

Pneumatic Rod Butt Welder

www.electroweld.com

Electroweld Pneumatically Operated Rod Butt Welder

Core Features:

- Rigid Frame Construction
- Designed for quick and easy operation, the welding process being automatic
- Settings are simple, finely adjustable, and reproducible for all variables
- Chromium Zirconium Copper Welding Jaws
- Clamping action via two Pneumatic Cylinders
- Welding Jaw spacing easily calibrated over indexing plate for different sized rods
- Annealing for Low Carbon Steel on same welding jaw setup with jaw space adjustment via provided spacing lever
- Water-Cooled Copper Secondary
- Multi-Function Foot Switch and/or Push-Button Station
- Advanced Design Low-Friction Air Cylinder
- Standard Electroweld AY-01 Micro Processor Based Controller with capability to program weld schedules
- Standard Coolant Re-circulator Water Pump
- 12-Month Warranty

Optional Features:

- 24-Month Extended Warranty
- Flash Guard, Machinist Vise, Cutter, Grinder
- Separate Annealing Jaw assembly for HC Steel and non-ferrous metals
- Auto-Annealer AN-200: Dual Stage



Customized Machines:

Electroweld Industries can also develop customized welding machines/solutions based on specific customer job requirements or specific industry applications.



Standard
Warranty



Extended
Warranty



International Shipping
Included in Price

made in INDIA

Application

Weld Material

Certification

Rod Butt Welding
 Ring Butt Welding
 Wire Butt Welding
 Flat Metal Butt Welding
 Stranded Cable/Rope/Cords Butt Welding

Mild Steel (C<0.25%)
 High Carbon Steel (C> 0.25%C)
 Copper
 Brass
 Aluminum

Per IS. 4804
 ISO 9001 - 2015

| Model: | RBW-15PN | RBW-20PN | RBW-25PN | RBW-30PN | RBW-40PN | RBW-50PN | RBW-60PN | RBW-75PN | RBW-100PN | RBW-150PN | RBW-200PN |
|---|---------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|---------------------|
| Max. Rating (KVA): | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 75 | 100 | 150 | 200 |
| Input Volts (V) (Welder Duty Cycle 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) |
| Phases (nos.) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Frequency (Hz) | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 |
| Weldable Material | Diameter (mm) | | | | | | | | | | |
| Low Carbon Mild Steel < 0.25%C (mm ²) | 3-12 | 4-14 | 5-16 | 6-17 | 8-18 | 10-20 | 16-22 | 18-25 | 19-28 | 20-31 | 25-35 |
| High Carbon Steel > 0.25%C (mm): | 3-9 | 4-11 | 5-12 | 6-13 | 7-14 | 8-15 | 10-16 | 12-17 | 12-18 | 13-20 | 15-25 |
| Copper (mm): | 3-7 | 4-8 | 5-9 | 6-10 | 7-11 | 8-12 | 10-14 | 12-15 | 12-18 | 13-20 | 15-25 |
| Brass (mm): | 4-9 | 5-10 | 6-11 | 7-12 | 8-13 | 9-14 | 10-16 | 12-17 | 13-19 | 14-22 | 16-27 |
| Aluminium (mm): | 5-9 | 6-10 | 7-11 | 8-12 | 8-15 | 9-16 | 10-18 | 12-19 | 13-21 | 14-24 | 16-29 |
| Carbon Steel Blade (width mm): | 20-40 | 30-50 | 30-60 | 35-75 | -- | -- | -- | -- | -- | -- | -- |
| Bimetal Blade (width mm): | 5-27 | 20-37 | 25-41 | 30-45 | 35-50 | 35-60 | 40-65 | -- | -- | -- | -- |
| Fuse (Amps): | 30 | 40 | 50 | 75 | 100 | 125 | 150 | 180 | 250 | 375 | 500 |
| Machine Duty Cycle: | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| Dimensions (mm): | 900 x 800 x 1300 | 900 x 800 x 1300 | 950 x 850 x 1450 | 950 x 850 x 1450 | 1100 x 900 x 1500 | 1100 x 950 x 1500 | 1100 x 900 x 1500 | 1100 x 950 x 1500 | 1550 x 1050 x 1600 | 1550 x 1050 x 1600 | 775 x 525 x 1050 |

Note: Maximum material welding thicknesses or Machine weldability data are always estimates.

