DNV·GL

Certificate No:
TAM000013M

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Spark Arrestor

with type designation(s)
CE 20SA 75 Silencer, CE 25SA 75 Silencer, CE 30SA 75 Silencer, CE 35SA 75 Silencer, CE 40SA 75 Silencer, CE 45SA 75 Silencer, CE 50SA 75 Silencer

Issued to
CORD EXHAUST
Singapore, **Singapore**

is found to comply with
NS-EN 1834-1
DNV GL class programme DNVGL-CP-0282 – Type approval – Spark arrestors

Application :

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

Issued at **Hamburg** on **2019-07-16**
This Certificate is valid until **2024-07-15**.
DNV GL local station: **Certification of Materials - Singapore**

Approval Engineer: **Guido Friederich**

for **DNV GL**

Olaf Drews
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.

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Product description

Spark Arrestors designed as Spark Arresting Silencers for installation in exhaust gas pipes of combustion engines.
The type approved spark arrestors comprise the types listed on the frontpage of this Type Approval Certificate.

The installation of the type approved spark arrestors in the exhaust gas duct may be carried out vertically or horizontally without affecting the spark arrestors performance.

Spark Arrestor connection size, Inlet / Outlet Diameter [DI / DO]: 75 mm to 2500 mm

Material: Steel

Application/Limitation

The spark arrestors are approved for installation in exhaust gas pipes on reciprocating combustion engines.
The type of arrestor has to be chosen according to maker's instructions.

Limitation / Exclusions

Certification and/or confirmation of any sound reduction levels (in decibel/dB) for the type approved spark arrestors is not included within this type approval.

Type Approval documentation

Tests carried out

Collection Efficiency Test

Test Standard:	EN-1834-1:2000, Section 6.4 – Spark arrester test, [6.4.1] – Collection efficiency test
Test equipment:	Spark Arrester Test Facility, consisting of: Blower, particle injector, filter for collecting particles which passed through the spark arrester test specimen.
Test results:	ECI Test Report, Doc. No.: TR/0832/12/18, dated 2018-11-27

Grain size (mm)	Collection Efficiency (%)
0,1	99,63
0,2	99,40
0,5	100

Marking of product

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

Periodical assessment

A condition for retention of the Type Approval Certificate in its validity period is that periodical assessments are successfully carried out.
The objective of the periodical assessment is to verify that the conditions for the type approval have not been altered.

- The main scope of the periodical assessment will normally include:

- Verification of the TA applicant's production and quality system w.r.t ensuring continued consistent production of the type approved products at the TA 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 a basis for the production
- Review of possible changes to the design, the material and the performance of the product
- Verification of the product marking

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnvgl.com

END OF CERTIFICATE