



PRESSURE EQUIPMENT GROUP

Pressure equipment includes boilers, pressure vessels, pressure piping and associated safety equipment. Pressure equipment design covers stress analysis, material selection, manufacture, testing, inspection, operation and failure analysis, codes, standards and regulations.

Hatch' Pressure Equipment Group offers a wide range of mechanical engineering expertise for the design, independent design verification, analysis, re-rating, fitness for service assessments, and fabrication specifications of pressure vessels all to a high standard and supported by a Quality System to AS/NZS ISO 9001:2000.

Hatch can supply project management for the fabrication and construction of pressure vessels.

Hatch can offer a complete service from design through to the supply of your pressure vessel and/or safety system.

CAPABILITIES

- Independent design verification of pressure equipment to be installed in Australia. (Hatch Perth Office is a Design Verifying Body complying with SAA/SNZ MP76).
- Pressure vessel calculation in accordance with AS1210, ASME VIII Div 1 & 2 together with specification and datasheet
- Pressure vessels manufacture, examination and testing
- Heat exchanger calculation in accordance with AS1210, AS3857, ASME VIII Div 1 & 2 and TEMA together with specification and datasheet
- Assessment of pressure equipment integrity in accordance with AS3788, API 579, etc
- Determination of safe remaining life of pressure equipment in accordance with AS3788
- Pressure relief device calculation, which includes inlet loss and orifice sizing selection together with specification and datasheet.
- Finite element analysis (FEA) for tubesheets, nozzle/shell junction and others
- Pressure piping layout and stress analysis (static and dynamic) in accordance with AS4041, ASME B31.1, ASME B31.3
- In-service inspection assessment of fitness for service API (RP) 579
- Tank design and verification (API 650)
- Services for registration of classified plant with WorkSafe or The Department of Mines and Petroleum (when "authority" is provided by the owner).
- Familiar with local regulatory authorities' requirements.
- All pressure equipment of hazard level C & D designed by Hatch will not require third-party design verification.
- Pressure vessel/heat exchanger of hazard level A, B & C designed to ASME VIII-Div.1 (by external party) can be independently verified by Hatch to AS1210 (verification calculation can be provided)

CONTACTS

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PRESSURE EQUIPMENT GROUP CONTINUED**SOFTWARE**

Design and design verification software:

- Compress by Codeware (ASME VIII-Div 1 & 2)
- MS Excel and MathCAD (developed in-house AS1210)
- Caesar II by Coade (pipe stress analysis)
- NozzlePro (ASME VIII nozzle/shell fatigue analysis)
- Finite element analysis (ANSYS)

