



■ The purpose of the turn taping machine is twofold to apply:

- epoxy on a bundle of rectangular magnet wires used in the manufacture of multi-turn stator coils,
- tape on the bundle.

The tape is applied on the fly as the bundle of strands is wound on to the loop winder.

The machine consists of one frame equipped with:

- a system to apply epoxy on the strands,
- a taping head with a tension system to tape the wires.

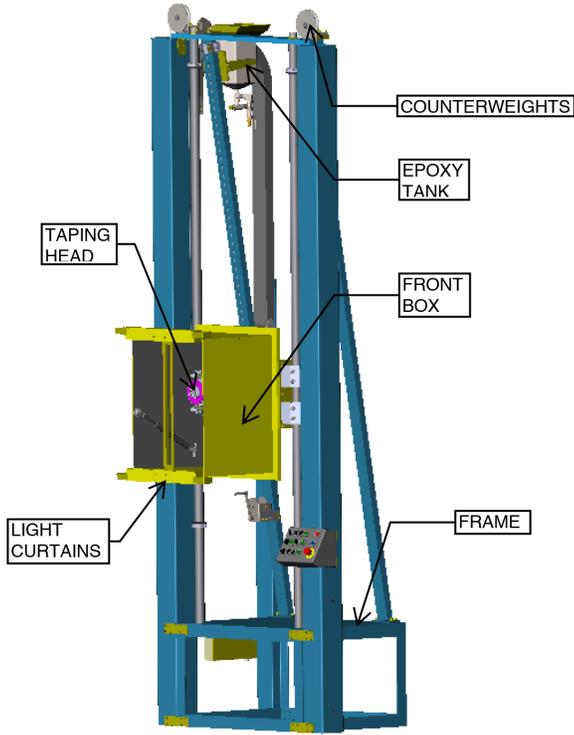
The maximal speed of the taping head is 600 RPM.

The epoxy system includes a reservoir for epoxy which is fed to up the machine with a carriage moving on a rail. The carriage is displaced by means of a manual winch.

Since the machine is designed to follow the strand orientation and speed, it is equipped with linear motion bearings and pivoting pillow blocks. Rubber coated wheels, linked to an encoder, track the linear velocity to control the rotation of the taping head. The encoder and wheel assemblies are mounted on a pneumatic clamp to avoid any slippage. The strands are kept in bundle by means of guides plates fabricated in Teflon.

To prevent epoxy scatters, a front box to prevent epoxy scatters installed on the front of the taping head moves vertically together with the taping head.

Counterweights permit the pivoting guide system and the taping head to float without any effort on the wires being taped.



## TECHNICAL DATA

### Machine data

Height:	148" (3 759 mm)
Depth:	29" (730 mm)
Width:	55" (1 303 mm)
Weight:	1 600 lb (727 kg)
Working height:	48" (1 219 mm)
Supply voltage:	480 V / 60 Hz / 3 Ph
Servomotor power :	10 HP (7.5 kW)
Power consumption:	18 A
Air pressure:	80 PSI (5.5 bar)
Air consumption:	0.5 SCFM
Max. operating speed (w/o epoxy):	600 RPM
Max. operating speed (w epoxy):	200 RPM
Tape tension:	20 lbf (9 daN)

### Strand dimensions:

Max. strand width:	0.5" (13 mm)
Max. strand height:	0.2" (5 mm)

