

MATERIAL NUMBER 1.7218 · CLASS 1.7

# F.8330

Material no. 1.7218

also listed as 25CrMo4

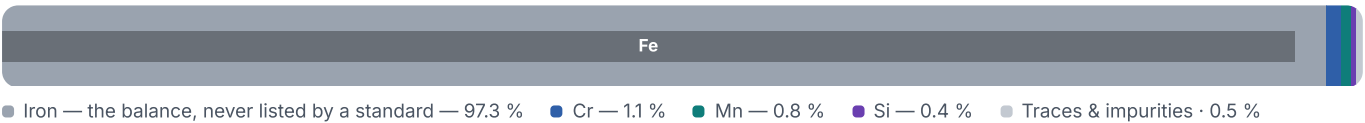
Chemical composition, mechanical and physical property values, and 111 standard designations from 24 regions.

|                              |                                                |                                      |
|------------------------------|------------------------------------------------|--------------------------------------|
| DENSITY<br><b>7.75</b> g/cm³ | OTHER DESIGNATIONS<br><b>111</b> in 24 regions | PROPERTY VALUES<br><b>15</b> on file |
|------------------------------|------------------------------------------------|--------------------------------------|

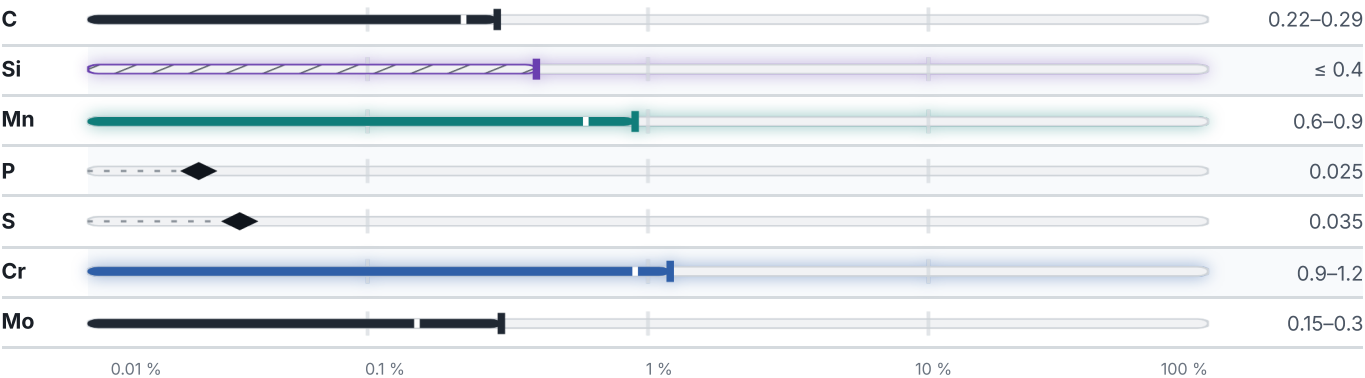
Chemical composition

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.

## Mechanical properties

15 values across 4 conditions

| CONDITION · DIMENSION      | RM<br>N/mm <sup>2</sup> | RE<br>N/mm <sup>2</sup> | A5<br>% | Z<br>% | KCU<br>kJ/m <sup>2</sup> |
|----------------------------|-------------------------|-------------------------|---------|--------|--------------------------|
| Bar, GOST 4543-71          | 930                     | 735                     | 11      | 45     | 780                      |
| ANNEALING 860 - 880°C      | RM<br>N/mm <sup>2</sup> | RE<br>N/mm <sup>2</sup> | A5<br>% | Z<br>% | KCU<br>kJ/m <sup>2</sup> |
| to 100                     | 550                     | 300                     | 18      | 45     | 45                       |
| NORMALIZING 860°C          | RM<br>N/mm <sup>2</sup> | RE<br>N/mm <sup>2</sup> | A5<br>% | Z<br>% | KCU<br>kJ/m <sup>2</sup> |
| 100 - 150                  | 600                     | 350                     | 16      | 45     | 400                      |
| CONDITION · DIMENSION      | HB                      |                         |         |        |                          |
| (annealing) , GOST 4543-71 | 229                     |                         |         |        |                          |

