

**Experience:**

**Sep 2011 - Present**

**Engineer**  
**Alan Towers Engineering Inc.**

- Provide Engineering consulting support for power generation and general industry.
- Consult on hydro generator improvement, failure analysis, maintenance, disassembly and reassembly, alignment, balancing, upgrades, life extensions, and new installations and commissioning.
- Registered as a Professional Engineer in Alberta, BC, NWT, Yukon, Saskatchewan, and Ontario.
- Category 1 Vibration Analyst.
- Completed CASTI Welding Fundamentals course.
- Project Management Professional with PMI.
- Acquired Alberta Boiler Safety Association Certification of Authorization for a peer company.

**Dec. 2008 - Aug 2011**

**Operations Manager**  
**Weir Canada, Calgary Service Centre, Calgary, AB.**

- Operations Manager of a large rotating equipment service centre with full machine and millwright shop capabilities.
- Responsibility for Projects, Administration, Estimating, Production, Health & Safety, Quality, Environmental, Lean Manufacturing, Budgeting, Forecasting, and Invoicing at the Calgary Service Centre.
- Raised lean score from 65 to 87, leading score amongst Weir Service Centres worldwide.
- Recently involved with business development, drafting and presenting technical proposals, and commercial negotiations.
- Registered as a Professional Engineer in Alberta, BC, and NWT.
- Project Management Professional with PMI.

**Mar. 2004 - Dec. 2008**

**Senior Engineer**  
**Weir Canada, Calgary Service Centre, Calgary, AB.**

- Senior Engineer supporting a rotating equipment repair shop, duties involved estimating, workscopes, technical specifications, cost control, and direct project planning and supervision.
- Projects varied in size from \$50k to \$1.5 mil.
- Supervisor and mentor to Engineers in Training.
- Project manager and Engineer for hydro-generator, pump, and gas turbine field and shop projects.
- Technical advisor to shop, field, and sales personnel.
- Radiation Officer, X-Ray Fluorescence Operator Level 1
- Utilized SolidWorks, CosmosWorks, AutoCad, and Microsoft Project software.

**Sept. 2001 - Mar. 2004**

**Mechanical Project Engineer**  
**Towers Engineering, Kelowna, BC.**

- Mechanical Project Engineer that performed mechanical design and development for clients, as well as, Manufacturing and Industrial Engineering consulting using lean techniques and quality management.
- Extensive aluminum and steel fabrication experience.
- Utilized SolidWorks and AutoCad software.

**Oct. 2000 - Sept. 2001**

**Manufacturing Engineer**  
**Dynasty Motorcar, Kelowna, BC.**

- Manufacturing Engineer responsible for designing and implementing production facility for low speed electric vehicles using lean thinking.
- Manage equipment specifications and price negotiations, purchasing, installation, and certification of production equipment and building improvements.
- Initiated quality systems for future ISO certification.
- Utilized ProEngineer and AutoCad software.

**Aug. 1998 - Oct. 2000                      Production Support Specialist (Liaison Engineer)  
Western Star Trucks, Kelowna, BC.**

- Responsible for implementing new product designs and managing improvements to older configurations.
- Directly support Class 8 Truck manufacturing, by solving problems on line within cycle time in a Liaison Engineering role.
- ProEngineer and FEA experience working with Design Engineers while redesigning and optimizing truck designs.

**Feb. 1997 - Aug. 1998                      Manufacturing Engineer  
Western Star Trucks, Kelowna, BC.**

- Directly supported Class 8 Truck manufacturing.
- Instituted cost, labour saving, ergonomics, and continuous improvement initiatives.
- Designed and provided technical direction for fabricators of tooling and jigs to support increased production and to ensure improved quality is realized.
- Implement ISO 9001 and QS 9000 quality standards.

**Sep. 1995 - Jan. 1997                      Lead Product Engineer  
Visteon, Markham Plant, Markham, ON.**

- Lead Product Engineer on Programmable Speedometer Odometer (PSOM) manufacturing line.
- Controlled production line operations and product integrity including, PSOM design and process improvements, operator manning, line layout and capacity, equipment, maintenance, and customer relations, with the objectives of optimizing manufacturing efficiency, cycle time, cost reduction and quality.
- Extensive use of total quality management, continuous improvement, theory of constraints, kanban kiting, total productive maintenance, poka-yoke, and lean manufacturing.

**Aug. 1993 - Sep. 1995                      Maintenance Production Supervisor  
Visteon, Markham Plant, Markham, ON.**

- Production Supervisor on Integrated Airbag Diagnostic Module line, Cluster ACI/SMD lines, and Maintenance Supervisor responsible for all midnight shift maintenance personnel with the objectives of meeting attainment, manufacturing efficiency, cycle time, cost reduction, and quality standards.

**Jan. 1993 - Aug. 1993                      Production Supervisor  
Visteon, Markham Plant, Markham, ON.**

- Production Supervisor on Integrated Airbag Diagnostic Module line with the objectives of meeting attainment, manufacturing efficiency, cycle time, cost reduction, and quality control.

**Jul. 1991 - Jan. 1993                      Design Engineer  
Strataflex, Toronto, ON.**

- New product design and the redesign of existing products to ensure optimization of manufacturability, cost and quality, for the manufacture of flexible circuit boards.

**Education:**

- Bachelor of Applied Science, Engineering Science, Aerospace Option.
  - 1991, University of Toronto, Toronto, ON.
- General Management Certificate for Professional Engineers
  - 2010, University of Calgary Continuing Education

**Contact Information:**

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