

T. J. SNOW



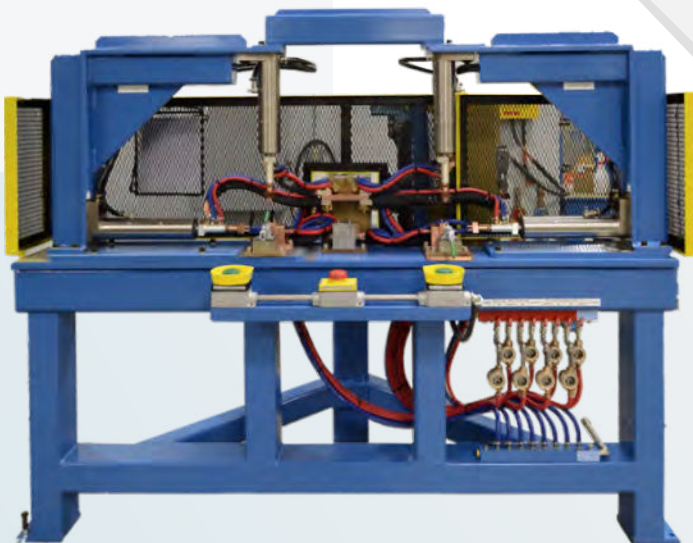
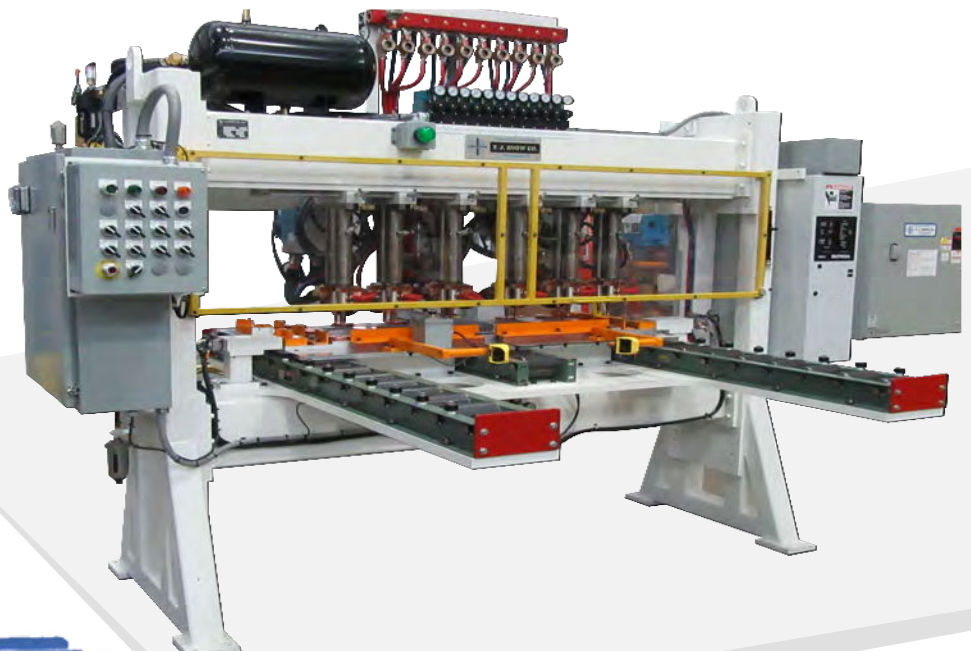
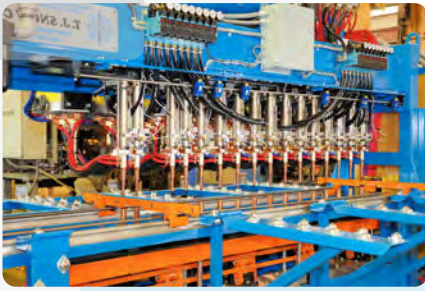
RESISTANCE
WELDING
ONE SPOT SHOP

tjsnow.com

CUSTOM & AUTOMATED MACHINERY

SPOT WELDING AUTOMATION

T. J. Snow custom designed and innovative resistance spot welding systems provide precision welding on work pieces that require spot welds in opposed, angled, circumferential, horizontal, and vertical, X-Y axis configurations. As a true custom product, clients approach T. J. Snow's team of applications engineers to provide innovative solutions and options for improving product precision and throughput. Design of custom fixtures and tooling can be built to your specifications.



