

# M700ST

(AR3600)

## OVERVIEW

The **M700 Small Tube Module (M700ST)** utilizes a rotary style cutter head which can squarely cut many grades of tubing. The M700ST can be connected directly to the Control Module or to a Control/Feeder setup for automated material processing.

### TECHNICAL DATA

#### Material Specifications:\*

Minimum material size: 1/64" (0.4mm) OD

Maximum material size: 1/2" (12.7mm) OD

Minimum cut length: 0.100" (.254cm)

Maximum cut length: 99,999.0 (in or cm)

Maximum programmable quantity: 99,999 pieces

#### Cut Tolerances:\*

Material Length

Under 2" (5.08cm):  $\pm 0.010$  ( $\pm 0.025$ cm)

Over 2" (5.08cm):  $\pm 1\%$

Squareness of Cut:  $\pm 2^\circ$

*\* Specification is material dependent and/or dependent on de-reeling system*

#### Module Dimensions (L x W x H):

16" x 7.25" x 8" (40.64cm x 18.42cm x 20.32cm)

#### Module Weight:

21lb (9.6kg)

### PERFORMANCE

#### Supported Modes

Continuous Mode

Single Piece Flow Mode

#### Jobs/Batches:

Up to 100 programmable Jobs;

1-20 Batches per Job

#### Feed/Cut Parameters

Feed Rates:

10 selectable rates (0-9)

Cut Rates:

10 selectable rates (0-9)

Cut Time:

0.2 seconds - 3.0 seconds

### POWER

Voltage supplied by the Control Module

### REQUIRED PARTS

Custom Bushings: (Material sample is required to properly size bushings)

### OPTIONAL PARTS

Carbide Blade: PR0976

Ceramic Blade: PR0977

Material Length Stop: IR3324

### REPLACEMENT PARTS

Tube Cutting Blade (standard): PR0975



# M700ST Small Tube Module

## BUSHING INSTALLATION

1. Turn off machine and disconnect from power supply.
2. If necessary, decouple the ST Module from the system.
3. Choose the proper size bushing set for the material to be processed.
4. To install the cut bushing, slide the bushing from left to right into the upstream cut bushing sleeve with the bushing chamfer facing toward the Control Module. Ensure the bushing is fully inserted and pressed against the ST cutting blade, and then tighten the set screw.
5. To install the exit bushing, use the supplied 5/64" Allen wrench to loosen the top chute screws and then lift the chute up and out to remove from the unit. Slide the bushing from right to left into the exit bushing block with the chamfer facing the cutting blade. Ensure the bushing is fully inserted and pressed against the ST cutting blade, and then tighten the set screw. Install chute back in unit.

**NOTE:** To best align either bushing relative to the cutting blade, carefully actuate the cutter head's blade holder arm so that it is fully in the 'cut' position. While holding the blade holder arm in this position, push the bushing toward the cutting blade until it just makes contact. Tighten the set screw and carefully release the blade holder arm. Test the holder arm to ensure the blade does not make any contact with either bushing. Any blade contact with a bushing will cause blade damage and/or erratic material cuts.

## MODULE ASSEMBLY

1. Turn off machine and disconnect from power supply.
2. Open the clamping latch on the backside of the upstream module (either the Control or Feeder Module) by first loosening the thumb screw and then pulling the latch out and away from the module.
3. Align the ST Module's upstream interface connection (alignment pins and electrical connector) with the upstream module's downstream interface connection, and gently slide the ST into the upstream module so that it just begins to engage.
4. On the backside of the upstream module, push the clamping latch back in toward the module and it will draw the ST Module into the upstream module.
5. Once the clamping latch is in the closed position, fasten the clamping latch's thumb screw to the rear panel of the module.
6. Install the Endcap into the ST Module's downstream interface connection using the same technique.  
Note: The Endcap (supplied with the M700C) must always be installed into the last connected module's downstream interface connection.

**NOTE:** All doors must be closed and the downstream Endcap installed for the system to function.

## BLADE REPLACEMENT

1. Turn off machine and disconnect from power supply.
2. If necessary, decouple the ST Module from the system.
3. Remove the cut and exit bushings.
4. Remove the blade holder screws and nylon washers.
5. Slide the blade out of the blade holder.
6. Replace the blade with a new standard (or optional) blade and then reinstall the hardware. Ensure the blade sits flat against the blade holder and under the nylon washers.

**NOTE:** The exit bushing block is aligned with the cut bushing sleeve from the factory and should never be disassembled. Be careful as to not inadvertently displace the exit bushing block during blade replacement.

**CAUTION:** When handling or removing a cutting blade, be aware that it is extremely sharp and can cause serious injury if improperly handled.