



Daniel Balagot, B.A.Sc., CFEI, P.Eng. *(he/him)*

(647) 738-5429 | dbalagot@30fe.com

902 – 40 University Ave., Toronto ON M5J 1T1



EXPERT SUMMARY

Mr. Daniel Balagot is an Associate with the Materials group at 30 Forensic Engineering. He holds a Chemical Engineering degree from the University of Toronto. Daniel specializes in manufacturing and process engineering in various industries. At 30, Daniel investigates a range of HVAC-R and mechanical systems failures, product failures, equipment failures, and equipment fire investigations. Daniel is a licensed Professional Engineer in the Province of Ontario and a Certified Fire & Explosion Investigator.

SPECIALIZED PROFESSIONAL COMPETENCIES

- Structure, Properties, Mechanics, and Production of Materials
- Manufacturing Processes
- Engineering Design and Product Failure
- Process Safety and HAZOP
- HVAC and Mechanical Systems and Equipment Assessments
- Project Management
- Procurement and Materials Management
- Technical Writing

ACADEMIC BACKGROUND

Chemical Engineering, University of Toronto, Toronto, Ontario, 2008

ADDITIONAL COURSES

Principles of Failures Analysis, 2023

FESTI NFPA 921 Certified Fire and Explosion Investigators Program, 2021

Working at Safe Heights (MOL Certified), 2021



PROFESSIONAL EXPERIENCE

30 Forensic Engineering

Associate, Materials Failure
2021 – Present, Toronto, ON

- Conducts forensic investigations in the following areas:
 - Product liability
 - Mechanical systems failures
 - HVAC-R and sprinkler systems failures
 - Power and process piping and plumbing
 - Plastic and polymer failure
 - Boilers and pressure vessels failures
 - Manufacturing equipment
 - Equipment breakdown
 - Equipment fires
 - Metallurgical analysis
 - Fractography and fracture surface analysis

Boiler Inspection and Insurance Company

Engineering Claims Adjuster
2018 – 2021, Toronto, ON

- Commercial claims handling; from First Notice of Loss to settlement
- Handled claims with large quantum ranging from thousands to multi-millions
- Provided technical engineering support to Claims Adjusters on different equipment
- Prepared large loss notices for upper management to discuss claim details

IKO Industries LTD

Corporate Process Engineer
2013 –2018, Toronto, ON

- Designed and developed multiple piping systems involving raw material and auxiliary resources, such as asphalt, hot oil, steam, process water, and compressed air
- Created Capital Expenditures Requisitions (CEARs) for multiple projects, Theory of Operation, IKO Standards documents, Master Equipment Lists, Engineering Weekly Reports, Project Schedules, and reviewed Standard Operating Procedures (SOPs) and Work Instructions (WI)
- Designed and updated piping and instrumentation diagrams (P&IDs), process flow diagrams (PFDs), and reviewed As-Built drawings
- Assessed processes in plants and implemented continuous process improvements (CPIs) to improve productivity and efficiency



- Assessed and performed troubleshooting of process equipment (tanks, pumps, piping, heat exchangers, etc.) for damage
- Inspected and assessed tanks as per API Standard 650 (Welded Tanks for Oil Storage) and API Standard 653 (Tank Inspection, Repair, Alteration and Reconstruction)
- Involved in the design and construction of the plants built in Sylacauga, Alabama, USA, Hillsboro, Texas, USA and Brampton, Ontario, Canada
- Travelled to different IKO manufacturing sites across North America to supervise, manage and implement new projects/designs/tests
- Worked with vendors on ordering parts and handling POs, invoices, etc.
- Oversaw projects ranging valued at thousands to multi-millions

Flextronics

Process Engineer/Maintenance Engineering Lead
2012 –2013, Toronto, ON

- Supervised 12 maintenance technicians
- Prepared maintenance PMs and assist team with maintenance duties
- Worked with vendors and manufacturers to improve machinery efficiency
- Worked with Allen Bradley and Siemens systems, HMIs, ABB robots, Servo motors
- Project Planning based on Kaizen and special projects
- Prepared risk assessment analysis and business justification plans
- Sustained machine efficiency by doing Root Cause Analysis (RCA)
- Designed and developed processes following all Codes and Standards

PROFESSIONAL SOCIETIES AND ASSOCIATIONS

- Professional Engineers Ontario (PEO), Member
- National Association of Fire Investigators (NAFI), Member
- Canadian Society of Chemical Engineers (CsCHE), Member