Equipment or component parts brought in for the purpose of manufacture of equipment or systems should themselves be CE marked or a have a Declaration of Conformity

SYSTEM/EQUIPMENT

Is pressure equipment being designed and manufactured by the organisation. If this is a simple pressure vessel go to relevant flow chart.

YES

Maximum allowable pressure greater than 0.5 bar? — NO → PED does not apply

YES

Equipment excluded from PED? (Note 1) — YES → PED does not apply

NO

Determine type of Pressure Equipment

Note: X, Y and Z are entry points for pressure accessories and/or assemblies

- Vessel
  - Determine state of fluid contents (X)
    - Gas → Determine fluid group (Note 2)
      - Group 1 → Table 1
      - Group 2 → Table 2
    - Liquid → Determine fluid group (Note 2)
      - Group 1 → Table 3
      - Group 2 → Table 4
- Steam Generator → Table 5
- Piping
  - Determine state of fluid contents (Y)
    - Gas → Determine fluid group (Note 2)
      - Group 1 → Table 6
      - Group 2 → Table 7
    - Liquid → Determine fluid group (Note 2)
      - Group 1 → Table 8
      - Group 2 → Table 9
- Safety Accessories
  - Manufctured for specific equipment
    - YES → Classified in the same category as the equipment it protects.
    - NO → Classified in the same category as the equipment it protects.
- Pressure Accessories
  - The volume is more appropriate than the nominal size DN? — YES → Go to point X
  - NO → The nominal size DN is more appropriate than the volume? — YES → Go to point Y
  - NO → The nominal size DN and the volume are equally appropriate
  - Compare the output category starting from X, with that from Y, and take the higher category → Go to point Z
- Assemblies
  - Assessment of each item in the assembly according to its category unless it has previously been assessed
  - Assessment of the integration of the components of the assembly against the essential safety requirements as determined by the highest category applicable to the items concerned other than that applicable to any safety accessories (TBA)
  - Assessment of the protection of an assembly against exceeding the permissible operating limits as referred to I the essential safety requirements at the level of the highest category applicable to the items to be protected (TBA)
  - Go to point Z

Determine maximum allowable pressure in bar and volume in litres

Determine maximum allowable pressure in bar and DN

Use the table to determine the appropriate conformity assessment category

Z → Choose the required module for the category

Category	Module (Annex E)
SEP	Sound engineering practice
I	A
II	A1, DI, E1
III	B1+D, B1+F, B+E, B+C1, H
IV	B+D, B+F, G, H1

Note 1

Vessels designed to contain liquids with a gas pressure above the liquid of no more than 0.5 bar. Exhaust and inlet silencers. Mobile offshore units as well as equipment specifically intended for installation on board. Pressurised pipes for the containment of transmission systems eg for electrical power and telephone cables. Enclosures for high voltage electrical equipment. Well control equipment intended to contain/control well pressure. This comprises christmas tree, BOP, piping manifolds and all their upstream equipment. Pipelines designed for conveyance of any fluid or substance to or from an installation (on or offshore) starting from and including the last isolation device located within the confines of the installation including equipment designed specifically for pipelines. (Doesn't apply to standard pressure equipment found in pressure reduction or compression stations).

Note 2

Fluid group 1 comprises dangerous substances which are explosive; extremely flammable, highly flammable (where max allowable temperature is above flashpoint); toxic/very toxic; oxidising.

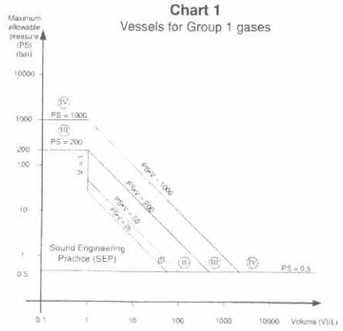
Group 2 is all fluids not shown in group 1 including steam.

