

MATERIAL NUMBER 1.0305 · CLASS 1.0

# A 106 Grade A

## Material no. 1.0305

also listed as P235G1TH

Chemical composition, mechanical and physical property values, and 16 standard designations from 3 regions.

| DENSITY                       | OTHER DESIGNATIONS     | PROPERTY VALUES  |
|-------------------------------|------------------------|------------------|
| <b>7.85</b> g/cm <sup>3</sup> | <b>16</b> in 3 regions | <b>6</b> on file |

### Chemical composition

Mass fraction in %

What this alloy is



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       | 235                      | —                       |

| NORMALIZED | REH<br>N/mm <sup>2</sup> | RM<br>N/mm <sup>2</sup> |
|------------|--------------------------|-------------------------|
| 16 – 40    | 225                      | –                       |
| 40 – 60    | 215                      | –                       |
| 60 – 100   | 200                      | –                       |
| ≤ 100      | –                        | 360–480                 |
| 100 – 150  | 185                      | 350–480                 |
| 150 – 250  | 170                      | 340–480                 |

Physical properties

1 values

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

Designations across standards

16 designations · 8 documented as identical

|                                |        |                              |      |
|--------------------------------|--------|------------------------------|------|
| Europe                         | 8      | United States                | 7    |
| 1.0305                         | din-en | K01200 This grade's own name | uns  |
| P235G1TH This grade's own name | din-en | K01201 This grade's own name | uns  |
| P235GH This grade's own name   | din-en | K01807 This grade's own name | uns  |
| P235GH TC1                     | din-en | K02501 This grade's own name | uns  |
| P235GH TC2                     | din-en | K02504 This grade's own name | uns  |
| St 35.8 This grade's own name  | din-en | A 106 Grade A                | astm |
| St 35.8/I                      | din-en | A 234 Grade WPA              | astm |
| St 35.8/III                    | din-en | Czechia                      | 1    |
|                                |        | 12021                        | csn  |

**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 A 106 Grade A

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 | 1.0305       | Aug 20, 2026 |