



COPY

## TYPE APPROVAL CERTIFICATE

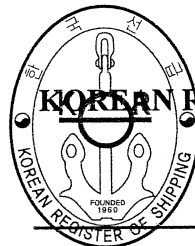
**Certificate No.** : LDN27999-FF001 **Initial Approval** : 9th August, 2011.  
**Product** : Fire Extinguishing System for Deep Fat Cooking Equipment  
**Manufacturer** : Nobel Fire System Ltd.  
Unit 6, Southgate Ind Estate, Green Lane, Heywood, Lancashire OL10  
1ND, United Kingdom  
**Product Description** : Type : NOBEL K-5 FIRE SUPPRESSION SYSTEM  
"See Appendix 1"

**Approval Condition** : "See Appendix 1"

**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".

Regulation 10.6.4, Chapter II-2 of SOLAS 1974 as amended by 2006 amendments and ISO 15371

This Certificate is valid until 8th August, 2016.  
Issued at Daejeon, Korea on 9th August, 2011.



**KOREAN REGISTER OF SHIPPING**

*General Manager of  
Materials and 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.*

## Product Description and/or Approval Condition

Certificate No : LDN27999-FF001

Date of Issue : 9th August, 2011.

### 1. Product Description

#### 1) System Specification

- Suppressant: NOBEL-K WET CHEMICAL LIQUID (Volume: 4.45 Litre)
- Nozzle Material: Stainless Steel 316
- Pipe Material/Size: Stainless Steel 304L/15mm
- Nominal Operating Pressure: 7~8 bar (Disc Ruptures)

#### 2) Application/Limitation

- Nozzle Max. Protected Area (Volume): 565mm \* 500mm (40 Litre)
- Nozzle Installation Limitation  
: Height 1.0~1.2m/Position one centered over the protected area (Allowance  $\pm 50$ mm)
- Pipe Length Installation Range: 1.0 ~ 10.0m
- Pipe Installation Limitation: Max. 6 elbows to be used

#### 4) Approval Drawings

- P/A3/797/147-IL, 119, 130, 167, 177, 255, 267, 274, 275, 276, 277, 278
- P/I/D K5 ASSEMBLY

### 2. Approval Condition

- 1) This approval is granted on the basis of test report no. TR/03/183/REV 1.
- 2) The deep fat fryer equipment system must be fitted with :
  - a primary and back-up thermostat with an alarm to alert the operator in the event of failure of either thermostat.
  - an alarm for indicating operation of the extinguishing system in the galley where the equipment is installed.
- 3) The system arrangement must automatically shut off the electrical power when the extinguishing system activates.
- 4) The controls for manual operation of the extinguishing system must be clearly labelled for ready use by the crew.
- 5) The following items are to be submitted for approval for each particular vessel.
  - Diagrams of piping and instrument
  - Diagrams of power source and control
  - Piping arrangements and hyd. calculation sheets
  - Specifications of pipes and pipe fittings
  - Specifications of location and dimension on the protected area
  - Spare parts list including the number of spare nozzle
  - Others considered necessary by the Society
- 6) Individual Product Certification is not required.

< End of Page >