

CURRICULUM VITAE

Michael T. Rees, P. Eng.

EDUCATION & PROFESSIONAL CERTIFICATIONS

- 2017 Certified Vehicle Fire Investigator (CVFI)
National Association of Fire Investigators (NAFI), Kentucky
- 2014 Certified Fire and Explosion Investigator (CFEI)
National Association of Fire Investigators (NAFI), Kentucky
- 1999 Bearing Engineering, Design and Analysis
The Torrington Company, Torrington, CT.
- 1998 Certified Manufacturing Technologist
Society of Manufacturing Engineers, Edmonton, AB.
- 1994 Bachelor of Science in Mechanical Engineering
University of Alberta, Edmonton, AB.

COURSES & WORKSHOPS

- FIAA, Hot Wheels, Vehicle Fire Investigation Course (Sept 2023) House Full of Gas, Red Deer, Alberta, April 2023
- FIAA, Electrical Appliances & Related Fires (June 2022)
- FIAA, Prosecutor's Perspective, Seminar (2018).
- FIAA, Hot Wheels, Vehicle Fire investigation Course (2017).
- One day courses offered through local technical societies on the following topics: Pipeline Design & Construction, Filler Metals, Failure Analysis Fundamentals, Corrosion Resistant Alloys, Stainless Steel Welding Metallurgy, Introduction to Welding Metallurgy, Principles of Lean Manufacturing for the Small Shop, and Properties & Processing of Steels.
- Three to five day courses: Electrical Engineering Fundamentals (February 2016), Building Science Fundamentals (September 2015) and Advanced Building Science (November 2016), Building the Perfect Engine/Principles Lean 6 Sigma (2005), Fundamentals of Vibration Analysis (Kadon Electro-Mechanical) (2000).
- 12 Week Program: NAIT - Manual Machining Course (2006)

PROFESSIONAL ASSOCIATIONS

- Member, Association of Professional Engineers and Geoscientists of Alberta
- Member, National Association of Fire Investigators (NAFI).

EXPERT TESTIMONY

Testified as an Expert Witness in the Court of Queen's Bench of Alberta (St. Isidore Co-op v Wheatheart AGI, April 2019). Qualified as an expert in Mechanical Engineering.

PROFESSIONAL CAREER

2012 - Present

ANDERSON ASSOCIATES CONSULTING ENGINEERS INC.

Mechanical Engineer

- Project management, design engineering and forensic engineering.
- Forensic engineering work to date has included vehicle fires, structural fires, industrial equipment failures, commercial building mechanical failures, building envelope/science, residential property loss investigations, and personal injury.
- Project work is based on client demand, and suitable manpower is allocated to satisfy the work load and schedule commitments.
- Project management duties typically involve supervision of 1 or 2 junior engineers, with project durations between 1 and 6 months.

2008 - 2012

ENGINEERING DESIGN RESOURCES LTD.

Director of Production

- Ownership with two partners for a "start up" engineering design and testing company.
- Partnership speciality for the technical design reviews and all product manufacturing and quality; primarily servicing the down-hole drilling tool and production tool industries.
- Managed up to 10 staff, including engineers, design technicians, cost accountants, and book keepers.
- Established and maintained good working relationships with clients and vendors both locally and internationally.

2001 - 2008

SPERRY SUN DRILLING SERVICES (DIV. HALLIBURTON)

Manufacturing Technology & Quality Engineering

- Responsibility for the technical and commercial aspects of production of several product lines available from the Nisku Manufacturing Facility by working closely with the designers, fabrication vendors, and end users to ensure the required level of quality was met or exceeded.
- Led design reviews with the end user and other technical staff, with a global perspective using a working knowledge of other countries codes and standards to ensure compliance or identify areas of discussion and agreement (contractual, etc).

- Worked on Design for Manufacturability using professional knowledge of primary manufacturing methods including machining, forging, welding, and casting; working knowledge of secondary and tertiary manufacturing/processing methods such as metal heat treating, weld overlays and sprays, coatings, etc.
- This work experience entailed learning many codes and specifications, particularly with oil & gas applications; working knowledge of materials, particularly carbon, low alloy and exotic chrome and nickel based alloys; general mechanical aptitude with specialty in rolling element and plain bearings.
- Problem solving technical issues faced by procurement. This included dispositioning concession requests pertaining to dimensional, functional, material, and manufacturing process concerns, communicating frequently with the vendor network, and often resulted in associated procedures being created as well as directly working with the design group to ensure drawings properly reflect the actual manufacturing requirements. As a result, I have been involved in this regard for all product lines manufactured in Nisku, Alberta.
- Mentoring two to three junior engineers-in-training in the Manufacturing Technology Department and Engineering co-op students.

1999 - 2001

THE TORRINGTON COMPANY (DIV. INGERSOLL-RAND)

Senior Technical Sales Representative

- Responsibility for managing bearing and component sales throughout a Western Canadian sales territory (incl. B.C., Alberta, Saskatchewan, and Manitoba)
- Main focus on end user accounts such as: pulp & paper mills, mines, aggregate equipment, oil & gas production equipment, and agricultural equipment.
- Product sold mainly through a large distributor network, the balance sold direct to Original Equipment Manufacturers (OEM).
- Both channels entailed technical work with engineers, designers, millwrights and maintenance specialists, mainly in the form of bearing selection, maintenance recommendations and seminars, and failure analysis.
- Addressed commercial and logistical issues with purchasing and marketing departments.

Jan. 1996 - 1999

INA BEARING COMPANY LTD.

Technical Sales Representative

- Working primarily with OEM (Original Equipment Manufacturers) customers and distributors throughout Alberta and Saskatchewan, provided solutions for new and existing customers using standard products and/or custom designed products by:
 - working with engineering on bearing design and selection and other technical issues
 - working with purchasing on commercial issues
 - working with production on product installation / assembly

1994 - Dec. 1995

MASTCO DERRICK SERVICES

Engineering Department

- Key responsibilities included overseeing projects from initial quotations to the final construction by:
 - performing mechanical and structural design and calculations
 - drafting existing & to-be-fabricated structures
 - material "take-offs" from Engineering drawings
 - estimating project costs of materials and labour
 - purchasing required materials
 - overseeing project progress in the shop
 - supervisory responsibilities including interviewing and hiring of shop personnel and customer relations

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July 16, 2024
Date