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USER GUIDE

UGE076-0214

# TAC/MTAC Series Inline Conveyors

Please record your equipment's model and serial number(s) and the date you received it in the spaces provided.

It's a good idea to record the model and serial number(s) of your equipment and the date you received it in the User Guide. Our service department uses this information, along with the manual number, to provide help for the specific equipment you installed.

Please keep this User Guide and all manuals, engineering prints, and parts lists together for documentation of your equipment.

Date:

Manual Number: UGE076-0214

Serial Number(s):

Model Number(s):

**DISCLAIMER:** Conair shall not be liable for errors contained in this User Guide or for incidental, consequential damages in connection with the furnishing, performance or use of this information. Conair makes no warranty of any kind with regard to this information, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose.

# Table of Contents

# Introduction

# Purpose of the User Guide

This User Guide describes the Conair Take Away Conveyor (TAC)/Medical Take Away (MTAC) Series Inline Conveyors and explains step-by-step how to install and operate this equipment.

Before installing this product, please take a few moments to read the User Guide and review the diagrams and safety information in the instruction packet. You should also review manuals covering associated equipment in your system. This review won't take long, and it could save you valuable installation and operating time later.

# How the Guide is Organized

Symbols have been used to help organize the User Guide and call your attention to important information regarding safe installation and operation.

 Symbols within triangles warn of conditions that could be hazardous to users or could damage equipment. Read and take precautions before proceeding.

**1** Numbers indicate tasks or steps to be performed by the user.

◆ A diamond indicates the equipment's response to an action performed by the user.

❒ An open box marks items in a checklist.

• A circle marks items in a list.

 Indicates a tip. A tip is used to provide user with a suggestion that will help with the maintenance and the operation of this equipment.

 Indicates a note. A note is used to provide additional information about the steps the user is following throughout the manual.

# Your Responsibility as a User

You must be familiar with all safety procedures concerning installation, operation, and maintenance of this equipment. Responsible safety procedures include:

- Thorough review of this User Guide, paying particular attention to hazard warnings, appendices, and related diagrams.
- Thorough review of the equipment itself, with careful attention to voltage sources, intended use, and warning labels.
- Thorough review of instruction manuals for associated equipment.
- Step-by-step adherence to instructions outlined in this User Guide.

# ATTENTION:
# Read This So No One Gets Hurt

We design equipment with the user's safety in mind. You can avoid the potential hazards identified on this machine by following the procedures outlined below and elsewhere in the User Guide.

### ⚠ DANGER: Moving Parts; pinch hazard.

Safety devices have been installed on this machine to prevent injury that could result from clothing or the operator becoming caught in moving traction belts. Never remove or disable safety devices to sustain production. Operating without these devices could lead to hazardous conditions that can cause severe injury.

The emergency stop (E-stop) button is located on top of the upper belt guard at the upstream end. When pressed, it will disconnect power to the belt drive. The E-stop must be physically pulled up to reset the switch and start the puller again.

### ⚠ WARNING: Improper installation, operation, or servicing may result in equipment damage or personal injury.

This equipment should be installed, adjusted, and serviced by qualified technical personnel who are familiar with the construction, operation, and potential hazards of this type of machine.

All wiring, disconnects, and fuses should be installed by qualified electrical technicians in accordance with electrical codes in your region. Always maintain a safe ground. Do not operate the equipment at power levels other than what is specified on the machine serial tag and data plate.

### ⚠ WARNING: Voltage hazard

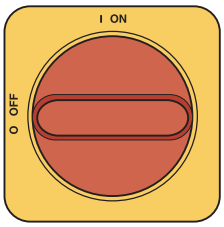
This equipment is powered by three-phase alternating current, as specified on the machine serial tag and data plate.

A properly sized conductive ground wire from the incoming power supply must be connected to the chassis ground terminal inside the electrical enclosure. Improper grounding can result in severe personal injury and erratic machine operation.

Always disconnect and lock out the incoming main power source before opening the electrical enclosure or performing non-standard operating procedures, such as routine maintenance. Only qualified personnel should perform troubleshooting procedures that require access to the electrical enclosure while power is on.

# How to Use the Lockout Device

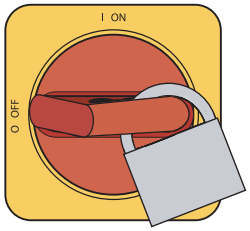
**CAUTION:** Before performing maintenance or repairs on this product, you should disconnect and lockout electrical power sources to prevent injury from unexpected energization or start-up. A lockable device has been provided to isolate this product from potentially hazardous electricity.




Lockout is the preferred method of isolating machines or equipment from energy sources. Your Conair product is equipped with the lockout device shown. To use the lockout device:

**1 Stop or turn off the equipment.**

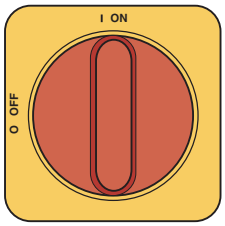
**2 Isolate the equipment from the electric power.** Turn the rotary disconnect switch to the OFF, or "O" position.




**3 Secure the device with an assigned lock or tag.** Insert a lock or tag in the holes to prevent movement.

**4 The equipment is now locked out.**

**WARNING:** Before removing lockout devices and returning switches to the ON position, make sure that all personnel are clear of the machine, tools have been removed, and all safety guards reinstalled.




