

MATERIAL NUMBER 1.2842 · CLASS 1.2

# 9KhF / 9KhVG przybliż.

## Material no. 1.2842

also listed as 90MnCrV8

Chemical composition, mechanical and physical property values, and 24 standard designations from 14 regions.

| DENSITY                       | OTHER DESIGNATIONS      | PROPERTY VALUES  |
|-------------------------------|-------------------------|------------------|
| <b>7.85</b> g/cm <sup>3</sup> | <b>24</b> in 14 regions | <b>8</b> on file |

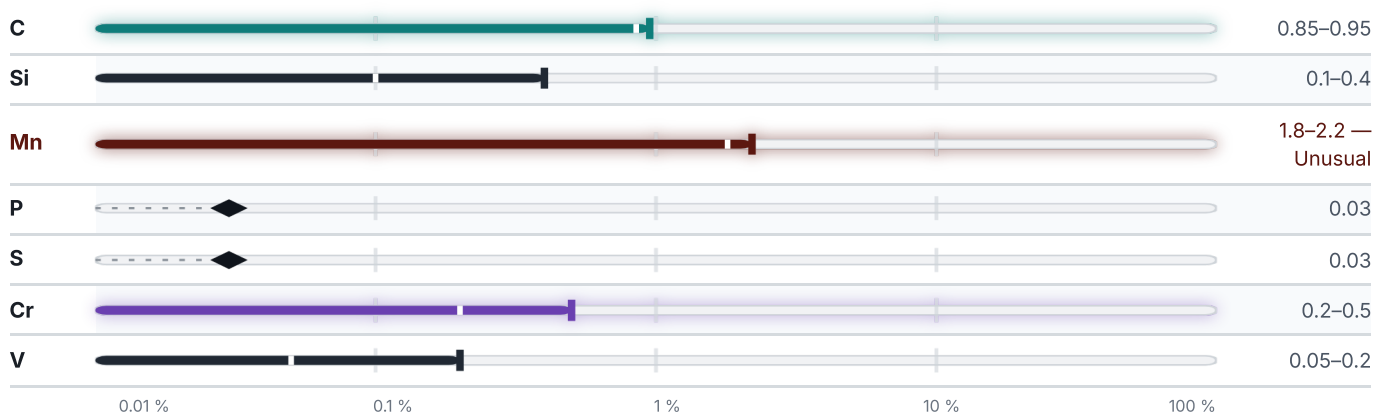
### Chemical composition

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, Mo.

Mechanical properties

1 values across 1 conditions

| SOFT ANNEALED | HB  |
|---------------|-----|
| Soft annealed | 229 |

Physical properties

1 values

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

Heat treatment

3 regimes

| STEP      | TEMPERATURE            | MEDIUM |
|-----------|------------------------|--------|
| Quenching | Temperature not stated | —      |
| Quenching | 780–810 °C             | Oil    |
| Annealing | Temperature not stated | —      |

Designations across standards

24 designations · 3 documented as identical

|                              |          |                                |        |
|------------------------------|----------|--------------------------------|--------|
| France                       | 3        | Czechia                        | 2      |
| 90MCV8                       | afnor    | 19312                          | csn    |
| 90MnV8                       | afnor    | 19313                          | csn    |
| 90MV8                        | afnor    |                                |        |
|                              |          | Slovakia                       | 2      |
| Russia / CIS                 | 3        | 19 312                         | stn    |
| 9ChVG                        | gost     | 19 313                         | stn    |
| 9KhF / 9KhVG przybliż.       | gost     |                                |        |
| 9Г2Φ                         | gost     | Europe                         | 1      |
|                              |          | 90MnCrV8 This grade's own name | din-en |
| United States                | 2        |                                |        |
| T31502 This grade's own name | uns      | Japan                          | 1      |
| O 2 This grade's own name    | aisi-sae | zblížony do SKS93              | jis    |
|                              |          |                                |        |
| United Kingdom               | 2        | China                          | 1      |
| B02                          | bs       | 9Mn2V                          | gb     |
| B02                          | bs       |                                |        |
|                              |          | Croatia                        | 1      |
| International                | 2        | Č3840                          | hrn    |
| 90MnCrV8                     | iso      |                                |        |
| 90MnV2                       | iso      | Poland                         | 1      |
|                              |          | NMV                            | pn     |
| Italy                        | 2        |                                |        |
| 90MnCrV8KU                   | uni      | Austria                        | 1      |
| 90MnVCr8KU                   | uni      | K720                           | onorm  |

**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 9KhF / 9KhVG przybliż.**  
Quotation, availability, mill certificate or a technical question — directly on the material page.

**Start an enquiry**

**DATASHEET ONLINE**  
View the material page

**GRADE SEARCH**  
Search all grades

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**ISSUED**  
Aug 20, 2026