Hydraulic Accumulator Division

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Global Certifications

By Mike Schubert

If you are reading this article, you cannot deny the following statement: “The world is much smaller than it was ten years ago.” Ever since the invention of the internet, the ability to communicate with other cultures has become immeasurably easier. This ease of communication has driven diverse people to engage in business that was once thought impossible.

Unfortunately, manufacturing standards among global regions have not progressed as quickly as communication standards. In fact, some of these standards as written make a global standard nearly impossible to achieve due to the parameters that must be met for the individual standards.

Parker’s Accumulator Division, the global leader in the manufacture of accumulators, offers the broadest range of solutions for today’s global customers. From the United States to Europe to Asia to Australia, we can provide the certifications necessary.

In North and South America, the basic standard that accumulators are built to is the American Society of Mechanical Engineer’s (ASME) boiler and pressure vessel code Section VIII, Division 1. Originally written to create a standard for the manufacture of boilers on steam locomotives, the code has evolved into requirements for pressure vessels today and, in particular, accumulators. The basics pertaining to accumulators are as follows:

- All units must be designed to a 3.5:1 design factor.
- All units with a 6" inside diameter and greater must be designed and certified to ASME Section VIII, Division 1. Typically, the vessel is hydrostatically pressure tested at 1.5 times its rated pressure under the supervision of an Authorized inspector.
- All units less than a 6" inside diameter must be designed and manufactured to the same criteria, but the hydrostatic pressure test on the individual units does not need to be witnessed by the Authorized inspector.
- According to Appendix 22 of Section VIII, Division 1, forged vessels can be rated to a 3:1 design factor. This would include bladder style accumulators.

Canadian Registration Numbers (CRN) can be obtained by constructing an accumulator from ASME certified material using ASME standards of design. Each province has its own registration number, and so the end destination of the accumulator must be known.

In South and Central America, ASME is generally accepted. Some countries do not strictly require ASME, but none will turn it down.

Europe’s requirement for accumulators is obtained by manufacturing according to the Pressure Equipment Directive (PED), which is as follows:

- All units less than 1 liter must be manufactured according to Sound Engineering Practices (SEP) in a facility audited by a registered Notified Body.
- All units 1 liter and larger must be constructed of European Congress recognized material manufactured at an ISO certified mill according to PED guidelines in a facility audited by a registered Notified Body.

The other certifications that Accumulator Division can provide are:

- Det Norske Veritas (DNV), which is primarily required in the North Sea
- American Bureau of Shipping (ABS), which is required on shipping vessels, docks, and oil rigs
- Australia’s AS1210.
- Chinese SELO certification.
- Japanese KHK certification, through our partnership with Taiyo

We also offer dual certified ASME/CE accumulators. Please call the division for details.

No matter where you need to be, Parker’s Accumulator Division will be there with you to support you with product and services.

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