To restore power to the equipment, turn the rotary disconnect back to the ON position:

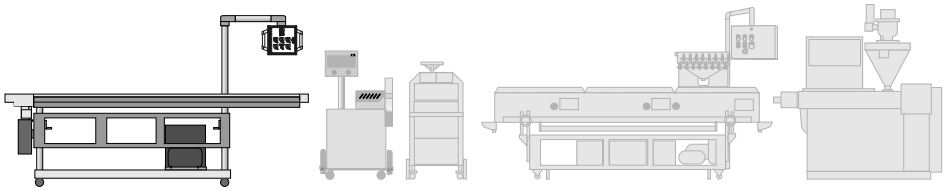
**1 Remove the lock or tag.**

**2 Turn the rotary disconnect switch to the ON or "I" position.**

# Description

# What Is the TAC/MTAC Series Inline Conveyor

Conair's Take Away Conveyor (TAC) and Medical Take Away Conveyor (MTAC) are designed to convey parts from an upstream device to a new location (catch bin, downstream device, etc.)



**TAC/MTAC**

# Typical Applications

Conair TAC/MTAC Series InLine Conveyors are typically used for conveying parts away from a cut source. They are used for most flexible products and some rigid products.

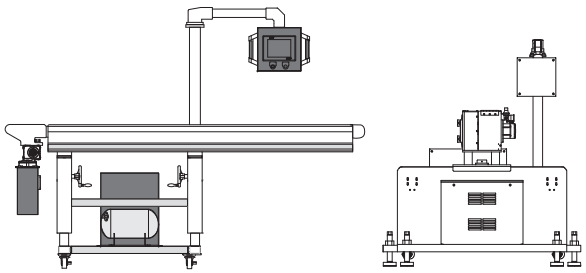
The TAC/MTAC is located in the downstream line just past the cutter or cutter/puller. Cut pieces fall onto the conveyor belt and are moved to another location (into a catch bin or into another room to be manually sorted/removed).

The TAC/MTAC can be used with blow-off which is tied into optional laser gauging systems for quality control of parts. The blow-off can be used to blow bad parts or good parts off of the conveyor and into the tray (the tray is emptied manually). Multiple blow-offs can be used.

# How It Works

The TAC/MTAC is controlled one of two ways:

- Independently (junction box and control with speed adjustment), or
- By a Conair Puller System (Medline, or CPC Puller/Cutter) with control through the puller Human-Machine Interface (HMI). For examples of the HMI conveyor control screens for the Medline and CPC, see Appendix B.



**TAC/MTAC** **Puller/Cutter**

## How It Works (continued)

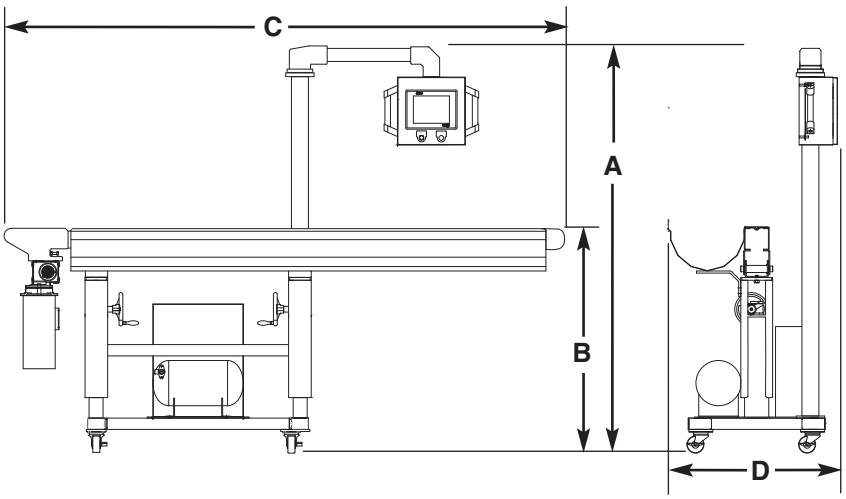
Material moves through a puller/cutter where the material is cut into a set length. Once the cutter makes the cut, the product drops onto the TAC/MTAC (located just after the cutter in the downstream line) which is conveying at a speed slightly faster than the puller/cutter. The conveyor pulls the cut part away. Optional laser gauging systems and blow-off can be used. If they are used, the laser gauge determines which parts are good and which are bad. The blow-off can be signaled by the puller system HMI to blow-off either the bad parts, or the good parts. The blow-off pushes the bad parts or the good parts into the tray, leaving the remaining parts on the conveyor to move into another room. The tray is manually emptied. The HMI allows the user to toggle between good or bad parts being blown off of the conveyor, depending on the application.



## TAC/MTAC Series Features

- Two control types (independent or controlled through HMI of Conair puller, Conair puller/cutter, or Conair Medline)
- Multiple widths and lengths
- Adjustable heights
- FDA approved belts available
- Stainless package available – standard on MTAC
- Optional blow-off(s) (one side or two sides available)
- Air knife
- Nozzled (individual)
- Multiple blow-off zones
- Optional catch tray designs

# TAC/MTAC Specifications




## OPTIONS

- Pneumatic ejector system including accumulator tank, regulator and controls with air knife or positionable, variable flow nozzles to eject the parts into a collecting tray. Available single or dual station blow-off.
- Medical configuration with precision up/down/tilt actuators. Available powder coated or in stainless steel.
- Stainless steel parts collection tray (various lengths available).
- High speed drive configurations for 500 and 600 FPM applications.
- Left-to-right operation.