[Learn More](#)

SLIMLINE® SPOT WELDERS

The durable, compact design of T. J. Snow's SlimLine® Resistance Welders makes for a cost-effective and efficient resistance welding solution. All standard SlimLine components are stocked at our Chattanooga location, so we can assemble one to your specifications in record time. SlimLine® Welders are available as Pedestal-Type Spot Welders, Projection Welders, Multi-Gun Spot Welders, and Seam Welders.

SlimLine® Standard Specs

- ✓ KVA: 30-170 KVA AC and MFDC
- ✓ Throat Depth: 18" to 36"
- ✓ Voltage: 220V, 440V, 575V
- ✓ Single Phase and 3 Phase (with MFDC)
- ✓ Air Cylinder Type: Standard Dual Acting, Air Over Oil, Ram Type, and Other Options
- ✓ Air Cylinder Stroke: Up to 6"
- ✓ Machine Initiation: Foot Switch, Palm Buttons, Automatic, PLC



[Learn More](#)



Advantages of SlimLine® Spot Welders

- ✓ Easy to customize
 - + Add welding guns
 - + Widen lower platen
 - + Install special tooling
- ✓ Durable compact design
- ✓ Easy access for simplified maintenance
- ✓ Quick changeover

Premium Options

- ✓ MFDC Power Supply & Control
- ✓ Electric Servo-Driven Force Delivery System
- ✓ Unitrol Soft Touch Pinch Point Safety System

PROJECTION WELDERS

Designed to produce high welding forces without deflection, T. J. Snow's heavy duty press-type resistance welders are available in a variety of set-ups including Spot Welders with arms, Projection Welders with platens, and Combination Spot and Projection with both arms and platens. Standard AC transformer sizes range from 50-500 KVA, with larger capacities and custom options available. MFDC and Three Phase Frequency Converter power supplies are also available.



Standard Specs of Projection Welders

- ✓ KVA: 50-500 kVA
- ✓ Throat Depth: 18" to 48" | Vertical Gap Adjustable up to 18"
- ✓ Voltage: 220V, 440V, 575V | Single Phase or Three Phase
- ✓ Transformer Tap Switch: 6 or 8 Taps
- ✓ Air Cylinder Options: Dual Action, Adjustable Stroke, Dual Action with Retract
- ✓ Air Cylinder Stroke: 4" Standard, 3" Retract Optional
- ✓ Air Cylinder Bore: 4" to 10" Available (1,000 to 6,280 lbs. at 80 PSI)
- ✓ Platen Size: Standard RWMA Size 1 & 2
- ✓ Machine Initiation: Dual Palm Buttons Standard or Foot Switch

Applications for Projection Welding

Projection welding can be broken down into three main categories, all of which involve just one stroke of the machine.

- ✓ Welding of multiple individual projections
- ✓ Welding of ring projections
- ✓ Welding of crossed wire joints

The most common form of projection welding involves attaching fasteners, such as nuts and studs, with typically three or four projections to focus the heat.



[Learn More](#)

ROCKER ARM SPOT WELDERS

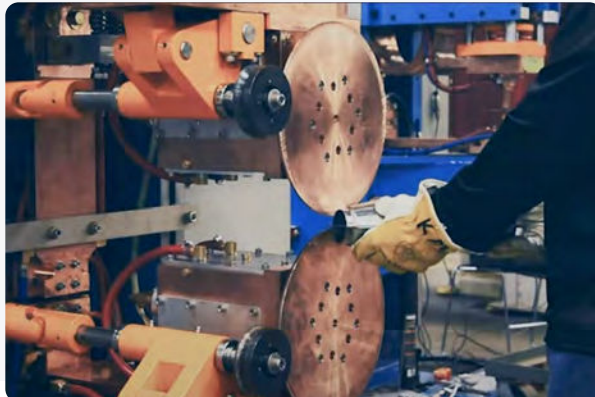
The durable, compact design of T. J. Snow's Heavy Duty Rocker Arm Spot Welder makes it a cost effective and efficient resistance welding solution. These robust, high speed machines are engineered to make high quality welds on a continuous production basis.

