



Conveyors and Automation Systems

[www.EMlcorp.com](http://www.EMlcorp.com)

## *Extruded Aluminum Frame Conveyors*



216-535-4848

## EMI's Extruded Aluminum Frame Conveyors Deliver a Sturdy, Lightweight Construction

### Models:

**EAF**

**Flat**

page 6



**EAC**

**Incline**

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**EAK**

**Flat to Incline**

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**EAR**

**Flat to Decline**

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**EAZ**

**Z Belt**

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### Exclusive Advantages:

- EA conveyors minimize maintenance and maximize productivity.
- Utilizes floor space more effectively than other conveyor designs.
- EMI's 3rd generation of aluminum conveyors – the culmination of EMI's 20 years experience engineering and building extruded aluminum conveyors.

**QUICKSHIP**

#### Ask about EMI's QUICKSHIP!

Many of our models can be shipped in 7-10 business days!  
Ask an EMI Associate today!



**Available in metric and feet-inch frame sizes**

**EMI conveyors are guaranteed for 3 years** to be free from defects of material or workmanship and to perform as promised when maintained in accordance with EMI manuals and operated under the conditions for which they were designed.

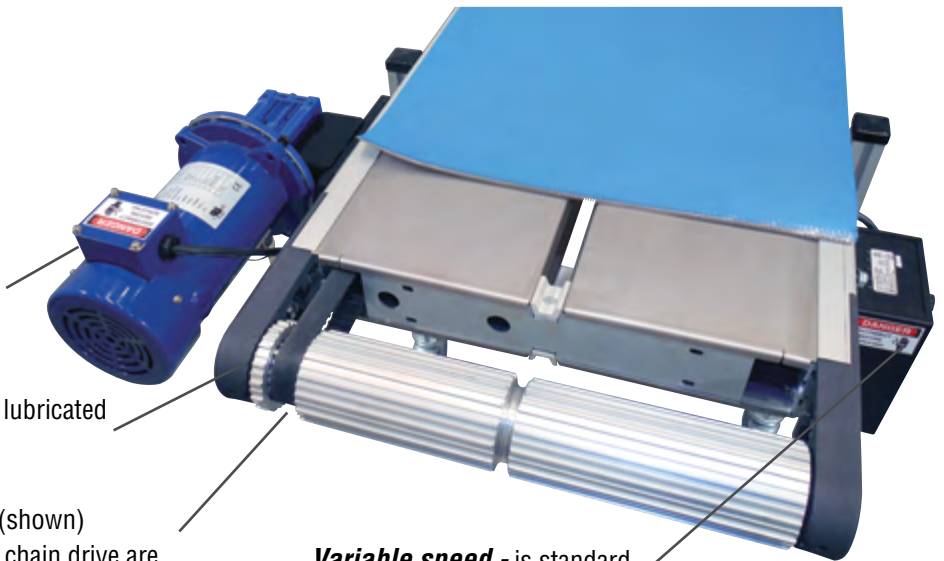
**EMI conveyors are built in the USA!**

## Standard Features:

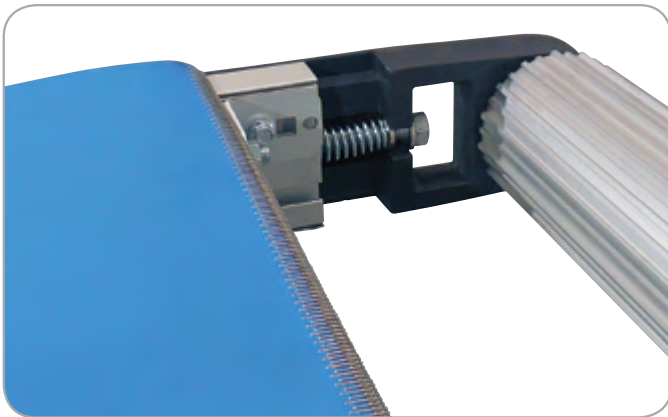
**Low profile external drives** - minimize interference when your operators have to work closely around the conveyor.

**Self-aligning bearings** are permanently lubricated and maintenance free.

**Power transmission styles** - Belt drive (shown) is standard. Internal drive, direct drive and chain drive are also available, see next page for examples.