| MODELS | TAC-406 | TAC-408 | TAC-412 | TAC-416 | TAC-808 | TAC-812 | TAC-816 |
|---|---|---|---|---|---|---|---|
| **Performance characteristics** | | | | | | | |
| Belt width in. {mm} | 4 {101} | 4 {101} | 4 {101} | 4 {101} | 8 {203} | 8 {203} | 8 {203} |
| Conveyor length feet {m} | 6 {1.83} | 8 {1.22} | 12 {3.66} | 16 {4.88} | 8 {1.22} | 12 {3.66} | 16 {4.88} |
| Belt type | Endless Poly-Kleen white covered belts | | | | | | |
| Belt speed | 500 FPM {152 m/min.} | | | | | | |
| Drive motor | 1 Hp variable speed AC motor | | | | | | |
| **Dimensions in. {mm}** | | | | | | | |
| A - Overall height | 71.7 {1820} | 71.7 {1820} | 71.7 {1820} | 71.7 {1820} | 71.7 {1820} | 71.7 {1820} | 71.7 {1820} |
| B - Height to top of belt | 40 ± 2 {1016± 51} | | | | | | |
| C - Overall length | 72 {1829} | 96 {2438} | 144 {3658} | 192 {4877} | 96 {2438} | 144 {3658} | 192 {4877} |
| D - Overall width | 29.5 {749.3} | 29.5 {749.3} | 29.5 {749.3} | 29.5 {749.3} | 29.5 {749.3} | 29.5 {749.3} | 29.5 {749.3} |
| **Weight lb {kg}** | | | | | | | |
| Shipping | consult Conair | | | | | | |
| **Voltage** | | | | | | | |
| | 230V/3 phase/60 Hz | | | | | | |

**SPECIFICATION NOTES:**

These tables define standard configurations only.

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

# Options

- Optional blow-off(s) (one side or two sides available)
- Optional catch tray designs

SECTION
3

# Installation

# Unpacking the Boxes

### ⚠ CAUTION: Lifting hazard.

To avoid personal injury or damage to the TAC/MTAC, lift the TAC/MTAC using a forklift or hoist with straps that have been positioned at the TAC/MTAC's center of gravity.

1. **Verify that the machine is the correct voltage** for your application.
2. **There are no specific spatial clearances necessary.**
3. **Customer must supply the plug or electrical connection to the end of the cord** (follow local codes, company procedure, qualified electricians, etc.).
4. **Connect air (60 to 80 psi** {4.14 to 5.52 bar}).
5. **Adjust the height** to be under the cutter bushing.
6. **If applicable, connect to the cutter puller** (communication to HMI for signal/control).
7. **Optional - Connect to E-stop (optional) of system.** See wiring schematic that came with your TAC/MTAC.

# Preparing for Installation

⚠ **WARNING: Improper installation, operation, or servicing may result in equipment damage or personal injury.**

This equipment should only be installed, adjusted, and serviced by qualified technical personnel who are familiar with the construction, operation, and potential hazards of this type of machine.

All wiring, disconnects, and fuses should be installed by qualified electrical technicians in accordance with electrical codes in your region. Always maintain a safe ground. Do not operate the equipment at power levels other than what is specified on the machine serial tag and data plate.

Verify that there will be no interferences to the location of the TAC/MTAC. The conveyor belt moves (warning pinch points) and products will be coming off the end of the conveyor. Users will need access to the control panel (if independent), the catch tray, and the end of the conveyor.

Use height adjustment to set TAC/MTAC height just under the end of the cutter bushing. Connect the TAC/MTAC to the proper voltage for your machine. Required voltage is listed on the equipment serial tag.

**1** **Make sure the installation area provides:**

- ❒ **A grounded power source** supplying the correct current and voltage. Check the serial tag for the correct amps, voltage, phase, and cycles. All wiring should be completed by qualified personnel and should comply with your region's electrical codes.
- ❒ **Minimum clearance for safe operation and maintenance.** Verify that there will be no interferences to the location of the TAC/MTAC. The conveyor belt moves (warning pinch points) and products will be coming off the end of the conveyor. Users will need access to the control panel (if independent), the catch tray, and the end of the conveyor.

**2** **Use height adjustment to set TAC/MTAC height** just under the end of the cutter bushing.

**3** **Connect the TAC/MTAC to the proper voltage** for your machine. Required voltage is listed on the equipment serial tag.

# Installing the TAC/MTAC Series Inline Conveyor

**CAUTION: Lifting hazard.**

To avoid personal injury or damage to the TAC/MTAC, lift the TAC/MTAC using a forklift or hoist with straps that have been positioned at the TAC/MTAC's center of gravity.

**CAUTION: Do not remove the safety guarding.**

1. **Place the TAC/MTAC Series Inline Conveyor next to the device from which parts will be removed.** Use the height adjustment to set TAC/MTAC height just under the end of the cutter bushing.

2. **Connect the TAC/MTAC to the proper voltage for your machine.** Voltage is listed on the equipment serial tag.

**NOTE:** Connection to power will vary based on your equipment (may be connected to independent power, or through power of other Conair equipment [puller, CPC, Medline]). Refer to wiring diagrams that came with your equipment.

# Testing the Installation

**DANGER: Pinch hazard.**

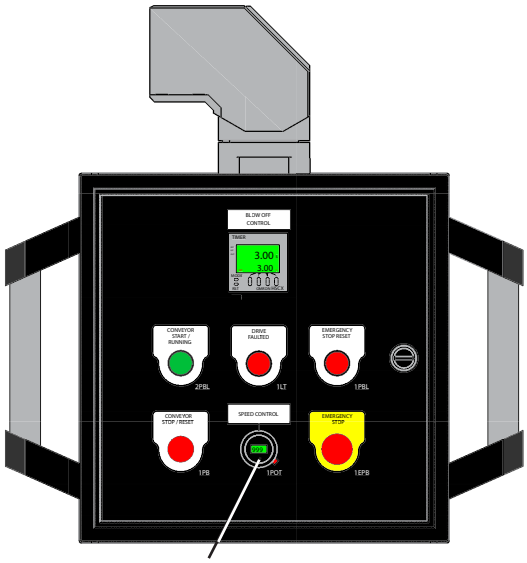
Never remove or disable safety devices to sustain production. Operating without these devices could lead to hazardous conditions that can cause severe injury. Take all necessary precautions when working around moving parts to prevent body parts and clothing from being pulled into the machine.

