



# welding

**Productive Robotics**

**Robotic Welding  
Systems**



**REPRESENTED BY:**  
Allegheny Educational Systems, Inc.  
320 East 3rd Avenue  
Tarentum, PA 15084  
Phone: 800-232-7600  
[www.alleghenyedusys.com](http://www.alleghenyedusys.com)



**Designed & Built  
in the USA**

# blaze welding

## ROBOTIC WELDING FOR YOUR TABLE, YOUR WELDER.

COMPATIBLE WITH MILLER, LINCOLN AND MOST OTHERS.

### Consistency and Quality

- 100% consistent, clean, precise welds
- Eliminate or reduce Post Weld grinding and cleanup
- Zero operator fatigue or monotony
- Perfect weld repeatability every time

### Simplicity

- Zero robot programming required
- Blaze learns when you show it
- Zero robot experience required
- Fast training (teach Blaze your first weld in minutes)

### ROI and Productivity

- 2X to 5X increase in productivity
- Lower cost per weld
- Increase production DAY ONE
- Highest possible “Arc On Time”
- Robots don’t take breaks
- 24/7 operation
- Reduced employee turnover (everyone loves robots)
- Increased safety
- In many cases it’s faster to teach Blaze to do the weld than to do it once manually

### Flexibility

- Fast short run changeovers
- Zero reprogramming on repeat jobs
- High Mix or Low Mix
- Short Run or Long Runs
- No new fixturing required. Use your existing fixtures.
- 7-Axis Maneuverability:
  - More welds without re-fixturing
  - Maneuver around clamping and fixtures
- Unlimited weld types and styles in a single run

### No Programming

- Productive Robotics’ proven “No Programming” software. Blaze learns by showing it where to weld.
- Zero robot experience needed
- Little training required
- All weld details set by selecting recipes on a professional touch tablet (not a tiny cell phone)
- No techie jargon

### Real World Proven

- Proven leading OB7 Stretch (long reach) collaborative robot
- Dedicated 5 Star welding software built from the ground up, not a patched together add on
- Collaborative Robot Safety (works side by side with your people)
- Live Online support by seasoned professional welding and robotics experts
- 100% money back guarantee