**Variable speed** - is standard on all EA conveyor models.

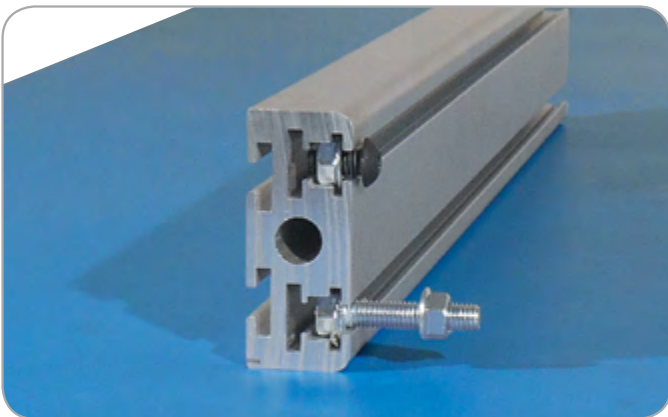


**Automatic spring-loaded belt tensioning** keeps the belt properly tensioned and tracking straight and facilitates ease of belt changes.

**Edge to edge belt** - ideal for robot indexing applications and when floor space utilization is important.

**Polyurethane belt** - has a tougher carcass compared to PVC and is FDA compliant. Options include cleats and corrugated walls.

**Laced belting** - is standard on all models. Endless belting is available at no charge.



**9/16" slots in the extruded aluminum frame accept standard 3/8" hex head nuts and bolts** - makes it easy to add peripheral equipment onto the conveyor by simply sliding hex head bolts into the slots then fasten with standard nuts.

## Space Saver Options

Available on all EA Conveyors

### ***Legs mounted under the frame***

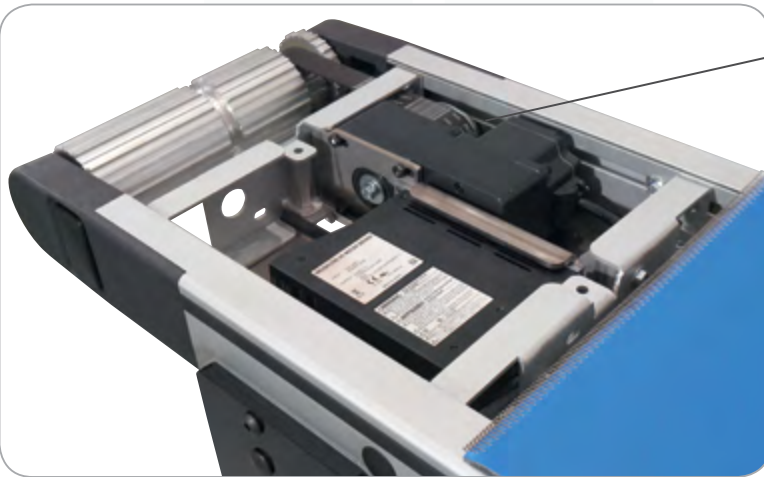
- Reduces conveyor width by 4" compared to standard leg set mounting.
- Includes locking swivel castors.
- No charge option

### ***Motor and drive mounted within the conveyor frame***

- Reduces conveyor width by 7¾" compared to the standard motor and drive.
- Includes compact variable speed controller.
- \$295 option

### ***Compact PLC indexing control***

- Eliminates large enclosures normally associated with many indexing packages.
- Ideal for robot indexing, box filling, and process control tie-in applications.
- \$795 option



***Internal Drive*** (option) - motor and drive are contained within the frame making it an ideal conveyor for robot indexing, assembly, and applications where floor space utilization is important.