**CAUTION:** Before testing the installation, verify that power is connected and on. Air is connected, on, and within the proper range. Alignment with line and cutter is good. Safety shields are in place.

Before testing the installation, verify that power is connected and on. Alignment with line and cutter is good. Safety shields are in place. If applicable, air is connected, turned on, and within the proper range.

**Independent Versions:**

1. Turn on the TAC/MTAC then adjust the speed using the adjustment knob. Make sure the belt is moving and is moving in the proper direction.




Speed Adjustment Dial

**Conair HMI Controlled Versions (with HMI from Medline, CPC, Puller, or Puller/Cutter):**

1. Connect signals from the Medline, CPC, puller, or puller/cutter to the TAC/MTAC. Connections are supplied that will work with newer Conair equipment. Older equipment may require adaptors or a new connection.

2. Adjust conveyor settings in the HMI then turn conveyor on using the HMI. Verify that the belt moves and is moving in the proper direction.

3. Test the E-stop to verify operation. Use the E-stop reset button to clear.

SECTION
4

# Operation

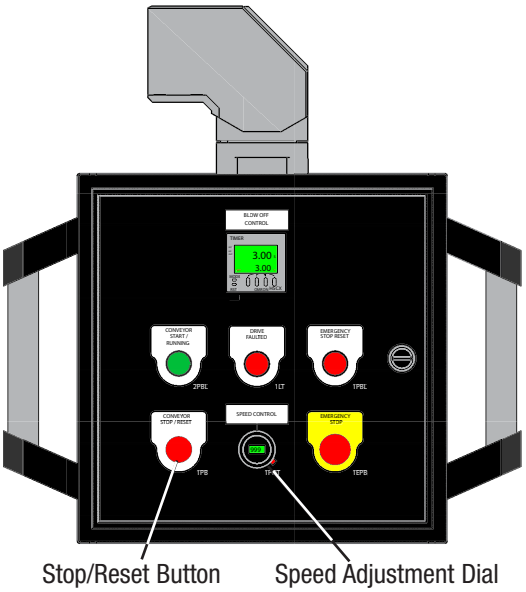
# Starting the TAC/MTAC

Before starting the TAC/MTAC, verify that power is connected and on. Alignment with the line and cutter is good. Safety shields are in place. If applicable, Air is connected, turned on, and within the proper range.

To start the TAC/MTAC:

**Independent Versions:**

1 **Use the 10 turn pot to adjust the speed** to be slightly faster than that of the puller.




**Conair HMI Controlled Versions (with HMI from Medline, CPC, Puller, or Puller/Cutter):**

1 **Adjust the speed via the speed button on the HMI** of the Conair Medline, CPC, Puller, or Puller/Cutter..

2 **Refer to Appendix B in this manual or your Conair Medline, CPC, Puller, or Puller/Cutter User guide** for more detailed operation of the TAC/MTAC through the HMI.

# Adjustments During Operation

1 **Make sure the TAC/MTAC operates at least as fast as the equipment making the product - preferably faster.** If the speed of the TAC/MTAC is not the same or faster than the equipment making the product, jam ups can occur.

# Stopping the TAC/MTAC

1 **Press the Stop/Reset Button.**

# Adjusting the Conveyor Height and Angle

### Adjusting the Height of the Conveyor on the TAC/MTAC

1. **Loosen the two bolts located on the sides of the TAC/MTAC pedestal** near the height adjusting hand wheel.
2. **Rotate the hand wheel** clock-wise to raise the conveyor or counter clock-wise to lower the conveyor.
3. When the proper height has been achieved, **tighten the two bolts loosened in Step 1.**


### Adjusting the Angle of the Conveyor on the TAC/MTAC

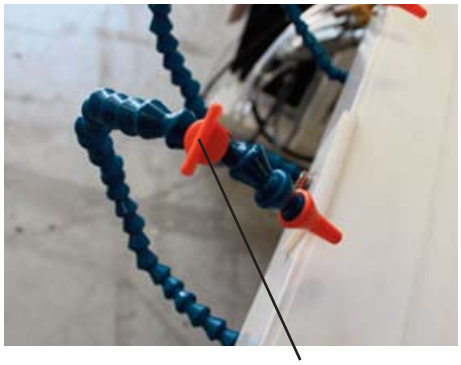

1. **Loosen the bolt located near the conveyor pivot point at the top of the TAC/MTAC pedestal.**
2. **Pivot the conveyor by hand or by using an appropriate hex wrench to turn the conveyor pivot shaft.**
3. When the proper angle has been achieved, **tighten the bolt loosened in Step 1.**

# Operating the Blow-offs

If the TAC/MTAC is equipped with blow-offs, use the following steps for operation.

**NOTE:** The shafts of the blow-off valves are flexible and allow for easy positioning.

**1 Position each blow-off as desired.**



Valve in the "Off" Position

**2 Make sure that the "On/Off" valve for each blow-off that will be used is in the "On" position.** The "On/Off" valve is in the "On" position when the valve aligns with the blow-off shaft.

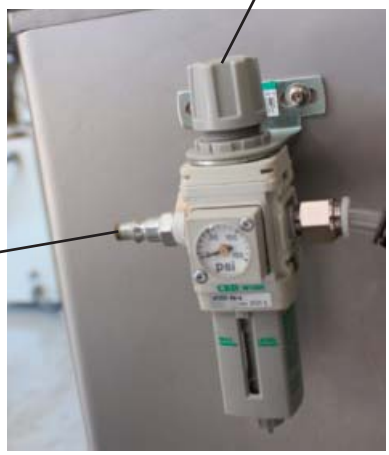
**3 Insure that the air supply is turned on and that the air pressure is set correctly** (see *Adjusting the Blow-off Air Pressure*).

