

# Database of Steel and Alloy (Marochnik)

[splav.kharkov.com/en](http://splav.kharkov.com/en)

[Home](#) [European steel grades](#) [Steel and Alloy](#) [Search](#) [Equivalent grades](#) [Grading](#) [GOST Standard](#) [Contacts](#)

YOU HERE: [Steel and Alloy](#) -> [High-temperature or heat-resistant steel and alloy](#)

## Characteristics for grade 30KH13N7S2 ( 30X13H7C2 ).

|                           |                                            |
|---------------------------|--------------------------------------------|
| <b>Grade :</b>            | 30KH13N7S2 ( 30X13H7C2 ) ( 3X13H7C2 ЭИ72 ) |
| <b>Classification :</b>   | High alloy high-temperature steel          |
| <b>Equivalent grades:</b> | <a href="#">Go here</a>                    |

## Chemical composition in % for grade 30KH13N7S2 ( 30X13H7C2 )

| C           | Si    | Mn      | Ni      | S         | P        | Cr      |
|-------------|-------|---------|---------|-----------|----------|---------|
| 0.25 - 0.34 | 2 - 3 | max 0.8 | 6 - 7.5 | max 0.025 | max 0.03 | 12 - 14 |

## Mechanical properties under T=20°C for grade 30KH13N7S2 ( 30X13H7C2 )

| Assortment        | Dimension | Direct. | $\sigma_B$ | $\sigma_T$ | $\delta_5$ | $\psi$ | KCU                 | Heat treatment |
|-------------------|-----------|---------|------------|------------|------------|--------|---------------------|----------------|
| -                 | mm        | -       | MPa        | MPa        | %          | %      | kJ / m <sup>2</sup> | -              |
| Bar, GOST 5949-75 |           |         | 1180       | 785        | 8          | 25     | 200                 |                |

## Equivalent steels for grade 30KH13N7S2 ( 30X13H7C2 )

Warning! Indicated both exact and nearest equivalents.

|        |
|--------|
| USA    |
| -      |
| S63005 |

## Specification : Mechanical properties :

|            |                                             |
|------------|---------------------------------------------|
| $\sigma_B$ | - Tensile strength , [MPa]                  |
| $\sigma_T$ | - Yield stress, [MPa]                       |
| $\delta_5$ | - Specific elongation at fracture , [ % ]   |
| $\psi$     | - Reduction of area , [ % ]                 |
| KCU        | - Impact strength , [ kJ / m <sup>2</sup> ] |
| HB         | - Brinell hardness , [MPa]                  |

Database of steels and alloys (Marochnik) contains information about chemical composition and properties more then 2500 steels and alloys (stainless steel, alloy steel, carbone steel, structural steel, tool steel, cast iron, aluminum alloy, titanium alloy, copper alloy, nickel alloy, magnesium alloy and others).  
Helpfull for specialists in grade technology, structural engineer, mechanical engineer, metallurgy and metal trader

[Top](#)

© 2003 - 2013 All rights reserved. [About program.](#)

The entire risk as to use of the Database of Steel and Alloy (Marochnik) content is assumed by you the user

