Certificate No:
TAE000000EH

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Battery (Accumulator)

with type designation(s)
MARINE & MULTIFIT, Equipment GEL (ES) series

Issued to
EXIDE TECHNOLOGIES, SAS
Gennevilliers CEDEX Hauts de Seine, France

is found to comply with
Det Norske Veritas' Rules for Classification of Ships, High Speed & Light Craft and Det Norske Veritas' Offshore Standards

Application :

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

This Certificate is valid until **2019-06-30**.

Issued at **Høvik** on **2015-09-23**
DNV GL local station: **Madrid** for **DNV GL**

Approval Engineer: **Sverre Eriksen**

Marit Laumann
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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Job Id: **262.1-008822-2**
Certificate No: **TAE00000EH**

Product description
Valve Regulated Lead-Acid batteries for equipment supply. Gel technology.

Product code	20h Capacity (Ah)	Voltage (V)
ES290	25	12
ES450	40	12
ES650	56	12
ES900	80	12
ES950	85	12
ES1000-6	190	6
ES1100-6	200	6
ES1200	110	12
ES1300	120	12
ES1350	120	12
ES1600	140	12
ES2400	210	12

Manufactured by
EXIDE TECHNOLOGIES Operations GmbH & Co. KG
Im Thiergarten
D-63654 Büdingen
Germany

Application/Limitation
Batteries for use in ships and offshore Units. To be installed as described for valve regulated batteries in the DNV rules.

Type Approval documentation

Tests carried out
Capacity (IEC 60896-21), Short Circuit (IEC 60896-21), Recharge Behaviour (IEC 60896-21), High Current Tolerance (IEC 60896-21) and Vibration Resistance (EN 50342, V3).

Marking of product
EXIDE MARINE & MULTIFIT - Product Code – Capacity (Ah)

Periodical assessment
The scope of the retention/renewal survey is to verify that the conditions stipulated for the Type approval is complied with and that no alterations are made to the product design or choice of materials.

The main elements of the survey are:
- Inspection on factory samples, selected at random from the production line (where practicable)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer's product type marking and Type Approval Certificate.

Survey to be performed at least every second year.

END OF CERTIFICATE