# Adjusting the Blow-off Air Pressure

If the TAC/MTAC is equipped with blow-offs, use the following steps for set the desired air pressure.

**1 Connect the air supply to the air pressure regulator.**

**2 Turn the knob at the top of the air pressure regulator to adjust the air pressure to the desired setting.** The air pressure setting can be read via the air guage on the front of the regulator.



SECTION

5

# Maintenance

# Maintenance Features

The TAC/MTAC Inline Conveyor  model needs regular, scheduled maintenance for peak performance. Among the features that require maintenance are:

- Belt tension
- Belt tracking
- Belt wear

# Warnings and Cautions

To maintain the best performance of the TAC/MTAC, it must be cleaned and inspected regularly. Maintenance includes a daily, weekly, quarterly, and semi-annual (every 6 months) schedule.

Use this maintenance schedule as a guide.  You may need to shorten the time of the maintenance schedule, depending on how often you use the TAC/MTAC, and the types of material flowing through it.  Follow all precautions and warnings when working on the equipment.

⚠ **WARNING: Improper Installation, operation, or servicing may result in equipment damage or personal injury.**

This equipment should only be installed, adjusted, and serviced by qualified technical personnel who are familiar with the construction, operation, and potential hazards of this type of machine.

All wiring, disconnects, and fuses should be installed by qualified electrical technicians in accordance with electrical codes in your region.  Always maintain a safe ground.  Do not operate the equipment at power levels other than what is specified on the machine serial tag and data plate.

⚠ **DANGER: Pinch Hazard**

Never remove or disable safety devices to sustain production.  Operating without these devices could lead to hazardous conditions that can cause severe injury.  Take all necessary precautions when working around moving parts to prevent body parts and clothing from being pulled into the machine.

# Preventative Maintenance Schedule

**WARNING: Moving Parts.**
**Improper servicing may result in equipment damage or personal injury.**

This equipment should be adjusted and serviced by qualified technical personnel who are familiar with the construction, operation, and potential hazards of this type of machine.

Before performing maintenance or repairs on this product, disconnect and lock out electrical power sources to prevent injury from unexpected energization or start-up. A lockable device has been provided to isolate this product from potentially hazardous electricity.

Make sure all safety devices and belt guards are installed before resuming normal operation.

**WARNING: Voltage hazard**

This equipment is powered by alternating current, as specified on the machine serial tag and data plate. Do not operate the equipment at power levels other than what is specified on the machine serial tag and data plate.

A properly sized conductive ground wire from the incoming power supply must be connected to the chassis ground terminal inside the electrical enclosure. Improper grounding can result in severe personal injury and erratic machine operation.

Before performing maintenance or repairs on this product, disconnect and lock out electrical power sources to prevent injury from unexpected energization or start-up. A lockable device has been provided to isolate this product from potentially hazardous electricity.



(Continued)

# Preventative Maintenance Schedule
## (continued)

To maintain the best performance of the TAC/MTAC, we recommend the following maintenance schedule. You may need to shorten the time between servicing, depending on how often you use the TAC/MTAC, and the types of material flowing through it. Maintenance should be performed anytime you change materials, lines, or equipment in the extrusion line.

- **Daily**
  - ❒ **Belt Tension (visually inspect).**
    If a belt shows sign of cracks, tears, or other damage, replace it.
  - ❒ **Belt Tracking**
  - ❒ **Belt Wear**
  - ❒ **Clean equipment.**
    Wipe the equipment with a clean dry cloth to eliminate dust and other build-up, which can deteriorate performance.

✎ **NOTE:** Regular cleaning of jack screws is suggested to ensure proper operation. Some conveyors may have a moisture accumulator on the pressure regulator. If installed on your unit, check this daily.

- **Monthly**
  - ❒ **Check and lubricate all grease fittings using a high-temp silicone based grease.**

✎ **NOTE:** Some conveyors may have a moisture accumulator on the pressure regulator. If installed on your unit, check this daily.

- **Semi-annual (every 6 months)**
  - ❒ **Gear Reducer oil level**

- **Belt Adjustments:**
  Belt adjustments are made on the end of the conveyor (bolts - opposite the drive end) to adjust belt tension and tracking. Adjusting one side moves tracking, adjusting both sides changes tension.

✎ **NOTE:** Do not over-tighten – damage to belt, premature belt wear, and bearing failure can occur.

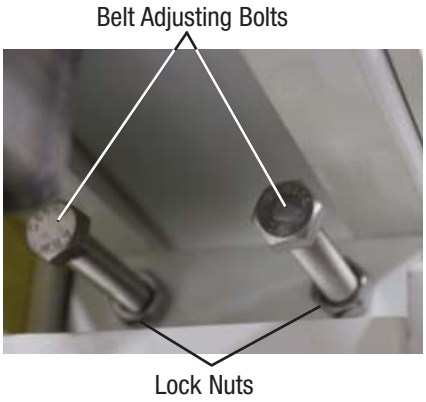
- **To Replace the Belt:**
  Turn both tension bolts in to loosen the belt. Pull the belt off of the open side of the conveyor. Place the new belt on the conveyor (bolts may have to be adjusted further in if older belt had stretched). Tighten bolts to create tension on belt.

# Belt Adjustments

**NOTE:** Belt adjustments are made on the end of the conveyor (bolts - opposite the drive end) to adjust belt tension and tracking. Adjusting one side moves tracking, adjusting both sides changes tension.

**1** **Loosen the four (4) bolts on the side of the conveyor that hold the conveyor table in place.**


**2** **Using a wrench, loosen the lock nuts on the two (2) belt adjusting bolts located at the end of the conveyor opposite the drive end.**




**3** **To increase the belt tension, turn each belt adjusting bolt clock-wise** until the desired tension is achieved. To decrease the belt tension, turn the belt adjusting bolts counter clock-wise.

