Toll Free: 800-582-5229 Ph: 651-646-1393 Fax: 651-646-3616 www.spotweldinc.com



# PressRite Combination Press/Projection Welders



#### INTRODUCTION

Spot Weld's Press Rite Type Resistance 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", 30" or 36"

**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**

The Press Rite Combination Press Spot / Projection welders use the same round arm design as the Press Spot welders, but have a lower knee like the projection welders. This gives you the versatility of a Press Spot, and the simple setup of a Projection welder.

Designed for applications that include:

- · Welding Studs or Weld Nuts
- High Electrode Force Applications
- · Projection Welding
- · Using special tooling to fixture a part
- Frequent tooling changes

#### **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!

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#### ADAPTABILITY

Experience being the best teacher, we have learned how to best align machinery with your needs. We take into account your production rate, your operators needs, electricity prerequisites, and of course your budget.

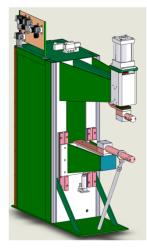
Confused by all the options available to you? Let us help you select from a long list of resistance welding styles:

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

#### ONE STOP SHOPPING

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.

## PressRite Features and Benefits



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.

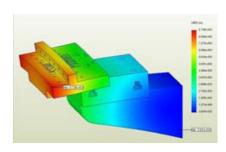
- Electrodes / Electrode Holders / Tip Dressers
- · Chillers, Coolant and Re-Circulators
- Electrolytic Grease
- Safety Equipment
- Rapid Fire
- Palm Buttons
- Disconnect Switch
- Constant Current
- Bowl Feeders
- Low-Ride Casters

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

#### SERVICES AVAILABLE

Engineering & Design
Custom Tooling & Fixtures
Custom Machining
Complete Machine Refurbishing
Transformer Repair
Installation and Setup
Field Service & Maintenance
Education / Training
Technical Support



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#### **PROFESSIONALS**

You get the individual attention you deserve at Spot Weld, Inc. You can rely on our courteous service. We know what we're talking about. If we don't have an answer, we'll say so, and then do our best to get it for you.

Call us with your questions about electrode tips, studs, holders or any kind of resistance spot weld equipment.

- Competitive Prices
- · Large Stock
- High Quality
- Fast Delivery
- No Minimum Order

#### GAURANTEE

All our machines carry a likenew one-year parts and labor quarantee.

If you're not satisfied, we take it back!

## **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.



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 included as an extra.









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KVA 1-ph AC	24" Throat Amps			
5	0	-	6,500	
10	6,500		9,500	
20	9,500		12,500	
30	12,500		16,500	
50	16,500		21,000	
75	21,000		25,000	
100	25,000		30,000	
150	30,000		36,000	
200	36,000		41,500	
250	41,500		46,000	
300	46,000		50,500	
350	50,500		54,500	
400	54,500		58,000	
450	58,000		61,500	
500	61,500	-	64,500	



## **SPOTWELD Incorporated**Excellence in Resistance Welding

### Single-Phase Resistance Welding

Ferrous Alloy Gauge	Actual Thickness	Low Carbon Steel	Galvanized Steel	Stainless Steel	Aluminum (1,2)		
Thickness	(in)	KVA (Transformer Required)					
3	0.2391	100	*	*	*		
4	0.2242	100	*	*	*		
5	0.2092	50	*	*	*		
6	0.1943	50	*	*	*		
7	0.1793	50	*	*	*		
8	0.1644	50	*	*	*		
9	0.1495	50	*	*	*		
10	0.1395	50	*	*	*		
11	0.1196	30	75	150	150		
12	0.1046	30	75	150	150		
13	0.0897	30	50	100	150		
14	0.0747	20	50	100	100		
15	0.0673	20	50	100	100		
16	0.0598	20	30	75	75		
17	0.0538	20	30	75	75		
18	0.0478	20	30	75	75		
19	0.0418	20	30	75	75		
20	0.0359	20	30	50	50		
21	0.0329	10	30	50	50		
22	0.0299	10	30	50	50		
23	0.0269	10	30	50	50		
24	0.0239	5	30	50	50		
25	0.0209	5	30	30	50		
26	0.0179	5	30	30	50		
27	0.0164	5	30	30	30		
28	0.0149	5	30	30	30		
29	0.0135	5	30	30	30		
30	0.0120	5	30	30	30		

- \* 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)

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