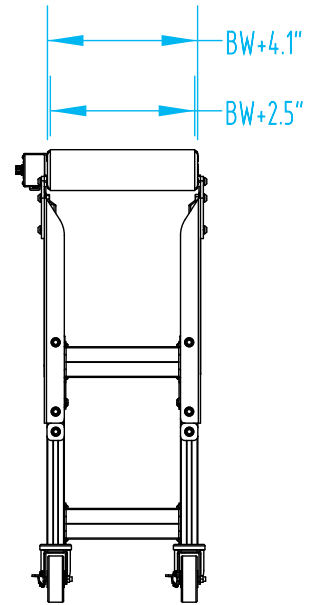
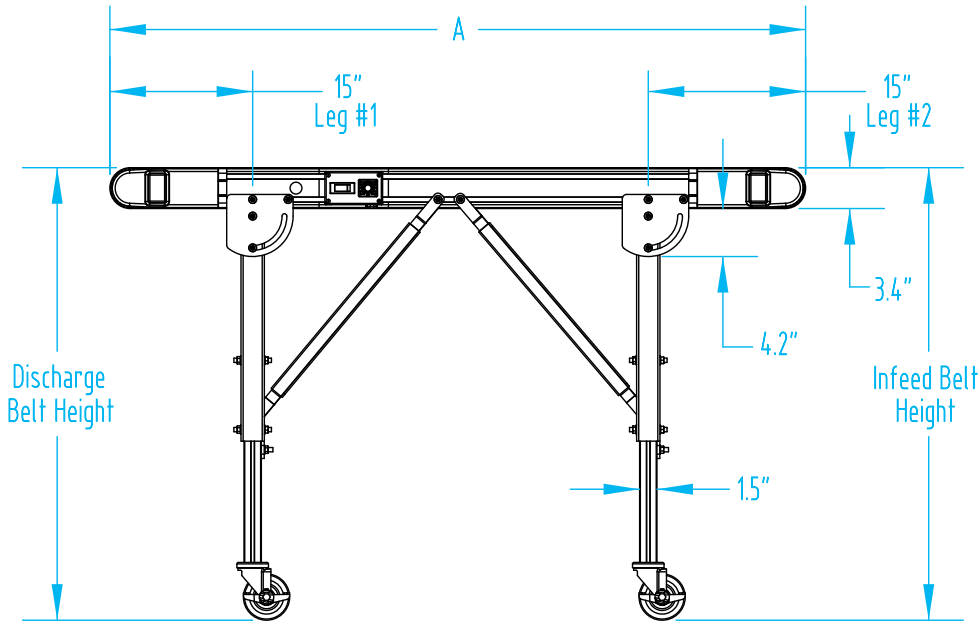
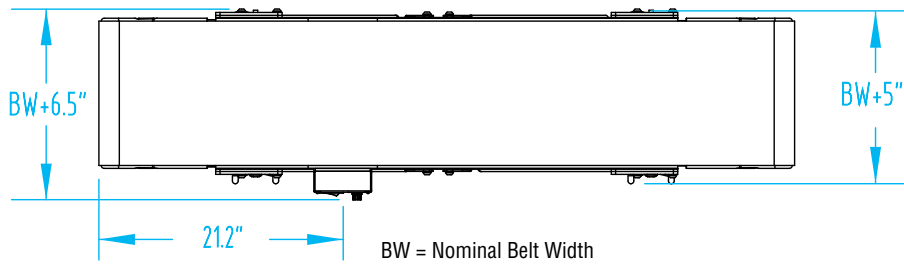
***Includes compact variable speed controller.***

***Direct Drive*** (option)



***Chain Drive*** (option, shown without chain drive cover)





- Indexing, reversing, and 6-70FPM variable speed functions
- Continuous run mode
- Accepts momentary or maintained signals for indexing and reversing
- Easily adjustable digital timers
- English and Spanish language



## Index / Reverse Combination Drive Option

### Available on all EA Conveyors

- 110/60/1 NEMA 1 Emerson M400 variable frequency drive with 230/60/3 AC output to motor.
- Upgrade to a 230/60/3 AC motor and 15' customer interface cord.
- For EA conveyors, Option T-99-VS: \$615.

### Advantages:

- Smaller footprint on conveyor with no extra enclosures or excessive hardware as needed with S-44 indexing and S-76 reversing options.
- The drive and motor are the only electrical components so there are fewer electrical components to stock or replace.
- An economical choice with less downtime than other indexing / reversing options.

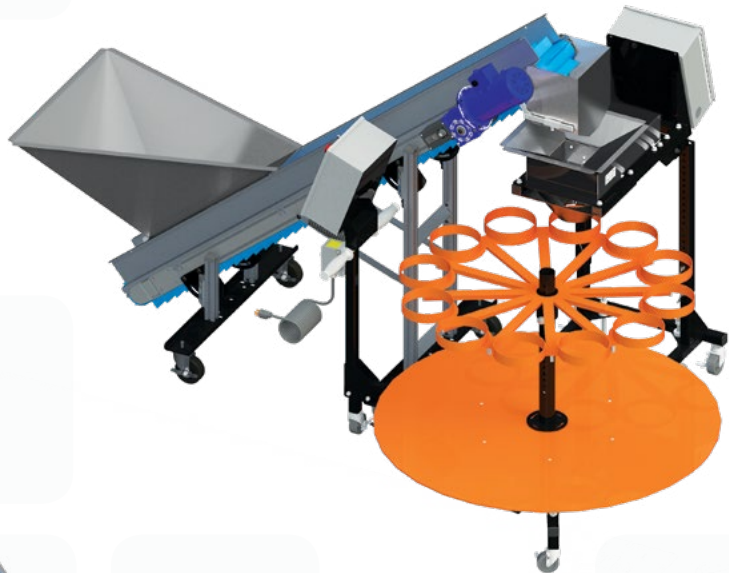
### Notes:

- Low end speed will result in loss of torque with high weight loads.
- Drive can be pre-configured for any combination of indexing and reversing options.
- Indexing can be controlled by either a momentary or maintained normally open dry contact or 24VDC signal.
- Indexing and reversing times are adjustable on the drive.

