STANDARD FOR CERTIFICATION

No. 2.9

Type Approval Programme No. 470

FIRE SAFETY

JUNE 2003

DET NORSKE VERITAS
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FOREWORD

DET NORSKE VERITAS is an autonomous and independent Foundation with the objective of safeguarding life, property and the environment at sea and ashore.

DET NORSKE VERITAS AS is a fully owned subsidiary Society of the Foundation. It undertakes classification and certification of ships, mobile offshore units, fixed offshore structures, facilities and systems for shipping and other industries. The Society also carries out research and development associated with these functions.

DET NORSKE VERITAS operates a worldwide network of survey stations and is authorised by more than 120 national administrations to carry out surveys and, in most cases, issue certificates on their behalf.

Standards for Certification

Standards for Certification (previously Certification Notes) are publications that contain principles, acceptance criteria and practical information related to the Society's consideration of objects, personnel, organisations, services and operations. Standards for Certification also apply as the basis for the issue of certificates and/or declarations that may not necessarily be related to classification.

A list of Standards for Certification is found in the latest edition of the Pt.0 of the ”Rules for Classification of Ships”, and the ”Rules for Classification of High Speed, Light Craft and Naval Surface Craft”.

The list of Standards for Certification is also included in the current “Classification Services – Publications” issued by the Society, which is available on request. All publications may be ordered from the Society’s Web site http://exchange.dnv.com. The list of publications is also available from this site.

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1. DNV Type Approval

1.1 Scope

These guidelines for type approval gives the requirements on which Det Norske Veritas bases its type approval of products specified in the relevant programmes in appendix A.

In general the conditions outlined in this guideline and in Certification Notes No. 1.2 Type Approval December 1996 shall be fulfilled before the type approval certificate is issued.

1.2 Documents to be Submitted

Application For type approval (form no. 90.01a) is to be submitted.

Further documents and number of copies to be submitted are specified in the relevant programmes in appendix A.

2. Design Requirements

The system is to comply with the rules and regulations as specified in relevant programmes in appendix A.

3. Elements of Type Approval

3.1 Design Assessment

The design assessment is to assess that the design of the product conforms to the requirements specified in 2. Design Requirements above.

3.2 Type Testing

The tests referred to in the documents in 2. above shall be carried out initially.

Witnessing by a DNV surveyor of the selection of test specimens may be required.

A DNV surveyor should witness relevant parts of the fire performance tests.

Det Norske Veritas will base its acceptance on the test reports, issued by a recognised fire laboratory, confirming compliance with above requirements.

3.3 Recognition of Test laboratory

Testing in accordance with the regulations and standards required by the DNV type approval programmes as stated in Appendix A will be accepted when carried out either:

1) at a European laboratory accredited by an EA (European Accreditation) member, or
2) at a non-European laboratory accredited by an organization who has signed an MLA (multilateral agreement) with EA (examples are: HOKLAS/Hong Kong and NATA/Australia), or
3) at a laboratory having the quality system audited by DNV (A quality audit by DNV will mean that a competent person will go through the Quality System of the laboratory in accordance with ISO/IEC 17025:2000. After closing the non-conformities, if any, a "Statement of Recognition" is issued. From then on, DNV will approve testing carried out by them as a part of a technical file, or
4) at a laboratory recognized/certified by an IMO Member State's Marine Administration
5) at a non-recognized/certified laboratory when testing is witnessed by a DNV branch auditor/expert and such arrangement is approved by the project leader prior to testing. Testing carried out on site or at the manufacturer's premises has to be witnessed by a branch auditor/expert.

3.4 Product Marking

The product or packing is to be marked with name of manufacturer, type designation and fire technical rating, as applicable.

The marking should be carried out in such a manner that it is visible, legible and indelible throughout the anticipated life of the equipment, and so that the marks of the product types can be traced back to the type approval certificate.

3.5 Issuance of Certificate

The type approval certificate will be issued upon satisfactory completion of the tests and procedures specified or referred to in this type approval guideline.

The certificate will have a validity of 4 years.

3.6 Renewal of Type Approval Certificate

A reminder letter will be sent to the certificate holder at least 3 months prior to the expiry of the certificate. The certificate holder may then apply to the local DNV station for renewal of the certificate.

Upon receipt of the request for renewal, the local DNV station will arrange a certificate retention survey as stated in 3.7 below.

The certificate retention survey report will constitute the basis for renewal of the type approval certificate.

3.7 Certificate Retention Survey

The objective of the survey is to verify that the product, design, material composition and product type marking are not altered as compared to original documentation.

The main elements of the survey are:

- Witnessing of factory tests/inspections of random samples from the production line
- Review of type approval documentation
- Review of possible changes in design, materials and performance
- Ensure traceability between manufacturer's product marking and type approval certificate

A report is to be made and submitted to the client after a certificate retention survey has been carried out. Certificate - retention Survey Report Form 90.02a may be used.

4. Appendix A – Type Approval Programme No. 470

Specified Requirements for Products

Contents

474.65	Foam Fire Extinguishing Liquid
474.66	Foam Proportioner
474.67	Inside Air Foam Fire Extinguishing System
474.68	High Expansion Foam Generator
474.71	Fixed Dry Chemical Fire Extinguishing System
474.81	Equivalent Fixed Gas Fire Extinguishing System
474.82	Fixed Fire Extinguishing System for Pleasure Craft
474.92	Twin Agent Fire Extinguishing System
475.11	Fire Hose
475.12	Combined Jet/Spray Water Nozzle
475.21	Fire Hose Reel
475.31	Portable Fire Extinguisher
475.32	Non-portable and transportable extinguisher
475.41	Compressed-Air Breathing System
475.42	Emergency Escape Breathing Device (EEBD)
475.51	Mobile Foam Fire Extinguishing Equipment