

# 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](#) -> [Bronze](#)

## Characteristics for grade BrAMts10-2 ( БpAMц10-2 ).

|                           |                                  |
|---------------------------|----------------------------------|
| <b>Grade :</b>            | BrAMts10-2 ( БpAMц10-2 )         |
| <b>Classification :</b>   | Tin-free pressure-worked bronzes |
| <b>Equivalent grades:</b> | Is absent                        |

## Chemical composition in % for grade BrAMts10-2 ( БpAMц10-2 )

| Fe      | Si      | Mn        | P        | Al     | Cu          | Pb       | Zn    | Sn      | Impurity |
|---------|---------|-----------|----------|--------|-------------|----------|-------|---------|----------|
| max 0.5 | max 0.1 | 1.5 - 2.5 | max 0.01 | 9 - 11 | 84.8 - 89.5 | max 0.03 | max 1 | max 0.1 | all 1.7  |

Comment: **Cu** is a basis; the percentage of **Cu** is given approximately.

## Mechanical properties under T=20°C for grade BrAMts10-2 ( БpAMц10-2 )

| Assortment            | Dimension | Direct. | $\sigma_B$ | $\sigma_T$ | $\delta_5$ | $\psi$ | KCU                 | Heat treatment |
|-----------------------|-----------|---------|------------|------------|------------|--------|---------------------|----------------|
| -                     | mm        | -       | MPa        | MPa        | %          | %      | kJ / m <sup>2</sup> | -              |
| cast in a metal mould |           |         | 450-550    |            | 10-14      |        |                     |                |

|                                                                              |                                           |
|------------------------------------------------------------------------------|-------------------------------------------|
| <b>Brinell hardness for BrAMts10-2 ( БpAMц10-2 ) , cast in a metal mould</b> | <b>HB 10<sup>-1</sup> = 100 - 120 MPa</b> |
|------------------------------------------------------------------------------|-------------------------------------------|

## 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