## Physical properties

8 values

| CONDITION · DIMENSION    | RHO<br>g/cm <sup>3</sup> | E<br>GPa | ALPHA<br>10 <sup>-6</sup> /K | LAMBDA<br>W/(m·K) | CP<br>J/(kg·K) | RHO_EL<br>nΩ·m |
|--------------------------|--------------------------|----------|------------------------------|-------------------|----------------|----------------|
| 20                       | 7.82                     | 208      | –                            | –                 | –              | 270            |
| 100                      | 7.8                      | 207      | 12.3                         | 41.9              | 462            | –              |
| 200                      | 7.77                     | 204      | 12.6                         | 40.7              | –              | 334            |
| 300                      | 7.74                     | 197      | 12.9                         | 39.6              | –              | 425            |
| 400                      | 7.7                      | 188      | 13.9                         | 38.4              | –              | 524            |
| 500                      | 7.66                     | 175      | 14.4                         | –                 | –              | 628            |
| 600                      | –                        | 160      | 14.6                         | –                 | –              | 757            |
| PROPERTY                 | VALUE                    |          | UNIT                         |                   |                |                |
| Density                  | 7.75                     |          | g/cm <sup>3</sup>            |                   |                |                |
| Transformation point Ac1 | 757                      |          | °C                           |                   |                |                |
| Transformation point Ac3 | 807                      |          | °C                           |                   |                |                |
| Transformation point Ar3 | 763                      |          | °C                           |                   |                |                |
| Transformation point Ar1 | 693                      |          | °C                           |                   |                |                |

## Technological properties

| PROPERTY          | VALUE                | UNIT |
|-------------------|----------------------|------|
| Weldability       | limited weldability. |      |
| Flake sensitivity | weakly predisposed   |      |

| PROPERTY           | VALUE           | UNIT |
|--------------------|-----------------|------|
| Temper brittleness | not predisposed |      |

## Designations across standards

111 designations · 7 documented as identical

|                                           |          |                                           |       |
|-------------------------------------------|----------|-------------------------------------------|-------|
| <b>United States</b>                      | 13       | <b>France</b>                             | 9     |
| G41300                                    | uns      | 18CrMo4                                   | afnor |
| H41300 <span>This grade's own name</span> | uns      | 25 CD 4 (S)                               | afnor |
| 4118                                      | aisi-sae | 25CD4                                     | afnor |
| 4130                                      | aisi-sae | 25CD4FF                                   | afnor |
| 4130H <span>This grade's own name</span>  | aisi-sae | 25CrMo4                                   | afnor |
| 4130RH <span>This grade's own name</span> | aisi-sae | 34CD4                                     | afnor |
| G41300                                    | aisi-sae | 34CD4FF                                   | afnor |
| G41350                                    | aisi-sae | 34CrMo4                                   | afnor |
| H41300                                    | aisi-sae | 34CrMo4RR                                 | afnor |
| H41350                                    | aisi-sae |                                           |       |
| SAE4130                                   | aisi-sae | <b>Japan</b>                              | 9     |
| 4125                                      | astm     | SCCrM1                                    | jis   |
| A519 Gr4130                               | astm     | SCM 2                                     | jis   |
|                                           |          | SCM418                                    | jis   |
| <b>Spain</b>                              | 12       | SCM420                                    | jis   |
| 25CrMo4                                   | une      | SCM420H                                   | jis   |
| 26CrMo4                                   | une      | SCM425 <span>This grade's own name</span> | jis   |
| 30CrMo4-1                                 | une      | SCM430                                    | jis   |
| 55Cr3                                     | une      | SCM432                                    | jis   |
| AM25CrMo4                                 | une      | SCM822H                                   | jis   |
| AM26CrMo4                                 | une      |                                           |       |
| F.1256                                    | une      | <b>Russia / CIS</b>                       | 9     |
| F.222                                     | une      | 20ChM                                     | gost  |
| F.8330                                    | une      | 20KHM                                     | gost  |
| F.8330-AM25CrMo4                          | une      | 20XM                                      | gost  |
| F.8372                                    | une      | 25ChM                                     | gost  |
| F.8830                                    | une      | 30KHM                                     | gost  |
|                                           |          | 30KHMA                                    | gost  |
| <b>United Kingdom</b>                     | 9        | 30XM                                      | gost  |
| 1717CDS110                                | bs       | 30XMA                                     | gost  |
| 25CrMo4                                   | bs       | cr.30XM                                   | gost  |
| 708A25                                    | bs       |                                           |       |
| 708H20                                    | bs       | <b>Italy</b>                              | 7     |
| 708M20                                    | bs       | 18CrMo4                                   | uni   |
| 708M25                                    | bs       | 25CrMo4                                   | uni   |
| CFS10                                     | bs       | 25CrMo4KB                                 | uni   |
| En20A                                     | bs       | 30CrMo4                                   | uni   |
| S534 <span>This grade's own name</span>   | bs       | 34CrMo4                                   | uni   |
|                                           |          | 35CrMo4                                   | uni   |
|                                           |          | KB                                        | uni   |