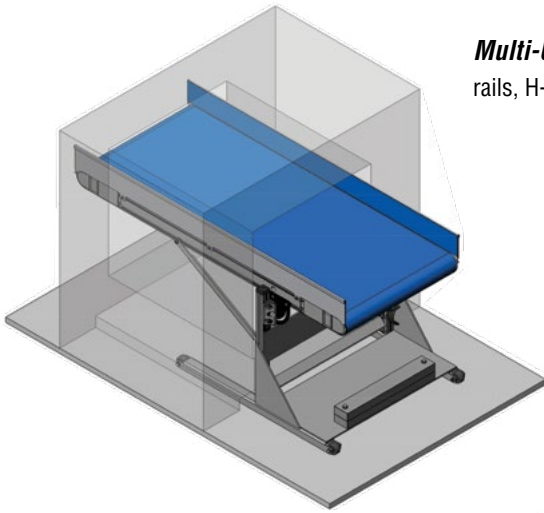
## Custom Conveyor Applications:

### EMI Custom Engineers to your Application -

Getting started is easy. If you have a concept in mind contact a EMI sales engineer who can come to your facility and discuss your application. Whether you need a single automation cell or a lights out, plant-wide system, EMI will design and build an automation system that meets your requirements and exceeds your expectations.

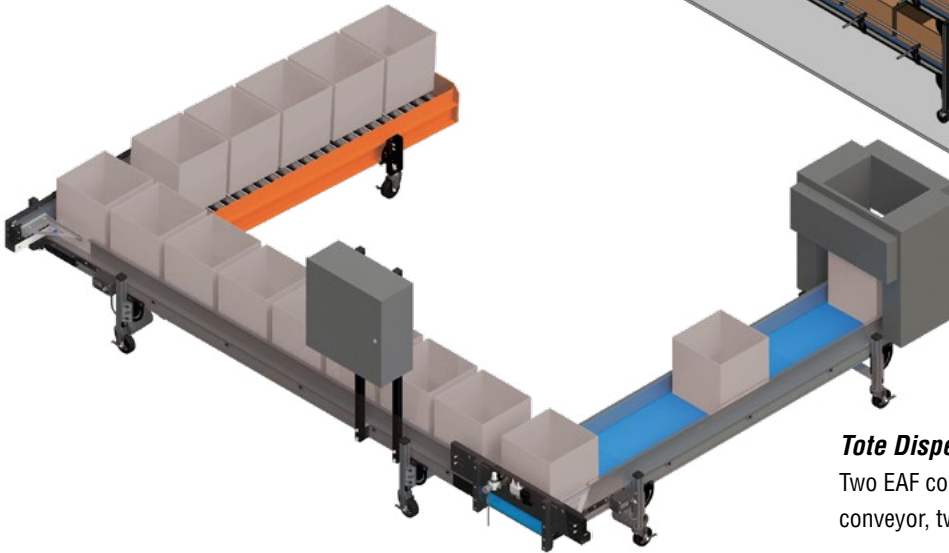
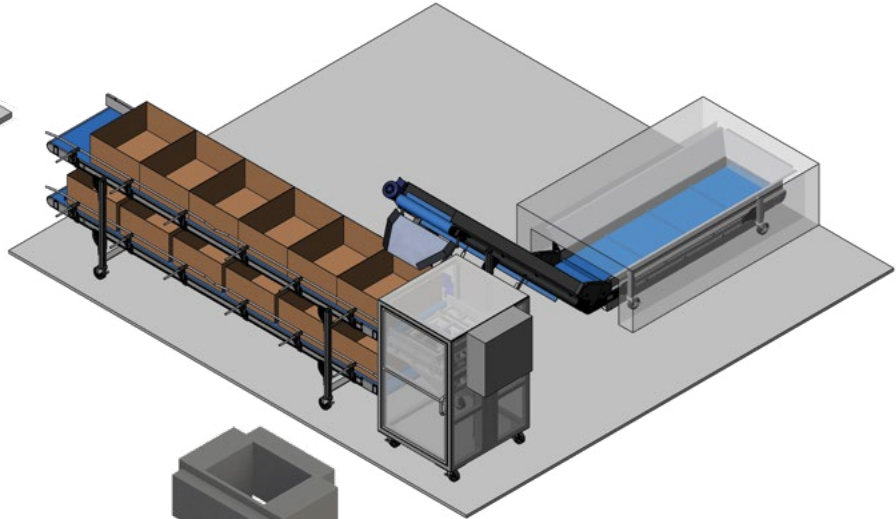


**Box & Bag Fill Turntables** - Applications can include a variety of belt styles with a cycle count boxfill system, and added options such as: soft drop zones, Lexan® rail covers, side rails, chutes, hoppers, and more!



