E.S. Fox Limited Institutional Construction



COMPANY CONTACT

E.S. Fox Limited — Institutional Construction www.esfox.com 905-354-3700 x1210

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
- STRUCTURAL DESIGN
- STRUCTURAL STEEL ERECTION
- BRIDGE ERECTION
- MILLWRIGHTING | RIGGING
- BOILERMAKING
- MECHANICAL
- ELECTRICAL
- SHEET METAL
- REFRIGERATION
- HVAC



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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, a privately owned, Canadian, multi-trade company, providing a single source for Industrial, Institutional, Commercial, and Power Generation projects. With over 3.0 million direct-hire man-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 power generation 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, Ontario, we offer over 83,000 square feet of production space. We work to the highest standards to produce Cryogenic Cold Boxes, Pipe Spools, Modules, and Pressure Vessels. With over 800 weld procedures and over 40 weld 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 Power Generation 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







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E.S. Fox Limited

Quality Assurance



ISO

- ISO 9001:2015
- ISO 14001
- ISO 18001

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 (Shop & Field)
- 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 (Shop & Field)
- CSA B51 Category A, B, C, E & H Type Welded Non-Welded Fittings (Shop & Field)
- CSA B51 Hot Tap & Line Stopping (Shop & Field)
- CSA Z7396. 1-17 Medical Gas Pipeline Systems Part 1

ASME

- National Board Registration for ASME Section III, R, VIII (Shop & Field)
- ASME Section III, Division 1: N, NPT, NA, NS
- ASME Section VIII, Division 1 & 2 Pressure Vessels (Shop & Field)
- ASME U, U2, S, & PP Stamps (Shop & Field)
- ASME U, UM Stamps: Edmonton Division (Shop & Field)
- ASME B31.1 Power Piping (Shop & Field)
- ASME B31.3 Process Piping (Shop & Field)
- ASME B31.5 Refrigeration Piping (Shop & Field)
- CSA B52 Mechanical Refrigeration Code









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E.S. Fox Limited

Locations & Facilities

Head Office: Niagara Falls, ON —240,000 square feet

Branch Location	Capabilities		Square Footage
Darlington, ON	Construction		
Hamilton, ON	Construction	Fabrication	3,000 sq. ft.
Kingston, ON	Construction	Fabrication	17,000 sq. ft.
Port Robinson, ON		Fabrication	83,000 sq. ft.
Sudbury, ON	Construction		
Thunder Bay, ON	Construction	Fabrication	5,000 sq. ft.
Tiverton (Kincardine), ON	Construction		
Vaughan (Toronto), ON	Construction		
Oshawa, ON	Construction		
		Total Fabrication	108,000 sq. ft.



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We provide the following construction services:

- Piping
- Electrical
- Structural Steel
- Ironworkers
- Millwrights
- Boiler Making
- Sheet Metal

- HVAC
- Instrumentation & Controls
- Operating Engineering
- Insulation
- Carpenters
- Labourers
- Refrigeration



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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



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E.S. Fox Limited Capabilities

PORT ROBINSON SHIPPING

We are unique in that we have access to the Welland Canal at our Port Robinson facility. This includes our own loading dock, where we can ship oversized modules up to 800 tons to any water accessible location in the world.

Transportation Access & Dock Facilities

- 1/2 mile from Highway 406 extension providing direct access to Queen Elizabeth Highway
- ◆ 1/4 mile from Canadian National Railroad line
- Heavy Barge Roll On/Roll Off Loading Dock extending into the Welland Ship Canal turning basin providing 10' draught and 400 ton capacity
- Heavy Lift Dock of 800 ton capacity, dock face 475 ft. draught 25 ft. The dock can accommodate maximum Seaway length vessels
- The site incorporates 5 acres of level, well compacted, crushed stone assembly area



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NHS Health Care Complex & Walker Family Cancer Centre

Client

Niagara Health System

Scope

- ESFL was contracted for erection of approximately 1,600 tons of structural steel framing for various portions of the new hospital with a very aggressive schedule
- ESFL erected the structural steel components using 3 tower cranes

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Toronto Pearson International Airport Expansion

Client

Greater Toronto Airports Authority

Scope

- ESFL was contracted for an "Airside" expansion to an existing and occupied terminal adjacent to live operations
- Reinforcing was also included at the Customs area on an off-shift
- The duration of this project was a year
- Overall tonnage: 2,500 tons

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640 MW Cogeneration Plant

Client

TD Bank

Scope

- An 80' long, 12' deep truss was erected inside an existing plenum space to support new structural steel for mechanical and electrical equipment on the roof
- In addition, in 5 hours over 130 pieces of steel were erected on the roof using a helicopter, erection was done at an average of 2.5 minutes per lift

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Brock University—Cogeneration Engines & Absorption Chiller Installation

Client

Brock University

Scope

- Performed Piping Tie-ins to existing systems during a very constrained time frame, to assist with Brock University's upcoming Engine and Chiller replacement project that encompassed replacing 4 existing co-gen engines with 2 larger new engines, and replacing 1 existing absorption chiller with new (equal size) absorption chiller
- Supply and install of all new piping and valves as identified, include all labour, premium time, tools and equipment to complete and make ready for operation all piping systems affected by this work
- Relocate/install designated instruments and gauges and valves as identified
- Filling of systems completed by Brock University staff, but required supervision and inspection by contractor for leaks/failure and immediate correction of same if found
- Valve tagging and pipe identification completed after systems were made operational

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Queen's University—New School of Medicine

Client

Queen's University

Scope

The four storey LEED certified structure includes two 125 seat class rooms, 28 small group rooms, a 20 room clinical simulation centre, a surgical simulation lab and numerous other laboratories. The project was tied to a federal stimulus program and had to be constructed under a fast-track schedule to meet funding deadlines. As a subcontractor to M. Sullivan & Son, E.S. Fox Limited was the key electrical contractor on the project responsible for installation of equipment and systems.

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