

Automatic HT Capacitor Winding Machine - 150DA



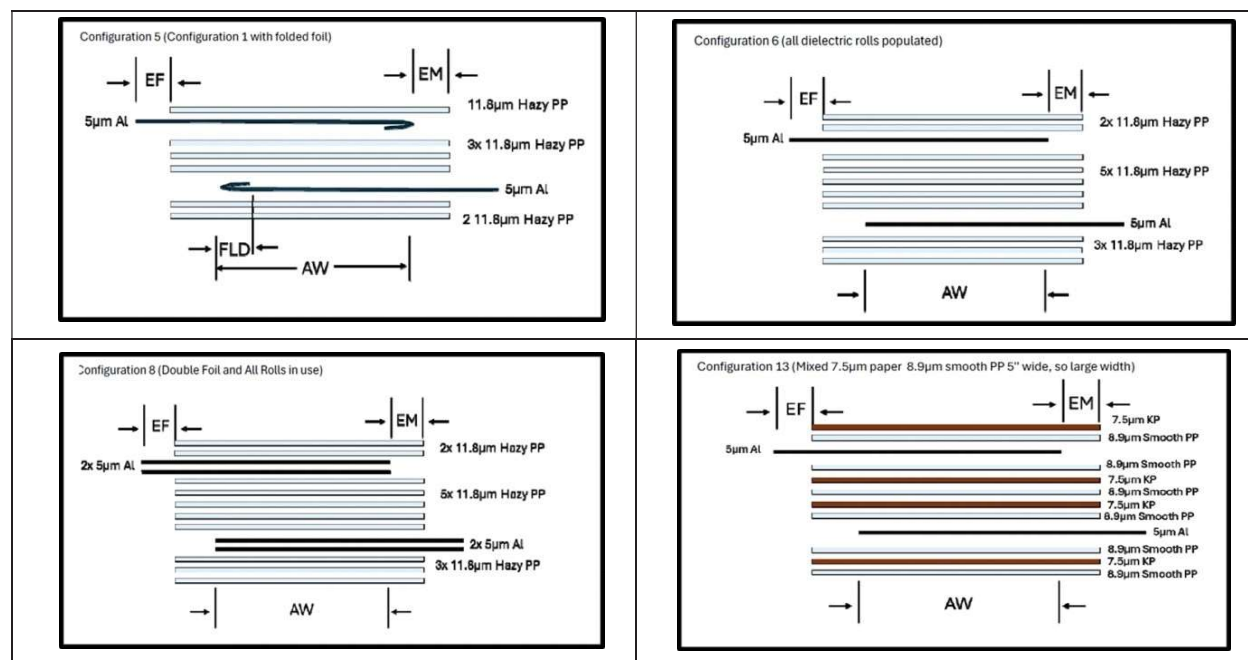
Features

- ❑ Winding of capacitor with extended foil of width ranging from 31mm to 134mm and diameter upto 160mm.
- ❑ Pneumatic type spring lock feeders for easy and fast loading of material.
- ❑ Low inertia dancing rollers for quick response and accurate tension control.
- ❑ Ground jockey rollers made out of alluminium alloy are fitted with low friction bearings.
- ❑ Servo controlled LH/RH Foil feeding and automatic foil cut and end fold, with edge fold loss detection for foils .
- ❑ Incorporated with Pneumatically operated Element pre press unit which moves along with the ejection conveyor unit to press the element at the ejection point to prevent rolling of element during the conveyor movement.
- ❑ Servo controlled automatic conveyor unit positioning (Up/Down) according to the mandrel and element Diameter.
- ❑ Automatic ejection and transfer of elements to the dry tester by motorized ejection conveyor which eliminates manual handling of elements ensuring better quality.
- ❑ Servo controlled automatic Dry Test unit positioning according to the thickness of the wound element to measure Capacitance value and perform DC High Voltage (10kV/20mA DC) withstand testing of the wound element under pressed condition.
- ❑ "DC Regulated Power Supply" for DC high voltage withstanding testing, discharge through charge/discharge unit & element PASS / FAIL decision.
- ❑ Provided additional discharging facility outside the dry test unit with the help of flexible springs strips to ensure operator safety .
- ❑ Automatic stacking of the elements on stacker.
- ❑ Automatic compound collapsible type mandrel with self threading & retraction.
- ❑ Series capacitance winding facility with Dual Arbor indexing system for winding and ejection.
- ❑ Quick change over of sleeves for the base mandrel with varying diameter.
- ❑ Servo controlled automatic Taping unit for Final sealing of the wound element through adhesive taping, taping Position can be adjustable according to the wound element length .
- ❑ Closed-loop tension control using AC servo motors for each unwinding spool maintaining consistent tension throughout the winding cycle.
- ❑ Control panel with user friendly 10.1"(inches) color touch screen for entering parameters & for monitoring the operation status.
- ❑ PLC (Programmable Logic Controller) controlled operation with human machine interface.
- ❑ User-friendly programming through touch panel and multiple program memory.

Technical Specification

Material Dimension	Aluminium Foil	PPR	PET	Kraft Paper
Number of Feeders	4	10		
Roll Inner Diameter	75±1mm	75±1mm		
Roll Outer Diameter	250 mm	300 mm	300 mm	250 mm
Thickness	4.5 - 13 microns	6 - 20 µm	4.8 - 12 µm	7.6 - 10.2 µm
Width	31 to 134 mm	37 to 140 mm		
Winding Diameter (D)	Up to 160 mm			
Surface Speed	Max. 3.5m/sec (Subject to winding quality).			
Mandrel/Sleeves (Compound Collapsible type)	Base Mandrel diameter 27.5mm & 51mm. On Dia 51mm Base Mandrel:- 90 Dia & 95 Dia mandrel sleeves			
Number of component per cycle	Single element			
Stacker	Motorized Stacker with max. Storing height 250 mm.			
Conveyor	Motorized Belt Conveyor.			
Element Ejection	Automatic Ejection Through Ejector cup on to the conveyor			
Test Voltage & Current	0 to 10kV/20mA DC (Continuously Adjustable)			
Protection	Re - Settable over-current trip with indication			
Dry Tester				
Testing Voltage	0 to 10kV/20mA DC Programmable (Optional).			
Testing time	2 to 60 sec. (Programmable).			
Test cycle	Automatic through PLC control.			

Winding Configuration



General Specification

Power supply	: 480 V AC ± 10%, 60 Hz, 3ph, 5kW.
Air supply	: Pressure - 6 Bar & 8cfm.
Floor space	: 4166mm x 1770mm x 2160 mm (L x W x H).
Machine weight	: 3800 Kgs.(Approx.)

NOTE:We reserve the right to modify above specifications at any time. Please confirm your specification before ordering.