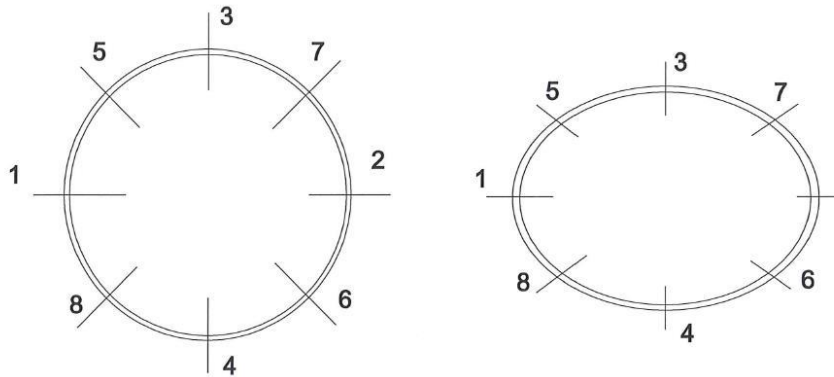


To avoid the possibility of distortion during the welding of the neck ring, it is recommended that the neck ring be tack welded first in eight diametrically opposite positions as shown below before applying the full weld bead.



## Certification

### CODAP2000 Certification

This is the French equivalent of the BSI Standards, or the German TÜV. Design calculations to this standard must conform to the CODAP 2000 specifications, and the final design must be approved.

### PED Certification

THE PED applies to the design, manufacture and conformity assessment of pressure equipment and assemblies of pressure equipment with a maximum allowable pressure greater than 0.5 bar.

Guidelines specifically exclude 'covers', collars, gaskets and flanges' and 'sight glasses with frames' from the definition of 'pressure accessory'. Therefore, these items do not need to be CE marked.

These items are classed as 'components of pressure equipment' and are therefore part of an assembly which must be CE marked by the manufacturer.

## Manways Statement

All PED approved doors are designed to recognise standards (eg TÜV / CODAP 2000) for use on vessels to comply with PED 97/23/EC and will be supplied with a documentation package including material certificates, design calculations and test results.

## General premise

- Before purchasing and later during the order phase to confirm one of our complete articles (manway, cover or valve) make sure that it processes the temperature static pressure and seal requirements necessary for the plant, tank or such like in which it is used.
- All the basic articles are supplied with a gasket in PARA (natural rubber) and hand wheel in plastic unless indicated otherwise in the catalogue. The PARA (natural rubber) gasket is suitable to come into contact with food substances, non-aggressive and/or acid substances or instable fluids subject to decomposition, at a temperature of -35°C to 90°C.
- It is advisable, first to consult our catalogue in which the maximum operating pressure for each article and the type of gasket (according to the explanation table) suitable to the temperature and the contained product, are given; our technical office is at your complete disposal for any further information and /or clarification.

## Installation – Usage – Safety

- Before positioning the frame, always make sure that the complete cover / frame opening / closing and coupling system functions properly to avoid having to correct any faults once the article is installed. After this, always remove the cover, the relevant accessories and the gasket.
- Always check that there are no damages, distortions or deformities in the hole made in the tank in which the specified article will be housed as this could compromise the general stability. If any damages, distortions or deformities should be found, they must be eliminated in an accurate, suitable manner. Under no circumstances should the frame be cut; if it should be indispensable to the cut the frame, consult our technical office. If any welding has to be carried out on the metal sheet, first of all, spot-weld the frame onto 4 cross-points, then spot-weld it in the circle at defined steps and finally weld it completely. Check the welding bead constantly to prevent distortions to the frame that could jeopardise its seal during the closure phase the gasket and/or the coupling with other parts. Then, after carrying out any type of grinding, pickling and/or silking operations on the welding, remount the cover tightening the screws or pins using suitable tools only. Make sure that the gasket is in a good state and well cleaned, assuring that when installed its surface is not damaged (pinched) during closure and that it is properly centred to prevent contact between metal and metal. Finally close the cover adjusting the hand wheels exclusively by hand, using a force suited to the type of tie rod and taking particular care to prevent any damages to the thread of the tie rods. Such assembly indications are of a general and non-exhaustive nature.
- During filling phase, in the inwardly opening doors, there could be a loosening of the closing arm on the frame. This loosening is provoked by the internal pressure, and it is normal. Avoid tightening the handwheel, since during emptying, there is no more internal pressure because of the liquid, so the pressure would be exclusively supported from the cover and the closing accessories – which could be irreparably damaged.
- Referring to the point above, in case the handwheel is tightened, please remember/remind to loosen it during the emptying phase.
- Make sure that the gasket is suitable for the contact and use of the substances inside the tank as well as for the products used for cleaning and disinfection. In case of any doubt, please contact the producer.
- Installation must be carried out by qualified personnel. HpE Process declines all responsibility related to installation procedure, if carried out in a way that does not comply with the instructions of the manufacturer and/or of this manual and/or of applicable regulations. If installed by qualified personnel, the article does not present any risks for the user. Safety, however, also depends on proper usage, according to the provisions of the products usage manual, while the user manual, while the user must assign the specific operations described in the manual itself to qualified personnel.
- Once installation is completed and before carrying out any type of operations, always check to ensure that the complete opening/closing and cover/frame coupling system functions correctly. If any distortions or faults are found, they must be eliminated in an accurate, suitable manner.
- Our products are safe articles, manufactured in observance of laws and regulations and are monitored and tested during the whole production cycle to guarantee the users safety. It is important to make sure that the personnel assigned to installing and managing the article are qualified regarding the legal provisions in force in the country in which the installation is made.
- The choice of materials relating to the usage, correct execution of jobs, verification of the condition of the plant in which the article is installed and its sustainability to guarantee safe usage is the responsibility of the installer.
- Due to the variety of possible usage, HpE Process has not provided any system of restricting access to the equipment in the presence of pressure: this eventuality is the responsibility of the assembly technician.
- To prevent any damages to manways or covers caused by accidental overpressures or de-pressurisations, the use of a safety valve is prescribed.
- Changing or modifying components or parts of the article with respect to the supply state is absolutely forbidden and will result in lapse of the Manufacturer's responsibility.

