

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Spark Arrestor

with type designation(s)

Standard non silencing spark arrestors: Part no. 25-N001A/15A/02A/25A/03A/25A/04A/05A/06A

Issued to

**Universal Silencer Europe Ltd
Hinckley Leicestershire, United Kingdom**

is found to comply with

**DNV's Offshore Standard DNV-OS-D101 "Marine and Machinery Systems and Equipment"
Det Norske Veritas' Rules for Classification of Ships**

Application :

Spark arrestor intended for use in the exhaust line of diesel engines, boilers and equipment containing sources of ignition installed onboard ships or offshore units.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2017-03-15**

This Certificate is valid until **2017-12-31**.

DNV GL local station: **Manchester**

Approval Engineer: **Amir Dzaferi**

for **DNV GL**



Digitally Signed By: Nguyen, Tin Huu

Location: DNV GL Høvik, Norway

Signing Date: 15.03.2017, on behalf of

**Oddvar Deinboll
Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Product description

Centrifugal Type Spark Arrestors

Alternative place of Production

- Teknoflow Green Equipments PVT. Ltd., Nashik, India.

Application/Limitation

Spark arrestor intended for use in the exhaust line of diesel engines, boilers and equipment containing sources of ignition installed onboard ships or offshore units.

Type Approval documentation

The following spark arrester drawings:

- 49110U Arrestor model 25-N001A rev. N
- 49115U Arrestor model 25-N015A rev. V
- 49120B Arrestor model 25-N002A rev. K
- 49125A Arrestor model 25-N025A rev. F
- 49130A Arrestor model 25-N003A rev. H
- 49135A Arrestor model 25-N035A rev. H
- 49140A Arrestor model 25-N004A rev. H
- 49150A Arrestor model 25-N005A rev. H
- 49160A Arrestor model 25-N006A rev. H

Tests carried out

Test report statements from USDA.

Marking of product

The product to be marked with manufacturer's name or trademark and type number identification.

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform an assessment after 2 years and after 3.5 years to verify that the conditions of the type approval are complied with. A renewal assessment will be performed at renewal of the certificate.

In cases where the Type Approved product is manufactured at other companies, the Periodical Assessment shall verify that the Type Approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore Periodical Assessment shall be carried out randomly at these companies.

Other conditions

DNV GL Product certificate is not required.

END OF CERTIFICATE