INTRODUCTION

Spot Weld’s Press Rite resistance spot welder is widely used by the metalworking industries today because of its extreme versatility. This general purpose machine represents a new high achievement in welder design and engineering, and embodies advantages which afford the greatest performance. Its modern design has incorporated ruggedness, accuracy, and reliable uninterrupted performance – all of which are of utmost importance to high production runs.

PRESS RITE STANDARD SPECIFICATIONS

KVA Sizes: 30, 50, 75, 100 or 150

Power Supply: 220 or 440 V, 50 or 60 Hz

Throat Depths: 12”, 18”, 24” or 30”

Electrode Holders: Water cooled, ejector type, furnished as standard on all machines.

Frame: Rugged, heavy gauge, one-piece, all steel body, strongly reinforced with welded stiffeners and ribs on heavy duty base.

Foot Switch: Air Operated

Double Acting Cylinder and Roller Bearing Slide:

The standard Press Rite or ram is made of lightweight, flame hardened steel. Accurately machined guide surfaces travel on anti-friction roller bearings for low inertia, friction free movement. Slide bearings are provided with initial adjustment and wear take up.

DESIGN

Spot Weld’s Press Rite resistance press spot type welder uses a solid copper casting to support the lower ø2-1/2” diameter arm. The lower arm design has about 10” of travel, allowing the deepest of parts to fit within the throat of the machine. A fully adjustable knee support allows greater rigidity for heavier gages of metal, but can be easily removed for welding tubes, tanks, pipes, HVAC ducts, or anything else that needs to go over the lower arm. The lower casting is allowed to swivel on its vertical copper post, which allows for using offset electrodes and greater versatility. Throat depths range from 12” – 36” (at 6” increments) standard. Should you need a greater reach than that, please contact us for details.

ABOUT US

With 35 years of service and experience, we have the best trained and most knowledgeable resistance welding technicians available anywhere, period. Contact our friendly staff with your welding problem, and we will work efficiently and quickly to solve nearly all of the most complicated resistance welding applications.

BUILT TO YOUR NEEDS

Spot Weld, Incorporated can take your application specifications and build standard or special application spot welders to suit your needs. Just tell us the material you are welding, the metal thickness, and provide us with any special prints or sketches that communicate your welding needs. We’ll take it from there!
Some of the key features that set our machine ahead of the competition are:

- Robust frame design
- Adjustable upper ram, precision CNC manufactured, with 8 heavy duty cam follower guides to maintain the tightest of tolerances
- Adjustable lower arm / knee for adjusting the welding gap
- Robust roller bearing pillow blocks
- Fully re-buildable
- Precision air system
- Exclusive use of copper core, water cooled transformers
- All copper is a minimum 99.9% pure, or RWMA class
- Designed and built in the USA

The main frame is high quality welded steel construction styled for trim appearance and functional design. The slim design requires a minimum of floor space. The upper arm extension is built integrally with the frame. The lower knee is steel, and supports the transformer; this allows the transformer to move up and down with the lower knee. A removable rear cover permits ready access to the frame interior for inspection and maintenance.

Optional Equipment

- **Adjustable, Retractable Cylinder**
  This type of cylinder incorporates the features of an adjustable stroke cylinder, plus a retraction feature. Operation of the retraction stroke can be controlled by the foot switch.

- **Electrodes / Electrode Holders / Tip Dressers**
- **Chillers, Coolant and Re-Circulators**
- **Electrolytic Grease**
- **Safety Equipment**
- **Rapid Fire**
- **Palm Buttons**
- **Disconnect Switch**
- **Constant Current**
- **Bowl Feeders**
- **Low-Ride Casters**

Confused by all the options available to you? Let us help you select from a long list of resistance welding styles:

- Single-Phase A/C
- Three-Phase A/C
- Medium Frequency Direct Current (MFDC) Inverter
- Seam Welding
- Rapid-Fire Welding
- Capacitive Discharge

Our in-house capabilities include 3D solid modeling (CAD), Finite Element (stress) Analysis, CNC prototyping, MIG & TIG (GMAW & GTAW) welding, plasma cutting, Horizontal and vertical milling, lathe work, and engineering skills make all this work for you.
Methods of Operation

- **Transformer**
  The “heart of the welder” the Rocker Rite transformer is built to RWMA automotive and appliance standards. Transformer secondaries are of cast copper with integral, non-corrosive water cooling pipes. Class “F” insulation is used throughout. The transformer is bonded and sealed with high temperature varnish baked on each coil. The resulting unit is a high power factor, high efficiency transformer with low leakage reactance. All transformers provided are water cooled.

- **Supply Voltage and Frequency**
  The Press Rite type machine can be supplied for any one standard voltage supply of 220, 380, 440, or 550 volts, 50 or 60 cycles, single phase. Dual voltage, special voltages or frequencies are available as extras.

- **MFDC (Medium Frequency DC) - Optional**
  Precisely controlled heating is required to achieve consistent, reliable welds. The medium frequency inverter achieves this level of control by precisely managing and monitoring weld parameters. The higher frequency permits much faster (1000 times per second) process control, which again results in better weld quality

- **Air Accessories**
  Standard Equipment included air pressure regulator, gauge, lubricator, speed control valve, and solenoid valve for control of the cylinder.

- **Electrical Accessories**
  Standard electrical accessories include a two stage foot switch. Dual palm buttons are available as options.

- **Controls**
  Standard NEMA controls are mounted to the right side of the welder frame unless special tooling or customer preference preludes. JIB electrical specifications can be
### Single-Phase Resistance Welding

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* Not recommended. Inquire regarding three-phase.

1. Go by thickness on chart, not gauge.
2. Aluminum will spatter using single phase welding.

**Note:** The above represents a 12" throat depth for gauge sizes shown. For each additional 6" of Throat Depth, subtract 1 (one) less gauge size. (Ex. For 16 ga. material, with an increase from 12" to 24" throat depth, is 16 ga. minus 2 gauge sizes = 18 ga. material)