- ✓ 3 circuit water manifolds for water cooling
- ✓ 5" diameter x 4" stroke adjustable/retractable
- ✓ 4 way solenoid operated air valve, air line filter, pressure regulator



RESISTANCE SEAM WELDERS

Resistance seam welders are built similar to press-type resistance welders except that the welding force is applied with two rotating copper wheels and the control adjusts the rotating speed and secondary amperage output. The resulting welds are continuous seams, overlapping spot welds, or evenly spaced roll spot welds. The machines are typically configured as circumferential (circular) or longitudinal. Although rare, there are seam welders that are convertible from circumferential to longitudinal.





CAPACITOR DISCHARGE (CD) RESISTANCE WELDING

Capacitor Discharge Resistance Welding (or CD Welding) is a special form of Resistance Projection Welding in which the welding energy is provided by the release of energy stored in a large capacitor bank. Designed for high-precision and mass production, capacitor discharge resistance welding solutions are available from T. J. Snow ranging from 1 – 160 kJoules.

- ⚙ **Multi-Pulse Capacitor System**
- ⚙ **"Elastomer" Fast Follow Up System**
- ⚙ **Standard Programmable Force & Force Monitoring**
- ⚙ **Optional Cabinet Locations**
- ⚙ **Additional Configurations**

BENEFITS OF USING CAPACITOR DISCHARGE WELDING



SHORTER WELD TIMES

The Capacitor Discharge (CD) Resistance Welding process utilizes stored energy rather than conventional processes which use direct demand on incoming power. This allows for very short welding times – typically in 10 milliseconds or less.



POWER & COST SAVINGS

An upgraded power service to your building is often not needed as the high electrical energy required is not taken directly from the power distribution network but from a bank of capacitors, which stores the energy and recharges between welds.



MINIMAL HEAT-AFFECTED ZONE

The short weld time ensures a minimal migration of heat into the area immediately surrounding the weld nugget, thus limiting – or virtually eliminating – alteration of the grain structure (softening in the HAZ).



CONCENTRATED WELDS

The resulting short weld time guarantees that the energy required to perform the weld is confined more closely to the weld area.

FLASH WELDERS

Flash welding brings two pieces of metal together during the arc-flash process and welds them together end to end.

- ✓ Hydraulic Servo Control for Upset Speed and Distance
- ✓ High Force Hydraulic Clamping
- ✓ Recipe Programming on the HMI
- ✓ Pre-Heat, Post-Heat, Quench and Temper Settings
- ✓ 150 – 300 kVA
- ✓ Up to 50,000 lbs. of Upset Force
- ✓ Up to 100,000 lbs. of Clamp Force



BUTT WELDERS

T. J. Snow's Heavy-Duty Resistance Butt Welding Machine is a compact, cost-effective and flexible resistance welding solution. Our standard Butt Welder is air-operated, water-cooled and capable of butt welding up to 3/8" wire diameter, end to end.

- ✓ 35 kVA
- ✓ Dual Voltage 220/440 V
- ✓ Air-Operated, Water-Cooled
- ✓ Capable of welding up to 3/8" wire diameter
- ✓ Multi-step transformer tap switch
- ✓ Two (2) clamping cylinders with adjustable stroke
- ✓ One (1) upset cylinder with adjustable stroke
- ✓ Filter, regulator, and lubricator combo
- ✓ ENTRON EN6001 Microprocessor Type Control





Portable Spot Welding Guns

TECNA® "C Style" and "Scissor Style" Portable Spot Welding Transguns are self-contained suspended production spot welding guns with integrated transformers and digital weld controls available 16-75 kVA capacity. Standard models are available in stock. Small 2 to 6 kVA hand held or light weight resistance welding guns are also available.



