



TYPE APPROVAL CERTIFICATE

Certificate No. : LDN34884-VV001 **Initial Approval** : 7th July, 2016
Product : Cryogenic Butterfly Valves
Manufacturer : Evolution Valves Ltd
Evolution House, Limeoak Way, Stockton on Tees, TS18 2LS, UK

Product Description : Double offset valve for High Performance
- Model : EV10317
- Design Temp. : -196°C to +205°C
- Design Press. : 19 bar
- Size : 10" (=DN250)
- Flange Rating : ASME B16.5 Class150
- Fluid : Liquified Gas
- Connection : Lugged Type
- Material
1) Body, Disc, Bonnet : ASTM A351 CF8M
2) Shaft : ASTM A479 Gr. XM19
3) Seat, Seal : PTFE
- Approved Drawings : 10317-BV250-BS, 10317-250-001, 10317-250-002C,
10317-250-005, 10317-250-006

Approval Condition : 1. This approval is granted on the basis of Design Assessment and prototype testing reports carried out by ABS and LR.
2. The materials for body is to be certified by this society.
3. The minimum average energy for Charpy V-notch impact test should be complied with the relevant requirements of the Rules, Pt.7, Ch.5.
4. Individual Product Certification is required.

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. 7, Ch. 5, Art. 503 of the Rules for Classification, Steel Ships and IGC Code, API 598, ASME B16.34, API 609.

This Certificate is valid until 6th July, 2021

Issued at Busan, Korea on 7th July, 2016



KOREAN REGISTER OF SHIPPING

[Signature]
General Manager of
Marine & Ocean Equipment Team

Note : 1 : The approval will be automatically suspended and the Certificate become invalid from the expiry date of the Certificate in the event that the extension has not been granted or the renewal of the Certificate is not underway.

2 : The manufacturer should notify this Society of any modification or changes that may affect the validity of this Certificate.