

centerline®

connecting needs with capabilities

FlexFast™ Welder
Ver. 3.0

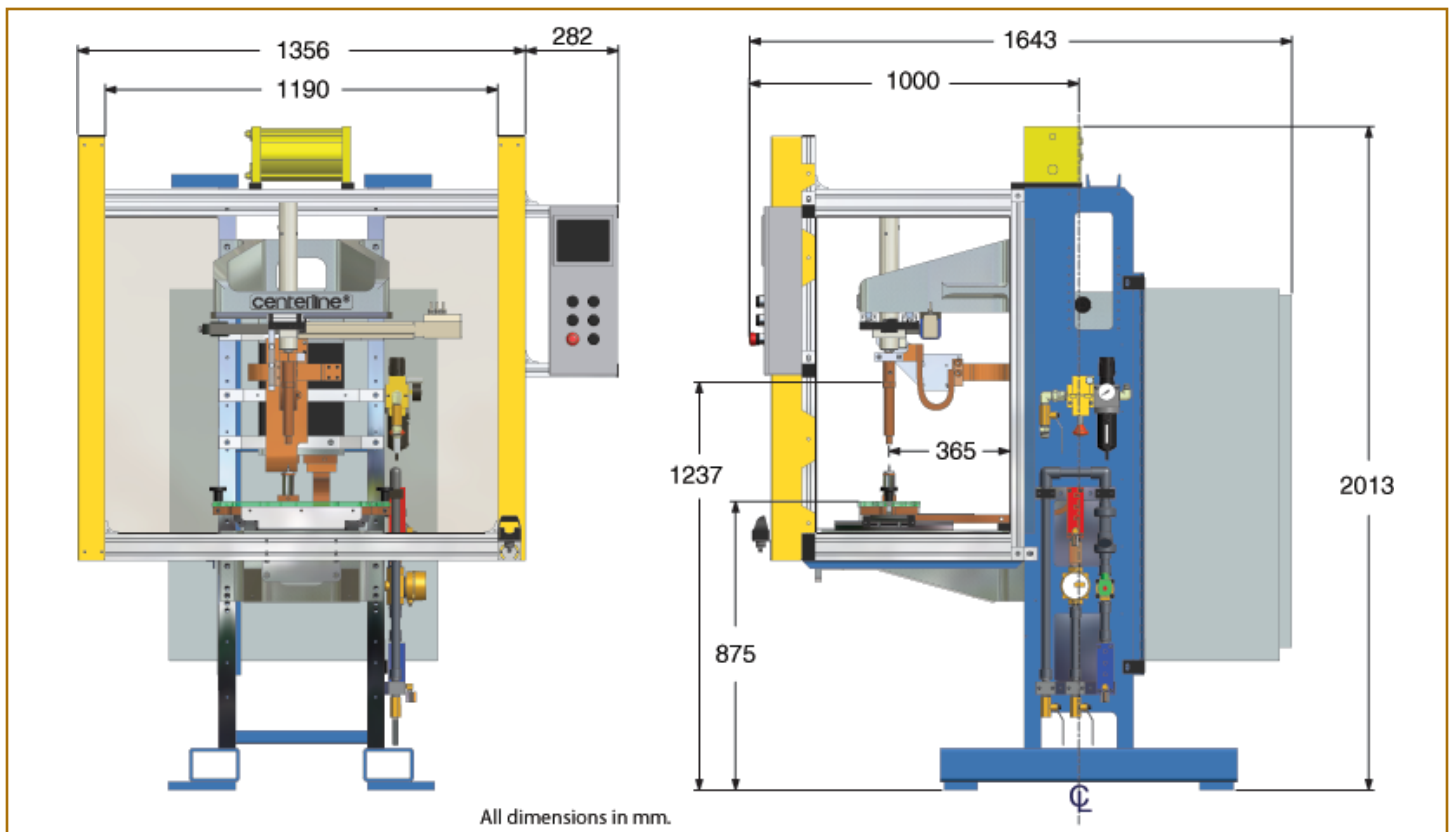
FlexFast™ Welder - Versatility and performance in a dynamic welding package.

The FlexFast™ Welder offers the ultimate in flexibility, durability and performance across a broad range of manufacturing applications. With a standard frame acting as a platform and a long list of standard and optional features, the FlexFast™ Welder is the perfect solution to your manufacturing challenges. The FlexFast™ can be considered one of the most comprehensive lines of fastener welders available today.

