

Guideline

**Anx.II-
02**

CLAP

FORM N°Z024

Version : 1

Directive 87/404/EEC

Directive references: Annex II

Adopted by WPG: November 1993

Adopted by CLAP: November 1993

Subject: Point 4 - Family

Question:

Directive 87/404/EEC gives the following definition in Annex II, point 4.1(f):

"Vessels form part of the same family if they differ from the prototype only in diameter, provided that the permissible requirements referred to in sections 2.1.1 or 2.1.2 of Annex I are complied with and/or in the length of their cylindrical portion within the following limits:

- where a prototype has one or more shell rings in addition to the ends, variants in the family must have at least one shell ring,
 - where a prototype has just two dished ends, variants in the family must have no shell rings.
- Variations in length causing the apertures and/or penetrations to be modified must be shown in the drawing for each variant."

The term "family" should be spelt out.

Answer: Withdrawn in march 1998

- 1) their diameter, provided that the requirements referred to in sections 2.1.1 or 2.1.2 of Annex I to the Directive are complied with,
or
- 2) their length
 - if the prototype has one or more shell rings in addition to the ends, the vessels must have at least one shell ring
 - if the prototype has just two dished ends, the vessels must have no shell ringsor
- 3) their wall thickness, which must be between $t/2$ and $2t$ if t is the wall thickness of the prototype,
or
- 4) their apertures and/or penetrations, if the cross-section of the apertures and/or penetrations in one line is not greater than 1.2 times the cross-section of the apertures and/or penetrations of the prototype.

Any combination of 1) to 4) is possible.

All other design parameters are to be adhered to.

Reasons

The technical definition of "family" has stood the test of time.

Note: The notified body forum will propose more detail on the meaning of items (b3) and (b4)