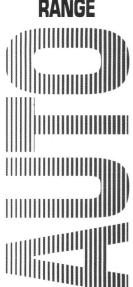
# Meritus Standard Machines



manufactured in the United Kingdom





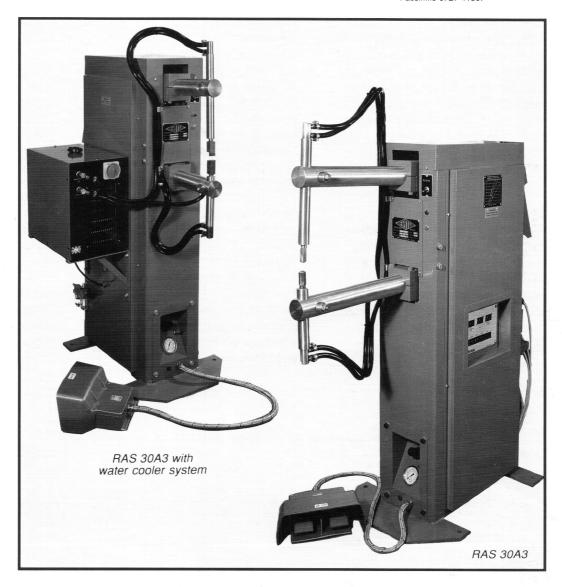


# Air operated spot welding machines from 10kva to 150kva

## Meritus (St Albans) Ltd

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# 'Autoforge' spot welders

#### Range

There are eight standard sizes covering 10, 15, 20, 30, 50, 75, 100 and 150 kva. These machines are particularly suitable for high speed continuous duty.

#### Operation

This is by solenoid controlled two-way compressed air cylinder applying pressure through a rocker beam.

## **Electrode cushion control**

This adjusts the descent of the upper electrode to any desired speed and completely eliminates 'hammer blow'.

# Initiation of welding cycle

This is automatically controlled by means of the 'squeeze' time setting selected on the 4 stage solid state synchronous electronic controller and used in conjunction with 'weld', 'hold' and 'off' times to control weld quality.

#### **Electrode pressure**

This is accurately controlled by means of an air pressure regulator and pressure gauge. Minimum air line pressure requirement 5.6 kgms/cm² (80 lbs/in²).

#### Water cooling

The electrodes, electrode holders and secondary connection points are all water cooled - minimum volume 7 litres per min. (1.1/2 gallons per min.)

#### **Electrode arms**

These are telescopic, enabling working length to be adjusted without removal from the machine, thus providing maximum welding capacity. Provision is made for both top and bottom electrode holders to be set forward or backward at an angle of 20° from vertical when required.

#### **Electronic contactors**

All machines are fitted with power thyristor contactors with infinitely variable phase shift heat control. This facility adds to the versatility of these machines by increasing the variety and range of thicknesses of materials that can be welded successfully.

# Welding Facilities on 'Autoforge' machines

A thumbwheel selection switch on the control panel adjusts the machine for single spot or stitch welding also for roller spot and seam welding when used in conjunction with the Meritus motorised seam welding head. The maximum stitch welding rate is 120 spots per minute; seam welding speed is continuously variable.

### Safety features

'Autoforge' machines are supplied with 'High lift - Low force approach' facilities or alternatively, with infinitely adjustable electrode gaps. Two hand switch initiation can also be fitted, if required, in addition to normal foot switch operation so that small components can be projection welded with operator safety.

#### **Optional Extras Available**

High lift - Low force approach. Variable speed motorised seam welding attachment (circumferential and longitudinal).

Copper arms.

Wide range electrodes and holders. Self contained water cooler system. Upslope, downslope, pre-heat and pulsation timers.

## **Spares**

The Meritus Autoforge range is manufacturerd in the United Kingdom and a full stock of parts are always readily available.

#### **After Sales Service**

A team of experienced service engineers are always prepared for a speedy response to customer needs.

| model    | kva | arm length<br>variable<br>between | no of<br>welding<br>heats | electrode<br>pressure      | welding<br>time | maximum continuous capacity                                                                       | weld<br>timer                                                                              |
|----------|-----|-----------------------------------|---------------------------|----------------------------|-----------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| RAS 10A3 | 10  | 150 mm &<br>450 mm                | infinitely variable       | 215 kg with<br>300 mm arms | 1 to 99 HZ      | 2 x 8 mm dia steel wire<br>2 x 2 mm steel sheet                                                   | all machines fitted with Meritus solic state synchronous controller type SST3 (811 - 1410) |
| RAS 15A3 | 15  | 150 mm &<br>450                   | infinitely<br>variable    | 300 kg with<br>300 mm arms | 1 to 99 HZ      | 2 x 9.5 mm dia steel wire<br>2 x 2.65 mm steel sheet                                              |                                                                                            |
| RAS 20A3 | 20  | 150 mm & 600 mm                   | infinitely<br>variable    | 260 kg with<br>450 mm arms | 1 to 99 HZ      | 2 x 9.5 mm dia steel wire<br>2 x 3.25 mm steel sheet                                              |                                                                                            |
| RAS 30A3 | 30  | 150 mm &<br>600 mm                | infinitely<br>variable    | 280 kg with<br>450 mm arms | 1 to 99 HZ      | 2 x 12.5 mm dia steel rod<br>2 x 4 mm steel sheet                                                 |                                                                                            |
| RAS 50A3 | 50  | 300 mm &<br>600 mm                | infinitely<br>variable    | 300 kg with<br>450 mm arms | 1 to 99 HZ      | 2 x 16 mm dia steel rod<br>2 x 5.00 mm steel sheet<br>2 x 1.25 mm brass<br>or aluminium sheet     |                                                                                            |
| AS 75A2  | 75  | 350 mm &<br>600 mm                | infinitely<br>variable    | 300 kg with<br>450 mm arms | 1 to 99 HZ      | 2 x 6.25 mm steel sheet<br>2 x 2 mm brass<br>or aluminium sheet                                   |                                                                                            |
| AS 100A2 | 100 | 350 mm &<br>600 mm                | infinitely<br>variable    | 570 kg with<br>450 mm arms | 1 to 99 HZ      | 2 x 6.25 mm steel sheet<br>2 x 3.25 mm stainless steel<br>2 x 2.5 mm brass<br>or aluminium sheet  |                                                                                            |
| AS 150A2 | 150 | 350 mm &<br>600 mm                | infinitely<br>variable    | 570 kg with<br>450 mm arms | 1 to 99 HZ      | 2 x 6.25 mm steel sheet<br>2 x 3.25 mm stainless steel<br>2 x 3.25 mm brass<br>or aluminium sheet |                                                                                            |