# ACME Mechatronics, Inc.

## Programmable winding machine : AEW SERIES

Application: Suitable for layer wound coils, instrument transformers, transformers upto 1000VA, various types of high quality magnetic coils, single section coils, choke coils etc.

Model : AEW5501/AEW5502
Salient features of ACME make coil winding machine.

- Speed can be changed while winding is in process with the help of speed knob.
- The spindle drive is closed loop which maintains the set speed on no-load & full load
- You can have no. of tappings. Maximum tappings are 194. You can have this type of winding by cascading different programs.
- Once the winding of the coil is complete, the traverse will automatically go to home position, the counter will be reset and machine will be ready to wind next coil.
- All the data's (viz. Program no., Final Turns, Coil width, Wire diameter and current turns) of particular winding are continuously displayed on the 16X2 LCD while operation.
- Machine has two different resets viz. "System Reset" through which the whole system is reset and "Counter Reset" through which the Current Turns counter is only reset and traverse will go to home position and will be ready to wind fresh coil.
- Machine has overload protection i.e. when the thicker wire get stuck in the spool from where it is coming, the machine stops automatically, avoiding the wire to break. After making wire free and starting the winding, the counter progresses from where it had stopped.
- Selectable layer stop facility via toggle switch, which enables to stop the machine at the either end of the bobbin when required. You can have layer stop as an when required i.e. at every layer or at desired layer(optional).
- Selectable start position. i.e. you can start your winding from left side of the bobbin or right side of the bobbin.
- Only four data are to be entered (i.e. Program no., Total Turns, Winding width in mm and wire diameter in mm) for winding particular coil during programming.
- The machine starts slowly to avoid the breaking of thinner wires and maintains the speed set by speed control knob. At the end of the winding the machine slows down automatically before few turns to avoid any extra turn winding.
- Machine has got user programmable 195 programs memory bank.
- Machine has single PCB for reliable operation and ease in maintenance. No engineer or technician has to visit for maintenance. Only the faulty PCB is to be replaced with the O.K. PCB which can be done by person with very little know-how.
- Toridal transformer is used which gives good regulation & higher efficiency.
- Machine is isolated from lines which gives extra safety where earthing is poor.
- No mechanical settings are involved.
- The machine starts counting the turns from where it had started (i.e. it does not have fixed point to sense the turns) which gives accurate turns.
- The current drawn by the DC motor is controlled which increases the life of motor brushes.
- Timing belt is used which avoids the slippage and so full torque of motor is transferred to the spindle which enables winding of thicker wire and less wear & tear of belt.
- Braking is applied using electrical brake using motor and so their are no problem which is encountered using electro-mechanical brake.
- Most of the features are controlled electronically which avoids wear & tear of different mechanical parts.

**ACME Mechatronics, Inc.**
**11769 Westview Parkway,**
**San Diego, CA 92126, USA.**
**Phone: 858-935-7688 / 619-847-3010**

**E-mail: sales@acmemechatronics.com**
**URL: www.acmemechatronics.com**