



Certificate No : MD00/0926/0009/7b

Appendix 1

LES BRONZES D'INDUSTRIE

26 Rue de la République

57360 Amneville

France

Long freezing range alloys	Alloy Type	Designation	tonnes Maximum
	Phosphor bronze	CuSn12	20.00
	Gunmetal	CuSn10Zn2	20.00
	Leaded gunmetal	CuSn5Pb5Zn5	20.00
		CuSn7Pb3Zn3*	20.00
	Leaded bronze	CuSn10Pb10	20.00
Short freezing range alloys	Alloy Type	Designation	tonnes Maximum
	Aluminium bronze	CuAl10Fe5Ni5	20.00

The following long freezing range alloy grades are also acceptable for specifically approved applications only up to 20 tonne maximum weight;

CuSn7Zn4Pb7 to EN 1982

G-CuSn10Zn to DIN 1705

C90500 to ASTM B271

C96400 to ASTM B369

Valid Until : 26 April 2020  
Date of Issue : 27 March 2018

Gavin Young

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



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**LES BRONZES D'INDUSTRIE**  
**26 Rue de la République**  
**57360 Amneville**  
**France**

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 : 26 April 2020**  
**Date of Issue : 27 March 2018**

A handwritten signature in blue ink, appearing to read 'G. Young', written over a horizontal line.

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