**Multi-Use Portable** - EAF with PVC belt, side rails, H-style leg stand, and counter weights.

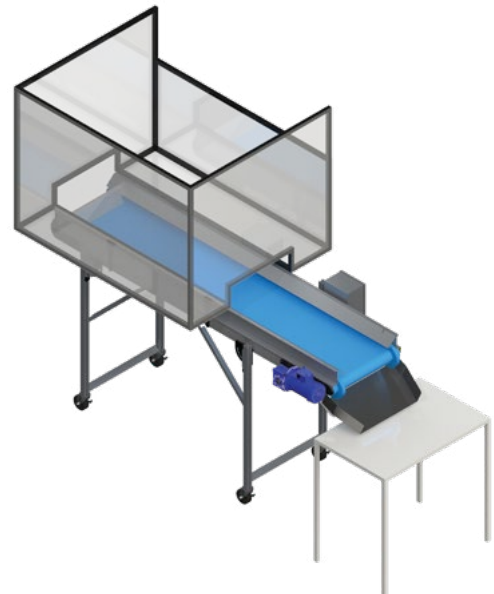
**Over / Under Boxfill** - EAF & EAC models with cleated belts, adjustable side rails, and a indexing control system with vertical and boxfill controls.



**Tote Dispenser** - Cycle count box fill system includes: Two EAF conveyors with internal drive packages, and a roller conveyor, two sweep arms, side rails, and a box stop.

**Over/Under Boxfill** - EAF and EAR conveyors with two levels of cooling take up minimal floor space.

**Safety Enclosures** - Available in many styles, they can be custom made to fit your conveyor for added protection.



# EAF Model – Flat Belt Conveyor

## Extruded Aluminum Frame

**Standard widths: 6", 12", 18", 24", 30", 36"**

Available widths: 4"–60" at 2" (50mm) increments

**Standard lengths: 3'–33' at 1' (300mm) increments\***

Available lengths: 3'–33' at 1" (25mm) increments\*

\*Consult your EMI representative for longer lengths



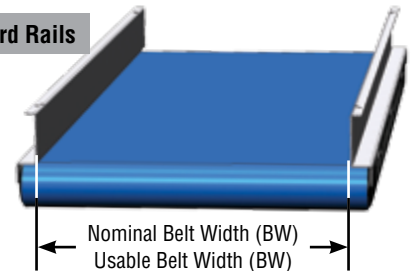
### Features

- Anodized extruded aluminum frame with side channels that accept standard 3/8" hex head bolts/nuts.
- Anodized aluminum side rails 4" high, 90° overlapping the belt 1 1/4" per side.
- Easy adjusting extruded aluminum leg sets with 4" locking swivel castors.
- 1/3hp 90V DC TEFC motor.
- Gear reducer is sealed and permanently lubricated requiring no service.
- 6-20 FPM variable speed drive (12-40 FPM or 21-70 FPM are available at no charge).
- Timing belt power transmission is enclosed within the conveyor frame.
- 100 lb. maximum load.
- V-guide belt guidance.
- Automatic spring loaded belt tensioning.
- Laced\*, flat polyurethane belting (blue), FDA approved material  
\*(Endless belting is available at no charge).
- 175°F belt temperature resistance.
- Units up to 20' long are shipped fully assembled.

