

Ref MA6

METALLISATION – BRONZE

General properties :

- Offers rubbing qualities very much the same of those of solid bronze.
- Bronze blasted into a bore is a good replacement for a shrink-fitted ring
- Metallisation also possesses properties of storing lubricants in the porosity of the deposit and to restore them by releasing when sliding on other materials.
- Good corrosion resistance.
- Slides very well on steels, molybdenum and nickel aluminide

Applications :

- Bores for variable speed drives
- Bearings
- Pump wheels
- Wheel shafts
- Propeller shafts
- Engine bearings
- Cylinder bore
- Valves

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PROPERTIES	
Name	Bronze
Symbol	CuSn 88/12
Composition %	Sn 10 – 11.5 P : 0.3 – 0.45 Cu : remainder
Bulk density	7.8
Average porosity %	7 to 8
Hardness	70 HB
Coefficient of expansion	18×10^{-6}
Maximum working temperature °C	200
Melting temperature °C	1025
Electrical resistivity 10 ⁻⁶ W cm	
Thermal conductivity Kcal dry -1° cm ² cm	

MACHINING BY TOOL	BLANK	FINISH
Type of tool	WCK 10	
Depth of travel mm	0.1	
Travel mm / lathe	0.08	
Lubricant	None	
Cutting speed m/mn	70	
Ra µm	1.6	

ABRASIVE MACHINING	BLANK	FINISH
Abrasive	SIC39C	
Grain	60	
Grade	J-K	
Binding agent	Vitrified	
Depth of travel µm	10	
Travel m/mn		
Lubricant	oil	
Speed of part m/mn	35	
Wheel speed m/s	30	
Ra µm	0.8	

TREATMENTS AND IMPREGNATIONS

The information provided may be subject to variation depending on individual supplies and applications.
Therefore, any information detailed in this technical sheet is provided in good faith and for guidance only. We cannot be held liable.