

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000AJ

This is to certify:

That
Jakob Hülsen GmbH & Co. KG
Tönisvorst Nordrhein-Westfalen, Germany

is an approved manufacturer of
Wrought Copper and Copper Alloys

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Alloy type(s)	Copper and Copper Alloys
Process	Hot Forming Process Cold Forming Process
Dimensions	max. DN500 x 13 mm
Welding Method	not applicable
Remarks	see particulars of the approval

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.

This Certificate is valid until **2018-12-31**.

Issued at **Hamburg** on **2016-01-26**

DNV GL local station: **Essen**

Approval Engineer: **Christian Wildhagen**



for **DNV GL**
Digitally Signed By: Roehr, Stefan
Location: DNV GL Hamburg, Germany
Signing Date: 2016-01-26 , on behalf of

Marcus von Busch
Head of Section

Job Id: **263.11-005254-1**
Certificate No: **AMMM00000AJ**

Particulars of the approval

Connecting Elements and Fittings:

Alloy Type	Product	Supply Condition	Wall Thickness [mm], max.	Diameter max.
CuNi10Fe1,6Mn acc. to DIN 86086	RF	acc. to standard	13	DN500
CuNi10Fe1Mn acc. to EN 12449	RF	acc. to standard	13	DN500
CuNi30Mn1Fe acc. to EN 12449	RF	acc. to standard	13	DN500
CuZn20Al2 acc. to EN 12449	RF	acc. to standard	13	DN500

RF: pipe fittings