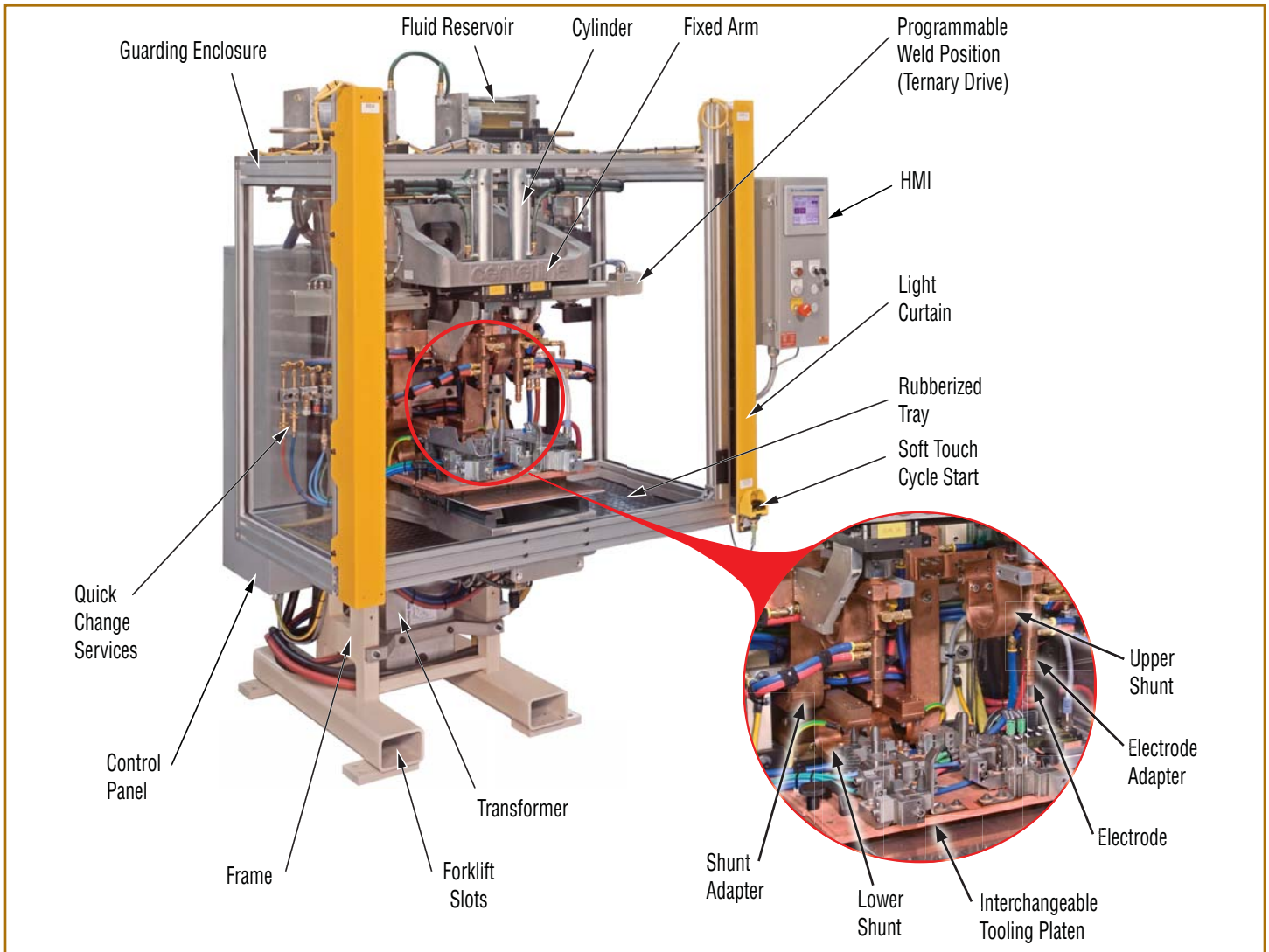
What makes FlexFast™ unique?