## Care-Maintenance

The main checks and maintenance operations to be carried out to ensure a long life for the walkways and covers, to be carried out exclusively with the plant at a stand-still, after de-pressurisation and de-assembly, are as follows:

- Check that after the initial period of use there are no solid residues (grape, grape-seeds, grape-stalks etc) on the gasket between the frame and the cover.
- During long periods when the plant is at a stand-still or when the tank is empty. It is indispensable that the covers should remain open so as not to cause the gaskets to dilate. Then, before starting new processing operations, the internal surfaces should be washed to remove any residues of dust etc.
- If it should be impossible to carry out these operations, the user should be aware that the probability of damaging the gaskets and therefore, the risk of subsequent leaks that could even result in emptying of the tank or the plant itself, increases considerably.
- As for all products, the manways, covers and valves are also subject to the natural ageing process. The action of rain, sun, wind etc... unfavourable characteristics to which they are subjected in the terms of seal and an over-exposed position of such articles foster and accelerate such a process. Mechanical damages during the installation phase or caused by extreme usage also have a negative impact on the duration of these articles.
- Carry out periodic maintenance (at least every 3 months) where possible to monitor the state of wear of the surfaces of the cover the rest of the frame, the good condition of the opening/closing system, the state of wear of the gasket and any surface deterioration due to the installation of the article in an environment with particularly unfavourable conditions.
- If any imperfections or breakages should be found, inform the supplier immediately, so as not to worsen the existing condition and to avoid a further deterioration, ordering the deteriorated or damaged parts.

## Guarantee

HpE Process guarantees its own products under the following conditions:

- In compliance with the law for 12 months after delivery
- The operating pressure indicates the static sealing pressure of the product and not the dynamic pressure which, in certain cases, due to wrong manoeuvres of water hammering, can exceed this threshold by a considerable amount.
- If any damages should occur to the manways they may be returned to the Manufacturer for repair, under penalty of nullity of the guarantee.
- In any case, HpE Process declines any responsibility and shall not be liable for any faults resulting from changes to their product, bad maintenance, wrong assembly, or the use of fluids not prescribed or with unsuitable temperatures and/or pressure, by the use of non-original spare parts or by wear due to usage.

## Transport- unloading- handling

- Particular care and attention must be paid during the transport and handling phase since the manways and covers are manufactured with thicknesses which, when assembled with plastic parts, can be damaged.
- The products must be handled using suitable means. Pallets weighing more than 30kg, must be unloaded with suitable mechanical means. Manual handling is absolutely forbidden.
- The products' packaging materials must not be disposed of in the environment. Packaging elements such as plastic, wood, cardboard, etc... must not be left within the reach of children since they are a potential source of danger. They must be disposed of at proper, indicated collection sites.

## Disposal

De-installation and/or decommissioning and/or any dismantling operations must be carried out by authorised, expert personnel only. HpE Process declines any responsibility for the above described to the end user who must define disposal procedures.

## Warnings

Users are recommended to follow the provisions imposed by Law Decree 81/2008 regarding safety in the workplace during all the phases described above.

## Spare Parts

Requests for spare parts must be sent to: HpE Process.

NB: The manufacturer cannot be considered responsible for any damages caused by improper, wrong and unreasonable usages.