

Benjamin Vanderloo, P.Eng. Senior Mechanical Engineer

Qualification Highlights

- Mechanical design using SolidWorks and AutoCAD
- Leading edge design skills using Finite Element Analysis (FEA) with SolidWorks Simulation
- FEA report writing in compliance with Alberta's standard, AB-520 and CSA B51 Annex J
- Advanced Understanding of commercial vessel software: Compress, PV Elite, CodeCalc, DesignCalcs and Nozzle Pro
- Design pressure vessels and pressure retaining devices
- Managing multiple projects simultaneously from quotation to fabrication

Code Knowledge:

- ASME Section VIII-1, VIII-2, I, IV, B31.1/B31.3, various other ASME standards

Specializing in:

- Pressure Vessels, Finite Element Analysis, Boilers, Fittings

Experience

2008 – Present

Pressure Vessel Engineering – Senior Mechanical Engineer

- Review and markup drawings for ASME compliance
- Design and analysis of pressure equipment using FEA and analytical methods
- Fatigue assessment of pressure equipment per ASME VIII-2
- Solid models and drawings
- Consulting with customers regarding Canadian registration numbers (CRN)
- Peer review of engineering work prepared within the office

2006 May-Dec & 2007 Sept-Dec

Automation Tooling Systems – Mechanical Designer (co-op)

- Designed detailed parts and assemblies using CAD software
- Reviewed and revised manufacturing drawings
- Created detailed drawings of parts and assemblies
- Solved manufacturing related problems
- Defined specifications pertaining to part processing and manufacturing

2005 May-Aug

Automation Tooling Systems – Process Engineering (co-op)

- Influenced engineering changes to part processing
- Measured parts using computer operated tools
- Updated and wrote work instructions to ensure proper manufacturing practices were used
- Designed parts and templates using CAD software

Education

**Graduated in 2008 - Bachelor of Applied Technologies in Mechanical Systems Engineering
Conestoga College Institute of Technology and Advanced Learning**

Professional Credentials

Licensed Professional Engineer in the province of Ontario (PEO)