| Model: | RBW-15PN | RBW-20PN | RBW-25PN | RBW-30PN | RBW-40PN | RBW-50PN | RBW-60PN | RBW-75PN | RBW-100PN | RBW-150PN | RBW-200PN |
|---|---|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|---------------------|
| Max. Rating (KVA): | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 75 | 100 | 150 | 200 |
| Input Volts (V) (Welder Duty Cycle 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) | 415V AC (± 10%) |
| Phases (nos.) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Frequency (Hz) | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 |
| Weldable Material | Cross Sectional Area (mm ²) | | | | | | | | | | |
| Low Carbon Mild Steel < 0.25%C (mm ²) | 7-113 | 13-154 | 20-201 | 28-227 | 50-254 | 79-314 | 201-380 | 254-491 | 284-616 | 314-755 | 491-962 |
| High Carbon Steel > 0.25%C (mm ²) | 7-64 | 13-95 | 20-113 | 28-133 | 38-154 | 50-177 | 79-201 | 113-227 | 113-254 | 133-314 | 177-491 |
| Copper (mm ²) | 7-38 | 13-50 | 20-64 | 28-79 | 38-95 | 50-113 | 79-154 | 113-177 | 113-254 | 133-314 | 177-491 |
| Brass (mm ²) | 13-64 | 20-79 | 28-95 | 38-113 | 50-133 | 64-154 | 79-201 | 113-227 | 133-284 | 154-380 | 201-573 |
| Aluminium (mm ²) | 20-64 | 28-79 | 38-95 | 50-113 | 50-177 | 64-201 | 79-254 | 113-284 | 133-346 | 154-452 | 201-661 |
| Carbon Steel Blade (width mm): | 20-40 | 30-50 | 30-60 | 35-75 | -- | -- | -- | -- | -- | -- | -- |
| Bimetal Blade (width mm): | 5-27 | 20-37 | 25-41 | 30-45 | 35-50 | 35-60 | 40-65 | -- | -- | -- | -- |
| Fuse (Amps): | 30 | 40 | 50 | 75 | 100 | 125 | 150 | 180 | 250 | 375 | 500 |
| Machine Duty Cycle: | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 10% |
| Dimensions (mm): | 900 x 800 x 1300 | 900 x 800 x 1300 | 950 x 850 x 1450 | 950 x 850 x 1450 | 1100 x 900 x 1500 | 1100 x 950 x 1500 | 1100 x 900 x 1500 | 1100 x 950 x 1500 | 1550 x 1050 x 1600 | 1550 x 1050 x 1600 | 775 x 525 x 1050 |

Construction: The machines are constructed with a sturdy light alloy housing and designed as portable models mounted on a moveable chassis fitted with four wheels. They are constructed for quick, easy, and fool-proof operation, the welding process being automatic. Settings are simple, finely adjustable, and reproducible for all variables. Uniform welds of high strength capable of withstanding subsequent drawing ensured. The Machine has 2 welding Jaws with grooves for welding different sized rods. The clamping action of the welding jaws is controlled via the Left and Right Clamping Levers which in turn activate the Pneumatic Clamping cylinders. The machine is also designed with a Horizontal welding cylinder for providing horizontal pressure on the welding jaws during the welding process.

Simple Settings:

1. **ELECTRODE SPACING:** Adjust lever on indexing plate depending on the diameter of the rod being welded.
2. **WELDING CURRENT:** Operate knob of the 8-step switch, current making and breaking is automatic via a built-in electromagnetic contactor.
3. **UPSETTING PRESSURE:** Micro-metrically adjustable with pressure knob.
4. **CURRENT ON / OFF:** Micro-metrically adjustable with simple thimble.

Welding Process:

The Machine is provided with a toggle switch to alternate between Welding and Annealing functionality. The actual welding or annealing is initiated with a common push button switch.

1. Fix the above 4 simple settings, clamp the job end-to-end in the center of the welding jaws.
2. Release gap stopper lever from teeth, press the welding push button and the welding then takes place automatically. Unclamp Job.
3. To anneal, put spacing lever to max. position. Clamp Job centrally in the Pneumatically Clamped Welding Jaws or the provided Annealing Jaws. Press the annealing push button till annealing temperature is reached.

Design Features:

UPSET TRAVEL: Movable platen travel on parallel guides.

UPSET PRESSURE: Provided by a precision spring action on the movable platen and micro-metrically adjustable with a knob. Setting is readable on a scale.

CLAMPS: Lever operated adjustable 'floating' steel clamps of precision quick acting design ensure firm preset clamping pressure. Release is quick and easy.

ELECTRODES: Special wear resistant copper alloy electrodes provided with precision 'V' grooves, permit rapid and accurate alignment of wires/rods/cables/blades.

WELDING CURRENT ADJUSTMENT: By means of an 8-step rotary switch from 50% to 100%.

JAW SPACING: Obtained with ease by a lever set against an indexing plate, adjusting in 10 steps.

WELD CURRENT INITIATION: By pressing welding / annealing push button after clamping the job to weld position simply starts the automatic welding cycle.

CURRENT CUT OFF: Adjustable over a wide range by means of micrometric thimble, the setting of which is read on a graduated scale.

ANNEALING FACILITY: Annealing on same welding jaw setup with jaw space adjustment via provided spacing lever for ease and quick annealing of the welded job ensuring a flexible zone at both ends of the weld. For High Carbon Steel, Copper, Brass and Aluminum rods a separate annealing jaw assembly will be provided.

PORTABILITY: The machine is mounted on a four wheeled chassis for easy portability.

Note:

Power Requirement is 220V AC 50/60Hz or 415V AC 50/60Hz

* Butt Welders up-to 30KVA can operate on either 2 Line/ 2 Phase 220V ($\pm 10\%$) or 415V ($\pm 10\%$) 50/60 Hz


* Butt Welders greater than 30KVA can only operate on 2 Line/2 Phase 415V ($\pm 10\%$) 50/60 Hz

* Prices Include customization for USA 3-Phase 2-Line 220V AC ($\pm 10\%$) or 440V AC ($\pm 10\%$) 50/60 Hz

* Prices Include customization for Specific Power Supply requirements for other Regions



ELECTROWELD
Operational Video #1
Electroweld
Pneumatically Operated Rod Butt Welder



ELECTROWELD
Operational Video #3
Electroweld
Pneumatically Operated Gasket Ring Butt Welder



ELECTROWELD
Operational Video #2
Electroweld
Pneumatically Operated Rod Butt Welder



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