**NOTE:** Do not over-tighten – damage to belt, premature belt wear, and bearing failure can occur.

**4** Once the desired tension is achieved, **tighten the lock nuts on the belt adjusting bolts and the blots that lock the conveyor table in place.**

# Belt Replacement

**1** Refer to the *Belt Adjustment section* and **loosen the four (4) conveyor bolts and the two (2) lock nuts on the belt adjusting bolts.**

**2** **Loosen the belt adjusting bolts** enough to allow the belt to slide off the conveyor.

**3** **Pull the belt off of the open side of the conveyor.**

**4** **Place the new belt on the conveyor** (bolts may have to be adjusted further in if older belt had stretched).

**5** **Tighten belt adjusting bolts to align the belt and to create tension on belt.**

**NOTE:** Do not over-tighten – damage to belt, premature belt wear, and bearing failure can occur.

**6** Once the belt is properly aligned and proper tension is achieved, **tighten the two (2) belt adjusting bolt lock nuts and the four (4) conveyor bolts.**

# Checking Electrical Connections

### ⚠ WARNING: Electrical hazard.

Before performing any work on this product, disconnect and lock out electrical power sources to prevent injury. A lockable device has been provided to isolate this product from potentially hazardous electricity.

### ⚠ WARNING: Improper servicing may result in equipment damage or personal injury.

This equipment should only be adjusted and serviced by qualified technical personnel who are familiar with the construction, operation, and potential hazards of this type of machine.

All wiring, disconnects, and fuses should be installed by qualified electrical technicians in accordance with electrical codes in your region. Always maintain a safe ground. Do not operate the equipment at power levels other than what is specified on the machine serial and data plate.

1. **Disconnect and lock out the main power.**
   Turn the main power disconnect to the off position before opening the electrical enclosure on the back of the TAC/MTAC. This is a safety device to prevent you from opening the doors if the power is still on.

2. **Open the electrical enclosure.**

3. **Inspect all wires and connections.** Look for loose wires, burned contacts, and signs of over-heated wires. Have a qualified electrician make any necessary repairs or replacements.

4. **Close the electrical enclosure door.**

5. **Inspect the exterior power cords.** Cords should not be crimped, exposed, or rubbing against the frame. If the main power cord runs along the floor, make sure it is not positioned where it could rest in pooling water or could be run over and cut by wheels and casters.

SECTION
6

# Troubleshooting

# Before Beginning

You can avoid most problems by following the recommended installation, operation, and maintenance procedures outlined in this User Guide. If you have a problem, this section will help you determine the cause and tell you how to fix it.

**Before you begin to take diagnostic actions, be sure to:**

- ❑ Find any wiring, parts, and assembly diagrams that were shipped with your equipment. These are the best reference for correcting a problem. The diagrams will note any custom features or options not covered in this User Guide.

- ❑ Verify that you have all instructional materials related to the TAC/MTAC Series Inline Conveyor. Additional details about troubleshooting and repairing specific components are found in these materials.

- ❑ Check that you have manuals for other equipment connected in the system. Troubleshooting may require investigating other equipment attached to, or connected with the TAC/MTAC Series Inline Conveyor.

# A Few Words of Caution

### ⚠ WARNING: Improper servicing may result in equipment damage or personal injury.

This equipment should only be installed, adjusted, and serviced by qualified technical personnel who are familiar with the construction, operation, and potential hazards of this type of machine.

All wiring, disconnects, and fuses should be installed and adjusted by qualified electrical technicians in accordance with electrical codes in your region. Always maintain a safe ground. Do not operate the equipment at power levels other than what is specified on the machine serial tag and data plate.

### ⚠ WARNING: Electrical hazard.

Before performing maintenance or repairs on this product, disconnect and lock out electrical power sources to prevent injury from unexpected energization or start-up. A lockable device has been provided to isolate this product from potentially hazardous electricity.

# Identifying the Cause of a Problem

The Troubleshooting section covers problems directly related to the operation and maintenance of the TAC/MTAC Series Inline Conveyors. This section does not provide solutions to problems that originate with other equipment. Additional troubleshooting help can be found in manuals supplied with the other equipment.

The main problems you will see with the TAC/MTACs are:

- **TAC/MTAC operation problems:** jam up, blow-off not working, belt pulling to one side or uneven belt wear, floppiness or slack in belt or premature bearing failure, sort quality not working, wrong part blowing off, and other problems identified by the fault messages that appear on the HMI.

Additional troubleshooting help can be found in the component manuals included with this User Guide.

# Operation Problems

Look in this section when the equipment is not working properly.

| Problem | Possible cause | Solution |
|---|---|---|
| **Jam up** | Speed too slow<br>Alignment<br><br>Height incorrect<br>Belt tracking | Adjust TAC/MTAC speed<br>Correct alignment with downstream line<br>Adjust height<br>Adjust belt tracking |
| **Blow-off not working** | Air pressure too low<br>Air pressure valve closed.<br>Air is not connected<br>No signal from HMI | Increase pressure<br>Open valve<br>Connect air<br>Check wiring, communications,and refer to UG that came with puller. |
| **Belt pulling to one side or uneven belt wear** | Belt Tracking | Adjust belt tension and tracking |
| **Floppiness or slack in belt or premature bearing failure.** | Belt tension<br>Over-tightened belt | Adjust belt tension<br>Adjust belt tension, replace bearings |
| **Sort quality not working** | Connection<br><br>Laser gauge settings | Check communication connections and wires<br>Check settings in laser gauge system |
| **Wrong part blowing off** | Incorrect setting in HMI<br>Guard doors not closed. | Toggle HMI setting for which part to blow-off (bad or good) |
| **Fault message** | Message on HMI | Refer to UG that came with your Conair equipment |

# We're Here to Help

Conair has made the largest investment in customer support in the plastics industry. Our service experts are available to help with any problem you might have installing and operating your equipment. Your Conair sales representative also can help analyze the nature of your problem, assuring that it did not result from misapplication or improper use.