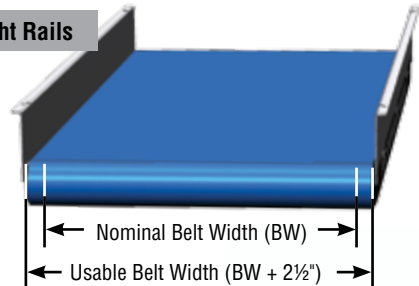


Shown without side rails

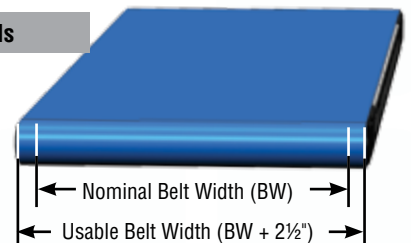
#### Standard Rails



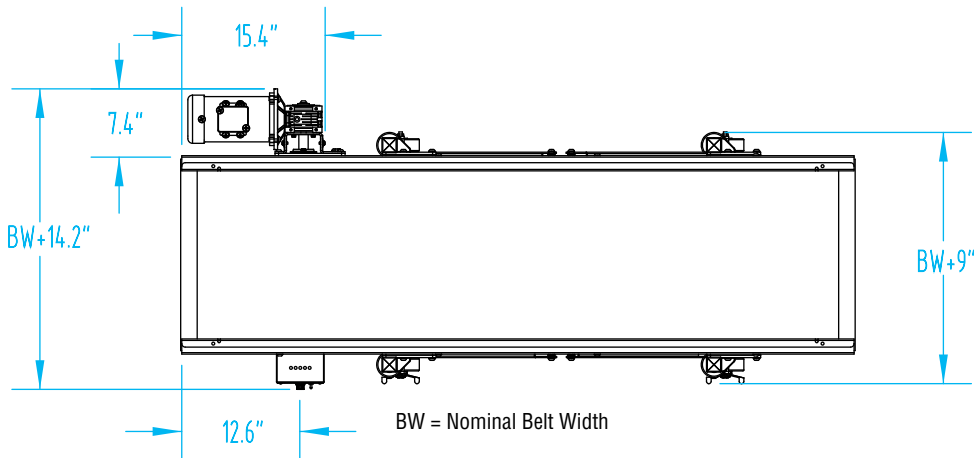
#### Straight Rails



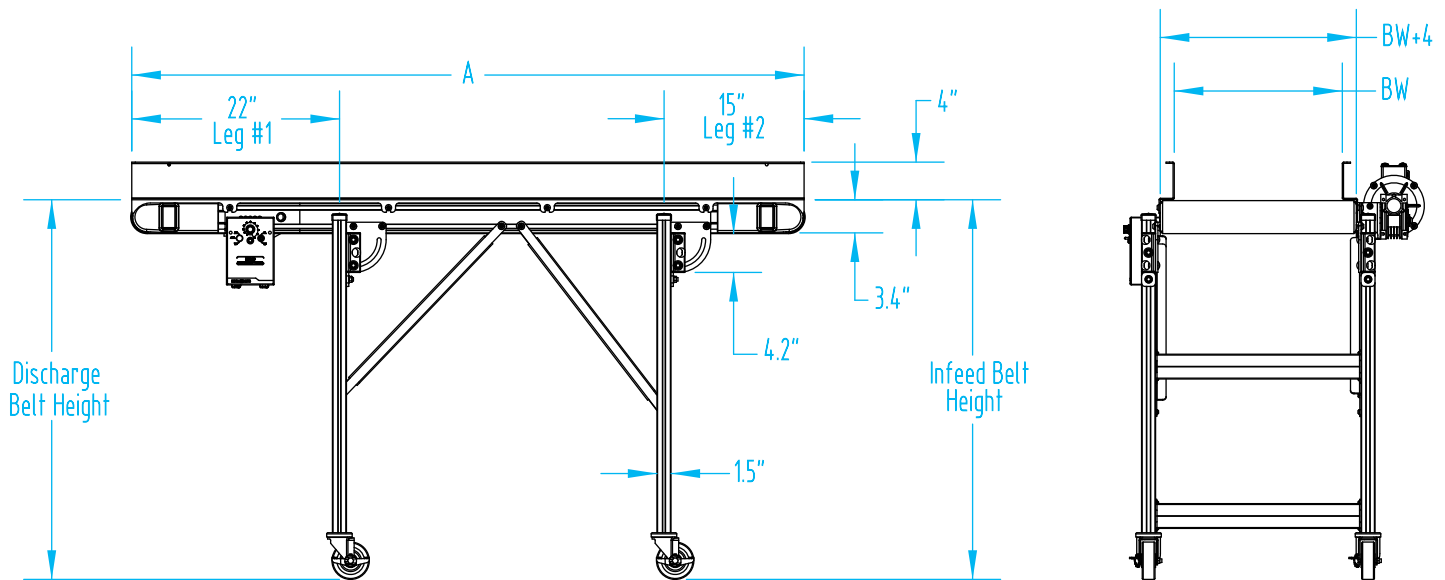
#### No Rails



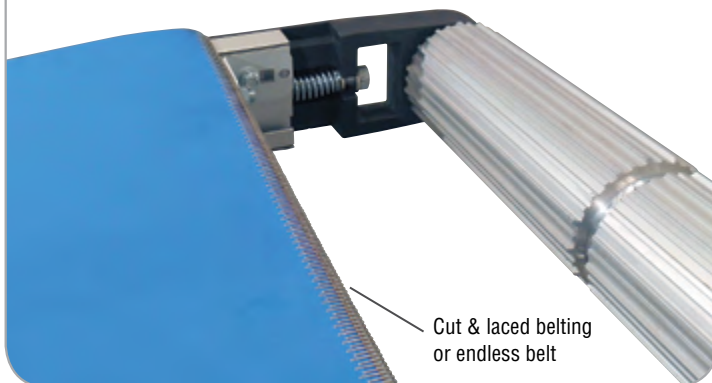




**QUICKSHIP** →



Automatic spring-loaded belt tensioning on all models keeps the belt properly tensioned, the tracking straight and facilitates ease of belt changes.



### Common Options

- Soft drop zone, to cushion part drop
- Straight side rails or no side rails
- Side rail extensions for part containment
- Lexan™ rail covers
- Chilled air or ambient air blowers for part cooling
- Stainless steel discharge chute
