



JNE Consulting



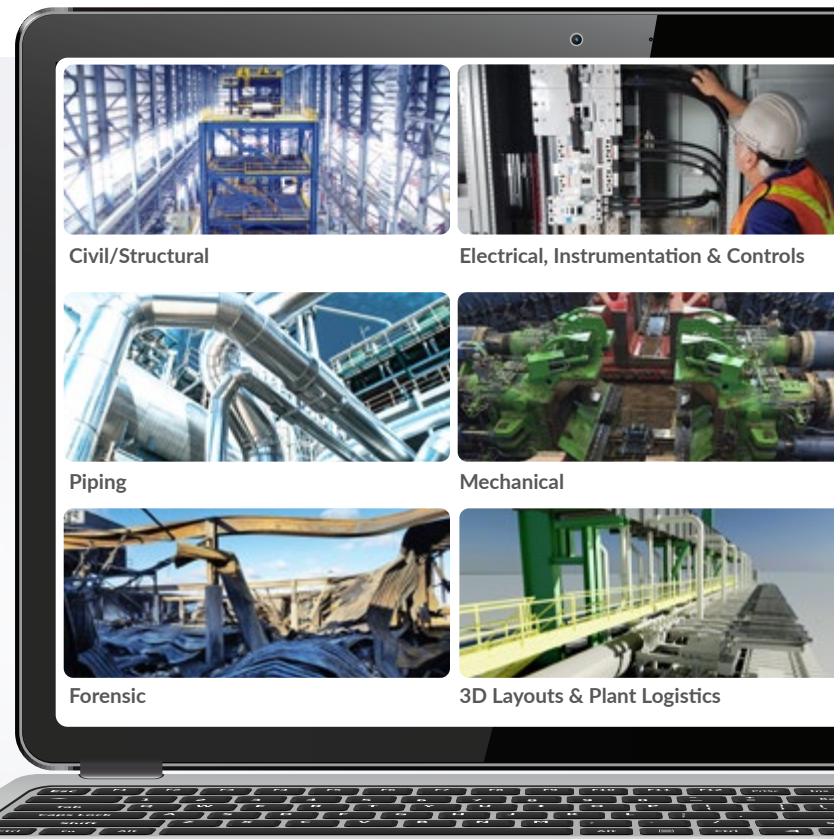
FULL-SERVICE ENGINEERING

ENGINEERING SUCCESS. GLOBALLY SINCE 1980.

Why JNE?

With the economic and technological challenges impacting the industry, JNE has provided solutions to meet our clients' demands for continual improvement by adding strategic value to their projects through innovative engineering. We are continually attracting engineers, technologists, and qualified staff from a broad range of industries, ensuring expertise in all fields of engineering.

We meet the increasing technical demands of industry by incorporating the latest sophisticated software and hardware tools into our engineering design process. We maintain a close relationship with the industry's leading process design experts, drawing on their fields of specialization to supplement in-house engineering. We provide our clients with experienced project teams to solve their most demanding engineering problems.



Complete engineering services for our clients worldwide...

One-Stop Solution

In addition to **full-service engineering**, encompassing the major disciplines, we also offer additional services such as **program management** and **procurement**. Our **bid package development** will save you money by clearly identifying your project requirements and ensuring that contractors understand your project specifications in detail, allowing you to level the playing field during your bid process and keeping your project on time and on budget.

We provide a level of detail in our **construction engineering** that gives clear direction to the contractor. JNE is always focused on constructability, reliability, and maintainability. This ensures the most cost-effective construction while minimizing downtime in your existing operations.

JNE provides **project** and **construction management** services using proven technologies, systems, and work processes to provide you with optimal results. We deliver your complex and challenging construction projects safely, on time, and within budget.

Our **commissioning management and support**, which occurs at the final stage of construction, brings all systems in your facility from mechanical completion to operational status. The JNE approach integrates commissioning with construction and validation, allowing your project to smoothly transition between phases while ensuring continuity. Using this approach, JNE completes your projects faster and at a lower overall cost.

Planning

JNE Consulting's proven expertise in **project development** and **capital planning** will ensure that your project starts off on a solid foundation. We understand that when it comes to project work, surprises are never good. Our capital planning services guarantee that your project scope is clearly defined and your project funding needs are accurately predicted.

We offer **pre-feasibility studies** to select the best available technology for your project. We conduct a feasibility study for the selected technology to develop a detailed project execution plan, including Capital Expenditure (CAPEX) and Operating Expense (OPEX), project schedule, and financial Return on Investment (ROI) with sensitivity analysis.

