



TYPE APPROVAL CERTIFICATE

Certificate No. : GCH32126-PE002 **Initial Approval** : 22nd January, 2014
Product : Tube Fittings
Manufacturer : HANSUN ENGINEERING CO., LTD
27, Noksansandan 361-ro, gangseo-Gu, Busan, Korea

Product Description : Bite-JIS B2351 Type Tube Fittings
" See Appendix 1 "

Approval Condition : " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".
Pt. 5, Ch. 6, Sec. 1 of the Rules for Classification of Steel Ships.

This Certificate is valid until 21st January, 2024
Issued at Gamcheon, Korea on 19th February, 2019



This certificate is signed electronically in accordance with IMO FAL.5/Circ.39/Rev.2. Validation and authentication of the certificate can be confirmed from "<http://e-cert.krs.co.kr>" by using the tracking No (ME19008080482) and certificate No.(GCH32126-PE002).



KOREAN REGISTER OF SHIPPING

General Manager of
Gamcheon Branch Office

- Note* : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.

Appendix 1

Product Description and/or Approval Condition

Certificate No : GCH32126-PE002

Date of Issue : 19th February, 2019

© Product Description :

Bite-JIS B2351 Type Tube Fittings

- Material : Stainless Steel, Carbon Steel, Brass
- Pipe O. D. : 6 mm to 42 mm
- Max. Working Pressure : 210 bar to 500 bar
- Temperature range : Stainless Steel : -20 °C to 300 °C
Carbon Steel : -23 °C to 300 °C
Brass : -20 °C to 200 °C
- Approved Document No. : KR/BITE-JISB2351/121213 approved on 12 Dec, 2013
- Designation : Straight Union(BU), Union Elbow(BL), Union Tee(BT), Bulkhead Elbow(BBL), Straight Bulkhead Union(BBU), Long Male Connector(BLMC), Male Elbow(BLM), Male Connector(BMC-R/G, BOM), Long Male Elbow(BLLM), Banjo Elbow(BSLM), O-Seal Male Elbow(BOLM), Male Branch Tee(BBTM), Male Run Tee(BRTM), Bulkhead Female Connector(BBFC), Female Connector(BFC), Jig(BJ), Cap(BC), Gauge Connector(BGC), Female Elbow(BLF), Female Branch Tee(BBTF), Female Run Tee(BRTF), Plug(BP), Sleeve(BS), Hose Male Union(BHUM), Hose Female Union(BHUF), Hose Bulkhead Male Union(BHBM), Nut(BN), Hose Bulkhead Female Union(BHBF), Hose Male Elbow(BHLM), Reducer(BR), Hose Female Elbow(BHLF), Hose Bulkhead Male Elbow(BHBLM), Hose Bulkhead Female Elbow(BHBLF), Welding Connector(BCW), Welding Bulkhead Union(BBUW), Adapter(BA-R/G), Positionable Elbow(BLA), Positionable Branch Tee(BBTA), Positionable Run Tee(BRTA)

© Approval Condition :

1. This approval is granted on the basis of document assessment and the test reports which were carried out as follows.
 - Tightness Test on 17 Apr, 2013 & 9 May, 2013 & 28 May, 2013
 - Repeated Assembly Test on 17 Apr, 2013 & 9 May, 2013 & 28 May, 2013
 - Bursting Pressure Test on 26 Apr, 2013 & 13 May, 2013 & 30 May, 2013
 - Pull-out Test on 4 Jul, 2013 & 9 Jul, 2013 & 23 Jul, 2013
 - Vibration and Pressure Pulsation Test on 11 Jun, 2013 & 4 Jul, 2013 & 28 Aug, 2013
2. Individual Product Certification is required in case of Tube Fittings belonging to Class I or II.
3. The materials used for Tube Fittings are to be certified by this Society or be satisfactory to the Surveyor.
4. Products are to be marked as follows for traceability of this approval.
 - Manufacturer's name or trade mark.
 - Product style and size.
 - Any additional marking, if required.

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