

APPROVAL OF MANUFACTURER CERTIFICATE

This is to certify:

That

Vítkovické slévárny spol. s r.o.
OSTRAVA-VÍTKOVICE, Czech Republic

is an approved manufacturer of
Copper Alloy Castings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Application area	Castings for valves, fittings and general application
Alloy type(s)	Al-bronze, see page 2
Casting method	Sand casting
Max. weight	2 100 kg
Heat treatment condition	As cast

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2017-12-28**

for **DNV GL**

This Certificate is valid until **2020-12-31**.

DNV GL local station: **Ostrava**

Approval Engineer: **Stefan Röhr**

Thorsten Lohmann
Head of Section



Job Id: **263.11-008410-1**
Certificate No: **AMMM00001WB**

Particulars of the approval

Castings for valves, fittings and general application

Alloy type	Grade ³⁾	Casting method ¹⁾	Max. weight [kg]	Delivery condition ²⁾
Al-bronze	CuAl10Fe5Ni acc. to EN 1982	SC	2 100	AC

Remarks:

- 1) SC: Sand Casting
- 2) AC: As cast
- 3) Certification of any material applied to classed object shall fulfil the applicable material requirements in the DNV GL class rules