

Titan Series Welder	
Introduction	Introducing the Titan Series Welder, the fastest welder on the market, engineered for efficiency and versatility in plastic welding. Featuring three advanced servo platens, it provides higher press force capacity and configurable heat sources: hot plate, InfraGuide, and quartz IR.

Mechanical Specifications		
Series	2000	4000
Work Area	Heated Area: 12" Deep / 15" Wide Press Area: 12" Deep / 15" Wide	Heated Area: 15" Deep / 24" Wide Press Area: 18" Deep / 24" Wide
Machine Dimensions	42" Wide / 96" Tall / 92.5" Deep	52" Wide / 96" Tall / 95.5" Deep
Side Door Open Distance	25"	25"
Machine Weight (without tooling)	3000 lbm	3700 lbm
Maximum Press Stroke (per press)	12"	12"
Maximum Press Open Height	28"	28"
Maximum Heat Shuttle Stroke	26"	26"

Performance Specifications		
Series	2000	4000
Press Acceleration	Up to 2g	Up to 2g
Maximum Press Speed	18 in/s	18 in/s
Potential Open Time	< 1 s	< 1 s
Clamping Force Capacity	2000 lbf	4000 lbf
Heated Tool Maximum Weight (total)	260 lbm	450 lbm
Press Tool Maximum Weight (each)	220 lbm	220 lbm
Press Positional Precision	±.001"	±.001"
Warranty	2 years	2 years

Operating Requirements & Heated Tool Specifications			
Technology Options	Power Requirements	Pneumatic Requirements	Temperature Control Zones
Heated Carrier	2000: 480V 3ph 50/60 Hz, 30A 4000: 480V 3ph 50/60 Hz, 60A	80 psi, 6 SCFM	2000: 5 (Heaters) 4000: 7 (Heaters)
Heated Tools	480V 3ph 50/60 Hz, 30A	80 psi, 6 SCFM	12 Max (Heaters)
InfraGuide (24 Lamp Max)	480V 3ph 50/60 Hz, 30A	80 psi, 42 SCFM	24 Max (IG Lamps)
InfraGuide (48 Lamp Max)	480V 3ph 50/60 Hz, 30A	80 psi, 78 SCFM	48 Max (IG Lamps)
InfraGuide (72 Lamp Max)	480V 3ph 50/60 Hz, 30A	80 psi, 115 SCFM	72 Max (IG Lamps)
InfraGuide (96 Lamp Max)	480V 3ph 50/60 Hz, 30A	80 psi, 150 SCFM	96 Max (IG Lamps)
Quartz IR with Heated Tools	480V 3ph 50/60 Hz, 60A	80 psi, 150 SCFM	12 Max (IR Emitters or Heaters)
Deluxe	480V 3ph 50/60 Hz, 60A	80 psi, 150 SCFM	12 Max (IR Emitters or Heaters) 96 Max (IG Lamps)

Standard Features	
3 Servo-Driven Platens	Servo-driven upper and lower press platens and heat shuttle
High-Speed Motions	High-acceleration motions (up to 2g) for industry-leading fast open time
High-Visibility Safety Doors	Interlocking, pneumatic safety doors with safety pressure strips, allowing visibility of the parts
Exhaust Vents	Dual top-mount ducting for front and rear machine fume management
Horizontal Heated Platen	Fully supported, horizontal heated platen
Leveling Feet	Supports a stable base for vibration control
Quick-Change Tool Clamping	Pneumatic, quick change, press tool clamping system
Side Access Doors	Hinged, low-profile, side-access double doors
Task Lighting	Lighting inside machine
Thermal Expansion Compensation	Heated area engineered for controlled expansion from the tooling center
Allen-Bradley Controls	Allen-Bradley PLC and 10" HMI running Allen-Bradley Optix
Auto Teach Mode	Automatically detect melt and seal positions for rapid weld recipe setup
Auto Seal Positions	Automatically program seal positions to minimize open time
History Tracking	Complete history of cycle data and recipe changes
SmartSafe Emergency Stop Recovery	Safe retract routine when E-stop is pressed
User-Defined I/O	Easily configure tooling inputs and outputs through the HMI
Heater and IR Emitter Monitoring	Analog current monitoring to ensure reliable heater performance and early issue detection
Independent Temperature Zones	Multiple temperature or heater control zones (1000 °F max for HP-C)
Unlimited Recipe Storage	Capacity to store an unlimited number of recipes
Password Protection	Prevent unauthorized changes to settings and parameters

Optional Features	
Pass-Through Loading	Integrate into an automated production line
SmartSafe Power Loss Recovery	Safe retract routine when the machine loses power
High-Precision Press Force	Load cells included with the press
Overhead Light and Fan	Operator comfort and visibility
Stacklight	Visibility from across the plant floor
Barcode Scanner	Customer specific part tracking
Label Printer	Customer specific part tracking
Light Curtain	Increased safety and decreased cycle time
Clean Room	Built with clean room-compatible materials and hardware

Optional Accessories	
Heated Rack	Preheats tools for faster tool changeover
Tool Cart	Tool handling cart for safe tool changeover
Tool Rack	Organized storage for tools not in use
Fume Management System	750 cfm HEPA and carbon filtration