

Type Approval Certificate Extension

This is to certify that Certificate No. 05/10021 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER

Hy-Lok Corporation

PLACE OF

1467, Songjeong-dong, Kangseo-gu,

PRODUCTION

Pusan, 604-839 Korea

DESCRIPTION

Cryogenic trunnion ball valve, one-piece body, top entry,

extended bonnet

TYPE

CRYOTB series

APPLICATION

Marine use for cargo tanks and cargo piping systems in ships for

carriage of liquefied gasses in bulk

DESIGN CODE

STANDARD

Chapter 5 of Lloyd's Register's Rules and Regulations for the

Construction and Classification of Ships for the Carriage of

Liquefied Gasses in Bulk (July 2008)

RATINGS

Nominal sizes (mm)

: 15 & 25

Nominal pressure rating (MPa)

: 1.0

Minimum service temperature (°C): -196

PERFORMANCE

TESTS

The following tests carried out on representative samples of 15 and 25mm sizes in accordance with BS 6364: 1984, API

Standard 607 4th edition, May 1993 & BS 5351 : 1986 with

satisfactory results:-

Operating torque test

Shell tightness test

3) Seat tightness test

Fire test

Anti-static test

Certificate No.

05/10021 (E1)

Issue Date

28 April 2010

Expiry Date

27 April 2015

Sheet

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Yokohama Design Support Office

Lloyd's Register

Lloyd's Register, registered office: 71 Fenchurch Street, London EC3M 4BS

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

The attached Design Appraisal Document No. 05/10021(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 05/10021 to which this extension should be attached.

Certificate No.

05/10021 (E1)

Issue Date

28 April 2010

Expiry Date

27 April 2015

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N. Terashita Yokohama Design Support Office

Lloyd's Register

Lloyd's Register, registered office: 71 Fenchurch Street, London EC3M 4BS

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