

Introduction

This document is a summary of OH&S requirements relating to hydraulic accumulators. Hydraulic accumulators are pressure vessels and as such are covered by statutory regulation. Any person importing, selling, or working on a pressure vessel **must** comply with these regulations.

Design Registration

(Responsibility of the manufacturer/importer)

Hydraulic accumulators (pressure vessels) with Hazard Levels A,B,C or D (as specified in AS4343:2014), shall have their design verified by a 3rd party & registered with the local WorkSafe authority. (4) (3)

Vessels may be designed & manufactured according to any recognised international standard (ie AS1210, AD2000, ASME, EN14359, PD5500) provided the design is verified by an Australian 3rd party qualified to do so.

Older equipment **must** also be design verified & registered, this can be carried out, given applicable documentation on the vessels is available. The old design **must** be shown to comply with current standards.

Servicing

Hydraulic service companies proposing to pre-charge or repair an accumulator have a responsibility to their workers and customers to ensure compliance with Workplace Health & Safety regulations.

Whilst in their possession a service company takes on the role of “owner” of the vessel.

“A PCBU¹ **must** not direct or allow a worker to use a registrable item of plant in the workplace if it has not been registered” (5)

The recommendation from WorkSafe/SafeWork is that “support organisations” such as hydraulic service companies have a duty of care to make a non compliant vessel safe (isolate, de-gas & strip if necessary) and make the owner aware of their legal responsibilities to maintain plant compliance.

In-Service Inspection

(Responsibility of the Owner)

employer/owners **must** ensure that pressure equipment is inspected in accordance with AS3788:2006.

All Pressure vessel inspections shall be carried out by a competent person, such as a boiler inspector or company that specialises in pressure vessel inspections.

Plant owners should keep the inspection certificate as a record of inspection along with all documentation relating to the vessel. (2)

NOMINAL REQUIREMENTS FOR STANDARD HYDRAULIC ACCUMULATORS

MODEL	HAZARD LEVEL	DESIGN VER + REG	ITEM OF PLANT	COMMISSIONING INSPECTION	1ST YEAR INSPECTION	EXTERNAL INSPECTION (2 yearly)	INTERNAL INSPECTION (12 yearly)
1L, 350 BAR	B	✓	✓	✗	✗	⚠	⚠
2.5-4L, 350 BAR	B	✓	✓	✓	✗	⚠	⚠
10-57L, 345 BAR	B	✓	✓	✓	✓	✓	✓

⚠ Inspect in accordance with "Good Engineering Practice"

Item of Plant Registration

(Responsibility of the Owner)

Hydraulic Accumulators with Hazard Levels A, B or C shall be registered as an *item of plant* with the local WorkSafe authority. (4)

Registration **must** be renewed annually in most states.

Plant owners with multiple accumulators in same location should enquire about “Multiple Registration of Plant Items”

¹ persons conducting a business or undertaking (PCBU)

References: (1) AS4343:2014 , (2) AS3788:2006 , (3) AS3920:2015 , (4) OH&S Regulation 2004 , (5) Code Of practice 2021 (Managing the risks of plant in the workplace)