

Smart Winder[®]
Automatic Needle Winding Machines



Synthesis



Features

- Completely Automatic Operations with Needle Type Winding Head (Single and Dual Station options), engineered to carry wire through the stator slots with high speeds.
- The machines are PLC controlled and deliver high level of accuracies with an AC Servo motors for each axis coupled with precise mechanics.
- Automatic core indexing driven by AC servo motor with infinitely programmable indexing angle to achieve different winding positions and wire routing paths.
- Coordinated movement of winding head, core indexer and head traverse to achieve very complex wire routing configurations with ease.
- Optimum combination of mechanical, pneumatic and electronic systems incorporated in the machine provide high performance coupled with reliable operations and simplicity in maintenance.
- Electronic wire tension controller under PLC control to achieve precise wire tension. The wire tension, being programmable for different stages of winding, facilitates better winding quality and flexibility in wire routing.
- Robust machine frame to dampen the vibrations & withstand large inertia generated during high speed winding.

Technical Specifications

Particulars	Smart Winder ST-U	Smart Winder IST-2
No. of Stations	1 No.	2 Nos.
Component Type	Multi-pole Stator (Internal and External Poles)	Multi-pole Stator (Internal Poles)
Wire Diameter	0.7 to 2.0 mm	0.5 to 1.2 mm
No. of Strands	Single	Single
Core Outer Diameter	300 mm (max.)	50 to 120 mm
Core Inner Diameter	20 mm	20 to 50 mm
Core Stack Height	250 mm (max.)	10 to 100 mm

Options

- Light Curtain with safety guard for operator safety
- Customized Tooling

Other products

- Automatic Stator Winding Machines (Flyer Type Winding Head)
- Automatic Multi-spindle CNC Coil Winding Machines
- Transformer Winding Machines
- Flyer-Type Coil Winding Machines
- Capacitor Winding Machines
- Semi Automatic Coil Winding Machines
- Special Purpose Machines

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