

Type Approval Certificate

This is to certify that the undernoted product has been tested with satisfactory results in accordance with the relevant requirements of the LR Type Approval System.

This certificate is issued to:

PRODUCER	BMT Co., Ltd
PLACE OF PRODUCTION	35, Sanmakgondannam 11-ril, Yangsan-si, Gyeongsangnam-do, Korea
DESCRIPTION	SAE J518 Flanged ball valve
TYPE	SBVE SERIES
APPLICATION	Marine use for Hydraulic oil systems
STANDARD	Lloyd's Register Rules and Regulations for Classification of Ships, Part 5, Chapter 12, Section 5, July 2014
RATING	Nominal Size (inch) : 3/4 Nominal Pressure ratings (bar): 210 Maximum Service Temperature (°C): 100 Body material : A182 F316
PERFORMANCE TESTS	The following tests carried out on representative samples of 3/4 inch in accordance with LR Type approval Specification 2 with satisfactory results:- <ol style="list-style-type: none"> 1) Shell test 2) Back seat test 3) High pressure closure test

Certificate No.	15/40088
Issue Date	22 July 2015
Expiry Date	21 July 2020
Sheet	1 of 2



Busan Technical Support Office
Lloyd's Register Asia

*Lloyd's Register Asia,
119, Daegyo-ro, Jung-gu, Busan, Republic of Korea*

**OTHER
CONDITIONS**

- 1) Where the valves are intended to be installed on a ship classed with LR, the valves are to be made, installed and tested in accordance with the Class I & II piping systems requirements of Part 5, Chapter 12 of the Rules Regulations for the Classification of ships.
- 2) This valve could not be used in spaces where leakage of failure caused by fire spread, flooding or the loss of an essential service in accordance with Part 5, Chapter 12, Section 6.1.3 of the Rules. The fire test is required.

LIMITATION

- 1) Type Approval does not eliminate the need for normal inspection survey procedures required by the Rules and Regulation.
- 2) If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
- 3) (in case of applications other than Marine) The application of this Type Approval Certificate will be limited to the relevant scope of the Specified standards and acceptance thereof by the local authorities.

"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 Asia of any modification or changes to the equipment in order to obtain a valid certificate."

The Design Appraisal Document No. 15/40088 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No.	15/40088
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Sheet	2 of 2



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Part 1A
Subject: Valves
Product: Ball valves (Part 1A)

Producer/Licence No.	Description of Product				Cert. No.
	Type	Details of Approval	Application	Remarks	
BMT Co. Ltd., 35, Sanmakgondan-nam 11-ri, Yangsan-si, Gyeongsangnam-do, Korea, Republic of.	SAE J518 Flanged ball valve	Nominal Size (inch) : 3/4 Nominal Pressure ratings (bar): 210 Maximum Service Temperature (°C): 100 Body material : A182 F316 The fire test has not been carried out, therefore, this valve could not be used in spaces where leakage of failure caused by fire spread, flooding or the loss of an essential service.	Marine use for Hydraulic oil systems	Expires: 21 July 2020	15/40088



 Lloyd's Register
 Digitally signed by
 Da-Young Kang
 Date: 2015.07.22
 11:06:29 +09'00'


 Da-Young Kang
 Busan Technical Support Office
 Lloyd's Register Asia

LR0311.2013.12



Marine Design Appraisal Document

Lloyd's Register Asia
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Date
22 July 2015

Please quote the document number on all future communications

THE LR TYPE APPROVAL SYSTEM, 2002.

Issued to: **BMT CO., LTD**
for: **SAE J518 FLANGED BALL VALVE**
TYPE APPROVAL CERTIFICATE No. 14/40088

The undernoted documents have been reviewed for compliance with the requirements of the LR Type Approval System, 2002 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Request for Marine Services, Form 2502 dated 16 February 2015
Application for Type Approval, Form LR2571 dated 16 February 2015

Documents for LR Type approval including the following design drawings:

<u>Drawing No.</u>	<u>Title</u>	<u>Date</u>
140422-01-122-13/C	General Arrangement Drawing for Ball valve	22-Jul-2015

TEST REPORTS

LR Busan Port Inspection and Surveillance of Production Facilities report (Annex C) dated 16 February 2015
Doc. No. BMT-TR150313-01, Shell test dated 13 May 2015, witness by LR Busan Port Surveyor
Doc. No. BMT-TR140814-02, Backseat test dated 13 May 2015, witness by LR Busan Port Surveyor
Doc. No. BMT-TR140814-03, High pressure closure test dated 13 May 2015, witness by LR Busan Port Surveyor

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register Asia reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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