- ▶ **Common frame design for all FlexFast™ models**
A modular platform enables the FlexFast™ family of welders to be offered in a wide range of configurations. It is designed to easily accommodate nut feeding, sensing components, and other automation features to customize the welder.
- ▶ **Single or dual, AC or MFDC transformers**
To perform virtually any nut weld or spot weld application. Simplifies upgrades and or modifications that may be required for new applications/programs.
- ▶ **Designed to withstand up to 1450 kg of weld force (3628 kg on HD model)**
To easily operate multiple actuators or satisfy heavy weld force requirements.
- ▶ **Cast actuator mounting module - multiple configurations**
A unique design that easily accommodates air/oil, pneumatic, or servo actuators in single and multiple arrays.
- ▶ **Multiple tooling platen sizes**
For single or multiple parts and a range of part sizes.
- ▶ **Quick change tooling plates**
Configured with all necessary attachments, cables and hosing to enable tooling changeover in under 5 minutes - no special tools required. Lightweight design does not require any lift assist for changeover needs.
- ▶ **Component options from industry leading suppliers**
Transformers, controls, plumbing and valving brands can be supplied to match existing plant specifications.
- ▶ **Fully compliant with ISO, OSHA and CSA standards**
Robust, dependable and proven design features that meet or exceed established industry standards.
- ▶ **Low impact operation**
Reduces part damage/scrap, minimizes equipment and tooling wear, improves the life of weld consumables.
- ▶ **Optimal work height and weld spacing adjustability**
Accommodates manual or robotics integration.

Typical Configuration



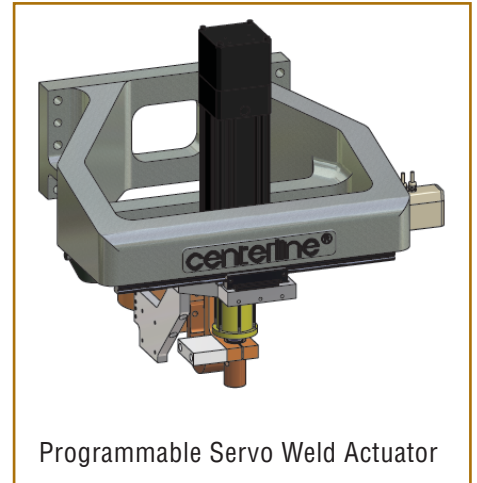
Standard Features



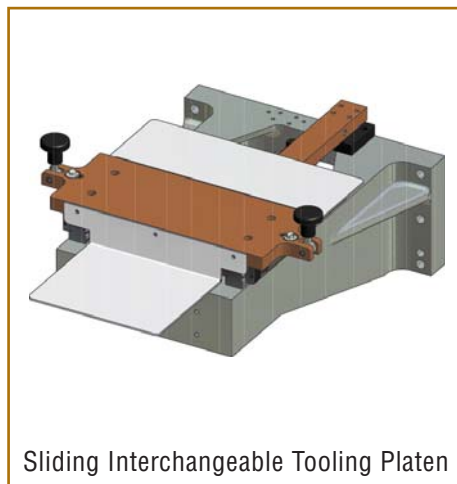
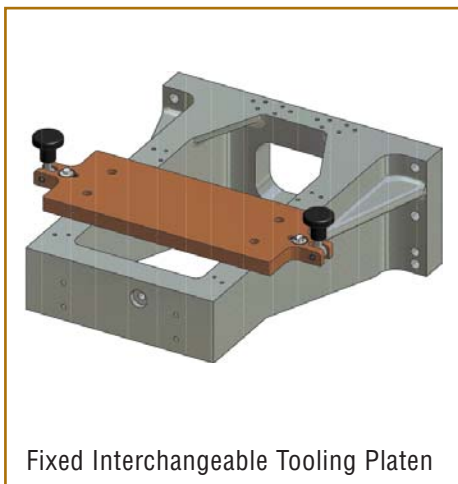
Options	Machine Type		
	Standard FlexFast™	HD Single Station	HD Dual Station
Working Envelope	150mm x 380mm	150mm x 590mm	2 X (150mm x 300mm)
Maximum Welding Force	1450 kg	3628 kg	3628 kg
Programmable Sliding Interchangeable Tooling Platen	1 (150mm travel)	1 (150mm travel)	2 (150mm travel each)
Multiple Knee Heights	√	N/A	N/A
Fixed Weld Actuators (Manual Position Adjustment)	3 maximum	4 maximum	3 maximum/station
Programmable Weld Positioner	2 max., 300mm travel/each	2 max., 300mm travel/each	2 max. 300mm travel each/station
Actuator Options: OHMA® Weld Actuator STAAC® Weld Actuator Servo Weld Actuator	√	√	√

Mounting Module Configurations

Actuator Mounting Module Options



Lower Tooling Module Options



The Utmost Versatility

CenterLine's FlexFast™ Welder is an innovative manufacturing solution that offers outstanding performance, durability and reliability, including a three (3) million cycle weld cylinder warranty.

