E.S. Fox Limited General Capabilities



COMPANY CONTACT

E.S. Fox Limited www.esfox.com 905-354-3700

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road

Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





SERVICES

- ENGINEERING
- FABRICATION
- CONSTRUCTION
- NUCLEAR
- STRUCTURAL STEEL
- BRIDGES
- TECHNICAL SERVICES



HEAD OFFICE P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com

E.S. Fox Limited

CORPORATE OVERVIEW

Since 1934, E.S. Fox Limited (ESFL) has set the standard for safety and quality in the fabrication and construction industry. ESFL is a privately owned, Canadian, multi-trade company, providing a single source for Industrial, Institutional, Commercial, and Energy projects. With over 3.5 million direct hire person-hours last year, we self-perform Structural Steel Fabrication and Erection, Mechanical, Electrical, Sheet Metal, HVAC, Refrigeration, Millwright / Rigging, and Boiler Making.

The strength of our company stems from the vast experience of its people, the integration of a variety of skilled trades, and dedication to total control of construction through computerized planning and monitoring techniques.

ESFL has established a reputation for high quality workmanship, operational flexibility, efficiency, and timely project completion.

CONSTRUCTION CAPABILITIES

As a fully integrated, multi-trade construction firm, E.S. Fox Limited provides clients with a single source solution for their detail engineering, fabrication, construction, and maintenance needs. We are a solutions based provider that delivers a superior level of service from "cradle-to-grave," as we offer multi-trade, service oriented solutions for all your ICI and Energy projects.

FABRICATION CAPABILITIES

E.S. Fox Limited is proud to operate three state-of-the-art fabrication facilities across Ontario. At our main fabrication facility in Port Robinson, we offer over 83,000 square feet of production space. We work to the highest standards to produce Pipe Spools, Modules, Cryogenic Cold Boxes, and Pressure Vessels. With over 800 weld procedures and 40 quality certifications including nuclear, E.S. Fox Limited continues to be a leader and a symbol of Canadian strength and tradition in the supply of Quality Fabrication Services for the Industrial, Commercial, Institutional, and Energy markets for over eight decades.



E.S. Fox Limited Environmental Health and Safety

SAFETY CULTURE

At ESFL, employee safety, protection of the environment, and work quality are the main focus of our safety culture. Both management and employees work together in an effort to further advance knowledge of safety and incident prevention. Together we work to ensure a safe work environment for all. Our employees believe in the fundamental principle that safety is everyone's responsibility.

One of our core values is to "Prevent the Event." Incident prevention is the integral part of every job with the safety and well-being of each individual the <u>number one priority.</u>

SAFETY PROGRAM KEY ELEMENTS

- Corporate Safety Manual
- Site Specific Safety Plans
- Orientation and Training
- Incident Investigation
- Lessons Learned Bulletins
- Job Safety Analysis
- Workplace Inspections
- Senior Management Review

- Safety First Attitude
- Trending and Analysis
- Setting Objectives and Targets
- Safety Workshops
- Mentoring Program
- J.H.S.C.
- Strong Communication
- Accountable Supervision
- Safety Meetings







HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700

WEBSITE: www.esfox.com



E.S. Fox Limited **Quality Assurance**



E.S. Fox Limited - Safety and Quality Assurance Certifications

ISO

- ISO 9001:2015
- ISO 14001
- ISO 45001



CWB

- Structural Steel CWB W47.1 Div. 1
- **Structural Aluminum** CWB W47.2 Div. 1



CSA

- CSA N285.0 Nuclear Class 1, 2, 3, & 4 Parts, Components & Support
- **CSA N285.0 Nuclear Material Supply Ferrous and Non-Ferrous** (3 Locations)
- CSA N286-12 Nuclear
- CSA N299.1 2016
- CSA B51 Boiler, Pressure Vessels & **Pressure Piping & Repairs**
- CSA B51 Category A, B, C, E & H **Type Welded Non-Welded Fittings**
- **CSA B51 Hot Tap & Line Stopping**
- **CSA B52 Mechanical Refrigeration**
- CSA Z7396. 1-17 Medical Gas Pipeline Systems Part 1