**Additional manuals and prints for your Conair equipment may be ordered through the Customer Service or Parts Department for a nominal fee.**

# How to Contact Customer Service

To contact Customer Service personnel, call:


✎ **NOTE:** Normal operating hours are 8:00 am - 5:00 pm EST. After hours emergency service is available at the same phone number.

From outside the United States, call: 814-437-6861

You can commission Conair service personnel to provide on-site service by contacting the Customer Service Department.

# Before You Call...

**If you do have a problem, please complete the following checklist before calling Conair:**

- ❒ Make sure you have all model, control type and serial numbers from the serial tag, and parts list numbers for your particular equipment. Service personnel will need this information to assist you..
- ❒ Make sure power is supplied to the equipment.
- ❒ Make sure that all connectors and wires within and between control systems and related components have been installed correctly.
- ❒ Check the troubleshooting guide of this manual for a solution.
- ❒ Thoroughly examine the instruction manual(s) for associated equipment, especially controls. Each manual may have its own troubleshooting guide to help you.
- ❒ Check that the equipment has been operated as described in this manual.
- ❒ Check accompanying schematic drawings for information on special considerations.

## Equipment Guarantee

Conair guarantees the machinery and equipment on this order, for a period as defined in the quotation from date of shipment, against defects in material and workmanship under the normal use and service for which it was recommended (except for parts that are typically replaced after normal usage, such as filters, liner plates, etc.). Conair's guarantee is limited to replacing, at our option, the part or parts determined by us to be defective after examination. The customer assumes the cost of transportation of the part or parts to and from the factory.

## Performance Warranty

Conair warrants that this equipment will perform at or above the ratings stated in specific quotations covering the equipment or as detailed in engineering specifications, provided the equipment is applied, installed, operated and maintained in the recommended manner as outlined in our quotation or specifications.

Should performance not meet warranted levels, Conair at its discretion will exercise one of the following options:

- Inspect the equipment and perform alterations or adjustments to satisfy performance claims. (Charges for such inspections and corrections will be waived unless failure to meet warranty is due to misapplication, improper installation, poor maintenance practices or improper operation.)
- Replace the original equipment with other Conair equipment that will meet original performance claims at no extra cost to the customer.
- Refund the invoiced cost to the customer. Credit is subject to prior notice by the customer at which time a Return Goods Authorization Number (RGA) will be issued by Conair's Service Department. Returned equipment must be well crated and in proper operating condition, including all parts. Returns must be prepaid.

Purchaser must notify Conair in writing of any claim and provide a customer receipt and other evidence that a claim is being made.

## Warranty Limitations

**Except for the Equipment Guarantee and Performance Warranty stated above, Conair disclaims all other warranties with respect to the equipment, express or implied, arising by operation of law, course of dealing, usage of trade or otherwise, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.**

# Blow Off Controls - From Medline

**Configuring the Blow Off Settings (Optional)**


A dedicated output is available for use with a Blow Off / Take Off Conveyor. This output is intended to operate a valve to blow good pieces from the Take Off Conveyor after a cut.

The Blow / Quality section modifies the way counting is done on the Total and Batch counters. If Blow / Quality is not available then Total and Batch increment at each cut. When Blow / Quality is available Total and Batch increment when the good pieces leave the Blow Off / Take Away Conveyor – bad pieces not counted.

**Offset**
An offset preset is available. This length acts as a delay from the cut. Distance is provided by the Puller – not the Take Off Conveyor. (There is no distance feedback available from the Take Off Conveyor). In most instances the Take Off Conveyor is set to travel faster than the Puller in order to create piece separation. The Offset should therefore be set shorter to factor this speed relationship.

**Time**
Time is the on-time duration for the valve. The time needed to eject product should be kept short to avoid exhausting accumulated air.

**Blow Amount**
Blow Amount is available to blow one or many pieces at once. For example, if Blow Amount is set to 5 the Blow Off will operate once after 5 pieces have been cut.

**Blow Activation**
On/Off is used to enable or disable the Blow Off.

**Style**
Style provides three options. Blow Amount as shown in the example above is one of the options. Other options are “Blow always when Good”, or “Blow always when Bad”. The quality input (good or bad) is used to control the valve. No matter which option is selected the air valve will always be off when the cutter is stopped.

**IMPORTANT:** The options “Blow always when Good” and “Blow always when Bad” can consume a lot of air. Their settings should be kept to low pressure.

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# Blow Off Controls - From Medline
**(continued)**

**Blow Indicator**
This shows the state of the Blow Valve.

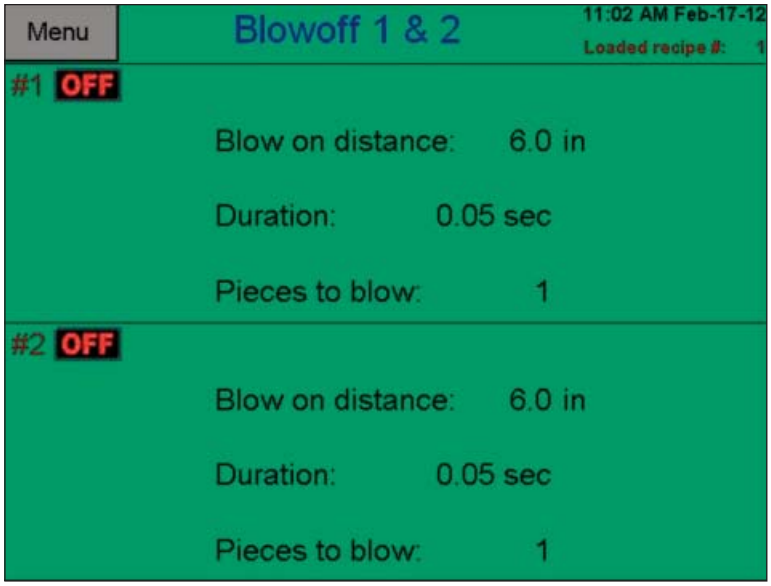
**Gauge (Product Quality) Indicator**
This shows the Quality State of the product at the gauge. If quality is good the light is Green. If bad, the light is Red.

