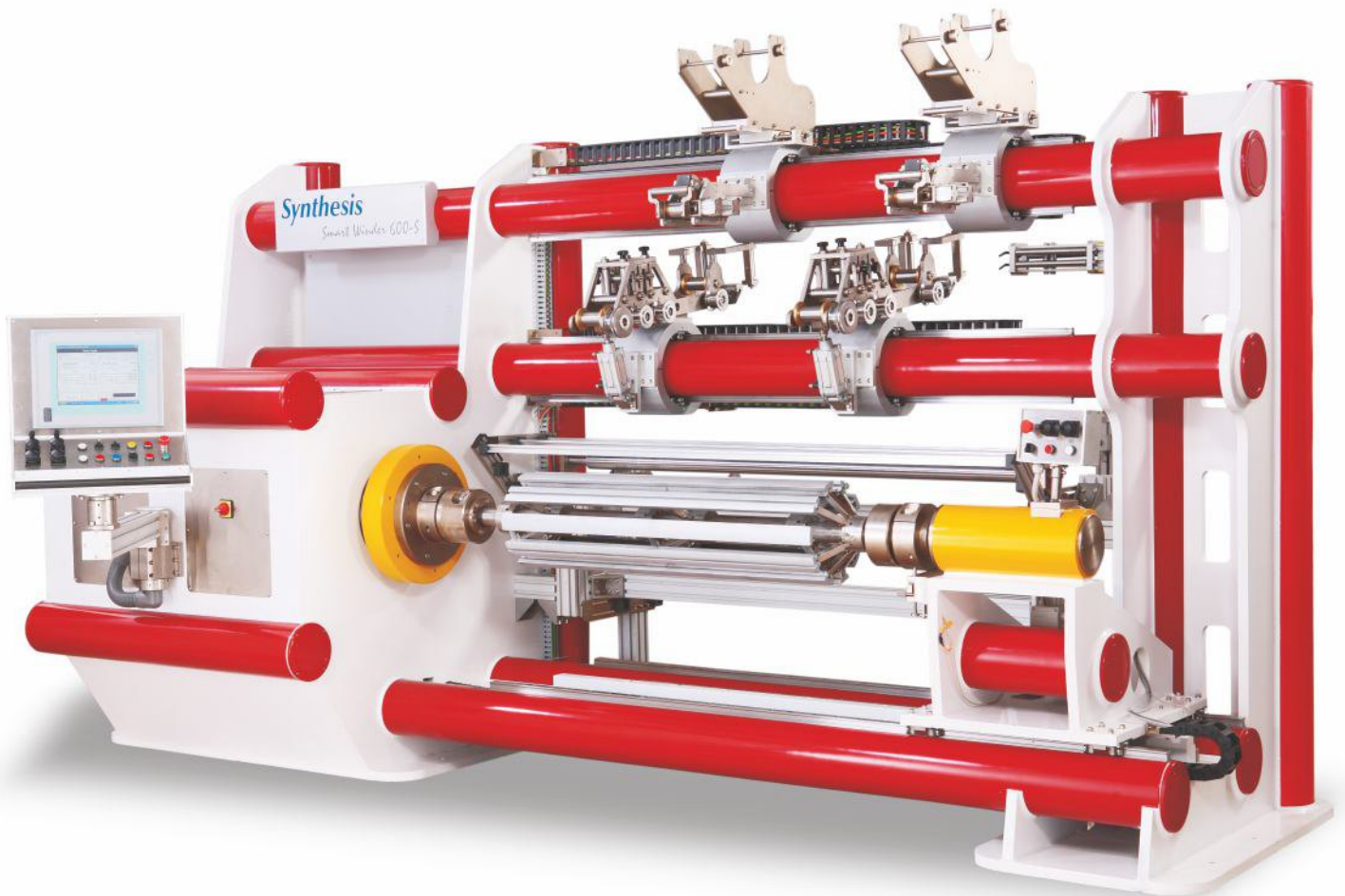


Smart Winder[®] 600-S
Traction Transformer Winding Machine



Synthesis

Description

The machine is designed and equipped to produce high and low voltage coils for power transformers. This machine is built to automate the winding process using either strip or round conductors & to carry out layer insulation / end filling of the coils with minimal intervention from the operator's part.

A high performance multi-axes motion controller governs the motion of the spindle & traverse units driven by AC Induction & Servo motors respectively.

Tail stock can move forward and backward, fitted with a linear rack & pinion arrangement driven by AC motor.

Equipped with two synchronous wire guides, it is possible to work on two totally independent coils at the same time, thus considerably reducing the time of manufacturing of the transformer.

Features

- Cylindrical/ rectangular winding
- End filling arrangement
- Programmable controls
- Motorised tail stock (with geared brake motor)
- Motorized de-coiler for strips/ foils

De-Reeler Carriage



Technical Specifications

Winding Diameter	: 800 mm (Max)
Winding Width	: 1000 mm (Max)
Coil Weight	: 1500 Kgs (Max) including mandrel
Centre Height	: 900 mm (from ground level)
Tail Stock	: Motorised adjustment with geared brake motor
No. of Spindles	: One
Spindle Speed	: 0 -160 RPM
Spindle Torque	: 1200 Nm (Max)
Spindle Drive	: AC Motor with Helical reduction gear box & brake. Closed loop vector drive with encoder feedback.
Air Supply	: 5 Bar
Power supply	: 20 kW, 415 V AC, 3 Phase, 50Hz.
Floor Area (W x L x H)	: 2700 x 4500 x 2800 mm (Without de-reeler)
Machine Weight	: 10000 Kgs (Approx)
Control System	: High performance multi axes motion control & modular servo drives

6 Round Conductors each of:

Wire Size	: Round - Ø 1.5 - 4 mm Rectangular - 3 x 1 mm to 12 x 5 mm CTC - 6 x 4 mm to 15 x 15 mm
Conductor Spools	: Weight - 600 Kgs (Max) OD - 650 mm (Max) ID - 75 mm Width - 650 mm (Max)
Conductor Tension	: 320 N (Max) control by AC servo motor
Conductor De-reeler	: Common stand for 6 spools mounted on rails with motorised movement to track wire guide axis
Conductor Guides	: 2 sets driven by independent servo motor
End Fill Guides	: 2 sets driven by independent servo motor
Insulation	: Simple holder for 2 Spools (W/o Brake) Weight : 200 Kgs OD : 540 mm (Max) ID : 75 mm Width : 1100 mm.

Spec. subject to change without notice.

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