



Model ATC-24
(Shown without full enclosure)

TENSIONLESS WINDING WITH AUTOMATIC CUT AND TRANSFER

ATC dual spindle coilers wind small flexible extrusions with little-to-no friction or winding tension. This eliminates deformities in delicate products making it ideal for extrusions such as medical tubing, small tube, filled cords and small flexible profiles.

The fully automated process transfers the product to the new reel without operator involvement or process disruption and effectively increases line speed and performance during changeover.

SERVO PRECISION FOR HIGHEST PERFORMANCE

Automatic Cut and Transfer Coilers are the perfect choice for tensionless winding of small diameter flexible tubing. Tension control is accomplished through a non-contact sonic loop detector communicating with a PLC to automatically adjust coil speed and traverse. Typical tube diameters are 0.085 inch to 0.50 inch {2.16 to 12.7 mm}. Tubes as small as 0.020 inch {0.5 mm} can be accommodated with a specialized minimal tension trim control. Automatic turret changeover is accomplished when the set amount of footage for the coil is reached.

The system comes complete with collapsible core assemblies or spools and can optionally accept customer supplied spools. All winder components that come into contact with the tube are made from stainless steel or are hard coat anodized.

■ Best accuracy with servo control

Turret rotation, traverse and spindle speed are all servo driven. This provides the ultimate in speed and positioning control for error-free performance, exceptionally high repeatability and minimal product tension throughout high speed coiling and cut/transfer. Finished spools require no 'dial-in' for product changeover.

■ Distortion-free product

Minimum tension is achieved by an advanced control algorithm that calculates each successive wrap diameter to adjust coil speed and traverse relative to the puller speed. This allows the sonic loop control to perform as a fine-trim device and ensures accurate, distortion-free, error-free lay of each wrap. The following circuit allows automated ramp-up of the winder synchronously with the line at startup.

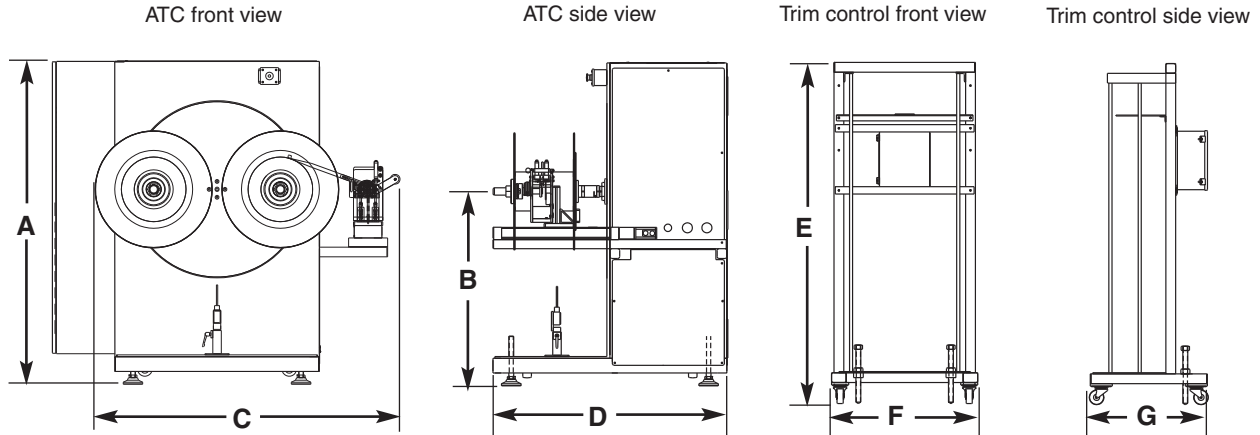
■ Recipes cut operator variability/error

Every operating input parameter can be saved as a recipe for repeatable product and process consistency. This includes coil speed changes during cut and transfer, traverse speed for accurate lay and turret speed during changeover to avoid product touching the floor.



ATC SERIES

SPECIFICATIONS



MODELS	ATC-24	ATC-36	ATC-48
Performance characteristics			
Product range tube diameter inches {mm}	Typical 0.085 to 0.5 {2.16 to 12.7} / Optional 0.02 {0.5} and up to 1.0 {25.4}		
Coil type	Collapsible for coreless reel - one set included		
Coil drive	Independent servo drive on each reel		
Core size OD inches {mm}	24 {610}	36 {914}	48 {1219}
Core width inches {mm}	12 {305}	12 {305}	12 {305}
Core size ID inches {mm}	7 {178}	7 {178}	12 {305}
Spool size OD inches {mm}	20 {508}	28 {711}	N/A
Spool width inches {mm}	12 {305}	18 {457}	N/A
Spool size ID inches {mm}	6 {152}	6 {152}	N/A
Spool flange thickness inches {mm}	1.5 {38}	1.5 {38}	N/A
Traverse	Servo control on traverse assembly		
Turret drive	Servo control on turret shaft		
Line rate	Nominal 500 FPM {152m/min} up to 800 FPM {243m/min} - Tube size dependant		
Line direction	Right to left		
Frame	Heavy-duty welded steel with four (4) swivel casters and four (4) leveling screws		
Controls			
PLC	Programmable microprocessor with touch screen HMI		
Panel	NEMA-4		
Dimensions inches {mm}			
A - Overall height	66.3 {1684.0}	86.0 {2184.4}	106.5 {2705.1}
B - Height to spindle centerline	40.0 {1016.0}	41.2 {1046.5}	52.0 {1320.8}
C - Overall length	72 {1828.8}	99.7 {2532.4}	125.0 {3175}
D - Overall width	54 {1371.6}	83.1 {2110.7}	83.5 {2120.9}
Weight lb {kg}			
Shipping	2200 {998}	4400 {1996}	5600 {2540}
Voltage	460V/3 phase/60 Hz		

Trim Control			
Dancer type	Non-contact ultrasonic for tube diameters 0.085 to 0.5 in. {2.16 to 12.7 mm} Ultra-lightweight roller contact ultrasonic for tube diameters 0.02 to 0.085 in. {0.5 to 2.16 mm}		
Dimensions inches {mm}			
E - Overall height	70.0 {1778}	70.0 {1778}	70.0 {1778}
F - Overall length	30.0 {762}	30.0 {762}	30.0 {762}
G - Overall width	24.4 {620}	24.4 {620}	24.4 {620}
Weight lb {kg}			
Shipping	500 {226.8}	500 {226.8}	500 {226.8}
Voltage	460V/3 phase/60 Hz		

SPECIFICATION NOTES:

Specifications can change without notice. Contact a Conair representative for the most current information.

