



# ABS

CERTIFICATE NUMBER

03-HS405911D/1-PDA

DATE

21 October 2008

ABS TECHNICAL OFFICE

Houston SED - Ship Systems

# CERTIFICATE OF Design Assessment

This is to Certify that a representative of this Bureau did, at the request of  
**Viking Corporation**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT: Valve, Flow Control  
MODEL: H-1, H2, H3 & H4  
ABS RULE: 2008 Steel Vessels Rules 1-1-4/7.7, 4-6-2/5.11  
OTHER STANDARD: UL 260, FM 1011/1012, 1013, 1016 and 1020;

AMERICAN BUREAU OF SHIPPING

Harris P. Haendler

Engineering Type Approval Co-ordinator

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**MA Certificate No.** 04-CH557068-X

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**Product:** Valve, Flow Control**Model:** H-1, H2, H3 & H4**Intended Service:**

Deluge System; Valves are used to facilitate manual or automatic on/off control in deluge system

**Description:**

Sizes: 1-1/2", 2", 3", 4" & 6"; Valve sizes 1-1/2" and 2" have NPT threaded end connections. Sizes: 3", 4", & 6" are available with flange inlets and flanged or groove outlets; Valve size 1-1/2" is model H3 and H4 only, Valve size 2", 3", 4", and 6" are models H1 and H2 only; H2 and H4 valves are coated inside and out side for protection against corrosive environments; Pressure rating of all sizes and models is 250 PSI.

**Ratings:**

MAWP 250 PSI

**Service Restrictions:**

Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

To be used and installed in accordance with manufacturer's recommendation

**Comments:**

All the components are to bear the manufacturer's trademark and identification legibly stamped or cast on the exterior of the component and also the primary pressure rating

**Notes/Documentation:**

This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction on the date of the ABS Rules used to evaluate the Product.

**Term of Validity:**

This Design Assessment Certificate number 03-HS405911D/1-PDA, dated 21/Oct/2008 will expire on 20/Oct/2013 or at an earlier date should there be alterations to the product's design or changes to the referenced ABS Rules and other specifications, which affect the product. Product use on or after 1 January 2009, will be subject to compliance with the ABS Rules or specifications in effect when the vessel, MODU or facility is contracted. The product's acceptability on board ABS-classed vessels or facilities is defined in the service restrictions of this certificate.

**STANDARDS****ABS Rules:**

2008 Steel Vessels Rules 1-1-4/7.7, 4-6-2 / 5.11

**National:**

UL 260, FM 1011/1012, 1013, 1016 and 1020