Front-end engineering design and **project planning** provides clients with a strategic plan clearly outlining all of the specific requirements of the project at the early stages to help identify risk areas, opportunities for value engineering, and provide a cost estimate for budgeting and capital approval purposes.

SERVICES

- Functional specifications
- General arrangements
- Requirements planning
- Needs and facility analysis
- Process equipment planning
- Project scheduling
- Operational assessments
- Detailed workflow analysis

...with the flexibility to accommodate projects of any size.

Safety

Safety is paramount in all of JNE's designs. We can provide your business with **process safety studies**, helping to prevent incidents involving explosions, fire, chemical hazards, pressurization, and vacuum conditions. In addition to reducing injuries to personnel, these safety studies can also limit asset loss and avoid business interruption. JNE will work with your maintenance personnel to develop efficient and effective lock-out systems for all of your maintenance and operational needs.

JNE provides engineering services related to the **Pre-Start Health and Safety Reviews** (PSRs) now required by law in some jurisdictions. JNE's PSR approach accommodates projects of any size or complexity.

SPECIALTY AREAS

- Lasers
- X-rays
- Robotics
- Microwaves
- Hazardous chemicals and molten materials
- Material conveyors
- Control systems
- Electrical classifications
- E-stops
- Light curtains
- Machine guarding

Automation and Panel Fabrication

JNE can address your automation requirements by drawing on our extensive industry experience to meet your unique project needs. We work with clients to develop custom, industrial automation and control systems, architectures for their new products and processes, and we will design, build, and supply all required custom control panels to the highest standard.

Our full service automation integration capabilities allow your systems to be constructed and factory acceptance tested in-house to minimize on-site installation and commissioning. Our panel shop is ISO 9001 registered and UL certified, and offers other industry standard certifications such as Canadian Standards Association (CSA) and Electrical Standards Association (ESA) upon request.

Environmental Services

DESIGN We design custom wastewater, air and solid waste treatment facilities for our clients. Our process engineers have many years of experience and have designed wastewater treatment plants in excess of 100,000 gallons per minute and air emissions control systems in excess of 1,000,000 standard cubic feet per minute. We can also provide process evaluations of existing systems, often resulting in cost-saving retrofits.

PERMITTING Environmental stewardship is a corporate goal for many of our clients. Managing all aspects of environmental compliance from permitting through design and construction is how JNE helps our clients meet their goals. Our engineers understand that environmental considerations have a significant impact on project cost and schedule. It is critical to develop the environmental compliance strategy early.



Dissolved Air Flotation (DAF) Units

Once the necessary permits are identified, JNE works closely with original equipment manufacturers (OEMs) and regulators to gather the required information and assemble the permit packages for agency approvals. This information is carried through into the design of the facility to ensure efficient use of resources and environmentally compliant operations.

Forensic

JNE is committed to providing our clients with high quality forensics engineering in a timely, flexible, and cost-effective manner. We utilize our extensive, experienced staff and multi-disciplinary expertise to create custom designed project teams to perform on-site inspections, damage analysis, cause investigation, and historical design and construction review.

We offer a complete package for a wide range of services requiring civil, structural, mechanical, and electrical engineering. Clients can expect to deal with a single source, ensuring a more effective and practical solution is delivered on time.

SERVICES

- Structural collapses of steel, wood, concrete, and masonry structures
- Assessment of structural damage due to vehicle and tree impact
- Fire and explosion damage assessment
- Structural failures of tanks, silos, cranes, racking systems, stages, and ladders
- Investigation of structural concerns associated with vibrations, settlement, and leakage
- Damage assessment and failure investigation of electrical and mechanical systems and components
- Assessment of unsafe buildings and scope of emergency measures
- Building code review for residential, commercial, industrial, institutional, and farm buildings
- Building envelope assessment
- Computer modeling, analysis, and design of steel, wood, concrete, and masonry structures
- Construction claims

Select Experience

Metals

ROLLING AND FINISHING

#4 and #6 Galvanizing Line
ArcelorMittal Dofasco • Hamilton, Ontario

Hot Strip Mill Gauge Relocation
Nucor • Tuscaloosa, Alabama

Sampling Line Upgrade
AM/NS Calvert • Calvert, Alabama

#2 Continuous Pickling Cold Rolling Mill
ArcelorMittal Dofasco • Hamilton, Ontario