ASME

- ASME Section III, Division 1: N, NPT, NA, NS
- **ASME Section VIII, Division 1 & 2 Pressure Vessels**
- ASME U, U2, S, & PP Stamps
- **ASME B31.1 Power Piping**
- **ASME B31.3 Process Piping**
- **ASME B31.5 Refrigeration Piping**
- **National Board Registration for** ASME Section I, III, VIII



COR

COR and Infrastructure Health and **Safety Association Certification**







HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9

TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



E.S. Fox Limited Locations & Facilities

Head Office: Niagara Falls, ON —250,000 square feet

Branch Location	Capabilities		Square Footage
Darlington, ON	Construction		
Hamilton, ON	Construction	Fabrication	10,000 sq. ft.
Kingston, ON	Construction	Fabrication	17,000 sq. ft.
Port Robinson, ON		Fabrication	83,000 sq. ft.
Thunder Bay, ON	Construction	Fabrication	5,000 sq. ft.
Tiverton (Kincardine), ON	Construction		
Vaughan (Toronto), ON	Construction		
Oshawa, ON	Construction		
Sarnia, ON	Construction		
		Total Fabrication	115,000 sq. ft.



HEAD OFFICE

P.O. Box 1010 9127 Montrose Road

Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



ENGINEERING CAPABILITIES

E.S. Fox Limited has extensive engineering experience relating to quality programs such as ISO 9001, CSA N299/Z299, and CSA M285.0/MCA-4000; ranging from conventional piping to Class 1 Nuclear components. Our Engineering team's commitment and goal is not just to complete the project on time, but also to add value to your project in the most efficient manner possible.

E.S. Fox Limited Engineering provides the following services but not limited to:

- Design Engineering
- Virtual Construction
- Total Station Services
- CAD Services
- Welding, Manufacturing, and Metallurgical Engineering



HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario I 2F 7

Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



FABRICATION SERVICES

At our main fabrication facility in Port Robinson, Ontario, we offer over 83,000 square feet of production space. We work to the highest standards required to produce Cryogenic Cold Boxes, Pipe Spools, Modules, and Pressure Vessels. With more than 800 weld procedures, we fabricate:

Modules and Vessels

- Process Modules and Equipment Skids
- Cryogenic Air Distillation Columns for: Oxygen, Nitrogen, and Argon
- Air Liquefaction / Separation
- Hydrogen Purification
- Catalyst Reclamation
- Oil / Water Purification

Pipe Fabrication

- Stand alone contracts & support of field projects and other fabrication projects
- Area of expertise is high alloy materials: Stainless Steel, Aluminum, Titanium, Chrome-Moly
- Carbon Steel up to 84" Diameter
- Victaulic—Roll Grooved Piping up to 48" Dia.
- Jacketed Pipe



HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9

TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



CONSTRUCTION SERVICES

As a fully integrated, multi-trade construction firm, E.S. Fox Limited provide clients with a single source solution for their detail engineering, fabrication, construction, and maintenance needs. We are a solutions-based provider that delivers a superior level of service from "cradle-to-grave," as we offer multi-trade, service-oriented solutions for all your ICI and Energy projects.

We provide the following Construction Services:

- Construction Management
- Piping
- Electrical
- Structural Steel
- Ironworking
- Millwrighting
- Boiler Making

- Sheet Metal
- HVAC
- Instrumentation & Controls
- Operating Engineering
- Insulation
- Carpentry
- Refrigeration



HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9

Niagara Falls, Ontario L2E 7J8
TELEPHONE: 905-354-3700
WEBSITE: www.esfox.com



NUCLEAR SERVICES

E.S. Fox Limited is a people-first, environmentally conscious, socially responsible EPC provider in the Nuclear sector with every aspect of its development. E.S. Fox Limited's Nuclear Services contributed millions of hours in support of Ontario's safe and reliable Nuclear power industry. We provide our clients with a streamlined solution for their detailed engineering, fabrication, construction, and maintenance needs. As the Nuclear power generation sector evolves from large Nuclear reactors to Small Modular Reactors, we are primed to support the transition.

