

#### **Core Values**

Conduct business with integrity and respect.

Maintain a positive, challenging workplace and a healthy work-life balance.

Sustain a safe and secure working environment through a collaborative culture.

Broaden employee job skills with professional development, education and training.

Embrace innovation and technology to deliver exceptional performance for our customers.

Operate with social responsibility to our community and the environment.



















#### Our Company

Lou-Rich is one of four subsidiaries of the holding company Innovance which is 100% employee owned. We believe that when employees are owners, everything improves and that's when our clients experience the greatest value. With more than 400 total employees, operations in Albert Lea, MN, Hayward, MN, Howard Lake, MN, and Rogers, MN and annual revenues over \$80 million, Innovance continues to grow and serve an expanding client base.

It all began back in 1972 with Louis Larson and Richard Ackland starting a tool & die operation in Southern Minnesota. After more than four decades the organization is still driven by the same passion to help solve customer problems and provide superior quality products. Some of North America's largest OEM manufacturers trust Lou-Rich with their most vital and complex engineering and manufacturing needs.







www.massfin.com



www.panplus.com







#### Quality

Every company says that quality is important to them, and that they produce quality parts. At Lou-Rich we take quality performance very seriously, which is why we are not only ISO 9001:2015 certified, but we also have an entire team dedicated to producing quality parts for our customers. But it runs deeper than that at Lou-Rich. Since we are 100% employee owned, every single employee is part of the quality team. Every. Single. One.

We engage an outside firm annually to audit our Quality Management System in an effort to continuously improve our processes. Part of the Lou-Rich Quality Assurance Program includes a robust Production Part Approval Process (PPAP) system, RoHS and REACH programs, and First Article protocol to ensure production parts are made exactly how they are supposed to. In addition, we monitor Critical to Quality Dimensions (CTQ's), do regular gage calibrations, and have great internal audit teams.

## Engineering

At Lou-Rich we adhere to strict design control processes, under the guidelines of ISO 9001, which ensures all key elements on new or existing products are covered from prototype to full production. With a highly skilled engineering and design staff of more than 20 people, we understand the complexities of product design. We regularly are able to provide design for manufacturability services that result in labor, material and time savings.

Our design review process integrates engineering with quality, operations and project management to ensure accurate project validation. With multiple CAD formats, along with SolidWorks and CREO, Lou-Rich engineering staff will work seamlessly with your current files. Through a robust continuous improvement methodology, our engineering team leads Lou-Rich in pursuing better ways of providing value to our customers.







Lou-Rich invests an average of \$3M a year in new capitol equipment with a focus on automation and robotics, to help our customers succeed.



#### MINI CASE STUDY

#### **Work Area Protection**

invented a retractable crash barrier that not only provides superior safety to alternative roadway barriers but can also be repaired in a fraction of the time at minimal cost. They were searching for a contract manufacturing partner that could handle the 3,400 pound, 21 foot long crash barrier and had the ability to consistently reproduce the complex design. Lou-Rich reviewed the sophisticated crash attenuator, and through a robust DFM process, considered every aspect of how to best manufacture the product. From laser cutting to welding to material management, the team found ways to help streamline the process, reducing lead times as much as 66%. VP of WAP says, "Lou-Rich is one of the most responsive companies we've ever worked with."

Full case study available at lou-rich.com





#### Fabrication & Welding

Our people have built everything from custom bacon packaging equipment to motorcycle handlebars; from mobile x-ray equipment to automated milking stations. Whatever your business, and whatever you need made, chances are Lou-Rich can handle it.

In the past three years alone, Lou-Rich has invested more than \$6M in new equipment to help our customer's succeed. Every employee-owner cutting and welding metal understands the importance of delivering quality products on time, every time.

Multiple lasers including a 6000watt Fiber Optic Laser means we can cut all gauges and thicknesses up to 1 inch. Our fully automated material handling system means less human intervention providing a low labor rate. Tube lasers, with automated load and unload capabilities, cut a wide variety of shapes up to 24 feet long and 5/8 inch thick. Brake press and mechanical press equipment, run by seasoned operators, can handle up to 300 tons.

