

### **Industry Support**

### **Beyond R&D**

SRC has served a variety of industries in Saskatchewan for over 75 years. We have the combined engineering and technical capability to custom design a wide range of equipment, systems and structures that will save you time and money on your upgrades, expansions, retrofits and new installations.

### **Operational and Maintenence Support**

- Mechanical design and engineering analysis
- Engineered solutions weld fatigue, torsion and deflection control, vibration, noise, wear, corrosion and heat transfer problems
- Material failure analysis, electron microprobe analysis and metallurgical failure analysis
- Critical shaft design and analysis
- Pump and fan optimization
- Remediation and upgrade services
- Reverse engineering and load rating
- Control loop optimization and automation
- Energy management services
- · Boiler and heating system optimization
- · Electrical demand charge management
- Combustion efficiency



Underground Up-hole Ore Mapping System

# Custom Design/Build (Structures and equipment)

- Gear boxes, drives, shafts, seals, bearings, actuators and hydraulics
- Conveyors, bucket elevators and vibratory feeders
- Clarifiers, water treatment systems and slurry handling systems
- Sieves, tanks, surge vessels, hoppers, chutes, guards and protective cages
- Mezzanines, platforms, stands, catwalks, stairs and rails
- Mechatronics: machines with integrated embedded processors, sensors, signal processing, data logging and innovative communications



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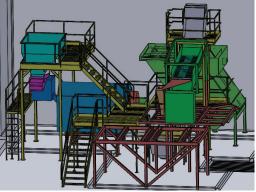
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### Expansion and Upgrade Services

- Capital cost estimates
- Solid modelling and general arrangement optimization
- · Codes and standards compliance
- Controls and instrumentation
- · Operational and hazard assessments
- Procurement, tendering and contracting support
- Project management services

#### **Training and Seminars**

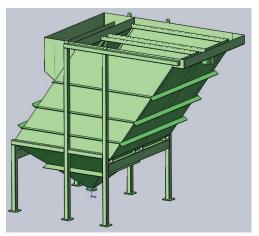
- Structural Design for Machinery
- Air Flow Design
- Pump Design
- Drive Design



Concept: Model of Kimberlite Ore Processing Facility



Completion: Physical installation of Kimberlite Ore Processing Facility



Model of Custom High-Capacity Slant Plate



Image of Custom Clarifier installed 10 weeks after design authorization