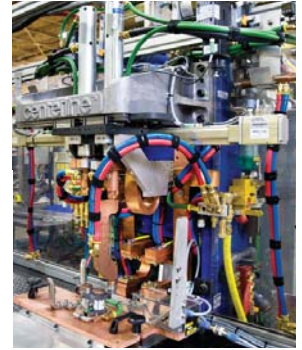
Optional Features

The FlexFast™ Welder can be configured to meet specific project & application needs and it has an extensive list of optional features.

FlexFast™ offers:

- ▶ One to four weld actuators available in pneumatic, air/oil or servo configurations
- ▶ Multiposition programmable lower tooling module
- ▶ Multiposition programmable weld actuator drive
- ▶ Programmable weld positioning with HMI
- ▶ Voltage Options: 575V, 460V, 380V
- ▶ Nut welding/spotwelding configurations
- ▶ Variety of error avoidance options
- ▶ Fastener feeder systems
- ▶ DeviceNet, EtherNet & Profibus options
- ▶ HMI units
- ▶ Cycle counters

NOTE: The FlexFast™ Welder is PSR ready for Canadian installations.



Multiple fasteners with Sliding Tooling/Electrodes



Three fasteners with Stationary Tooling/Electrodes



Ultimate Programming Flexibility

Jobs are user-configurable using the HMI touch screen. Typically, custom PLC programming is not required when a new fixture is added.

Functionality includes:

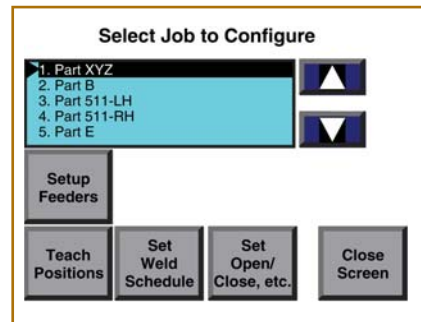
- ▶ Interchangeable fixtures
- ▶ User-configurable jobs¹
- ▶ Configurable fixture inputs to sense part presence, clamps, probes, etc.
- ▶ Multiple weld positions per job
- ▶ Jog to/teach weld position²
- ▶ Independent weld force per weld³

¹ a fixture may have multiple jobs

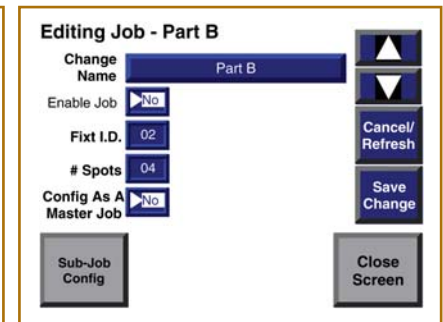
² with electric actuator X/Y positioning option

³ with programmable regulator option

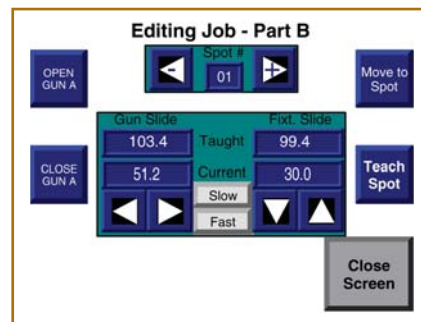
1. Select and name job.



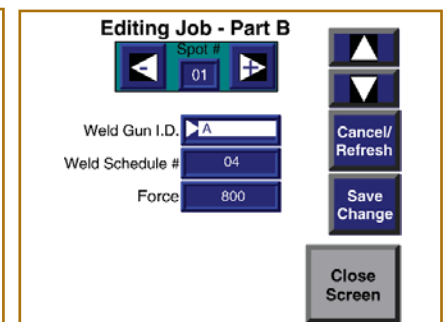
2. Configure and select schedules.



3. Teach positions and set up I/O.



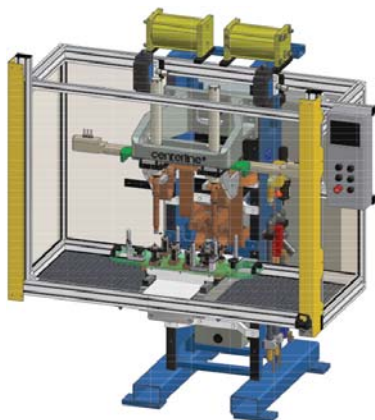
4. Set up weld forces.