World class welding results from a mix of technique and artistry, which is what our AWS certified welders have. From simple manual MIG & TIG welding, to complex weldments Lou-Rich does it all. Multiple robotic weld centers with touch sensing and seam tracking provides high quality, repeatable weld placement and bead control. Tool lengths up to 18 feet and a max swing diameter of 60 inches gives great flexibility in these automated systems. From light sheet metal to heavy plate stainless steel, and virtually anything in between, Lou-Rich welders do it right.

Our employee operators are driven to meet and exceed customer expectations and ensure each part is made exactly how it should be.







#### Machining

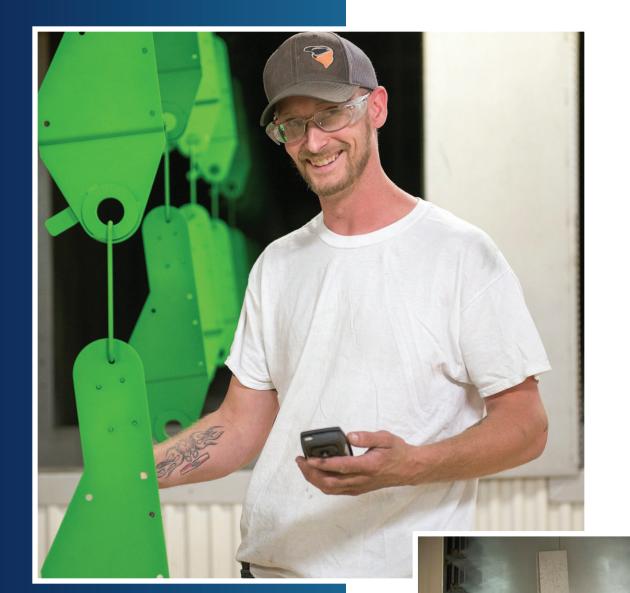
Precision machining is all about exacting detail and craftsmanship, which Lou-Rich has a wealth of. Sizable investments are made virtually every year to leverage technology advances and expand our varied and significant capabilities.

Our employee operators
are driven to meet and exceed
customer expectations and
ensure each part is made
exactly how it should be. LouRich was built on precision and our
customers count on us every day to hold
the tightest of tolerances and turn out great parts.

Lou-Rich offers all of the machining capabilities you would expect, and some that may surprise you. Our Vertical Mills can handle up to 80 inches, and our Vertical Turning Mazak has a diameter of over 36 inches. With multiple Horizontal Machining Centers

from 400mm to 1200mm,
and a whole department of
standalone Horizontal units,
chances are we can handle
whatever you need. Swiss
Turning machines along with
Bar Feed and Single & Twin
Turret Lathes allows for a wide
variety of materials and operations to
be done in very efficient methods.

From low volume high mix with zero set-up projects to high volume, large scale complex projects, Lou-Rich equipment and skilled operators do the job right. Want to see for yourself? Come for a tour and see everything in action.



## Painting & Finishing

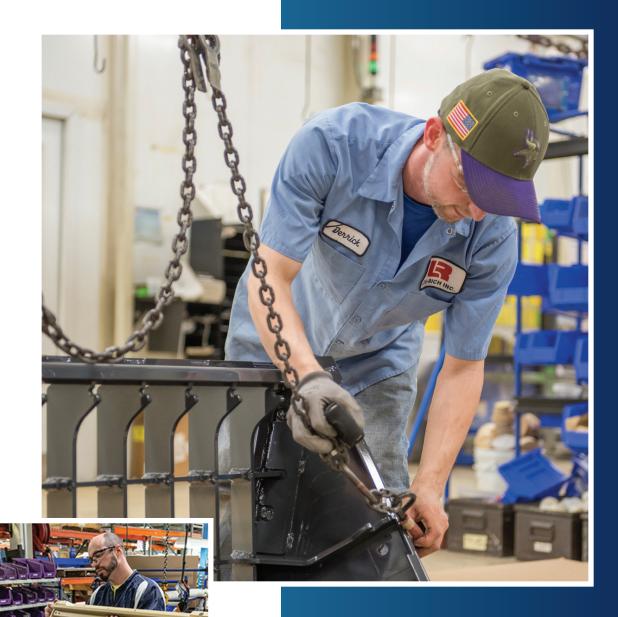
Powder coat or liquid you ask? How about both! At Lou-Rich we have a sophisticated and efficient 8 stage paint & wash system that can handle a wide variety of either powder coat or liquid paints. With finishes ranging from textured to semi-gloss, rest assured our paint group will get your project finished just the way you need it.

