

Multi-disciplinary team of engineers, scientists and technologists specializing in the design of custom industrial measurement systems.

CUSTOM SENSOR DESIGN AND PROTOTYPING

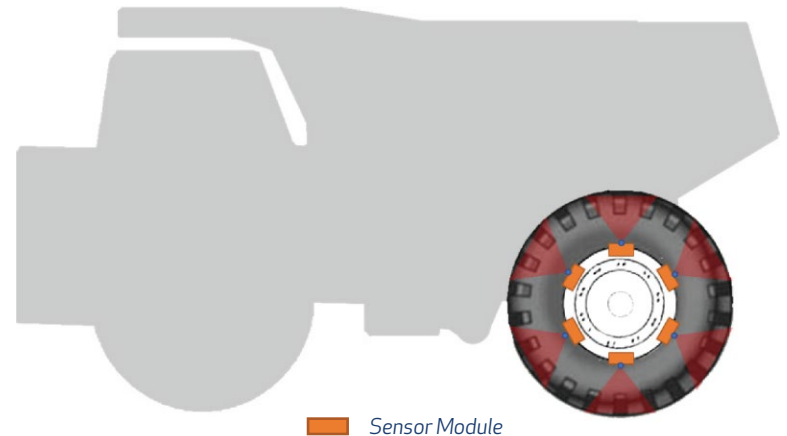
- Custom embedded sensors for equipment, field and process condition monitoring
- Prototype development and testing
- Field deployment, monitoring and preventative maintenance

INDUSTRIAL SENSOR DEVELOPMENT

Analyzer Design from Concept to Field Deployment

- Measurement Concept Development
- Continuous Online Measurement for Diverse Applications
- Mechanical, electrical and instrumentation design.
- Process control and automation design.
- Analysis Software
- Process Sampling Systems
- Remote data transfer/IIOT Capabilities

Supporting research and industry advancement with purpose-built instruments; providing reliable and accurate process measurements.



— Sensor Module



Online Analyzer for Boiler Feedwater Quality

FOR MORE INFORMATION, PLEASE CONTACT:

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Monitoring, Analytics & Informatics

InnoTech Alberta, a subsidiary of Alberta Innovates, is a leading research and technology organization serving the needs of industry, entrepreneurs and the public sector. Our leading-edge expertise and industrial-scale research and demonstration facilities accelerate and de-risk technology development and deployment for our clients with a focus on industrial solutions and commercial applications.

Visit us at: InnoTechAlberta.ca

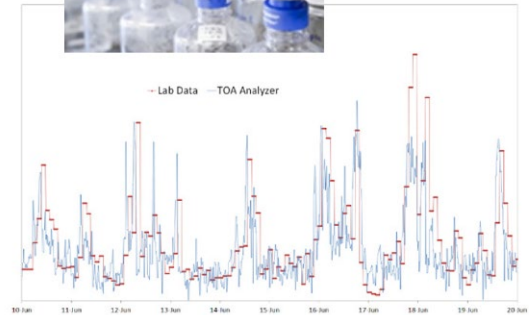
INDUSTRIAL SENSOR ANALYZERS SUITE

Tailings Oil Analyzer

- Measures bitumen levels in tailing and middlings
- Fully automated online measurement Analyzer
- Process Optimization and Cost Savings by reducing Bitumen loss to tailings
- Improve Environmental Monitoring and Compliance for Bitumen lost to tailings



Tailings Oil Analyzer



Correlation of Lab vs TOA Tailings Data 1

NIR Ore Grade Analyzer

- Online absorbance measurement of near infrared spectra from 1400-2400nm
- Online measurement of bitumen and water contents in oil sands ore allows the operator to make process adjustments to optimize the extraction process



NIR Ore Grade Analyzer



Oil Sand Absorbance Spectrum for H₂O and Bitumen

Analyzer Sustainability Support

- Adhoc or scheduled on-site maintenance and analyzer support
- Remote maintenance through wireless connections available
- Remote connectivity allows for continuous monitoring of machine data, identification of machine issues, tracking of trends, and prediction of potential failures

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DATA ANALYTICS AND IIOT

- Predictive Maintenance
- Process Modelling
- Upset Prediction
- Process Optimization
- Hidden Process Insights



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