



WESTKEN

THE WEST KENNETT CORPORATION

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“BULLDOG” 35KVA & 50KVA **AIR OPERATED BENCH WELDER**



The welder is a standalone unit designed to be placed on work benches and tables in the client's production shop. It is an air operated machine capable of delivering approximately 14000 welding amps into the welding area. It can be supplied in a spotwelding or projection welding layout, fitted with standard or high lift cylinder and be fitted with a horizontal cylinder layout for “T” welding. The machine can be married into a carrousel semi or full automated system for high productively components.

This machine can be viewed on our [YouTube](#) page.

Machines come standard fitted with a “*Masterweld 15*” multi program timer control. Located inside the machine cabinet, the machine has a select switch for weld on/off, foot/hand start and eight position weld select switch. Thyristor units are I.S.O format water-cooled semi-pack 140 Amp as per our standard device.

The machine is a small frame machine using laser cut panels and framing parts to assemble the body of the machine. The transformer is our water cooled fully encapsulated 35kva or 50kva transformer with thermostat overheat protection. Current supply to the upper welding head is through flexible laminated copper shunts. The machine uses 25mm water cooled tip holder and 16mm CuCrZr welding electrodes or tips. Throat depth is approximately 350mm.



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The top arm is a laser cut steel fabrication and is not height adjustable. Adjustment will be available on the bottom arm assembly which is manufactured from 50mm brass bar. The machine can be operated either as a hand start or foot start machine. The main front upright has the four pin connect plug for the foot switch.

A 1/4inch FRL unit and 1/4inch 5/2 ISO solenoid system come standard. The air cylinder is an 80mmdia barrel in standard format but can be changed to suit specific client requirements, with stroke of approximately 100mm and maximum tip pressure of 250kg@7 bar. High lift can be fitted as an optional extra. The machine is powder coated Westken standard Blue and grey.

Depending on layout format the machine can be used to spot weld or projection weld flat plate, wire products, round bars, electrical contractors, small projection welded components, and with the correct electrodes, resistance brazing/soldering.

The timer system is supplied standard with pulsation that allows for the welding of galvanized products.

The transformer is fully encapsulated with a dual thermostat protection switch. There is no tapping switch as all transformer outputs are controlled by the phase shift on the timer control system. This system has stepless adjustment from 10 percent to 100 percent of transformer capacity. The transformer is dual water-cooled. The transformer delivers approx. 14500amps to the tips in standard machine layout.

The air equipment consists of a 1/4" Filter-Regulator-Lubricator set supplying air to an I.S.O 24vdc air solenoid device. The air cylinder is an 80mm dia cylinder with a brass piston. The piston rod is guided through two bronze bushes. To stop spot head rotation an anti-rotation plate and pin assembly is fitted to the ram that is guided through an insulated anti twist block in located in the upper arm. The air pipes are high-pressure nylon tubing as is fitted to pneumatic tooling in the automotive industry.

GENERAL DISCLAIMERS:

West Kennett Corporation is not liable for damages resulting from, or attributable to the non-compliance of the user of the procedures and recommendations in this manual. Failure to observe these instructions may cause serious injury or death and may result in the warranty being declared null and void.

Read and understand the entire contents of this user manual, with special emphasis on the safety instructions and procedures throughout the user manual, before installing, operating, or maintaining this equipment. This machine and user manual is for use only by persons trained and experienced in the safe operation of welding equipment. Do not allow unqualified persons to install, operate, or maintain this machine. Contact your distributor if you do not fully understand this user manual. Wear safety clothing and always use safety equipment.



If you are not sure, please phone and ask, we will help.

West Kennett Corporation retains the right to modify, improve, and upgrade our products at any time without prior notice due to ongoing improvements of our products and services.

And finally,

This is another in a set of documents that hopefully will help you understand the equipment better. There will be a more in-depth study of the timer, air system, cooling system and how and why a weld takes place.

Look on our website www.westken.co.za for the following:

- 1) Introduction to set-up of Westken spotwelding timers for newcomers & others.
- 2) Cooling water for welding machines.
- 3) Explanation of clever words & terms concerning Resistance welding & timer systems.
- 4) Introduction to Spotwelding for newcomers and others.
- 5) Introduction & a basic explanation to Timer control systems.
- 6) Manuals for other machines in our range of equipment.

If you have any questions concerning the above or others question concerning resistance welding, please do not hesitate to contact one of our really clever people at **Westken**. Try the following people who might be able to give a helping hand or some good advice. Remember they do it almost every day, I am talking resistance welding.

Really technical stuff concerning the mechanical and electrical layout and workings of the machines:

..... Mr. Stuart Dorling.

tech@westken.co.za

Stuff concerned with machining the copper, brass, soldered type electrodes etc and the setup manufacturing or usage of machinery.

..... Mr. Jaco Truter.

info@westken.co.za

When you can get stuff and how much stuff costs

..... Ms. Laroshelle Pryor

admin@westken.co.za

