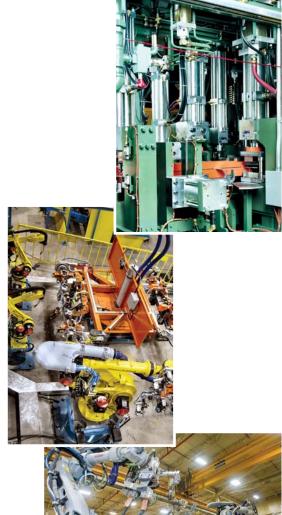
Automated Machinery & Production Systems



¢enterline-

connecting needs with capabilities





Success through Commitment _

In today's business environment, it's imperative that you remain as competitive as possible. Working with a strong partner that you can trust and has the equipment, people, experience and expertise to respond to your needs is critical to your success. By connecting your needs with our capabilities, CenterLine can be that partner.

With over 50 years experience, CenterLine is a recognized leader in advanced welding and metal fabricating production technologies and processes.

The Machinery Division, the largest division in CenterLine's group of companies, is a full service integrator/machine builder of custom automated systems. It provides complete single-source solutions for part and process development, machine design, manufacturing, testing, installation, training, service and support.

Aside from custom automated systems, CenterLine also supplies a series of standard flexible welding and automation products that can be reconfigured and re-deployed for the next program or even the next shift. Where practical, our custom equipment can integrate these modules to extend equipment use beyond a single program. This approach adds more value to capital equipment investments and can help minimize program changeover challenges.

With CenterLine you receive practical, innovative and quality equipment that is supported by a full complement of engineering, project management, training and other support services. We've earned our reputation as a complete partner with an unwavering commitment to customer success. It's why leading OEMs and Tier part suppliers depend on CenterLine to assist them in successfully launching their new programs and implementing improvements to their existing production systems.







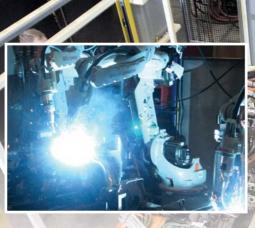
Facility Overview

Plant Size _

- 148,000 sq ft / 13,750 m²
- Machining and Fabrication Area: 2 Bays of 50' x 300' each
- Standard Products and Low Volume Production: 2 Bays of 50' x 200' each
- Machine Assembly and Small Machining Areas: 2 Bays of 50' x 300' each, 2 Bays of 60' x 300' each

Technology Competencies _

- Machinery Integration
- Resistance Spot Welding Various materials, including: Hot Stamp, HSLA materials, Martensite and Aluminum
- Resistance Welding, Other Hot upset, butt, seam, roll spot, wire & tube (to self or to sheet)
- Gas Metal Arc Welding (GMAW) Single and twin wire applications, Steel, Stainless Steel and Aluminum
- Drawn-Arc Stud Welding
- Laser Welding
- Laser Cutting Cells for tube and hot stamped parts
- Tube Bending Swaging, Piercing, Custom Forming & End Preparation
- Sheet Piercing, Forming and Joining Including staking studs/nuts, hole piercing and shearing operations
- Mechanical Assembly Staking, riveting, hinges and ball joint rivets
- Sealing Systems Adhesives & foam-in-place gasket install (including curing)
- Cold Spray Coating Corrosion protection, metal restoration, conductive layers (on glass) and wear abatement



connecting needs with capabilities

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Machining/Fabrication Capabilities ____

- Bending/Forming (Press Brake)
- CMM
- CNC Machining (Milling, Lathe, Boring, Grinding)
- Controls Programming
- Electrical Design
- Fabrication (frames, transfers, guarding)
- Heat Treating
- Painting
- Panel Build
- Single and Multi-Station Assembly
- Waterjet Cutting
- Welding
- Wire EDM

Support Services _

- Machinery Installation, Start-Up and Service Support
- Prototype development and sample parts
- Process and part development
- Detailed weld reports to end user specifications
- Low volume or service part production for our machinery customers
- Ramp up volume production solutions for simple or sub-assembly operations
- Resistance and MIG welding training for engineering and maintenance personnel
- Redeployment and retooling of equipment





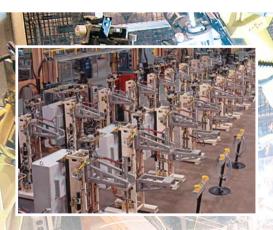
CAD Capabilities _____

- CATIA
- Pro-E
- Inventor
- AutoCAD

Parts Experience

CenterLine has a great deal of experience designing equipment for a large variety of automotive components. This includes, but is not limited to:

- Rails and Cross Members
- Instrument Panels
- Seats seat backs, tracks, risers, floor latches, seat drive components
- Intrusion Beams
- Fuel Fillers
- Hitches
- Controls Arms links and torsion bars
- Bumpers
- Cradles engine suspension



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Installation and Customer Support

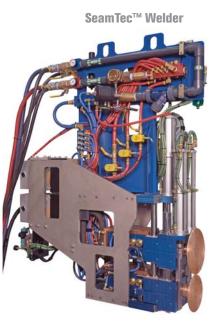
- Whenever possible, the mechanical, electrical and programming staff members that originally built and set up the equipment are used for service and support. This policy ensures that our service personnel are familiar with the entire history of the project and have a clearer understanding of the equipment's operation.
- CenterLine operates a company plane that is used primarily to satisfy service and support requirements. This allows the company to react quickly to your most urgent needs and reach.

The CenterLine Advantage _

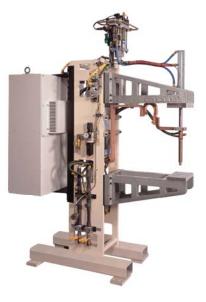
CenterLine is a modern, vertically integrated, multifaceted company with a wide range of in-house machining and finishing equipment. Our highly trained staff provide strong technical expertise backed up by a wealth of real world experience. These factors allow us to properly, and effectively, satisfy your needs and expectations. In most cases, our in-house capabilities enable us to complete projects without the use of outside resources. Whatever your needs, you can trust CenterLine to fulfill its project responsibilities and to provide you with the most competitive process solutions.



FlexFast™ Welder



FlexFast[™] Lite Welder





Our Commitment - Uncompromised Standards _

Leading OEMs and Tier 1 companies recognize that establishing reliable and consistent manufacturing practices across all of their operations is good business. It allows them to effectively control their operations and provides the operational agility to take full advantage of emerging business opportunities inherent to today's rapidly changing market demands.

Through our various international locations you can rely on CenterLine to be where you need us to be. No other resistance welding based company offers the depth of product, engineering and service support.

CenterLine's culture and processes are heavily focused on continuous improvement; it's an environment where both successes and failures drive our offerings. Our years of practical experience provide us with the know-how to effectively deal with universal industry challenges. Through our strong affiliations with key industry associations, we remain active in the development and implementation of industry standards and best practices that provide the highest value to our customers.

Contact us today to discuss your upcoming projects or current challenges and to learn how CenterLine can help you attain the success you demand and deserve.

Visit us online to find out more about our products, services and organization at *www.cntrline.com*.

Please also visit us at **www.supersonicspray.com** to discover how Centerline's Cold Spray metal coating technology can benefit your operations.



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