

MATERIAL NUMBER 1.4460 · CLASS 1.4

# S31200

Material no. 1.4460

also listed as X 4 CrNiMoN 27 5 2

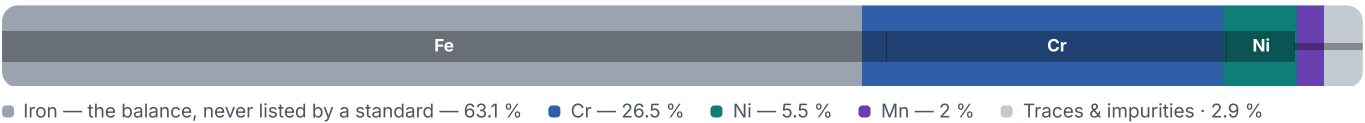
Chemical composition, mechanical and physical property values, and 47 standard designations from 9 regions.

|                             |                                              |                                      |
|-----------------------------|----------------------------------------------|--------------------------------------|
| DENSITY<br><b>7.8</b> g/cm³ | OTHER DESIGNATIONS<br><b>47</b> in 9 regions | PROPERTY VALUES<br><b>11</b> on file |
|-----------------------------|----------------------------------------------|--------------------------------------|

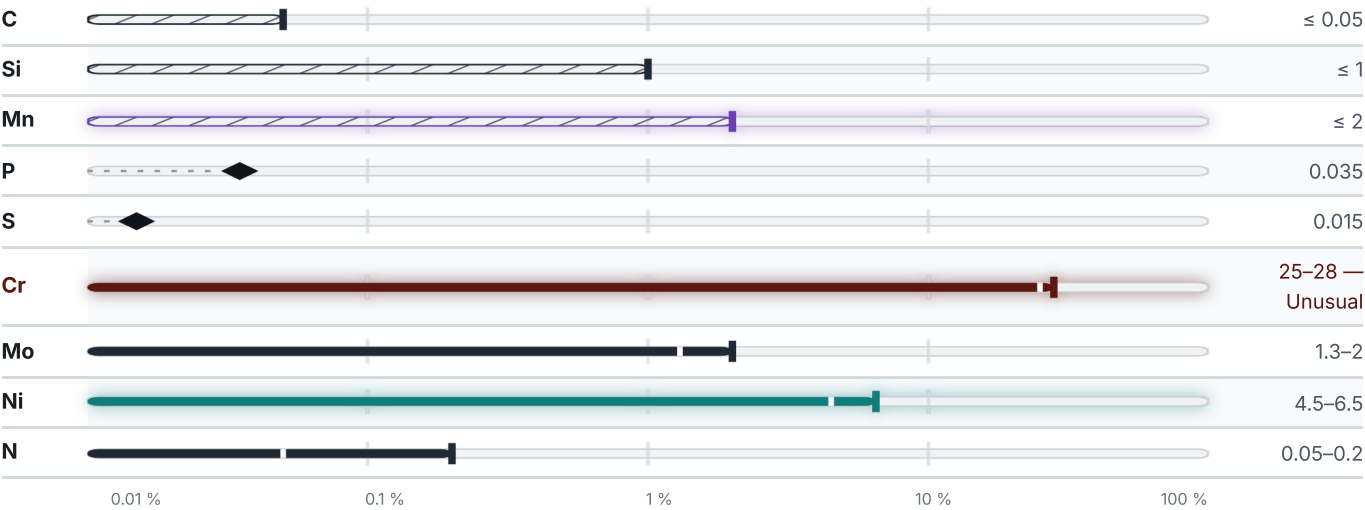
Chemical composition

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

This grade's composition falls outside the published model's validated range (a low-alloy composition window), so no

transformation temperature is predicted here.

Mechanical properties

23 values across 6 conditions

| CONDITION · DIMENSION                                 | RM<br>N/mm² | RE<br>N/mm² | A<br>%  | HB           | HRC          | HV      |
|-------------------------------------------------------|-------------|-------------|---------|--------------|--------------|---------|
| Plate/Sheet Hot-rolled                                | 590         | 390         | 18      | –            | –            | –       |
| Hot-rolled                                            | –           | –           | –       | 277          | 29           | 292     |
| CONDITION · DIMENSION                                 | RM<br>N/mm² | RE<br>N/mm² | A5<br>% | Z<br>%       | KCU<br>kJ/m² | HB      |
| Forging, GOST 25054-81                                | 539         | 343         | 18–22   | 35–40        | 390–780      | –       |
| 08KH21N6M2T ( 08X21H6M2T ) ,<br>Forging GOST 25054-81 | –           | –           | –       | –            | –            | 140–200 |
| SOFT ANNEALED                                         |             |             |         |              |              | HB      |
| Soft annealed                                         |             |             |         |              |              | 260     |
| QUENCHING 950 - 1050°C,COOLING<br>AIR                 | RM<br>N/mm² | RE<br>N/mm² | A5<br>% | Z<br>%       |              |         |
| 60                                                    | 590         | 345         | 25      | 45           |              |         |
| CONDITION · DIMENSION                                 | RM<br>N/mm² | RE<br>N/mm² | A5<br>% | KCU<br>kJ/m² |              |         |
| Sheet trick, GOST 7350-77                             | 590         | 345         | 20      | 590          |              |         |
| CONDITION · DIMENSION                                 |             |             |         | RM<br>N/mm²  | A5<br>%      |         |
| Sheet thin, GOST 5582-75                              |             |             |         | 590          | 22           |         |

