



Certificate No : MD00/3206/0006/7b

Appendix 1

**RAGUSE + VOSS  
Metallgießerei GmbH  
Grauwalling 24  
27580 Bremerhaven  
Germany**

Long freezing range alloys	Alloy Type	Designation	tonnes Maximum
	Phosphor bronze	CuSn10PbP*	0.60
		CuSn10P*	0.60
		CuSn11P	0.60
		CuSn12	0.60
		CuSn10*	0.60
	Gunmetal	CuSn10Zn2	0.60
	Leaded gunmetal	CuSn5Pb5Zn5	0.60
		CuSn7Pb3Zn3*	0.60
	Leaded bronze	CuSn10Pb10	0.60
		CuSn5Pb9	0.60
		CuSn9Pb15*	0.60
		CuSn5Pb20	0.60
Short freezing range alloys	Alloy Type	Designation	tonnes Maximum
	Copper 30% nickel	CuNi30Cr*	0.20
		CuNi30Nb*	0.20
	Aluminium bronze	CuAl10Fe5Ni5	0.20
		CuAl9Ni*	0.20
		CuAl9Ni7*	0.20
		CuAl11Ni*	0.20

\* Accepted only for projects for which the use of the grade has been specifically approved by LR plan appraisal.

Valid Until : 29 November 2021  
Date of Issue : 21 March 2019

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**Gavin Young**  
Metallurgical Specialist to Lloyd's Register EMEA  
A member of the Lloyd's Register group



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has been approved as a manufacturer in accordance with the requirements of Lloyd's Register for :-

**Copper Alloy Castings for Valves, Liners, Bushes and Fittings**

This approval is subject to compliance with the Rules for the Manufacture, Testing and Certification of Materials. The full details of the processes and grades to which this approval applies are given in the Appendix of this certificate.

Lloyd's Register is to be notified of any change that may affect the validity of this Certificate.

This Certificate is issued to the above manufacturer and is valid until the date given below.

**Valid Until : 29 November 2021  
Date of Issue : 21 March 2019**

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