We provide the following Nuclear Services:

- Safety & Quality Control
- Nuclear Fabrication
- Project Management
- Engineering, Procurement, & Construction (EPC)
- Indigenous Relations



HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9

TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



STRUCTURAL STEEL AND BRIDGE DIVISION

E.S. Fox Limited's Structural Steel & Bridge Division operates as a fabrication and erection service provider throughout Canada. With our highly skilled team of erectors and supervision, E.S. Fox Limited has distinguished itself through our dedication to quality and excellence in all phases of Structural Steel construction. From Commercial and Industrial projects to Bridges and Roller Coasters, E.S. Fox Limited continues to be an industry leader focused on organizational excellence through principles such as Safety, Quality, and Service.

We provide the following Structural Steel and Bridge Services:

- Architecturally Exposed Structural Steel
- Commercial and Industrial Steel
- Institutional Steel
- Bridges
- Themed Entertainment



HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9

TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com



TECHNICAL SERVICES AND MAINTENANCE

ESFL's highly-qualified factory-trained technicians provide services on all types and brands of equipment encountered across all Industrial, Commercial, Institutional, and Energy markets. They are certified for specialized critical environments such as oil & gas (onshore, offshore, oil sands), nuclear, biopharmaceutical research, healthcare, data centres, museums, and art galleries.

ESFL offers maintenance agreements tailored to meet the specific needs of different systems and owner priorities.



WE OFFER SERVICES FOR:

- Installations
- Heating, Ventilation, & Air Conditioning
- Mechanical Repairs & Maintenance
- Refrigeration
- Technical Services Building Analysis
- Energy Retrofit Projects
- Savings & Incentives

From HVAC and Controls to Design-Build systems, ESFL offers a wide range of technical services.



HEAD OFFICE

P.O. Box 1010

9127 Montrose Road

Niagara Falls, Ontario L2E 7J9

TELEPHONE: 905-354-3700

WEBSITE: www.esfox.com





UIG Cryogenic A-500 Cold Box

Client

Scope

Universal Industrial Gases Inc.

- Dimensions: 159'0" (L) x 28"-9" (W) x 15"-4" (H); Weight: Approx 500,000 Lbs
- End User: NUCOR Gallatin Steel (Ghent, Kentucky)
- Use: Supplies Oxygen to Steel Mill
- Other Uses: Nitrogen and Argon sold as by-products
- Transport: Shipped via laker barge from Port Robinson to site and transported under hook on NUCOR access road

Trades

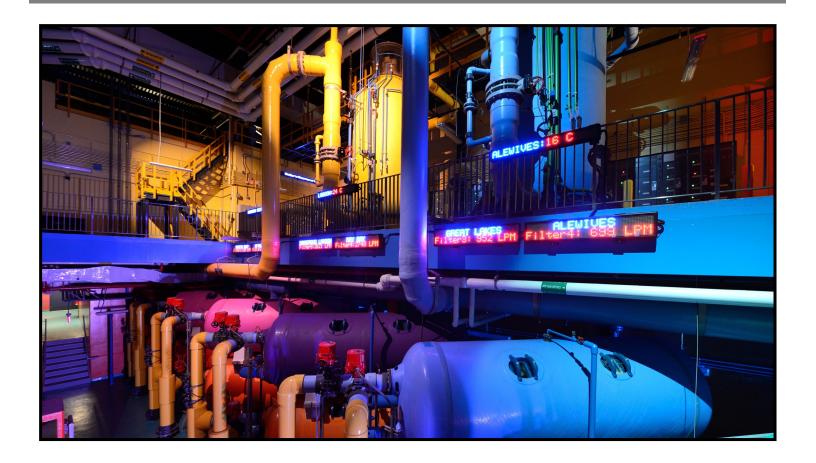
Production Workers | Vessel Workers

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700

WEBSITE: www.esfox.com





Ripley's Aquarium Life Support Systems

Client

Ripley's Entertainment

Scope

- ESFL was contracted for the supply and installation of all components associated with the Life Support Systems for the new Ripley's Aquarium at the base of the CN Tower in Toronto
- Due to its location, deliveries of materials and equipment had to be meticulously coordinated as there was limited space for staging work

