

Guideline

**Anx I-
01**

CLAP

FORM N°Z017

Version : 1

Directive 87/404/EEC

Directive references:

Annex I

Adopted by WPG: July 1993

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Subjet: Clause 2 - Protection against corrosion

Question:

The Directive in Annexes I, clause 2 requires that: "The manufacturer must also take account of the following provisions:
- the vessels shall, bearing in mind their prescribed use, be adequately protected against corrosion".

Answer:

a) The prescribed use must be specified by the manufacturer in the instruction which calls for information on the "intended use of the vessels".
The intended use of the vessel must take into account the foreseeable service conditions which are related to the function of the vessel (e.g. air/oil separators etc.).
There are however real service conditions of which a manufacturer cannot be aware, e.g. possible presence of even small traces of water in the gas or presence of an industrial atmosphere which contains droplets of salt water etc., which can greatly increase the corrosion phenomena.

b) Adequate corrosion protection can be achieved by different measures such as
- A specified corrosion allowance which must be chosen by the manufacturer as a function of the "intended use".
- A protective coating or lining, the effectiveness of which must be demonstrated by the manufacturer through appropriate tests which could be considered by the notified body in the framework of the means of attestation procedures chosen by the manufacturer. If the coating is a proprietary system the manufacturer may demonstrate adequate protection without specific tests; the technical documents should include the detailed information.

Consensus with respect to "protection against corrosion":

The manufacturer shall in the instructions clearly specify the intended use by referring to the phenomena considered. In addition the manufacturer shall specify:

- The measures taken with respect to corrosion protection and the precautions that a user shall take in order to ensure that possible corrosion phenomena are under control; this shall include information on the recommended frequency of the periodic examination of the vessel which should be reasonable and realistic. This item related to the manufacturers' recommendations and not to any examination which may be required by Member State national legislation.