- Endless belting
- Green polyurethane belting
- Sealed belt edges to minimize dust
- Deionizing blowers to eliminate static electricity and prevent particles from sticking to parts
- AC frequency motor for low cost indexing
- Robotic indexing control interface
- Box filling by cycle count or weight
- Reversing for process control
- Alternate motor locations

# EAC Model – Incline Belt Conveyor

## Extruded Aluminum Frame

### Standard widths: 6", 12", 18", 24", 30", 36"

Available widths: 4"–60" at 2" (50mm) increments

### Standard lengths: 3'–30' at 1' (300mm) increments\*

Available lengths: 3'–30' at 1" (25mm) increments\*

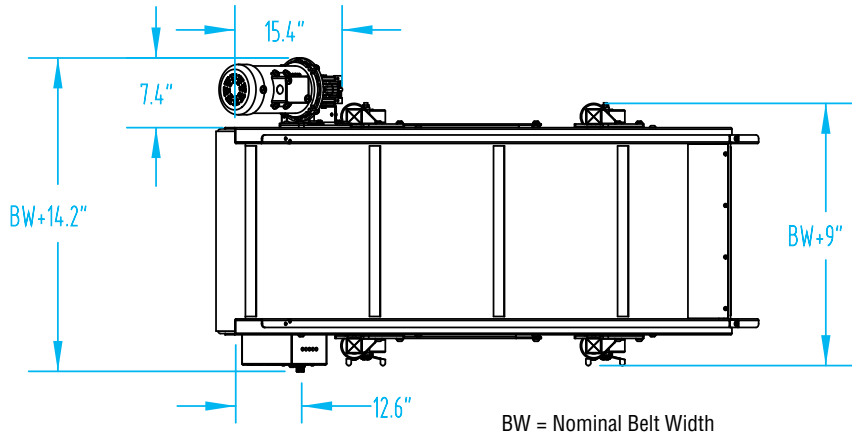
\*Consult your EMI representative for longer lengths