Trades

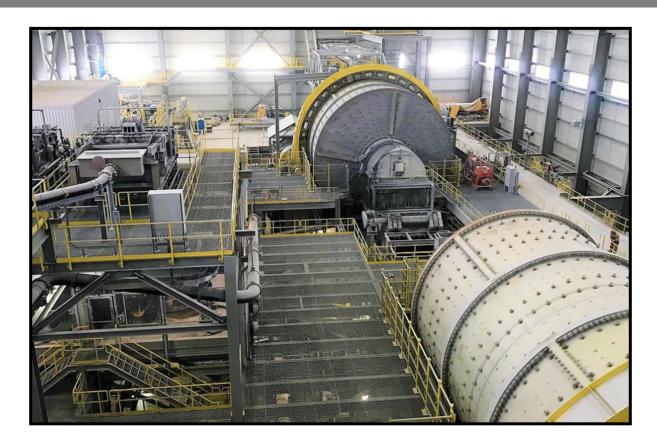
Pipefitters | Millwrights | Ironworkers

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700

WEBSITE: www.esfox.com





Rainy River Gold Mine MPEI Grinding Building—Interior

Client

Scope

New Gold Inc.

ESFL was the Prime Contractor for the MPEI Contract 015—Crusher Building for a new Gold Mine in Northern Ontario. Project Management, cost control, safety, scheduling, and quality control was performed by the site project team and supported by our Thunder Bay and Niagara offices. The trade manpower, staff, support and subcontracts will exceed 150,000 man-hours.

There was no permanent power; ESFL supplied and maintained generators and a temporary power grid for the offices, warehousing and worksite. ESFL was also in charge of the supply and installation of all piping, electrical, and HVAC systems as well as the installation of all major owner supplied equipment.

Trades

Electrical | Pipefitters | Millwrights | Ironworkers | Sheet Metal

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700

WEBSITE: www.esfox.com





The Britt Condos

Client

Benson Steel

Scope

- ESFL was contracted for this 16 level structural steel addition to the top of an existing 31 floor concrete condominium
- Consisted of approximately 1200 tons of structural steel
- Located in Downtown Toronto on Bay Street

Trades

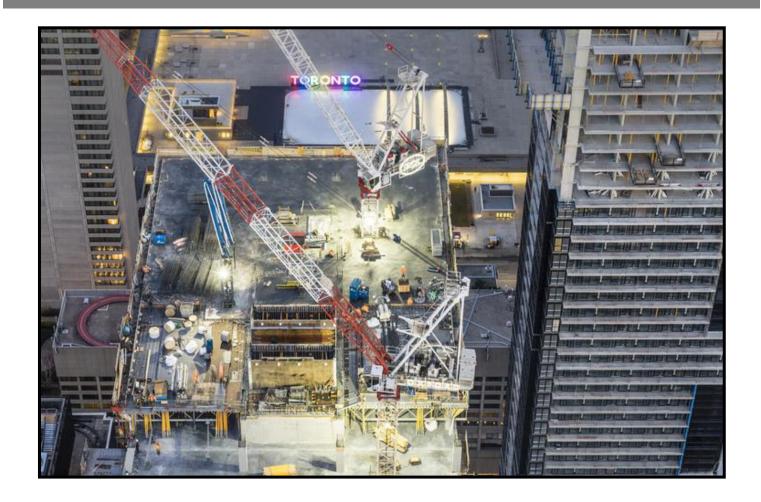
Ironworkers

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700

WEBSITE: www.esfox.com





100 Adelaide Street West

Client

Scope

Walters Inc.

