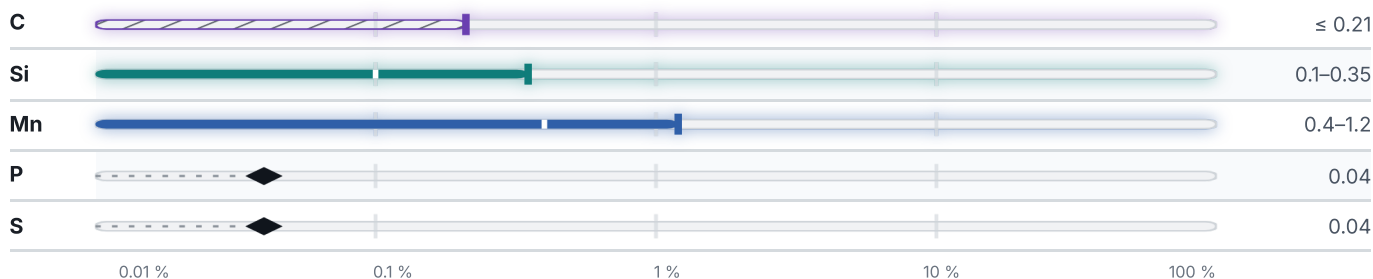
Mass fraction in %

What this alloy is



● Iron — the balance, never listed by a standard — 98.7 % ● Mn — 0.8 % ● Si — 0.2 % ● C — 0.2 % ● Traces & impurities · 0.1 %

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

9 values across 1 conditions

| NORMALIZED | REH<br>N/mm <sup>2</sup> | RM<br>N/mm <sup>2</sup> |
|------------|--------------------------|-------------------------|
| ≤ 16       | 265                      | —                       |
| 16 – 40    | 255                      | —                       |

| NORMALIZED | REH<br>N/mm <sup>2</sup> | RM<br>N/mm <sup>2</sup> |
|------------|--------------------------|-------------------------|
| 40 – 60    | 245                      | –                       |
| 60 – 100   | 215                      | –                       |
| ≤ 100      | –                        | 410–530                 |
| 100 – 150  | 200                      | 400–530                 |
| 150 – 250  | 185                      | 390–530                 |

Physical properties

1 values

| PROPERTY | VALUE | UNIT              |
|----------|-------|-------------------|
| Density  | 7.85  | g/cm <sup>3</sup> |

Designations across standards

13 designations · 5 documented as identical

|             |                             |                 |                          |
|-------------|-----------------------------|-----------------|--------------------------|
| Europe8     |                             | United States4  |                          |
| 1.0405      | din-en                      | K02707          | This grade's own nameuns |
| P255G1TH    | This grade's own namedin-en | K03006          | This grade's own nameuns |
| P265GH      | This grade's own namedin-en | A 106 Grade B   | astm                     |
| P265GH TC1  | din-en                      | A 234 Grade WPB | astm                     |
| P265GH TC2  | din-en                      |                 |                          |
| St 45.8     | This grade's own namedin-en | Czechia         | 1                        |
| St 45.8/I   | din-en                      | 12022           | csn                      |
| St 45.8/III | din-en                      |                 |                          |

**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 1.0405

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

[Start an enquiry](#)

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MATERIAL NO.  
1.0405

ISSUED  
Aug 20, 2026