
COMPANY PROFILE

Background & Capabilities



2160 de la Montagne, Suite 740
Montreal, QC H3G 2T3
CANADA

Telephone: (514) 286-0004
Fax: (514) 286-1413

Email: info@novopro.ca
Web site: <http://www.novopro.ca>



Introduction

NOVOPRO is a Canadian project-based company specializing in developing, engineering, and managing projects and related technologies as applied to the metallurgical, mining, mineral processing, and pharmaceutical industries.

Project Development

NOVOPRO has been involved in assisting clients develop a number of projects from inception and feasibility, to financing, implementation, and start-up. Our experience has been gained through the development of projects from \$5 to \$800 million, applied to metallurgical, mineral processing, public institutions and pharmaceutical/life sciences industries. The expertise required for such projects are available at NOVOPRO, which can be listed as follows:

- Conceptual Design
- Feasibility Studies
- Project Engineering
- Program Development
- Project Financing
- Capital Cost Estimation
- Operating Cost Estimation
- Preparation of Cash flow Projections and Financial Models
- Project Risk Mitigation
- Preparation of Project Information Packages



Example of a conceptual design in 3D Inventor.

Project and Construction Management

NOVOPRO considers project management as a core activity, and specializes in providing all aspects related to project management to clients on projects ranging from small renovations to large-scale industrial.

Considering project management the key ingredient in developing and implementing projects, NOVOPRO has made a point of emphasizing this aspect of its capabilities by choosing skills within its members to enable services to be rendered highly applicable to this field.

Client or owner's representation is a part of the services offered in order to augment the client's team to deal with large increases in work loads that inevitably result during the project development and implementation stages. As part of this role, NOVOPRO understands the reporting requirements for decision making to take place, at various stages of the project.



Project Planning and Control

As part of the project management requirements, project planning tools are well understood to produce project schedules (programs), enabling planning of resources and budget.

Project cost reporting and control is essential in project implementation to ensure expenditures are in-line with the project budget, and the cash flow available will meet the project demands.

NOVOPRO can offer complete commercial services including invoice verification and approval, and technical and commercial contract document review.

Weekly and monthly financial reporting can be generated to highlight the commercial activities that have taken place, providing a forecast of activities anticipated in the next time frame.

Procurement and Contract Administration

To support engineering and construction management, NOVOPRO provides procurement and contract administration services to enable complete EPCM services to the clients on a variety of project sizes. This includes the preparation of contracts and RFQ's, technical and commercial evaluations, bids, contract award, administration, as well as expediting.

Other relevant services are inspection, logistical support, progress monitoring and tracking, vendor and contractor evaluations, quality control, and management.



Project Engineering

NOVOPRO provides engineering services, where applicable, to develop and implement various phases of projects, from preliminary studies to detailed engineering and EPCM.

The multi-disciplinary capabilities available are tailored to projects in all stages of development and implementation, providing clients with highly applicable services to fulfill all technical project needs including:

- Mechanical and building engineering piping and design, including 3D modelling
- HVAC engineering
- Electrical and controls engineering and energy optimization
- Civil and structural design
- Environmental engineering, including ESIA and mitigation measures.

Related Engineering Services

The personnel at NOVOPRO have participated in numerous projects in related fields including building services, life sciences sector, laboratories, pharmaceutical, radiopharmaceutical, and medical device production facilities. The services provided in these sectors included the design and layout of base buildings, the associated infrastructure, support systems and utilities including ventilation, building controls, water systems, medical gases, and fume hood systems.

These projects were executed while performing scoping studies, the preparation of basis of design documents, detailed design, construction management, commissioning and start-up, as well as process and facility validation. These activities have been performed for green-field projects, expansions, and internal renovations where the work and tie-ins must be planned and executed to minimize the impact of the ongoing activities in the surrounding areas.

This has thus provided NOVOPRO with the following project and area involvement:

Building Design and Services

- Ventilation systems design
- Steam generation and distribution
- Electrical power generation and distribution
- Energy optimization and monitoring

Laboratories

- General chemistry laboratories
- Microbiology laboratories and Bio-containment areas
- Integration of fume hoods, laminar air flow units and bio-safety cabinet systems
- Variable air volume systems and controls for multiple fume hood installations

Pharmaceutical

- Solid dosage, compounding, tableting
- Non-sterile liquids creams and ointments
- Granulation, coating, and drying
- Clean rooms to Grade A,B,C, and D
- Sterile filling of small and large volume parenterals
- Autoclaves and depyrogenation
- Packaging
- Validation

Radiopharmaceutical

- Production facilities
- Laboratories
- Radiochemistry areas
- Clean rooms and dispensing areas.
- Isolators and shielding
- Packaging and shipping
- Robotic storage and retrieval bunkers

**Utilities and Support Areas**

- WFI, RO water generation and distribution
- Pure steam generation and distribution
- CIP and SIP systems
- Ventilation and air handling systems
- Automation and building controls
- Start-up and commissioning

Environmental Engineering

Sustainable and sound industrial design must always consider the long-term environmental effect of a facility on its surroundings. The goal of our specialists is to achieve this harmony with elegant solutions that will also yield a competitive commercial operation. To complement our process expertise, clients can benefit from our know-how in environmental engineering as applied to metallurgical and inorganic chemical plants. Process simulation in combination with laboratory test work is used to optimize processes and reduce solid waste as well as liquid effluents.

Process heat recovery is used as an internal means of energy optimization, including integrated cogeneration schemes for maximization of energy efficiency. Other areas of expertise are capabilities in waste characterization, minimization and management, leading to overall sound waste management strategies.

Environmental audits and risk analyses studies may also be performed. Environmental and social impact assessments and statements (ESIA's) will be essential to the client in identifying risks and potential impacts of a project. ESIA's can be further instrumental in:

- Understanding corporate responsibilities regarding project-related environmental concerns;
- Evaluating regulatory compliance of projected process operations;
- Assessing the overall environmental viability and sustainability of a project;
- Planning mitigation measures and technological alternatives to improve plant performance and acceptability within well-defined environmental parameters.
- Anticipating the impact of stated environmental government policies.



Project team posing for the “highest beam” ceremony for the magnesium recycling plant, Delfzijl, The Netherlands.