



SNC • LAVALIN

Building what matters

Nuclear and Industrial Manufacturing Services

High quality specialized manufacturing services

Nuclear Manufacturing Operations

Our Nuclear and Industrial Manufacturing Service Centre is a 9,000 square foot full-service, high-quality and performance-driven organization set up to provide manufacturing and testing services for complex nuclear and other industrial components and assemblies.

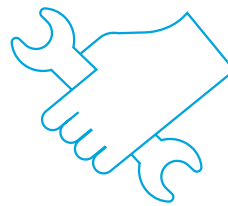
Our dedicated manufacturing workforce consists of approximately 40 highly-skilled engineers, trades, technicians, and support staff, with well over 500 years of combined manufacturing expertise under our belt. We provide high quality products made to client specifications. Our products are able to withstand high stress and pressure environments commonly found in nuclear and other industrial sectors.

Our industry experience and capabilities allow for specialized nuclear and industrial manufacturing such as nuclear fuel channel components, spare parts, reactor maintenance and refurbishment tools. We work closely with our clients to carry out high-mix, low-volume production runs (1-1000) and multi-shift operations. Our team can provide the manufacturing support you need.

Turnkey Services

Fully Integrated Industrial Manufacturing Services

Machine & Fabrication Shop: Our clients benefit from on-site material warehousing, access to welding machines, and a broad range of welding and fabrication capabilities by our trained and qualified welders (MIG/TIG).



500+
YEARS OF COMBINED
MANUFACTURING
EXPERTISE

Component Manufacturing Capabilities

To maintain the highest quality standards, we recently invested \$2.5m in our machine and fabrication shop to ensure the best results for our clients. Our machining capabilities include a 5 axis-CNC mill, CNC lathe, wire EDM, surface grinding, laser marking, multi-tasking 5 axis milling machine, in addition to conventional machining. Our two overhead cranes, each with a 5-ton capacity, allows us to accommodate jobs of all sizes.

Assembly, Non-destructive Examination & Testing: Whether for life extension projects, fueling machines or components testing, our expertise and full capabilities in assembling and testing is unrivaled. We can assemble, examine and test many reactor inspection and maintenance tools and most reactor components, channel closures, shield plugs, snout plugs, feeder hubs, B8/bio bares in end fittings to suit pressure tubes, and others:

- › Tensile testing
- › Metallographic preparation and examination
- › Hardness testing
- › Heat treatment of various metals in air and other environments
- › High temperature and high pressure corrosion testing
- › Non-destructive examination – LPI and UT
- › Corrosion studies in high temperature and pressure autoclaves
- › Miscellaneous bench top corrosion tests



Nuclear I&C & Electrical Harness Lab: Our team provides complete electrical assembly, testing, and instrumentation calibration services for any industrial use, including pressure, force, vacuum and temperature calibration.

Metrology & Calibration: Our 2,100 square foot facility is climate controlled and offers state of the art machines to perform contact and non-contact dimensional and surface inspections. Our experts perform full CMM (co-ordinate measuring machine) inspections with accuracy of 1 μm . Whether it is 1 part or 100, we provide consistent, reliable and accurate results along with concise and professionally presented reports, ensuring your products are of the highest quality available for industrial use.

Raw Material Warehouse: Our well-organized team tracks and manages a multitude of industrial materials, allowing us to quickly respond to our clients' needs and reduce lead times. We stock nuclear grade raw material, including end fitting blanks (forgings), and are ready to use the following raw material stock:

- › Pipe, HSS
- › Carbon and stainless steels, aluminum, bronzes, alloys, polymers, etc. (traceable with MTR or CMTR)

Project Management, Estimating & Manufacturing Engineering, Planning, Procurement, & QC Staff and Support

Our dedicated Quality Control (QC) staff have years of hands on experience in manufacturing and fabrication of nuclear and other industrial components. Our products are delivered in the most effective and efficient way, while our state-of-the-art testing guarantees the integrity of our products and services. Our extensive experience includes the preparation of history docket and ITPs. We can input early designs to determine their manufacturability and potentially reduce project costs.



FULL CMM INSPECTIONS
WITH ACCURACY OF

1 μm



Pressure Boundaries and Code Legislation/Compliance

- › **Nuclear:** ASME Section III, Division 1, Class 1,2 & 3 components, vessels, fittings, supports, and supply nuclear grade material. All fabrications supplied in accordance with CSA N285.0
- › **Industrial:** ASME Section VIII Division 1, ASME B31.1, ASME B31.3, various types of fittings and boiler, pressure vessel, and pressure piping code CSA B51

Vendor List, Local Machine and Fabrication Shops, Material Suppliers and Special Processing

Our team can help co-ordinate procurement activities using dedicated and experienced procurement personnel to support your manufacturing services, including:

- › **Quoting:** We can offer a fast turnaround from sketch to formal RFQ. Yearly quotation volume of 181,000 hours worth of work with an average CPI of 1.14
- › **Emergency:** Bring your requirements to us, and we will get it done. Our highly trained experts can provide anything from a sketch to a registration design package. We run multiple shifts including weekends and offer on-site support
- › **Logistic co-ordination:** We ship anywhere

Customer Weekly Project Status Reporting, Performance Tracking and KPIs

We provide our clients with daily and weekly performance tracking to help manage project schedules and budgets. We can also provide weekly or monthly project status reports as required.



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