

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 PRODUCTION	1467, Songjeong-dong, Kangseo-gu, 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 4 th edition, May 1993 & BS 5351 : 1986 with satisfactory results:- <ol style="list-style-type: none">1) Operating torque test2) Shell tightness test3) Seat tightness test4) Fire test5) Anti-static test
Certificate No.	05/10021 (E1)
Issue Date	28 April 2010
Expiry Date	27 April 2015
Sheet	1 of 2



N. Terashita
Yokohama Design Support Office
Lloyd's Register

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

"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
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Sheet	2 of 2



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