Hot Dip Galvanizing Line
Severstal North America • Dearborn, Michigan

Slitter Line Foundation
Atlas Steel • Harrow, Ontario

STEELMAKING AND CONTINUOUS CASTING

New Electric Arc Furnace (EAF) and Slab Caster
ArcelorMittal Dofasco • Hamilton, Ontario

AutoTap
Arcelor Mittal • Burns Harbor, Indiana

Alloy Addition System
ArcelorMittal Dofasco • Hamilton, Ontario

Tundish and Ladle Repair Facility
ArcelorMittal Dofasco • Hamilton, Ontario

New Hot Metal Scale
Stelco • Hamilton, Ontario

Caster Flume Additions and Repairs
Gerdau • Whitby, Ontario

COKE AND IRON MAKING

2 Blast Furnace Construction Engineering
ArcelorMittal Dofasco • Hamilton, Ontario

Cast House and Stock House Design
Danieli Corus • Ukraine

By-products Upgrades
Stelco • Hamilton, Ontario

Wastewater Treatment Upgrades
DTE Shenango • Pittsburgh, Pennsylvania

Charge Car Rebuild Engineering
DTE • Pittsburgh, Pennsylvania

Quench Station Rebuild
ArcelorMittal Dofasco • Hamilton, Ontario





Power

5MW Electrical Co-generation System
Greenfield Specialty Alcohols, Inc. ▪ Brampton, Ontario

Turbo Generator 1
ArcelorMittal Dofasco ▪ Hamilton, Ontario

Turbo Generator 2
ArcelorMittal Dofasco ▪ Hamilton, Ontario

Food and Beverage

Grounding and Short Circuit Study, New Substation
Dare Foods Ltd. ▪ Milton, Ontario

Package Line Relocation
Nestle Purina ▪ Mississauga, Ontario

Automotive

Boiler Replacement Project
Ford Motor Company ▪ Woodhaven, Michigan

Booster Pump Replacement Project
Ford Motor Company ▪ Woodhaven, Michigan

Refrigerant Storage System Upgrade
Toyota Motor Manufacturing Canada ▪ Woodstock, Ontario

Cyclone Separators Building Design and Fabrication
Toyota Motor Manufacturing Canada ▪ Woodstock, Ontario

Crossmember Die Cast Installation
Chrysler Canada ▪ Etobicoke, Ontario

Electro-Kinetic Flotation Unit
Chrysler Canada ▪ Brampton, Ontario

Automation

Reheat Furnace Upgrades
ArcelorMittal Dofasco ▪ Hamilton, Ontario

Lime Kiln Combustion Control System
Innophos ▪ Dunnville, Ontario

Water Treatment

Wastewater Treatment and Reflux Stripper Installation
Shenango, Inc. ▪ Pittsburgh, Pennsylvania

Bay Water
Stelco ▪ Hamilton, Ontario



Material Handling

310 Mega-Newton Multi-Directional Forging Complex
Ellwood Crankshaft Group ▪ Sharon, Pennsylvania

Rock Dryer
Canadian Gypsum ▪ Hagersville, Ontario

Lime Kiln #1 and #3 Fuel Conversion Project
Carmeuse ▪ Beachville, Ontario

Industrial

Citric Acid Plant Construction
Jungbunzlauer ▪ Port Colborne, Ontario

Screen House Modifications
Carmeuse ▪ Beachville, Ontario



Chemical

Industrial Alcohol (IA42) Expansion
Greenfield Specialty Alcohols, Inc. ▪ Chatham, Ontario

New Carbon Line with 2-8MW Co-Generation
Steam Turbines
Columbian Chemicals ▪ Hamilton, Ontario

Third Effect Evaporation
Greenfield Specialty Alcohols, Inc. ▪ Chatham, Ontario

New Fill Line, Tank Farm and Plant Expansion / Upgrade
Diversey, Inc. ▪ London, Ontario



CANADA HEADQUARTERS

176 Shaw Street
Hamilton, Ontario
Canada L8L 3P7
(905) 529-5122

USA HEADQUARTERS

103 Gamma Drive, Suite 160
Pittsburgh, Pennsylvania
15238, USA
(412) 963-1950

USA MIDWEST

33029 Schoolcraft Road
Livonia, Michigan
48150, USA
(734) 396-8055

EMAIL

info@jnegroup.com

JNEGROUP.COM



JNE

Consulting

JNE Consulting is a division of The JNE Group of Companies.
For more information, please visit JNEGroup.com.