



CERTIFICATE NUMBER 22-2239194-PDA  
EFFECTIVE DATE 21-Apr-2022  
EXPIRY DATE 20-Apr-2027  
ABS TECHNICAL OFFICE Houston ESD - Piping

## CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

### **KIDDE-FENWAL INC.**

located at

**400 MAIN STREET, , ASHLAND, MA, United States, 01721**

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.

**Product:** Galley Fire Extinguishing System  
**Model:** Fire, Kidde Wet Chemical Galley Fire Protection System - WHDR-125, WHDR-260, WHDR-400S, WHDR-400M & WHDR-600  
**Endorsements:**  
**Tier:** 3 - Type Approved, unit certification not required

This Product Design Assessment (PDA) Certificate remains valid until 20/Apr/2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

  
Jingdong Sheng, Managing Principal Engineer

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

**KIDDE-FENWAL INC.**

400 MAIN STREET

ASHLAND MA

United States 01721

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Web: www.kidde-Fenwal.com

**Tier: 3 - Type Approved, unit certification not required**

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**Product:** Galley Fire Extinguishing System  
**Model:** Fire, Kidde Wet Chemical Galley Fire Protection System - WHDR-125, WHDR-260, WHDR-400S, WHDR-400M & WHDR-600

**Endorsements:****Intended Service:**

Wet Chemical system specifically designed and listed for the suppression of fires in galley cooking appliances, plenums, hoods, and ducts.

**Description:**

Manual/Automatic Fire Suppression System.

**Rating:**

This system is a 175 psig (70 ° F) nitrogen only pressurized system and as such is considered to be an ABS Class III system. Accordingly pipe fittings valves etc. where not specified in the approved manual are to be to the ABS Surveyor's satisfaction.

**Service Restriction:**

- 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.
- Each shipboard installation is to be reviewed for compliance with the manufacturers approved manual P/N 87-122000-001.

**Comments:**

- The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- Fire tests per ISO 15371 were performed on Models: WHDR-125 and WHDR-260 only. For design specific requirements to ISO 15371 testing, please refer to the attachment.
- In accordance with Manufacturer's manual, galvanized piping and fittings are not allowed.
- Surveyor is requested to verify DOT marking on cylinders.
- Although it is understood that Kidde Fenwal Inc. do not supply the deep fat fryer, the attending Surveyor is requested to confirm that the supplier of the deep fat fryer where fitted, is in compliance with 4-7-2/5.5 (ii) of the Marine Vessels Rules.

**Notes/Drawing/Documentation:**

Drawing No. 06-237853-001, Revision AA, Valve Rebuild Kit Addendum, October 2021, 10 pages.

Drawing No. 87-122000-005, Revision AA, Vent Plug Maintenance Addendum, October 2021, 6 pages.

Drawing No. EX3559, UL Approval of Addenda, Revised: 2022-01-05, 16 pages.

Supporting Documentation:

P/N 87-122000-001, Revision BD, WHDR Wet Chemical Fire Suppression System - Design, Installation, Operation and Maintenance Manual, 292 pages.

P/N 87-122000-002, Revision AA, Supplement to WHDR Wet Chemical Fire Suppression System Design, Installation, Operation and Maintenance Manual, 10 pages.

P/N 87-122000-003, Revision AA, Charbroiler Coverage Addendum, dated December 2015, 4 Pages.

P/N 87-122000-004, Revision AA, Chain Broiler Piping Addendum, dated March 2016, 4 Pages.

Drawing No. PEO10011A Validation, PEO10011A Validation dated 29 March 2016, 1 Page.

Test Report by Danish Institute of Fire and Security Technology, File No. PEO10011A, WHDR-125, and WHDR-260 Wet Chemical System, 23 Pages, Date: 2015-10-15.

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**Terms of Validity:**

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**STANDARDS**

**ABS Rules:**

Rules for Conditions of Classification, Part 1 – 2022 Rules for Building and Classing Marine Vessels 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2022 Marine Vessel Rules: 4-7-2/5.5 (i), (iii), (iv),(v).

**National:**

Underwriters Laboratories standard UL 300: 2019 Fire Testing of Fire Extinguishing Systems for Protection of Restaurant Cooking Areas.

**International:**

ISO 15371: 2015 Ships and Marine Technology -- Fire-extinguishing systems for protection of galley deep-fat cooking equipment - Fire tests.

**Government:**

NVIC 6-70 dated 23AUG1970 as per USCG Letter (16714/162.038/GEN)

**EUMED:**

NA

**OTHERS:**

NA