Physical properties

2 values

| CONDITION · DIMENSION | RHO<br>g/cm³ | E<br>GPa | ALPHA<br>10^-6/K | LAMBDA<br>W/(m·K) | RHO_EL<br>nΩ·m |
|-----------------------|--------------|----------|------------------|-------------------|----------------|
| 20                    | 7.85         | 193      | –                | –                 | 700            |
| 100                   | –            | 185      | 9.5              | 14.6              | –              |
| 200                   | –            | 178      | 13.8             | 15.9              | –              |
| 300                   | –            | 169      | 16               | 17.5              | –              |
| 400                   | –            | 164      | 16               | 19.2              | –              |
| 500                   | –            | 162      | 16.3             | 20.5              | –              |
| 600                   | –            | 153      | 16.7             | 21.7              | –              |
| 700                   | –            | 139      | 17.1             | 21.7              | –              |

| CONDITION · DIMENSION | RHO<br>g/cm³ | E<br>GPa | ALPHA<br>10 <sup>-6</sup> /K | LAMBDA<br>W/(m·K) | RHO_EL<br>nΩ·m |
|-----------------------|--------------|----------|------------------------------|-------------------|----------------|
| 800                   | –            | 136      | 17.1                         | 24.3              | –              |
| 900                   | –            | –        | 17.4                         | 25.5              | –              |
| PROPERTY              |              |          | VALUE                        | UNIT              |                |
| Density               |              |          | 7.8                          | g/cm³             |                |

Technological properties

| PROPERTY    | VALUE                | UNIT |
|-------------|----------------------|------|
| Weldability | without limitations. |      |

Designations across standards

47 designations · 6 documented as identical

| United States |                       | 23       | Japan                |                       | 5      |
|---------------|-----------------------|----------|----------------------|-----------------------|--------|
| S31200        | This grade's own name | uns      | SCS11                |                       | jis    |
| S31260        | This grade's own name | uns      | SUS 329J1            |                       | jis    |
| S32900        | This grade's own name | uns      | SUS 329J1FB          |                       | jis    |
| 329           | This grade's own name | aisi-sae | SUS 329J1SUS 329J1TB |                       | jis    |
| J92740        |                       | aisi-sae | SUS 329J1TP          |                       | jis    |
| S31260        |                       | aisi-sae |                      |                       |        |
| S32900        |                       | aisi-sae | Spain                |                       | 4      |
| 25Cr-5Ni-Mo-N |                       | astm     | F.3309               |                       | une    |
| 44LN          |                       | astm     | F.3552               |                       | une    |
| A1022         |                       | astm     | X 8 CrNiMo 27-05     |                       | une    |
| A240          |                       | astm     | X8CrNiMo26-6         |                       | une    |
| A480          |                       | astm     |                      |                       |        |
| A781 Grade 3A |                       | astm     | Sweden               |                       | 3      |
| A789          |                       | astm     | 2324                 |                       | ss     |
| A790          |                       | astm     | Duplex 2324          |                       | ss     |
| A928          |                       | astm     | SS2324               |                       | ss     |
| A949          |                       | astm     |                      |                       |        |
| CD6MN         |                       | astm     | Europe               |                       | 2      |
| F2215         |                       | astm     | X 4 CrNiMoN 27 5 2   | This grade's own name | din-en |
| grade F50     |                       | astm     | X3CrNiMoN27-5-2      | This grade's own name | din-en |
| J93371        |                       | astm     |                      |                       |        |
| S31200        |                       | astm     | France               |                       | 1      |
| S32900        |                       | astm     | Z5CND27.05.AZ        |                       | afnor  |
| Russia / CIS  |                       | 7        | China                |                       | 1      |
| 08KH21N6M2T   |                       | gost     | 0Cr26Ni5Mo2          |                       | gb     |
| 08X21H6M2T    |                       | gost     |                      |                       |        |
| 0X21H6M2T     |                       | gost     | Poland               |                       | 1      |
| 10Ch26N5M     |                       | gost     | DUPLEX               |                       | pn     |
| 12KH25N5TMFL  |                       | gost     |                      |                       |        |
| 12X25H5TMΦЛ   |                       | gost     |                      |                       |        |
| ЭП54          |                       | gost     |                      |                       |        |

**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 S31200

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

[Start an enquiry](#)

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**MATERIAL NO.**  
1.4460

**ISSUED**  
Aug 20, 2026