

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000002F
Revision No:
1

This is to certify:

That

OK Kwang Engineering Co., Ltd.
59 Hakjang-ro, 169beon-gil, Sasang-gu, Busan, Republic of Korea

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	Sn-bronze, Pb-Sn-bronze
Manufacturing method	Sand casting
Max. weight	See page 2
Heat treatment condition	See page 2

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 **2020-02-06**

This Certificate is valid until **2022-06-29**.

DNV GL local station: **Busan**

for **DNV GL**

Approval Engineer: **Stefan Röhr**

.....
Thorsten Lohmann
Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Job Id: **263.11-010318-1**
Certificate No: **AMMM000002F**
Revision No: **1**

Particulars of the approval

Castings for valves, fittings and general application

Alloy type/grade	Casting method ¹⁾	Max. weight [kg]	Heat treatment condition ²⁾
Sn-bronze	SC	500	AC
Pb-Sn Bronze	SC	500	AC

Remarks:

- 1) SC: Sand Casting
- 2) AC: As cast