

Pressure System Safety Regulations PSSR

The Pressure System Safety Regulations 2000 revoked and replaced the Pressure Systems and Transportable Gas Containers Regulations 1989 and cover various aspects of a systems safety. Ranging from the systems design through to its construction, then covering any subsequent repairs or modifications.

Compliance with the regulations can be problematic, Velosi is able to act as your Competent Person, giving you impartial advice as to how you might best comply with the regulations and carry out any technical inspections or assessments and issue the Written Scheme of Examination in accordance with the regulations.



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Type A
Inspection Body
Accredited to
ISO/IEC 17020

The PSSR covers various types of systems. However, there are some criteria with regard to whether a system is included or not. These relate to the stored energy (Pressure x Volume), steam scalding, the relevance of the fluid contents and specific exclusions.

The following are examples of where the PSSR legislation would apply:

- Boiler systems for schools, hospitals, shopping canter and office buildings,.
- Compresses air systems in garages and workshops. (but not the associated tools)
- Premises where autoclaves are used i.e. Dentists.
- Power stations
- Petrochemical complexes
- Process plants

Under the regulations it is the responsibility of the Duty Holder to ensure compliance, the Duty Holder can be either a person or an organisation and can range from the user or the owner, and can in some cases be the designer, manufacturer or seller. Once in use the Duty Holder then has a responsibility to ensure that the system is not used until it has a Written Scheme of Examination for the periodic examination.

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This Written Scheme must be issued by a Competent Person, such as Velosi. The Written Scheme must cover the protective devices, vessels, and any pipework that may give rise to danger. The scheme effectively certifies that the system is suitable for its intended use. The content of the Scheme must be reviewed at regular intervals. The length of the interval is determined from an examination of the system. The Duty Holder also has a responsibility to ensure that the examinations according to the scheme are carried out by a Competent Body according to the interval set in the Written Scheme.

It is often considered that the PSSR covers all aspects of a pressure system's safety. However, it is only relevant to the potential for release of stored energy or steam, which could cause harm. It is also usually considered that the PSSR is related to insurance. However, they are actually separate issues and need not necessarily be carried out by an insurance company.

Velosi's internal controls maintain a database of systems and schemes that it has certified and is able to ensure that reminders are issued to Duty Holders so their responsibilities can be maintained.



The Written Scheme of Examination defines the type of inspection, including any non-destructive examination, pressure testing, visual and dimensional check. The extent of the inspection such as full internal, full external with all lagging removed etc; it defines the periodicity of the inspection, this is based on the severity of the process and the judgment of the Competent Person for the equipment to remain safe under the existing working conditions.

There are some Common misconceptions of the PSSR SI 128 - Pressure System Safety Regulations:

Often you hear owners refer to their need for an insurance inspection. This is a myth, which, although not propagated by the insurances companies, they make no effort to dispel. What owners / users actually require is compliance to the PSSR and a Written Scheme of Examination.

Unless you specifically request your maintenance company to cover the PSSR, it is unlikely they will. The maintenance is a separate issue, commonly offered by the equipment supplier, who is not usually set up, or willing, to act as a Competent Person as defined by the PSSR.

The ultimate responsibility for the safety of the equipment, and the compliance to the PSSR, is not with the insurance company or the inspection company. It rests with the owner / user of the equipment. Commonly though, other people can be affected such as the designer, manufacture, and Competent Person. Should something go wrong, the HSE would prosecute the owner / user first.

The PSSR predecessor, the Pressure Systems & Transportable Gas Containers Regulations, used to define periodicity of inspection. However, the PSSR does not impose fixed periodicity. They are left entirely to the discretion of the Competent Person and the owner / user. This allows the Competent Person to take into account all relevant factors regarding the condition of the equipment and set an appropriate inspection period.

The PSSR are purely a UK regulation and have nothing to do with Europe. The PED / PER apply to the new construction and putting into service of equipment. The PSSR are concerned with the in-service aspects of the equipment.

