Certificate No: LR2040364TA
Issue Date: 30/10/2020
Expiry Date: 19/03/2025

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**SHANGHAI HUAJIAN PIPE FITTINGS CO.,LTD**
Address	No.7146-7148 Hunan Road,PuDong District,, Shanghai, 201314, China
Place of Production	SHANGHAI HUAJIAN PIPE FITTINGS CO.,LTD No.7146-7148 Hunan Road,PuDong District,, Shanghai, 201314, China
Type	Butt Weld Fittings
Description	Copper Pipe Fittings
Trade Name	HJ
Application	Marine and Offshore application
Specified Standard	Rules and Regulations for the Classification of Ships, July 2019 Q/ILXJ1-2012 Straight Tee union Q/ILXJ2-2012 Reducing Tee union Q/ILXJ3-2012 90˚ elbow union Q/ILXJ4-2012 45˚ elbow union Q/ILXJ5-2012 Reducing union
Ratings	HJ201 Straight Tee Nominal diameter range: DN15 to DN200 Nominal Wall Thickness (mm): 1.0 to 3.0 Max. Working Pressure (bar): 10

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Xiaodong Zhang

Lead Specialist and Section Leader for Engineering Section to Lloyd's Register Classification Society (China) Co Ltd

19th Floor, 550 Yan An dong Road, Shanghai, Huangpu District, China

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Working Temperature range: 0~300˚C
Pipe Fittings Material: CuNi10Fe1.6Mn, CuNi10Fe1Mn, BFe10-1.6-1, BFe30-1-1
HJ202 Reducing Tee
Nominal diameter range: DN20 to DN200
Nominal Wall Thickness (mm): 1.5 to 3.0
Max. Working Pressure (bar): 10
Working Temperature range: 0~300˚C
Pipe Fittings Material: CuNi10Fe1.6Mn, CuNi10Fe1Mn, BFe10-1.6-1, BFe30-1-1

HJ203 90˚ Elbow & HJ204 45˚ Elbow
Nominal diameter range: DN15 to DN500
Nominal Wall Thickness (mm): 1.0 to 5.0
Max. Working Pressure (bar): 10
Working Temperature range: 0~300˚C
Pipe Fittings Material: CuNi10Fe1.6Mn, CuNi10Fe1Mn, BFe10-1.6-1, BFe30-1-1

HJ205 Reducer
Nominal diameter range: DN20 to DN500
Nominal Wall Thickness (mm): 1.0 to 5.0
Max. Working Pressure (bar): 10
Working Temperature range: 0~300˚C
Pipe Fittings Material: CuNi10Fe1.6Mn, CuNi10Fe1Mn, BFe10-1.6-1, BFe30-1-1

Other Conditions

Where the pipes fittings are intended to be installed on as ship classed with Lloyd's Register (LR), the following conditions should be followed.
1. Suitable pipe fittings are to be selected and installed in accordance with the manufacturer's instructions. In all cases, pressure and temperature rating of the fittings are to be suitable for the intended service conditions.
2. Raw materials for pipe fittings used in Class I or II piping systems are to be produced at a works approved by LR and are in general to be tested in accordance with the Rules for Materials. Part 5, Chapter 12, Section 1.6.1 of Rules refers.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register Classification Society (China) Co Ltd of any modification or changes to the equipment in order to obtain a valid Certificate.

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The Design Appraisal Document No. LR2040364TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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