Screens shown for illustration purposes only.

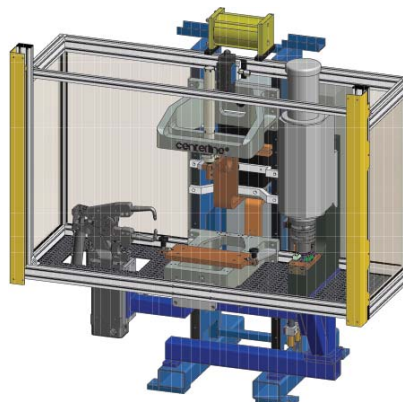
FlexFast™ Configuration Examples

Dual Weld Actuators



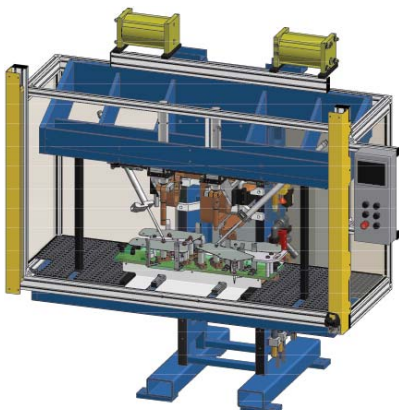
- Two independent, programmable weld actuators
- Lower platen programmable in & out motion

Weld Gun & Spin Riveter



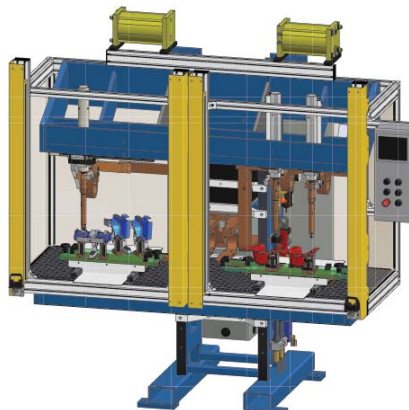
- Spot welding
- Spin riveting
- Other applications can be accommodated

HD Dual Weld Actuators



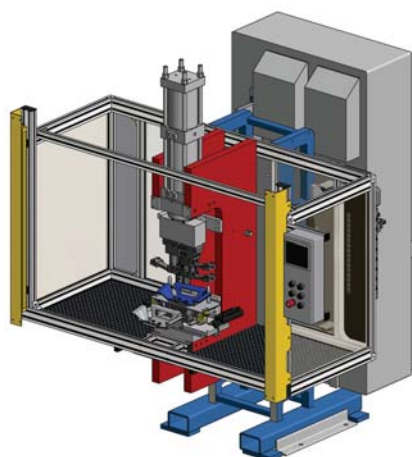
- Wide platen
- High electrode forces
- Nut feeder
- Dual OHMA® weld cylinders

HD Weld Gun & Dual Station



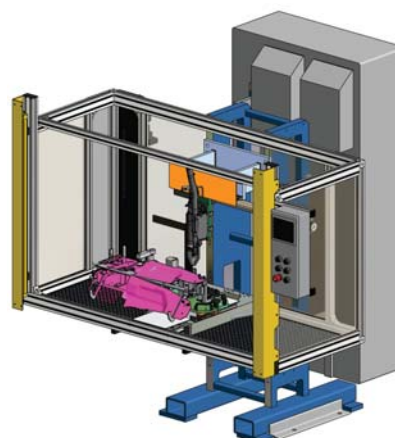
- Two individual platens
- Independent work areas
- Dual controls

