DNV·GL

Certificate No:
MEDB00000DE

EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2014/93/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:

That the Deep fat cooking equipment fire extinguishing systems components (automatic or manual type)

with type designation(s)
Amerex KP Fire Suppression System KP 375

Issued to
Amerex Corporation
TRUSSVILLE AL, United States

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/3.43 and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/1, II-2/10 & X/3 and 2000 HSC Code 7

Further details of the equipment and conditions for certification are given overleaf.

Høvik, 2015-12-18
for **DNV GL AS**

This Certificate is valid until
2020-12-17

Notified Body No.: **0575**

Vidar Dolonen
Head of Department

DNV GL local office:
New Orleans

Martin Gjelstad
Surveyor

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Product description

"Amerex KP Fire Suppression System KP 375"
fire extinguishing system consists of spray nozzles, piping, section valves (as applicable), cylinders and a mechanical release module. The system is a pressure vessel system.

The deep – fat cooking protection system should be designed according to new SOLAS Ch. II-2, Reg.10, 6.4.1 - .5. This certificate addresses only item Reg. 10, 6.4.1. Compliance with the shut down function has to be verified in each case.

Application/Limitation

Approved for use as a fire extinguishing system for galley deep-fat cooking equipment.

The system shall be installed according to the below specification:

Spray nozzle, cylinders, piping, extinguishing agent etc.	
Part	Drawing No. , Description
Nozzle FR GR 2xFG W/Cap KP	13729 Rev. F
Material	Spray nozzle: Brass, body to be chrome plated.
Cylinder KP375 with valve, with capacity 14.2 litre	16338 Rev. N, 13325 Rev. S 12284 Rev. Z (valve)
Nitrogen Cylinder	12856 Rev. G
Mechanical release module	11977 Rev. B'/C'
Piping diameter dimensions	12.7 mm. Only stainless steel to be used (to avoid clogging). Galvanized pipe is not allowed
Maximum piping length	28.4 m
Extinguishing agent Type: Premixed agent	KP Agent Model 544 Recharge Mixture of potassium acetate and water

Definition: a vat is the heating unit containing the oil.
The wet chemical extinguisher agent supply is pressurized gas based. The system is assembled by cylinder, piping and spray nozzles according to the below tables.

Single Vat Deep Fat Fryer	
A spray nozzle 13729 is to be installed according to the installation manual, one nozzle is to be located over each Deep Fat Fryer, a maximum of seven 13279 nozzles per each KP 375 Cylinder system.	
Vertical distance from vats:	Min. 914 mm Max. 1219 mm
Max. size of vat	495 x 483 mm
Drawings, assembly	Amerex manual no. 20150
Operation pressure (cylinders):	16.5 bar

For all systems:

- For MED approval the cylinders and valve have to be approved according to the Pressure Equipment Directive 97/23/EG minimum module B + C1.
- System components, such as pipes, pipe connections are to be certified or inspected in accordance with DNV GL Rules or equivalent standards acceptable to the Flag State.
- Welding of pipes to be in accordance with DNV GL Rules.

The following documents are to be approved and filed by the Flag State Administration:

- System arrangement plans including location and specification of cylinders, nozzles, sections valves, release stations and control arrangement.
- Shut down of function defined by SOLAS Ch. II-2, Reg.10, 6.4.2 – 6.4.5.
- Manual containing operating and maintenance instructions

Installation testing:
- Pressure testing of pipe system to at least 1.5 times maximum working pressure.
- Testing according to maker's manual.

Periodical testing:
- Periodical control and inspection is to be in accordance with makers manual.

Each system is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation
Test report no. 01.20685.15.107 dated 2015-10-28 from Southwest Research Institute, Texas, USA.

Amerex design, installation, maintenance and recharge manual No. 20150. dated December 2008 and Appendix B dated December 2008.

Component drawings as mentioned above.

Tests carried out
Tested according to ISO 15371:2009.

Marking of product
The spray nozzle is to be marked with type designation whereas control unit is to be marked with name of manufacturer and type designation and Mark of Conformity (see below)

Mark of Conformity
The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.