



**STANDARD FOR CERTIFICATION**

**No. 2.9**

**Type Approval Programme No. 785.80**

## **CONTINUOUS DRIP FUEL SAMPLER**

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A list of Standards for Certification is found in the latest edition of Pt.0 Ch.1 of the "Rules for Classification of Ships" and the "Rules for Classification of High Speed, Light Craft and Naval Surface Craft".

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## 1. Scope

### 1.1 General

This Standard for Certification 2.9 – Type Approval Programme gives the requirements on which Det Norske Veritas base their type approval of Continuous Drip Fuel Samplers.

### 1.2 Objective

The type approval of Continuous Drip Fuel Sampler is based upon the requirements in the following documents:

- DNV’s “Rules for Classification of Ships”, Pt.4, Ch.6 “Piping Systems”
- MARPOL 73/78 Annex VI, Regulation 18
- IMO Res. MEPC 96(47).

The procedure for assessment of conformity of manufactured products (production) and the installation onboard is not part of the scope of the Type Approval Programme.

## 2. Conformity Assessment - Design of Product Type

### 2.1 Procedure

The Type Approval Procedure consists of the following elements:

- design assessment
- type testing
- issuance of Type Approval Certificate
- certificate retention survey.

See Det Norske Veritas Standard for Certification No.1.2 for the general procedure for type approval.

### 2.2 Documentation

Drawings (triplicate) and data showing all design details and materials are to be submitted together with application for type approval. The following data and information shall be given:

- functional description
- design data/dimensions
- assembly drawing and sectional drawings at scale including parts list and specification of materials and connected accessories
- detail drawings as applicable
- type testing program
- test reports
- maker’s installation, maintenance and operating manual.

### 2.3 Material Requirements

Materials are to comply with DNV “Rules for Classification of Ships”, Pt.4 Ch.6 “Piping Systems”.

### 2.4 Design Requirements

The design requirements are the applicable parts of DNV “Rules for Classification of Ships”, Pt.4 Ch.6 “Piping Systems”, and IMO MEPC 96(47) as referred to in MARPOL Annex VI, Regulation 18.

## 3. Elements of the Type Approval

### 3.1 Design assessment

The documentation evaluation is carried out to assess that the

Continuous Drip Fuel Sampler is in conformity with requirements as stated in 2.3 and 2.4, including arrangement for tamperproof sealing of primary container to sampler, and arrangement for attachment/tightness of primary container to sampler.

### 3.2 Type Testing

Each new type and size of Continuous Drip Line Samplers shall be subject to the following prototype tests witnessed by a DNV surveyor:

- visual inspection verifying compliance with drawings
- pressure test applying a pressure of 1.5 times the sampler pressure class
- functional/performance test in operation during a bunkering.

### 3.3 Type Approval Certificate

When the design assessment and type testing are successfully completed a Type Approval Certificate will be issued to the manufacturer for the conformity of the design of the product type.

The Type Approval Certificate will include:

- sampler size ranges, pressure classes and associated dimensions, with additional conditions related to arrangement onboard
- additional features.

The Certificate is given a validity period of 4 years.

### 3.4 Renewal of the Type Approval Certificate

At least three months before the period of validity expires, the certificate-holder has to apply for renewal of the certificate.

Upon receipt of the request for renewal, Det Norske Veritas will perform a certificate retention survey. The main elements of a retention survey are:

- review the Type Approval documentation
- review of possible changes in design, materials and performance
- ensure traceability between manufacturer’s product type marking and the Type Approval Certificate.

The survey report will constitute the basis for the renewal of Type Approval and the issuance of a new certificate.

### 3.5 Design Changes

The Society is to be informed about any design changes which may have an influence on the performance data specified in the type approval certificate. Additional performance tests are to be carried out if considered necessary.

## 4. Maker’s Certificate

Each unit shall be furnished with a certificate issued by the maker. The certificate is to contain:

- declaration that the design of the unit conform to the basis for the type approval
- details of shop testing carried out
- reference to DNV TA-certificate.