**Designed & Built  
in the USA**

BLAZE  
WORKS WITH  
YOUR CURRENT  
WELDING  
SETUP



YOUR TABLE



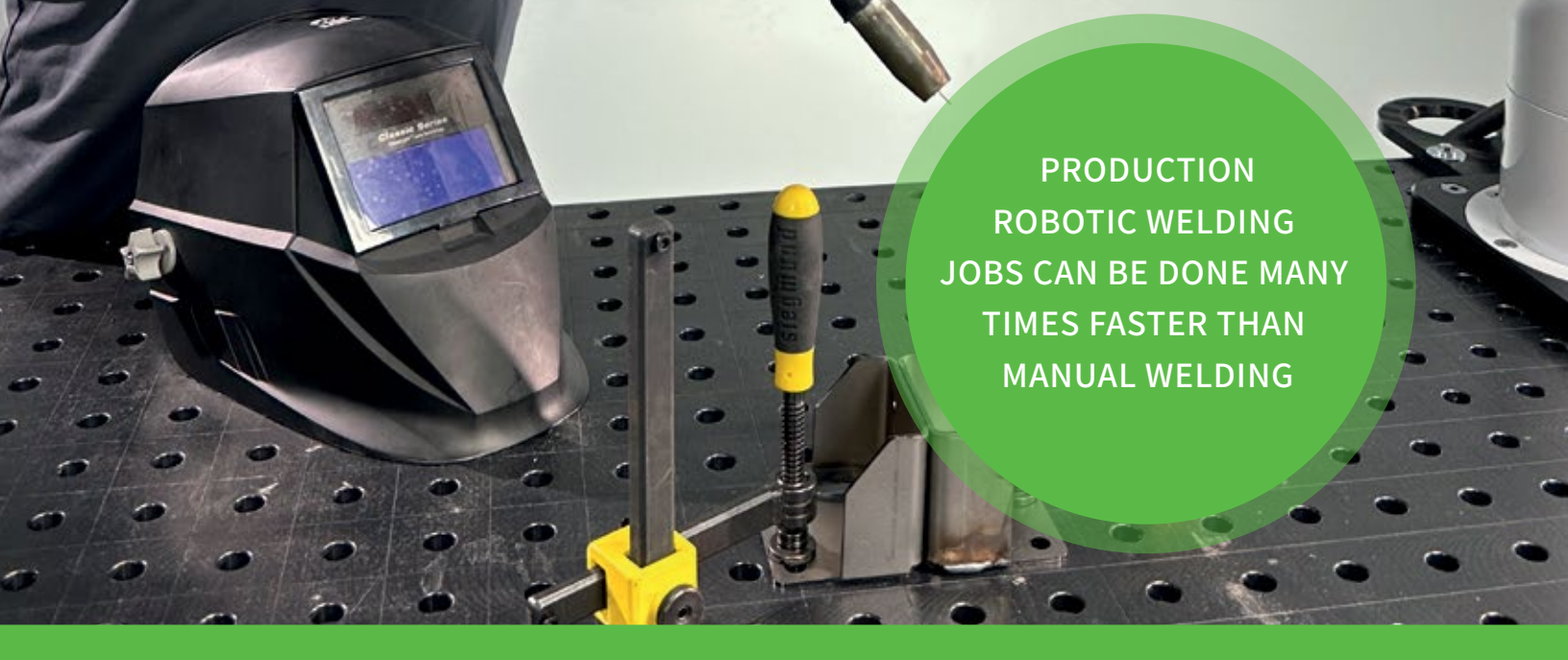
YOUR WELDER



# TEACH BLAZE A JOB IN LESS TIME THAN IT TAKES TO DO IT ONCE MANUALLY.



PRODUCTION  
ROBOTIC WELDING  
JOBS CAN BE DONE MANY  
TIMES FASTER THAN  
MANUAL WELDING





## BLAZE 7-Axis Welding is a “Must-Have”

Only a 7-Axis robot can maneuver around all sides of large or complex parts and fixtures without restriction. Get more weldments done in a single setup with 7-Axis, versus having to re-fixture with a 6-Axis robot.



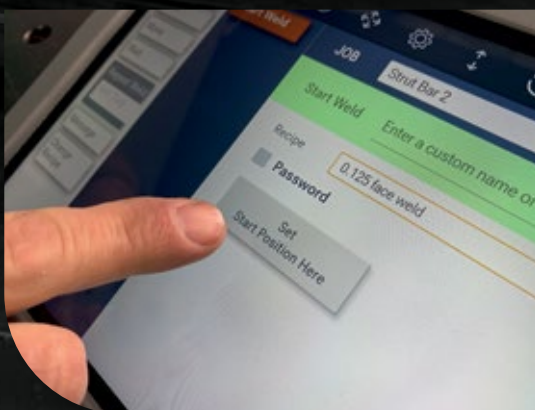
## BLAZE Learns Welds by Doing

Use the control handle to physically teach Blaze to weld, without programming. Show Blaze the start and end of welds, circles and any complex shape. Show Blaze tack points at the **touch of a button**.



## Techie Jargon Banished

All welding details and recipes set on the Tablet Controller with Productive Robotics' famous drag and drop display. Productive Robotics' “No Programming” system allows anyone, regardless of experience, to teach Blaze to weld.



## Unlimited Weld Complexity

The unlimited library of welding recipes allow complete control and customization of all welding parameters, including: material type, weld speed, wire speed, gas flow control, weld pattern and more. Simply select your desired recipe, or customize the recipe as you choose. Unlimited different weld types can be used within a single job.

# blaze LF

## AUTOMATED WELDING PACKAGE: BLAZE WELDING ROBOT, TABLE AND WELDER

Blaze LF is designed for ease and convenience for automation of both large and small size weldments. The 8 ft long table provides unrestricted access on all sides for placing large objects and easily loading and unloading components.