We take pride in our environmentally friendly system that is capable of applying paint to many substrates including sheet metal, aluminum, castings, and plastic. Whatever finish your project calls for, Lou-Rich can handle it with multiple deburring equipment options, bead and shot blasting, urethane molding, polishing and more. We also have an 8,000 Sq ft process development research lab, and an ISO certified Class 8 clean room. We enjoy a challenge and collaborating with our customers to get the very best finish possible.

## **Assembly Solutions**

Not only does Lou-Rich manufacture, machine and paint great parts, we can also provide full scale assembly services. In fact, we are so serious about it that we have a dedicated facility for assembly projects just down the street from our main manufacturing plant.

A devoted team of employee-owners treat every assembly project like it's their own. With training in Lean principles, our assembly group, with the help of our design team, will create the most effective process possible, saving you time and money. Our assembly cells are designed to maximize product flow and efficiency. With significant investment in training, tools, and work cells backed by our robust ISO 9001 quality management system, you can rest assured your project will be constructed to exact specifications.



Today we thrive on building things that other contract manufacturing companies shy away from.



#### **MINI CASE STUDY**

**Scotsman** is the world's leading ice machine manufacturer, and Lou-Rich has been in a working relationship with Scotsman since the mid-1970's. As Scotsman continued to grow the market, Lou-Rich seamlessly kept pace with manufacturing demand, and offered many design and cost improvements along with way. Scotsman has been able to leverage the significant investments Lou-Rich has made in recent years with more sophisticated CNC machining equipment that includes robotics and automation, resulting in shorter delivery cycles.

Full case study available at lou-rich.com





## Complex Manufacturing

Nearly 50 years ago Lou-Rich started as a tool & die shop, and over time as our customers' requests became more complex, so did our capabilities. Today we thrive on building things that other contract manufacturing companies shy away from.

We talk the language of engineers because so many of us are engineers. But even more important than that, Lou-Rich is chock full of problem solvers. Our employee owners are dedicated to finding the very best way to build your parts, no matter how complex it may be.

Lou-Rich is strong on design for manufacturability, and often times we can take out material and labor cost from our customer's original prints without compromising the integrity of the product. Our in-house team that builds tools and fixtures is very seasoned, and loves a good challenge. We even have 3D printing capabilities to help turn prototypes quickly.



In place are several processes to help manage complex projects including a software based costing system that helps deliver quotes quickly and at the same time identifies cost drivers.

Our engineering and project management teams work together to manage revision changes and to ensure communication both internally and with our customers. Lou-Rich is serious about Continuous Improvement in every area of the business, which means our customers continue to benefit from added capabilities, improved processes and great value.



# Project Management

It's one thing to have the technical capabilities and manufacturing capacity to do the job, it's something else to have the project management and processes to match. At Lou-Rich we have all of the above, and we pride ourselves on our ability to combine technical expertise and project management. No matter how large and complex your project may be, our team of dedicated employee-owners are up to the challenge.

Our engineering and design staff work closely with customer service and production to ensure every project goes smoothly. Often times our staff is relied on from our customers for

design for manufacturability that leads to cost savings.

Multiple CAD formats, SolidWorks, CREO and even 3D printing capabilities means our customers get great flexibility, great service and great results. Our supply chain and procurement group can help source castings along with whatever purchased components are required to simplify the customer's procurement process for their parts and assemblies.

# Company Summary

At Lou-Rich, we believe that when employees are owners, that makes everything in the customer experience better. While we are proud of the equipment and capabilities inside our facility our greatest asset, and the reason our customers trust Lou-Rich, will always be our people.















#### We are a 100% Employee Owned company.



