

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No: **AMMM00000AZ**Revision No:

This is to certify:

That

Shanghai Huajian Pipe Fitting Co., Ltd. 7146-7148, Hunan Highway, Xincheng Town, Nanhui District, Shanghai, China

is an approved manufacturer of Wrought Copper and Copper Alloys

in accordance with

DNV rules for classification – Ships

and the following particulars:

Application area Copper and copper alloy fittings

Product Fittings

Alloy type Copper-Nickel 90-10
Manufacturing method Cold formed, seamless

Max. outer diameter See page 2
Max. wall thickness 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 classed object shall fulfill the material requirements in the applicable DNV class rules.

Issued at Hamburg on 2022-06-24

for DNV

This Certificate is valid until 2025-01-31.

DNV local station: Shanghai

Approval Engineer: Stefan Röhr

Thorsten Lohmann
Head of Section

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Job Id: **263.11-002346-6** Certificate No: **AMMM00000AZ**

Revision No: 3

Particulars of the approval

Copper and copper alloy fittings

Designation	Grade	Manufacturing method 1)	Max. outer diameter	Max. wall thickness [mm]	Heat treatment condition
Copper-Nickel 90-10	CuNi10Fe1.6Mn acc. DIN 86088	CFS	DN 200	3	acc. to standard
	CuNi10Fe1.6Mn acc. DIN 86089	CFS	DN 300	4	acc. to standard
	CuNi10Fe1.6Mn acc. DIN 86090	CFS	DN 250	3	acc. to standard

Remarks:

1) CFS: Cold finished seamless

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