



TYPE APPROVAL CERTIFICATE

Certificate No:
TAM00000UX
Revision No:
2

This is to certify:

That the Spark Arrestor

with type designation(s)
Spark arrestor Type DARI 1.0

Issued to
BBM Acoustic India Pvt. Ltd.
Pune, Maharashtra, India

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

Application :

Issued at **Høvik** on **2023-07-10**

for **DNV**

This Certificate is valid until **2028-05-03** .

DNV local unit: **Mumbai**

Approval Engineer: **Geir Olav Moen**

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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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

Spark Arrestor, Type DARI 1.0
 Designed to be used in exhaust gas pipes of combustion engines.

Inlet / outlet pipe diameter range [dE / dA]: 219.1mm - 2500 mm

Application

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

Material	Stainless Steel	Carbon Steel	Low Alloy Steel
	304 (1.4301), 304L (1.4307) 316 (1.4401) 316L (1.4404), 316Ti(1.4571), 321 (1.4541).	ASTM A 516 Gr.60 ASTM A 516 Gr.70, EN10025-2 S235JR EN10025-2 S275JR EN10025-2 S355J2 EN10028-2 P265GH	ASTM A 387 Gr.11 ASTM A387 Gr.22 EN10028-2 16Mo3 EN10028-2 13CrMoSi5-5 EN10028-2 10CrMo9-10
Media temperature range of spark arrestor:	-196°C to 800°C	-20°C to 550°C	20°C to 700°C
Flow speed:	5 m/sec to 70 m/sec		
Exhaust Gas Mass Flow Rate	2000 Kg/hr to 96000 Kg/hr		

Type Approval documentation

The approval is based on the following documentation:

Drawing 14535 A 01/07 Rev.1 dated 2018
 Drawing 14535 A 1/6 Rev.1 dated 2016-12-14 and 14535 A 1/5 Rev.0 dated 2011-10-18.
 Manufacturers test report (measurement report) Doc. No. 14535-IRP-01 dated 2011-10-27
 Certification of Spark Arrestor (Document issued in German), dated 2012-11-09
 Det Norske Veritas Survey report No.: ESN-11-34700, dated 2011-10-17
 Type Approval Assessment Report, dated 2017-01-26
 Type Approval Assessment Report, dated 2023-06-02

Tests carried out

Tested according to EN-1834-1:2000, Chapter 6.4.1,
 Measurement report Doc. No. 14535-IRP-01 dated 2011-10-27

Marking of product

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



Job Id: **262.1-039841-1**
Certificate No: **TAM00000UX**
Revision No: **2**

Places of manufacturing

BBM ACOUSTIC (India) Pvt. Ltd.
266, Bhare, Post-Ghatawde
(near Mseb Substation), Pirangut
Tal. Mulshi, Pune-412 108
India

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment to verify that the conditions for the Type Approval are complied with. Refer to the Class Programme DNV-CP-0338, Sec.4.

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