Press-type Spot Welders

Press spot welders feature a stationary, ergonomic frame designed by TECNA®. The control unit has been positioned on the side of the machine to allow the operator to view the welding data even during the working cycle. The pneumatic commands and the compressed air pressure gauge have been placed at the top for easier adjustment and reading.



Rocker Arm Spot Welders

TECNA® rocker arm spot welders are fully engineered, compact solutions equipped with the TEI01 control, which is positioned in the front of the machine for ease of use and monitoring during the weld cycle. Versatile and adjustable for multiple jobs, rocker arms are a wise investment as they are suitable for a variety of applications.



Spot & Projection Combination Welders

TECNA® offers combination spot and projection welding in both single-phase AC and three-phase MFDC options. The combination spot/projection welders feature a stationary, ergonomic frame.

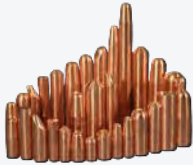
Spring Tool Balancers & Retractors

TECNA® produces a range of Spring Balancers that are all available from T.J. Snow in a variety of capacities, ranging from .5 lbs to 395 lbs. Tool Balancers are essential devices that improve productivity, minimize line operator labor and reduce long-term damages and wear to hoses, cables and tools.



Resistance Welding Accessories & Supplies

The Nation's Largest Inventory of Spot Welding Consumables!



Spot Welding Tips & Electrodes



Weld Checkers & Monitors



Weld Cylinders



Weld Controls



Transformers



Cables & Shunts



Water Chillers



Spring Balancers & Tool Retractors

Why T.J. Snow



**\$2 million
of inventory**



**On-time
Delivery**



**Competitive
pricing**



**Knowledgeable
customer service**



**Ability to
ship worldwide**



ORDER ONLINE

FEATURED BRANDS



**AND
MORE!...**

Service

T. J. Snow's Service Department troubleshoots, repairs and retrofits most resistance welding machines and controls. Our comprehensive service capabilities help you succeed with the resistance welding process



Installation & Upgrades



Repair & Rebuilds



**Fast Service with
Company Plane**



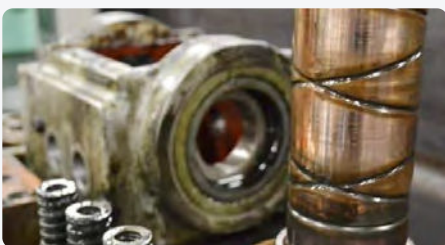
**Welder Certification &
Calibration**



**Set-up & Weld
Schedule Development**



**Weld Control &
Electronics Repair**



Seam Weld Head Repair



Transformer Repair



TECNA® Gun & Balancer Repair

COMPLIMENTARY
PHONE SUPPORT

 **(423) 894-6234**

We offer **complimentary phone support** for all T. J. Snow-purchased welders and equipment.

Training

T. J. Snow is the industry leader in resistance welding training.

We understand the importance of making sure your weld operators are properly trained and are familiar with the resistance welding process.



[Learn More](#)



Welding Training at Your Plant

Consists of 6 hours of detailed classroom instruction along with 2 hours of hands-on instruction at one of your existing machines.



Off-Site Regional Welding Classes

Our popular Resistance Welding Regional Seminars are conducted throughout the Eastern U.S. at a local conference facility.



Welding Training at T. J. Snow

Consists of 6 hours of detailed classroom instruction along with 2 hours of hands-on instruction in our weld lab.



Online Spot Welding Courses with Live Instructor

Our regional seminars are now available in an online form. This option is a virtual classroom hosted by one of our Certified Resistance Welding Technicians.



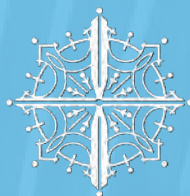
E-Course: Intro to Resistance Welding for Machine Operators

NEW! T. J. Snow introduces a new e-course designed for resistance welding machine operators. Corporate licenses are available.



ABOUT US

From humble beginnings in Jim (T.J.) Snow's home in 1963, T. J. Snow Company has grown by giving personal attention to small and large customers alike. Today, under third generation ownership, T. J. Snow remains focused on being a leader in providing resistance welding machinery, consumables, supplies, service and training.



T. J. SNOW



tjsnow.com

CONTACT US



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