### No Programming

All welding details and recipes are set on the Tablet Controller with Productive Robotics' famous drag and drop display. Productive Robotics' "No Programming" system allows anyone, regardless of experience, to teach Blaze to weld. Blaze LF is designed for ease and convenience for automation of both large and small size weldments. The 8 ft long table provides unrestricted access on all sides for placing large objects and easily loading and unloading components.

### Unlimited Weld Complexity

The unlimited library of welding recipes allow complete control and customization of all welding parameters, including: material type, weld speed, wire speed, gas flow control, weld pattern and more. Simply select your desired recipe, or customize the recipe as you choose.

### Large Format Table

Large 4 ft x 8 ft welding table with unrestricted access allows multiple simultaneous weld fixture setups, or large weldments. Full width front and side doors provide unrestricted access to the entire welding table.





**1550 mm/61" RADIUS  
OPERATING SPHERE**

## **Blaze Welding Robot**

Productive Robotics proven OB7 Stretch robot provides unmatched reach and maneuverability that only a seven axis robot can provide.

## **Auto Continuum 350 Welder**

Top of the line welding package allows 100% duty cycle handles nearly any wire type with continuous welding without breaks or interruptions.

## **The 7-Axis Advantage**

Like a human arm, seven joints allows the operator to access all sides of a work setup without restriction.

# blaze DUO

## HIGH PRODUCTION DUAL STATION ROBOT WELDER

With automated doors separating two identical weld stations, Blaze Duo minimizes downtime by allowing operators to safely set up one job while the robot is welding another. With Blaze Vision monitor, you can view direct video monitoring of welding, in progress.

Blaze DUO features the Blaze Welding robot with its unlimited library of welding recipes, “No Programming” drag and drop tablet controller, and complete control and customization of all welding parameters. The Blaze robot easily learns any job in minutes, from simple to complex paths, varying weld recipes and weld types.



Two Stations for  
Simultaneous Setup  
and Welding

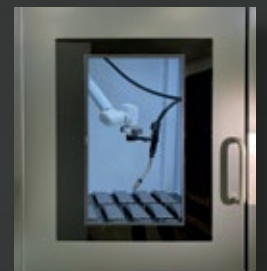
### Blaze Welding Robot

Productive Robotics proven OB7 Stretch robot provides unmatched reach and maneuverability that only a 7-Axis robot can provide.

### BlazeVision™

#### Live Video Monitoring

Direct video monitoring of welding, in progress, displayed on the Blaze Vision monitor. Welding visors, goggles, or welding screens are not required.



LIVE VIDEO  
MONITORING  
(NO VISORS  
REQUIRED)







## LED Lighting

Built in bright LED lighting provides perfect illumination for setting up jobs and fixtures.

## Unrestricted Access

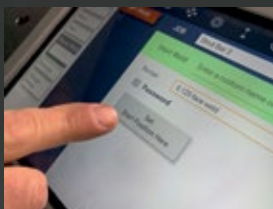
Double doors at each weld station open fully to allow complete and unrestricted access to the large 4 ft x 8 ft weld table and all setups.

## Filtered Fume Extraction

Unique combination of Merv 8 + Merv 14 filtering allow the Blaze system to operate in most any environment.

## 5 Star Software

Dedicated welding software built from the ground up by industry leader Productive Robotics (not a patched together add-on).



## Auto Continuum 350 Welder

Top of the line welding package allows 100% duty cycle. Handles nearly any wire type with continuous welding, without breaks or interruptions.

# Blaze Welding Robot Specifications

Blaze Welding Robot, LF and Duo specifications subject to change without notice.