**Take Away / Blow Off**
This section contains one check box. Check this box when the Combination Puller/Cutter is being used with a Take Away / Blow Off Conveyor. When this box is checked the Total and Batch counters increase when good pieces are blown off the conveyor. If unchecked, pieces are counted as they are cut. The Blow Off section on the Main page has three options. There are Blow always when Good, Blow always when Bad and Blow for a time options. The quality at the cutter affects each of these options.

# Blow Off and Quality Control - From CPC

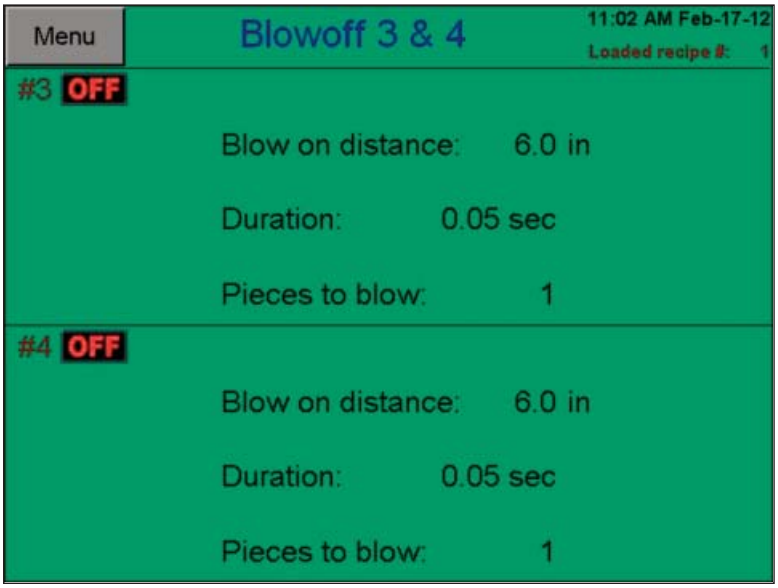

**Quality Setup Page**
This page allows access to the quality input setup parameters. The quality input is a "dry contact" input from a customer supplied gauge. This input tells the cutter whether good or bad product is passing through the cutter. This input works in conjunction with the blowoffs for product separation at the conveyor. A quality mode can be set that tells the cutter that all product is "good", "bad" or "gauge". "Gauge" mode tells the cutter that the product state comes from the quality input.

# Blow Off and Quality Control - From CPC




**Cutter Blowoff 1 & 2 Page**

This page allows access to the blowoff 1 & 2 parameters. The blowoff outputs can operate in either "on demand" or "continuous" mode. "On demand" mode is active whenever the cutter is in either "Encoder", "Timer" or "End Sense" mode. "Continuous" mode is active whenever the cutter is in "Flywheel" or "Follower" mode. The blowoff's work in conjunction with the quality input. This allows good and bad product to be separated at the take away conveyor.




**Cutter Blowoff 3 & 4 Page**

This page allows access to the blowoff 3 & 4 parameters. The blowoff outputs can operate in either "on demand" or "continuous" mode. "On demand" mode is active whenever the cutter is in either "Encoder", "Timer" or "End Sense" mode. "Continuous" mode is active whenever the cutter is in "Flywheel" or "Follower" mode. The blowoff's work in conjunction with the quality input. This allows good and bad product to be separated at the take away conveyor.

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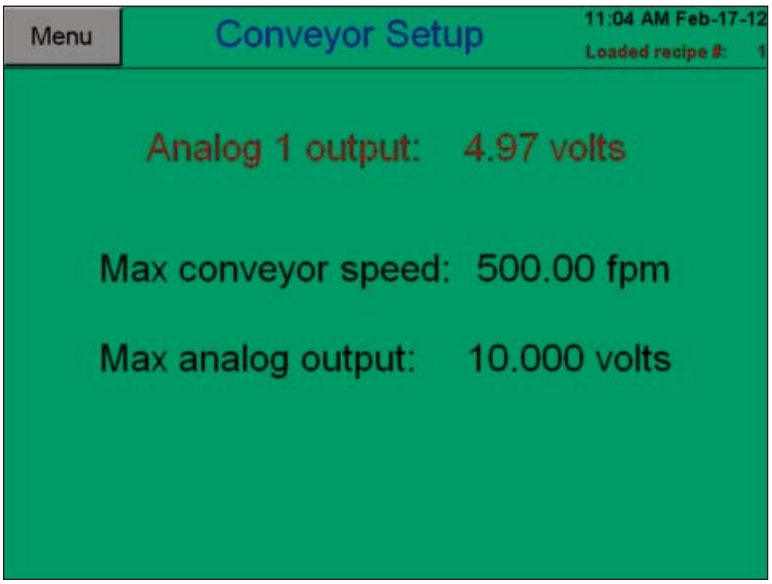
# Blow Off and Quality Control - From CPC (continued)




**Cutter Conveyor Setup Page**
This page allows access to the conveyor setup parameters. The cutter can control the speed of a conveyor by way of a 0-10 vdc analog signal. This page allows scaling of the analog signal to speed units.