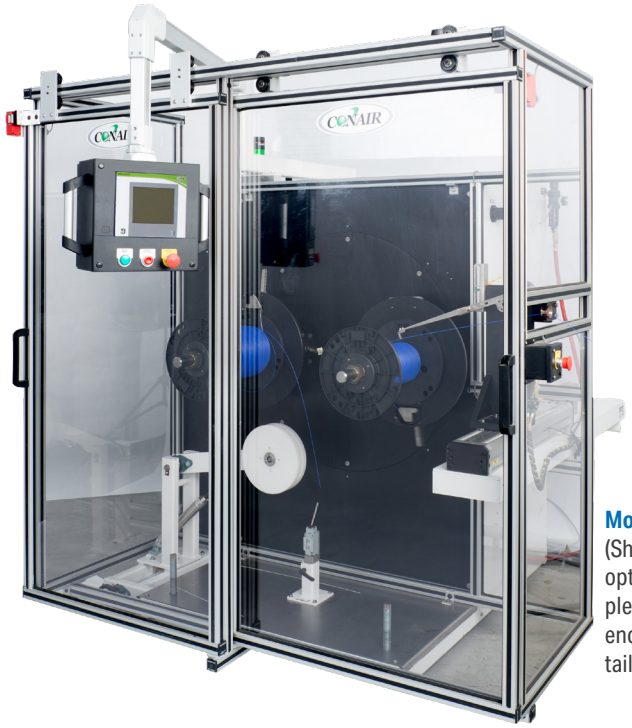
Tensionless Winding with Automatic Cut and Spindle Transfer

Conair 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 flexible tubing, medical tubing, filled cords and small flexible profiles.

The fully automated process transfers the product to the new reel without operator involvement or process disruption.



Model ATC-24 (Shown with optional full plexiglass enclosure and tail retainer.)

Servo Precision for Highest Performance

Automatic Cut and Transfer Coilers (ATC's) are the perfect choice for tensionless, high speed winding of small diameter flexible tubing. Tension control is accomplished through a non-contact sonic detector communicating with the ATC's PLC to automatically adjust coil speed and traverse motor. The ATC accommodates tube diameters from 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 wound with a specialized minimal tension trim control. Automatic spindle changeover is accomplished when the programmed 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

Spindle rotation, traverse motion and spindle speed are all servo driven. This provides the perfect in speed and positioning control for error-free high repeatability and optimum product tension throughout the entire high speed coiling and cut/transfer process. Finished spools require no dial-in for product changeover.

Distortion-free product

Optimum tension is achieved by an advanced control algorithm that calculates each successive wrap diameter to adjust coil speed and traverse motion relative to the tube size and 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

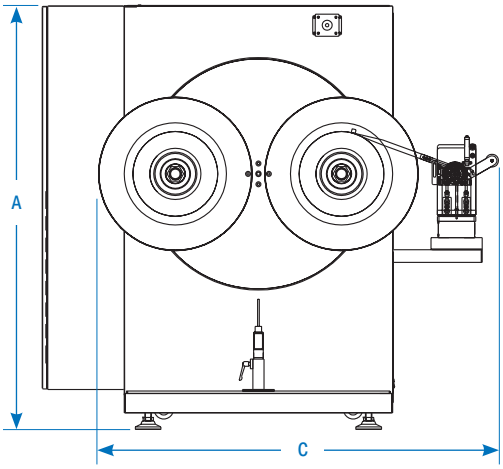
Every operating parameter can be saved within a recipe for repeatable production consistency. This includes coil speed changes during cut and transfer, traverse speed for accurate lay and turret speed during changeover to avoid product touching the floor.

Options to meet your needs

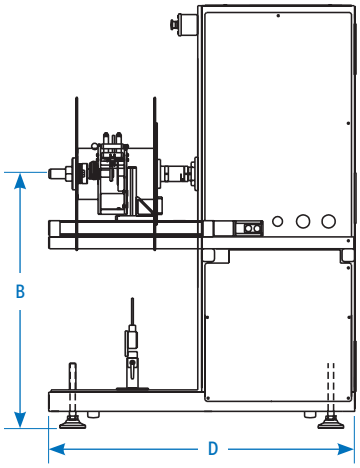
- Spare set of collapsible coils
- Modifications for use of customer coils
- Additional product tips
- 230V/3 phase/60 Hz voltage
- Left-to-right operation
- Custom paint
- Manufactured to meet medical requirements
- Full plexiglass enclosure

Specifications

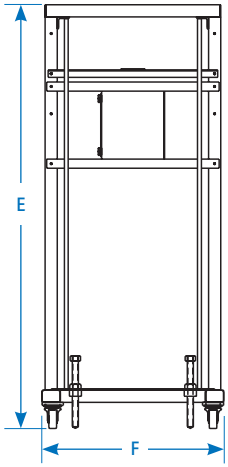
ATC Front view



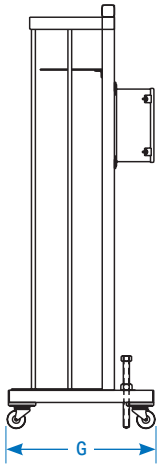
ATC Side view



Trim control front view



Trim control side view



Models	ATC-24	ATC-36
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}
Core width inches {mm}	12 {305}	
Core size ID inches {mm}	8 {203}	
Spool size OD inches {mm}	20 {508}	28 {711}
Spool width inches {mm}	12 {305}	18 {457}
Spool size ID inches {mm}	6 {152}	
Spool flange thickness inches {mm}	1.5 {38}	
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 (STD)	
Frame	Heavy-duty welded steel with four (4) swivel casters and four (4) leveling screws	
Controls		
PLC	Programmable microprocessor with touchscreen HMI	
Panel	NEMA-4	
Dimensions inches {mm}		
A - Overall height	66.3 {1684.0}	86.0 {2184.4}
B - Height to spindle centerline	40.0 {1016.0}	41.2 {1046.5}
C - Overall length	72 {1828.8}	99.7 {2532.4}
D - Overall width	54 {1371.6}	83.1 {2110.7}
Approximate weight lb {kg}		
Shipping	2200 {998}	4400 {1996}
Voltage Full load amps *		
	Consult Conair	

Specification Notes

* FLA data for reference purposes only. Does not include any options or accessories on equipment. For full FLA detail for power circuit design of specific machines and systems, refer to the electrical diagrams the equipment order and the nameplate applied to the machine.

Specifications may change without notice. Consult with a Conair representative for the most current information.

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}
F - Overall length	30.0 {762}
G - Overall width	24.4 {620}
Approximate weight lb {kg}	
Shipping	500 {226.8}
Voltage Full load amps *	
460V/3 phase/60 Hz	Consult Conair