Press Application



- Clinching/staking fastener applications
- OHMA® Piercing Cylinder

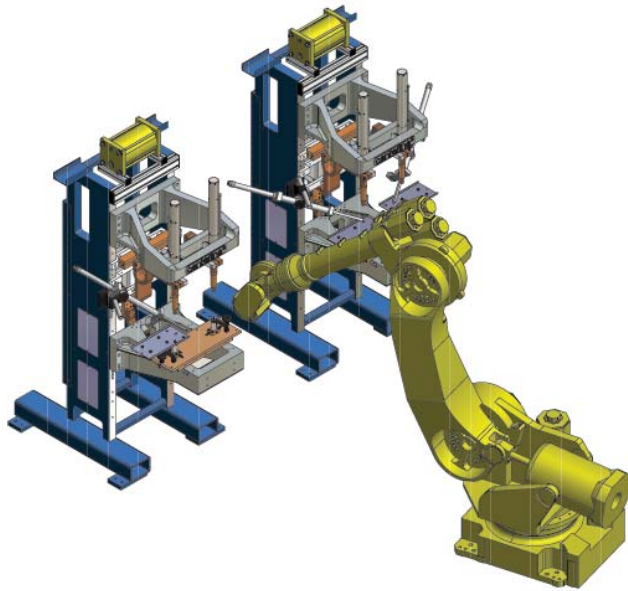
Drawn Arc Stud Welder



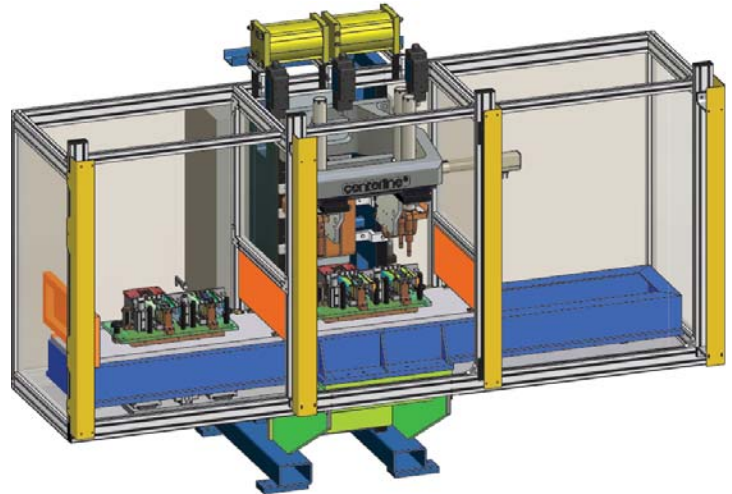
- Programmable positioning
- Drawn arc stud welding
- Fixture part ejecting

FlexFast™ Configuration Examples

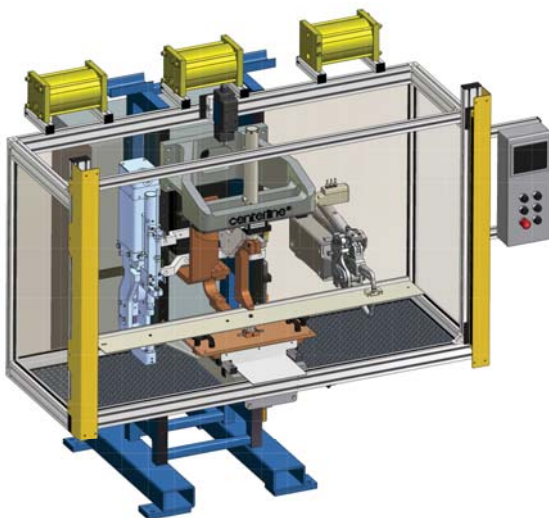
Robotic Cell Welds Four Different Fastener Styles



Shuttle & Three Load Stations

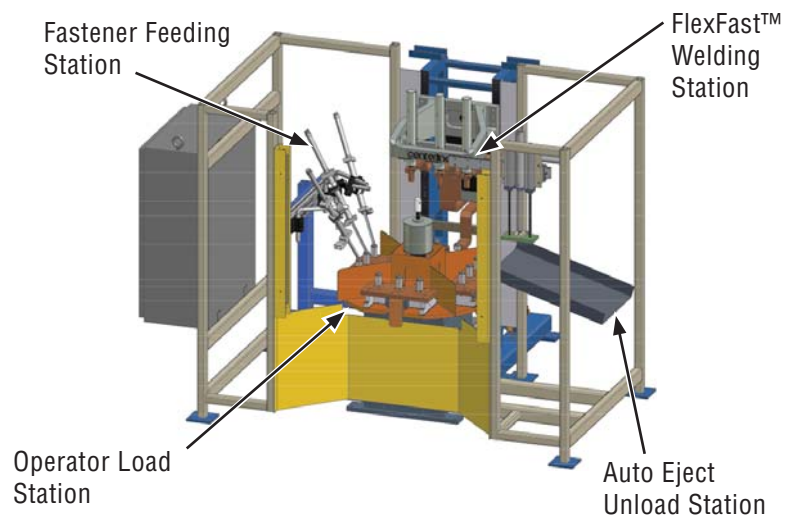


Two Weld Guns



Four Station Mini Indexing Turntable

For High Volume Fastener Welding





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