

# Electronic Torque Controlled Motors

The current model of the Wicksteed Electronic Torque Control unit makes use of all the latest techniques in transistorised sensing devices mounted on sturdy printed circuit boards. The basics of the equipment is a load-current, sensitive, cut-out which automatically disconnects the power supply to the drive motor the moment that a pre-determined value of expansion or torque has been attained.

The drive motor itself is of the conventional electric drill type which is reversed by a relay device. One of the motor's principal characteristics is that the current consumed by it increases as the load is applied. Accurate monitoring of this current facilitates determination of not only the effort expended but also the degree of tube rolling which has taken place.

Upon completion of the planned cycle there is a momentary pause - for the operator's benefit - after which another relay is energised and the tool reversed out of the tube.

As soon as the drive motor trigger switch is released, expansion stops and the control unit resets itself ready for the next cycle.

Should circumstances arise whereby the operator finds it necessary to suspend the function of the drive motor prior to the completion of the normal controlled expansion, there is a press button provided to give reverse rotation on the next occasion the trigger switch is operated. An additional refinement is embodied in the provision of a 'variation' regulator which automatically compensates for voltage fluctuations.

## Range

Approximately 1/4" O.D. - 2 1/2" O.D. (6.35mm-63.5mm) Tubes.

DRIVE MOTORS			
MODEL	R.P.M.	TUBE SIZE	WEIGHT
'LA' TYPE	460	1/4" O.D. - 5/8" O.D. LIGHT GAUGE	1.6kg
'MA' TYPE	350	5/8" O.D. - 1 1/8" O.D. APPROX	3.3kg
'SMA - D' TYPE	Variable 4 Speed	3/4" O.D. - 1 1/2" O.D. APPROX	11.0kg
'SMB' TYPE	60	1 1/4" O.D. - 2 1/2" O.D. APPROX	11.0kg

(Figures illustrated assume normal wall thinning conditions)

## Standard Features and Equipment Include:

Ammeter, Automatic Voltage variation adjustment. Automatic voltage range selection, Expander drive motor with quick release chuck and length of cable and plug.

## Control Unit

The Control Unit is contained in a steel case with carrying handle and has a lockable lid. There is also a lever on the setting control which can be locked to prevent interference by unauthorised persons, and a compartment for tools.

## Electricity Supply

For use on 210/240 volts AC 40/60 Hz supply.

To ensure the best results Wicksteed 'C' type expanders should be used in conjunction with this equipment.

## Rental

This equipment is available for rental on a daily/weekly basis.



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