- 1200 tons of architecturally exposed steel starting at the 550' elevation for penthouse
- This project required a high-level of coordination with all mechanical equipment installation, jumping, and removing of tower cranes
- The BMU's were used to complete the steel erection

Trades

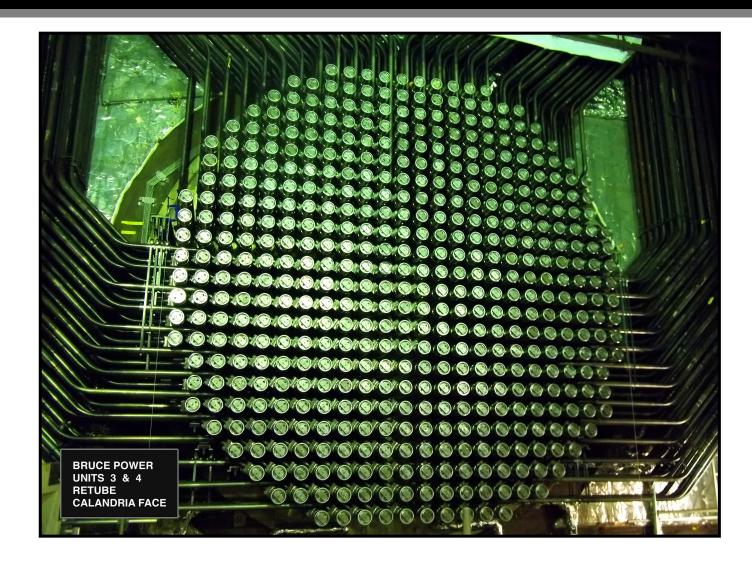
Ironworkers

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700

WEBSITE: www.esfox.com





Feeder Tubes — Bruce Retube Project

Client

Bruce Power

Scope

- Fabricate and install 1,920 replacement Feeder Tube Sections (Bruce 1&2)
- Original specification called for welded fittings on compound bends
- Specification changed to utilize all bent feeders (welded elbows eliminated)

Trades

Production Workers | Pipefitters

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road

Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700

WEBSITE: www.esfox.com





Canada's Wonderland Yukon Striker

Client

Canada's Wonderland

Scope

- Largest dive coaster in the world, overall drop of 245" at 90 degrees, reaches 80mph
- Offloaded, assembled, and erected components of roller coaster (3,625' long)
- Included all station members, transfer station, column, track elements, setting of equipment and trains
- Logistically sensitive site, 4 cranes simultaneously used

Trades

Ironworkers

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9

TELEPHONE: 905-354-3700
WEBSITE: www.esfox.com





640 MW Cogeneration Plant

Client

TransCanada Pipelines

Scope

- Supplied and erected 1500 Tons of Structural Steel
- Field installed two Alstom HRSG's
- Associated piping and electrical work for ten process modules
- Assembled modules at our main yard and dock facility in Port Robinson
- Shipped job to site for final assembly by ESFL

Trades

Ironworkers | Sheet Metal

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9

TELEPHONE: 905-354-3700 WEBSITE: www.esfox.com





Cytec Niagara Falls—Phosphine Plant Expansion

Client

Cytec Niagara Falls

Scope

E.S. Fox Limited was a Prime Contractor for the plant expansion at Cytec's facility in Niagara Falls, which produces Phosphine and Phosphine derivative products for Industrial, mining, and agricultural products. ESFL was awarded several contracts including:

- **Utility Racks**
- Thermal Oxidizer & Flare Building—Mechanical & Electrical Process Systems Installation
- Phosphine / Compression—Mechanical & Electrical

Trades

Pipefitters | Millwrights | Ironworkers | Electricians | Sheet Metal

HEAD OFFICE

P.O. Box 1010 9127 Montrose Road Niagara Falls, Ontario L2E 7J9 TELEPHONE: 905-354-3700





PORT ROBINSON HAMILTON SARNIA TORONTO