## Blaze Welding Robot

Maneuverability	Unmatched 7-Axis flexibility
Robot Torch Reach	1,550 mm (61") including MIG torch
Weld Speed	Up to 2,540 mm (100") per minute
Weld Recipes	Unlimited
Welding Modes	Continuous, Tack, Stitch, Weave
Weight	22 kg/58 lbs
Repeatability	+/- 0.1 mm (.004")
Speed	0-2+ m/sec (78"/sec)
IP Class	IP 61
Joint Range	+/- 360° (all)
Mounting Flange Diameter	220 mm (8.66")
Working Temperature	0-37C 32-100F
Power	120/240V, 60 cycle 500W (not including welder power)
Power Consumption	90-650 W
Safety	Speed and Force limited
Linear Speed	2 m/sec max (dependent on position)
Noise Level	Quiet, dependent on speed and payload
Mounting Orientation	Vertical: table/ceiling Horizontal: wall
Cable Length	1 meter, 5 meters (3 ft, 16 ft)

## Sealed Case Control Computer

IP Rating	IP30
Communications Hardware	Ethernet 100MB
Protocols	Ethernet IP, TCP/IP, Modbus
Power	100-240 VAC 50-60 HZ

## Teach Tablet

IP Rating	IP30
Connection	USB
Dimensions	253 mm x 125 mm x 37 mm (10" x 5" x 1.5")
Cable	5 meters (16 ft)

## Support

Live Online support by seasoned professional welding and robotics experts



# Blaze LF Welding Package Specifications

## Blaze Welding Robot Included

### Dimensions

Table Height	914 mm (36")
Weld Table	1,244 mm x 2,490 mm (48" x 96")

### Auto Continuum 350 Welder

Maximum Current	350 Amp 10V - 44V
100% Duty Cycle	
3 Phase 50/60hz	
Power Supply	230VAC, 380VAC, 400 VAC 460Vac, 575Vac
Welding Circuit Rating	230VAC - 575VAC 230V @ 40amps 575VAC @ 20A

### Advanced MIG processes

Versa-Pulse™  
Accu-Pulse® MIG (GMAW-P)  
RMD®  
MIG (GMAW)  
High-deposition MIG (GMAW)  
Flux-cored (FCAW)

### Wire Drive

Wire Feed Speed	50-1000 IPM (1.27-25.4 m/min.)
Wire Dia range	0.9-2.0 mm (.035-5/64")

# Blaze DUO Specifications

## Blaze Welding Robot Included



### Dimensions

Overall	2565 mm x 1549 mm x 2540 mm (101" w x 61" d x 100" h)
Table Height	914 mm x (36")
Two Weld Stations	1060 mm x 1,244 mm (41.75" x 48")
Spatter Catch Trays	2 trays cover entire weld area

### General

Lighting	High intensity LED
Fume Extraction	
Fume Filter Rating	Merv 8 + Merv 14

### Wire Drive

Wire Feed Speed	50-1000 IPM (1.27-25.4 m/min.)
Wire Dia range	0.9-2.0 mm (.035-5/64")

### Advanced MIG processes

Versa-Pulse™  
Accu-Pulse® MIG (GMAW-P)  
RMD®  
MIG (GMAW)  
High-deposition MIG (GMAW)  
Flux-cored (FCAW)

### Auto Continuum 350 Welder

Maximum Current 350 Amp 10V - 44V  
100% Duty Cycle  
3 Phase 50/60hz  
Power Supply 230VAC, 380VAC, 400 VAC  
460Vac, 575Vac  
Welding Circuit Rating 230VAC - 575VAC  
230V @ 40amps  
575VAC @ 20A

## Direct Factory Support

Our Welding and Robotics Experts are here to help with all your questions.

**Call Us: 1-805-244-9300**

+1 (805) 244-9300  
sales@productiverobotics.com  
1035 Cindy Lane  
Carpinteria, CA 93013 USA  
productiverobotics.com

Productive Robotics, Blaze,  
Blaze Vision and OB7 are trademarks  
of Productive Robotics, LLC



**Designed  
& Built  
in the USA**



**Productive Robotics**

[sales@productiverobotics.com](mailto:sales@productiverobotics.com)

[www.productiverobotics.com](http://www.productiverobotics.com)