|                                             |     |                                            |        |
|---------------------------------------------|-----|--------------------------------------------|--------|
| <b>China</b>                                | 5   | <b>Austria</b>                             | 3      |
| 25CrMo                                      | gb  | 25CrMo5S                                   | onorm  |
| 30CrMn                                      | gb  | BOHLERV330                                 | onorm  |
| 30CrMo                                      | gb  | BOHLERV340                                 | onorm  |
| ML30CrMo                                    | gb  |                                            |        |
| ML30CrMoA                                   | gb  | <b>Europe</b>                              | 2      |
| <b>Sweden</b>                               | 4   | 1.7218                                     | din-en |
| 2225                                        | ss  | 25CrMo4 <span>This grade's own name</span> | din-en |
| 2233                                        | ss  | <b>Czechia</b>                             | 2      |
| 2234                                        | ss  | 15124                                      | csn    |
| SIS 2225 <span>This grade's own name</span> | ss  | 15130                                      | csn    |
| <b>Poland</b>                               | 4   | <b>Romania</b>                             | 2      |
| 18HGM                                       | pn  | 26MoCr11                                   | stas   |
| 20HM                                        | pn  | T30CrMo3                                   | stas   |
| 25HM                                        | pn  |                                            |        |
| L25HM                                       | pn  | <b>Australia / New Zealand</b>             | 2      |
| <b>South Korea</b>                          | 4   | 4130                                       | as-nzs |
| SCCrM1                                      | ks  | 4130H                                      | as-nzs |
| SCM420                                      | ks  | <b>Finland</b>                             | 2      |
| SCM420TK                                    | ks  | 25CrMo4                                    | sfs    |
| SCM430                                      | ks  | G-25CrMo4                                  | sfs    |
| <b>International</b>                        | 3   | <b>Slovakia</b>                            | 1      |
| 20CrMo4                                     | iso | 15 130                                     | stn    |
| 25CrMo4                                     | iso | <b>Latin America</b>                       | 1      |
| 3567                                        | iso | 4130                                       | copant |
| <b>Hungary</b>                              | 3   | <b>Serbia</b>                              | 1      |
| 25CrMo4                                     | msz | Č.4730                                     | srps   |
| CMo 1                                       | msz |                                            |        |
| MCrMo                                       | msz | <b>Belgium</b>                             | 1      |
| <b>Bulgaria</b>                             | 3   | 25CrMo4                                    | nbn    |
| 20ChM                                       | bds |                                            |        |
| 25ChML                                      | bds |                                            |        |
| 25CrMo4                                     | bds |                                            |        |

**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.

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ISSUED

Aug 20, 2026