

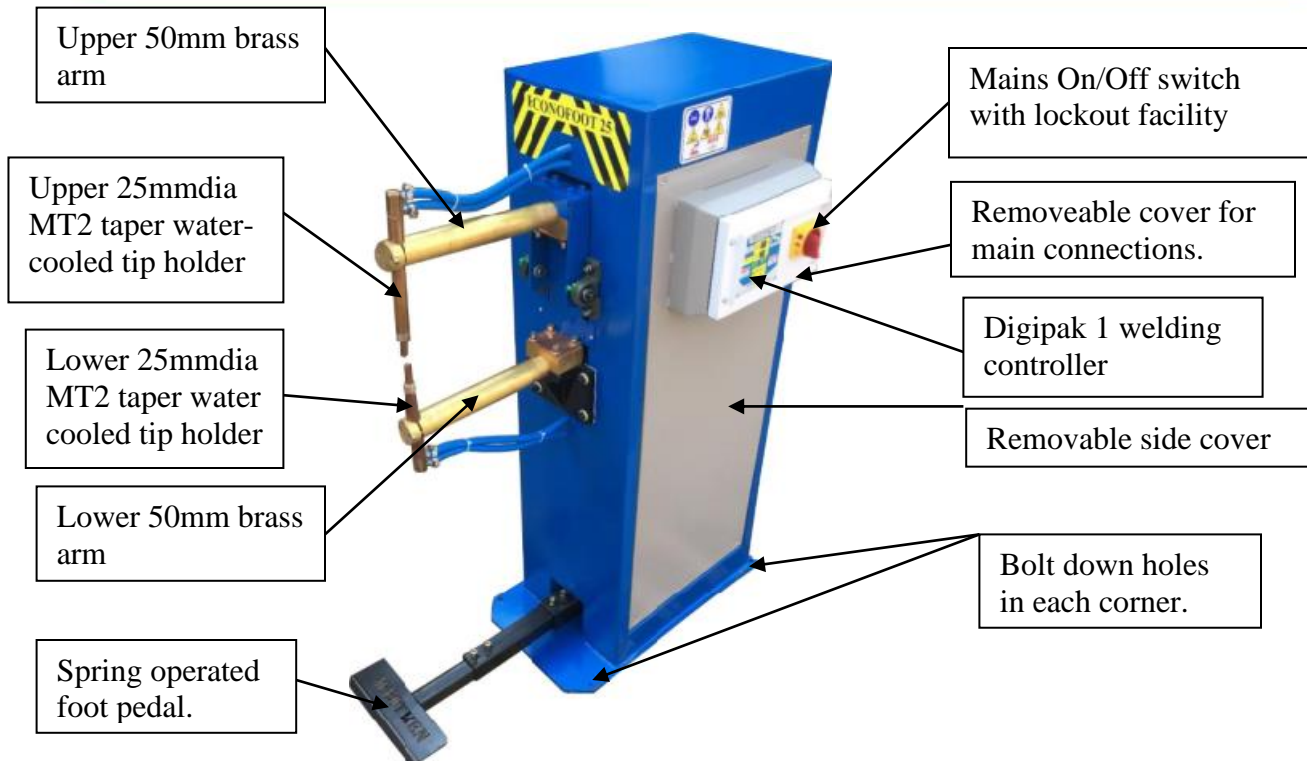


WESTKEN

THE WEST KENNETT CORPORATION

Last update 19th February 2024

“ECONOFOOT” 20kVA, 25kVA & 45kVA, FOOT OPERATED SPOT WELDERS



The foot operated “Econofoot” spotwelding machine is our medium duty foot operated spotwelding machine. The machine is a more cost-effective option to the higher duty “Series-90” foot pedal spotwelding machines. This type of foot pedal machine is common and used throughout the fabrication industry.

The machine is standard with its fixed lower arm height of 900mm & 400mm throat depth. The Machine Footprint is 400mm wide x 1000mm deep x 1500mm high.

The machine is used in the Automotive, general, and white goods industry. Although the machine is not as fast as an air machine the advantage of using this machine is that the welding heads can be brought onto the job and aligned before final welding takes place. This is an aid where welds are in hard to get at or tricky places.

Please Note* this machine is not suitable for nut welding.

The machine uses a foot pedal/rocker arm with adjustable compression springs to achieve tip pressure. The machine is fitted standard with our “DigiPak 01” Digital timer control system with heat/current and time setting using thyristor transformer switching. A rotary cam on/off switch is fitted standard to the machine.

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GENERAL MANUAL FOR "ECONOFOOT" 20KVA, 25KVA & 45KVA, FOOT OPERATED SPOTWELDERS

The machine can be offered as a 20kVA (220v), 25kVA (380v) or a 45kVA (380v) with water cooled (minimum of 20L/min flow) encapsulated transformers. Standard 16mm x MT2 taper Tips & water cooled 25mmdia tip holders. The arms are 50mmdia brass.

The machine is a general-purpose spot-welder. The machine will weld clean & rolled mild steel and stainless-steel components, flat sheet metal or wire/round bar.

INSTALLATION WATER COOLING AND ELECTRICAL:

WATER: At the lower right-hand rear of the machine is the cooling water inlet and outlet. These are two 10mmdia or 12mmdia water fittings for the hoses. The machine needs approximately 20litres of water a minute at about 3 bar pressure. This water cools the firing unit (when it's a water-cooled unit), transformer, upper / lower tip holders and the welding tips.

EARTH CONNECTION: At the lower center rear there is a connection for the earth cable. It is very important that the earth is connected to the machine. The earthing of this machine is a safety feature and must be always used.

ELECTRICAL CONNECTION: This an inlet cutout / hole in the lower left had of the machine for the supply cable. The cable can be routed up through the machine and a connection made to the rotary on/off switch next to the Digipak timer system. The front cover of the switch / timer unit can be removed to allow this connection to be made.

Suggested cable sizes are:

20kva 220v machine	10mm cable	60amp breaker
25kva 380v machine	10mm cable	60amp breaker
35kva 380v machine	16mm cable	80amp breaker
45kva 380v machine	16mm cable	80amp breaker

TECHNICAL SPECIFICATIONS:

MACHINE CAPACITY	Continuous Capacity @ 50% duty cycle.	kVA	20	25	45
	Clean cold rolled plate.	mm	1.5+1.5	2 + 2	3 + 3
	Round bar scale free and clean.	mm	5 + 5	6 + 6	8 + 8
MACHINE VOLTAGE	Primary voltage.	V	220	380	380
	Number of transformer tappings	None	-	-	-
MAINS SUPPLY	Nominal supply voltage.	V	220	380	380
	Nominal frequency.	Cycles	50	50	50
	Fusing capacity.	Amps	60	60	60
	Feed cable CSA 10m run.	mm ²	10	10	16



SET UP AND PROGRAMMING OF THE ECONOFOOT DIGIPAK TIMER:

Before set up and programming is undertaken please ensure the Digipak is “ON”. This step is simple as the LED’s on the fascia will be powered on..

1. Use initial start program of 10 “WELD TIME” cycles and “HEAT %” at 60%.
2. To set welding cycles Pulse the yellow membrane switch “+/-“ to achieve a readout of 10 on the “WELD TIME” LED.
3. To set the percentage heat Pulse the yellow membrane switch, up or down arrow, to achieve a readout of 60 on the “HEAT %” LED.
4. Undertake a test weld on the material to be welded, the red “WELD” LED will light up while welding is taking place.
5. Adjust setting to suit weld requirement.

Please Note* always attempt to have a short “WELD TIME” and high “HEAT %” rather than a long “WELD TIME” and low “HEAT %”.

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

