

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Spark Arrestor

with type designation(s)

SA size 1.5" to 60" and CP35 size 1.5" to 40", CP40 size 2" to 40", CP45 size 3" to 40"

Issued to

AXCES BV

Tholen, Netherlands

is found to comply with

DNV GL rules for classification – High speed and light craft

**DNV's Offshore Standard DNV-OS-D101 "Marine and Machinery Systems and Equipment"
NS-EN 1834-1**

Application :

The spark arrestors are approved for areas where emission of exhaust gases is permitted onboard ships and mobile offshore units classed by DNV GL.

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2021-01-07**.

Issued at **Høvik** on **2016-01-08**

DNV GL local station: **Rotterdam**

Approval Engineer: **Amir Dzaferi**

for **DNV GL**

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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.

Job Id: **262.1-008753-3**
Certificate No: **TAM000004B**

Product description

Spark Arrestor

Type SA size 1.5" to 60"

Type CP35 size 1.5" to 40", CP40 size 2" to 40", CP45 size 3" to 40"

Place of Production

AXCES PRODUCTION Sp. z o.o., Radymno, Poland

Application/Limitation

The spark arrestors are approved for use on diesel engines in areas where emission of exhaust gas is permitted onboard ships and mobile offshore units classed by DNV GL.

Type of arrestor has to be chosen according to maker's instructions.

Type Approval documentation

Drawing of SA arrestor size 1.5" to 60", drawing Nos.: SA1_5 to SA60_0

Drawings of CP35 size 1.5" to 40", CP40 size 2" to 40", CP45 size 3" to 40"

Tests carried out

Test report dated 2009-12-17 for SA type and 2011-07-05 for CP type.

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, DNV shall perform a Periodical Assessment every second year and before the expiry date of this certificate.

The objective of the Periodical Assessment is to verify that the conditions for the Type Approval are not altered since the Type Approval certificate was issued.

The main scope of the assessment normally includes:

- Verification of the company's production and quality system w.r.t. ensuring continued consistent production of the Type Approved products at the Type Approval applicant's own premises and at other companies that are given the responsibility for manufacturing of the products.
- Review of the TA documentation and that this is still used as basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking.

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

For retention of the Type Approval, a DNV surveyor shall perform a survey every second year and before the expiry date of this certificate to verify that the conditions of the type approval are complied with.

Other conditions

DNV product certificate is not required

END OF CERTIFICATE