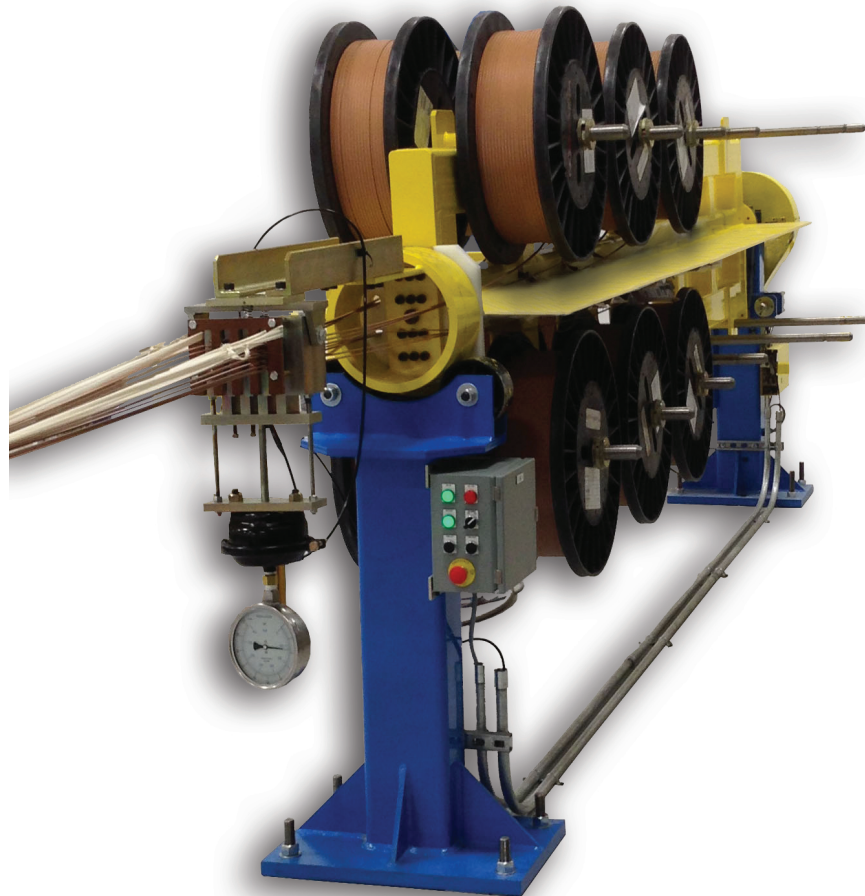


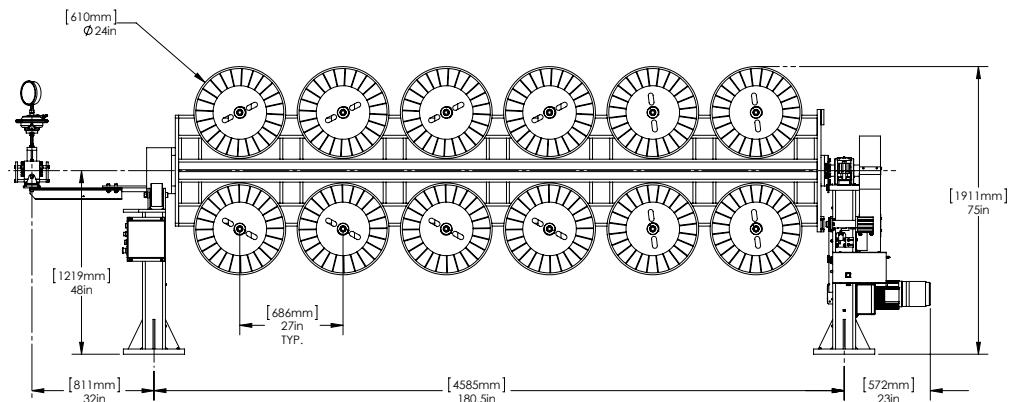
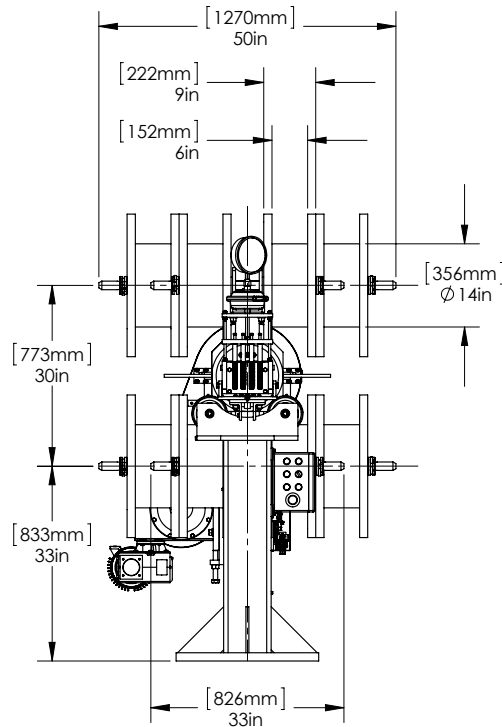
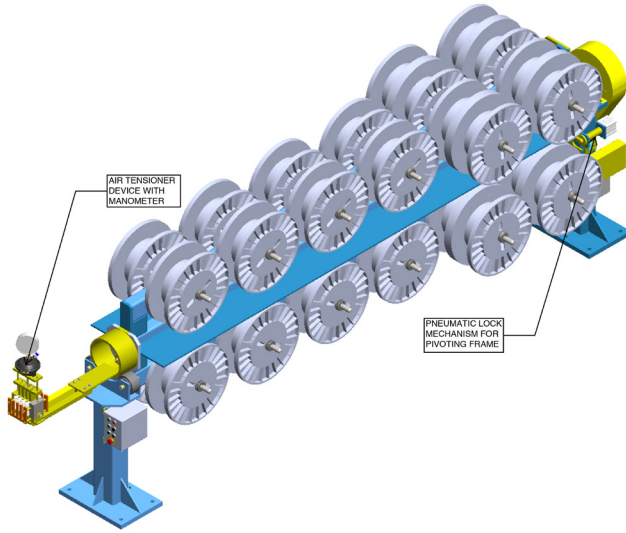
- The purpose of the pivoting dereeler is twofold to:
  - provide unwind strands from up to 24 reels of magnet wire, used in the manufacture of multi-turn coils,
  - simultaneously rotate all reels and stands  $180^\circ$  as the operator of the bobbin winder performs a  $180^\circ$  inverted turn transposition in a given turn of a stator coil.

The PDA-24 consists of a frame pivoting on two supports. The right end of the frame is fixed by means of a stub shaft (bolted on the frame) and a pillow block resting on top of the support. The left end is fitted with a drum resting on two casters mounted on the support. A gear reducer driven with a 2HP AC motor is mounted on the right support. The shaft of the pivoting frame is driven by means of a chain and chain sprockets. A safety guard covers the chain and sprockets.

Two mechanical switches limit the rotation of the pivoting frame during the transposition. ( $0^\circ$ - $180^\circ$ ). The pivoting frame is locked in place using a pneumatic lock mechanism. The lock mechanism is controlled by means a pneumatic valve installed in the pneumatic control panel.

An extension arm is mounted at the left end of the pivoting frame. A pneumatic tension device is installed at the forward end of this extension. This device guide and tension by friction the magnet wires. It is controlled with the pneumatic control panel mounted on the right support.





## TECHNICAL DATA

### Machine data

Height:	75" (1 911 mm)
Length:	235.5" (5 982 mm)
Width:	50" (1 270 mm)
Working height:	48" (1 219 mm)
Weight (without reel):	3 000 lb (1 364 kg)
Supply voltage:	480 V / 60 Hz / 3 Ph
Power unit AC motor power:	2 HP (1.5 kW)
Power consumption:	6 A
Total ratio:	400/1
Rotation for transposition:	180°
Air pressure:	80 PSI (5.5 bar)
Air consumption:	0.5 SCFM
Max. tension on each strand:	40 lbf (18 daN)

### Reels specifications:

Number of reels:	24 (extension at 32)
Max. number of reels unbalanced:	2
Max. weight:	500 lb (225 kg)
Max. outside diameter:	24" (610 mm)
Inside diameter:	1 1/2" (38 mm)
Max. width:	9" (22 mm)

### Strand dimensions:

Max. strand width:	0.5" (13 mm)
Max. strand height:	0.2" (6.5 mm)