SCHMELZMETALL

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Product overview HOVADUR® B

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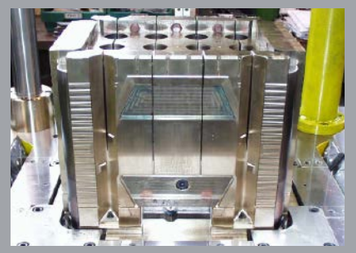
HOVADUR® B

Special Alloys in Aluminium-bronze



Tradename			HOVADUR® B 20	HOVADUR® B 30
Material designation, EN standard			CuAl10Ni5Fe4	CuAl11Fe6Ni6
Material No., EN standard			CW307G	CW308G
Material No., former DIN standard			2.0966	2.0978
Material No., UNS-System (ASTM)			C63000 / C63020 / C63200	*
Chemical composition (nominal values in % of weight)				
Al			8,5–11,0	10,5–12,5
Fe			3,0–5,0	5,0–7,0
Ni			4,0–6,0	5,0–7,0
Mn			max. 1,0	max. 1,5
Others			0,5	0,5
Cu			Remainder	Remainder
Mechanical properties (nominal values at 20 °C)				
Hardness Brinell	1)	HB	170–210	220–260
Tensile strength	2)	N/mm^2 (MPa)	min. 680	min. 740
0.2% yield strength	2)	N/mm^2 (MPa)	min. 320	min. 420
Elongation (A5)	2)	%	min. 10	min. 5
Elastic modulus		N/mm^2 (MPa)	118000	115000
Physical properties (nominal values at 20 °C)				
Specific weight		g/cm^3	7,55	7,40
Thermal conductivity		W/mK	50	56
Electrical conductivity	1)	MS/m	approx. 5	approx. 4
Thermal expansion coefficient		$x\ 10^{-6}/K$	16,0	16,0

1) Agreed properties (In case of different opinions, hardness is calculated as the average of 3 randomly located measurings)
2) Associated properties (Strength values will only be proved if ordered by the customer)
Details of the properties or application of materials are for descriptive purposes only. Confirmation of suitability with regard to specific properties or application require written agreement.

Forms of delivery		
Round forged	•	•
Flat, square forged	•	•
Plates forged	•	•
Pieces cut from round bar/plate, rough	•	•
Pieces cut from round bar/plate, premachined	•	•
Max. weight of a forged piece	1000 kg	1000 kg

Description of material / Application examples		
	HOVADUR® B 20 is a multiphase aluminium bronze. The alloy combines high strength, even at higher temperature and alternating stress, with high wear resistance as well as good resistance to corrosion and cavitation. HOVADUR® B 20 is resistant against sea water. **Application** Sparking-free tools for chemical industry and offshire uses. Highly strained bearings, guide bushes and sliding elements.	**HOVADUR® B 30** is a multiphase aluminium bronze. This alloy is characterized by very high strength and resistance to wear as well as good resistance to corrosion, erosion and cavitation at higher temperature. HOVADUR® B 30 is resistant against sea water and many aggressive substances. **Application** Utmost strained bearings and guide bushes, valves and valve faces. Parts for chemical plant construction and offshore applications.

All our alloys HOVADUR® B are tested and certified as being safe concerning contact with food.