Category I	Category II	Category III	Category IV
Module	Modules	Modules	Modules
A	A1	B1 + D	B + D
	D1	B1 + F	B + F
	E1	B + E	G
		B + C1	H1
		H	

Key

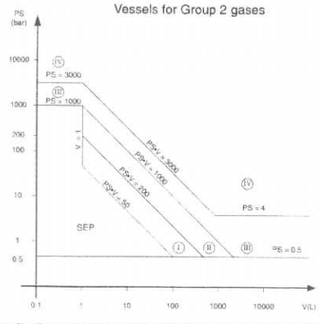
Module	Design	Production
A	Technical documentation	Internal production control
A1	Technical documentation	Internal production control with monitoring of the final assessment
B	Type examination	
B1	Design examination	
C1		Monitoring of final assessment
D		Quality assurance for production, final inspection and test
D1	Technical documentation	Quality assurance for production, final inspection and test
E		Quality assurance for final inspection and test
E1	Technical documentation	Quality assurance for final inspection and test
F		Product verification
G	Unit verification	Unit verification
H	Quality assurance for design,	manufacture, final inspection and test
H1	Quality assurance for design, with design examination and	manufacture, final inspection and test monitoring of final assessment

Chart 1
Vessels for Group 1 gases



Exceptionally, vessels intended to contain an unstable gas and falling within categories I or II on the basis of Chart 1 must be classified in category III

Chart 2
Vessels for Group 2 gases



Exceptionally, portable extinguishers and bottles for breathing equipment must be classified at least in category III

Chart 3
Vessels for Group 1 liquids

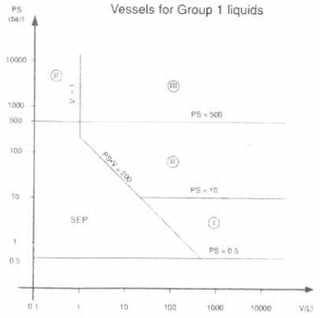
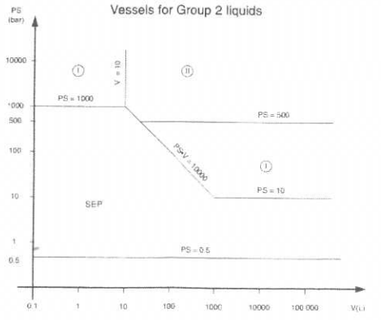
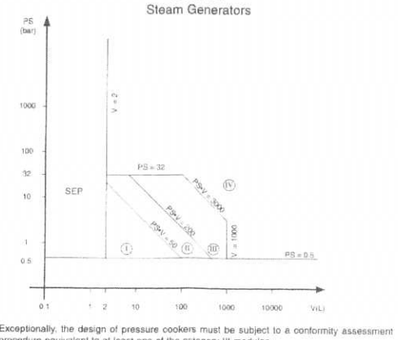


Chart 4
Vessels for Group 2 liquids



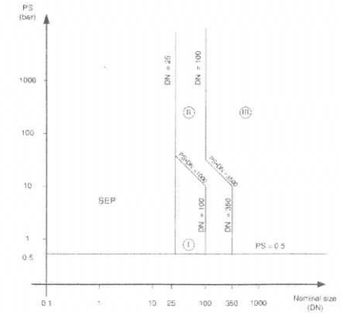
Exceptionally, assemblies intended for generating warm water at temperatures not greater than 110°C which are manually fed with solid fuels and have a product of pressure and volume greater than 50 bar litres, must be subject either to an EC design examination (Module B1) with respect to their conformity with Sections 2.10, 2.11, 3.4, 5(a) and 5(d) of the essential safety requirements, or to full quality assurance (Module H).

Chart 5
Steam Generators



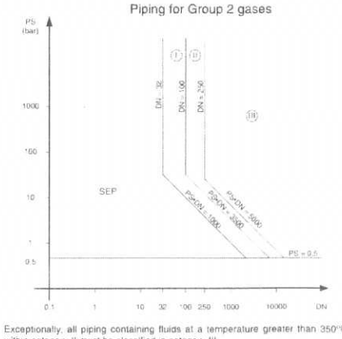
Exceptionally, the design of pressure cookers must be subject to a conformity assessment procedure equivalent to at least one of the category III modules.

Chart 6
Piping for Group 1 gases



Exceptionally, piping intended for unstable gases and falling within categories I or II must be classified in category III.

Chart 7
Piping for Group 2 gases



Exceptionally, all piping containing fluids at a temperature greater than 350°C and falling within category II must be classified in category III.

Chart 8
Piping for Group 1 liquids

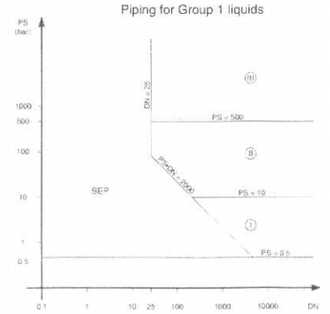


Chart 9
Piping for Group 2 liquids