## Features

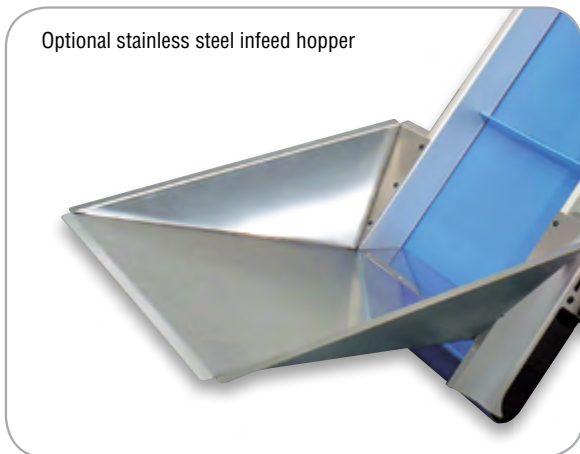
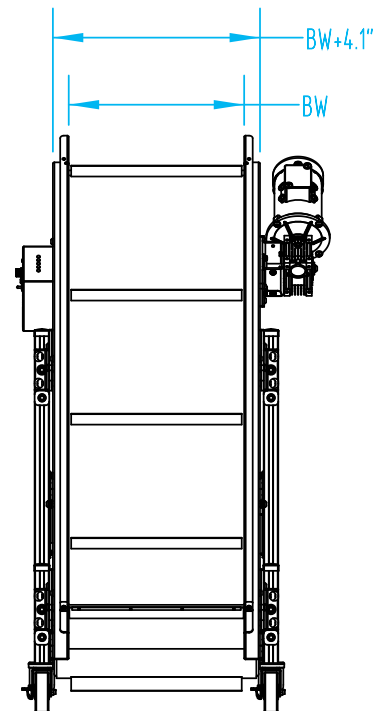
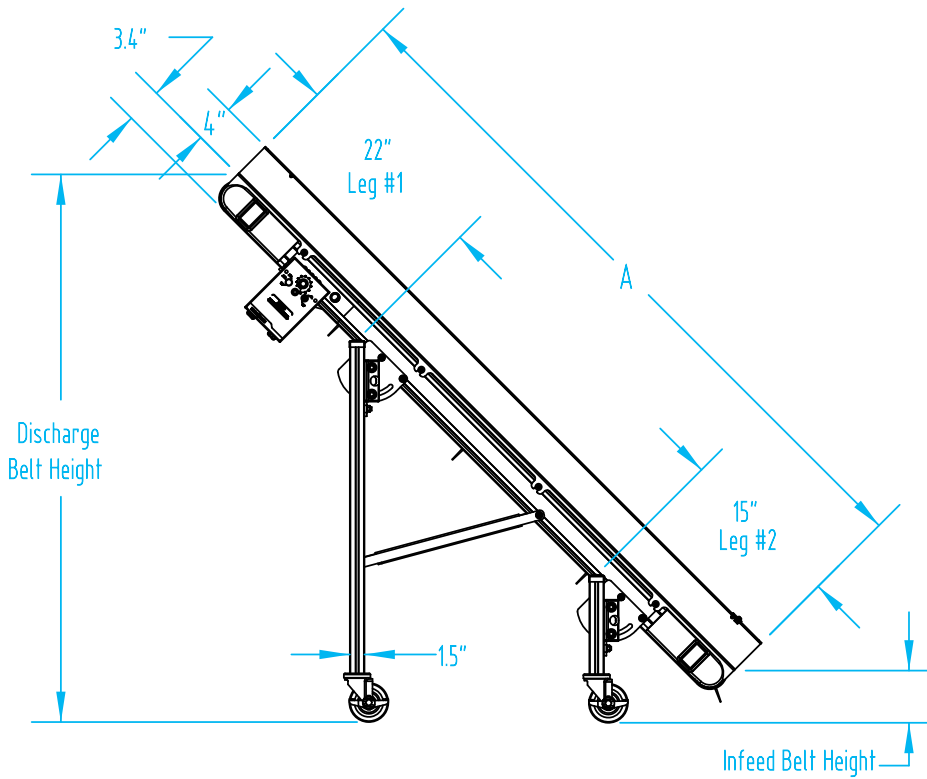
- Anodized extruded aluminum frame with side channels that accept standard 3/8" hex head bolts/nuts.
- Anodized aluminum side rails 4" high, 90° overlapping the belt 1¼" per side.
- Easy adjusting extruded aluminum leg sets with 4" locking swivel castors.
- 1/3hp 90V DC TEFC motor.
- Gear reducer is sealed and permanently lubricated requiring no service.
- 6-20 FPM variable speed drive (12-40 FPM or 21-70 FPM are available at no charge).
- Timing belt power transmission is enclosed within the conveyor frame.
- 100 lb. maximum load.
- V-guide belt guidance.
- Automatic spring loaded belt tensioning.
- Laced\* polyurethane belting (blue) with 1½" high cleats on 18" centers, FDA approved material. \*(Endless belting is available at no charge.)
- 175°F belt temperature resistance.
- Units up to 20' long are shipped fully assembled.



Alternate belting is available on all EA models. Cleated and corrugated wall belting is available in the standard blue or green polyurethane as well as many other options including: white & black PVC, rough top, plastic mesh, Intralox™, flat wire, flat top chain, rope, and high temperature belting.



**QUICKSHIP**



### Common Options

- Stainless steel infeed hopper
- Side rail extensions for part containment
- Corrugated wall belting for small part containment
- Lexan™ rail covers
- Chilled air or ambient air blowers for part cooling
- Stainless steel discharge chute
- Endless belting
- Green polyurethane belting
- Deionizing blowers to eliminate static electricity and prevent particles from sticking to parts
- Box filling by cycle count or weight
- Alternate motor locations

# EAK Model – Flat to Incline Belt Conveyor

## Extruded Aluminum Frame

### Standard widths: 6", 12", 18", 24"

Available widths: 6"–26" at 2" (50mm) increments

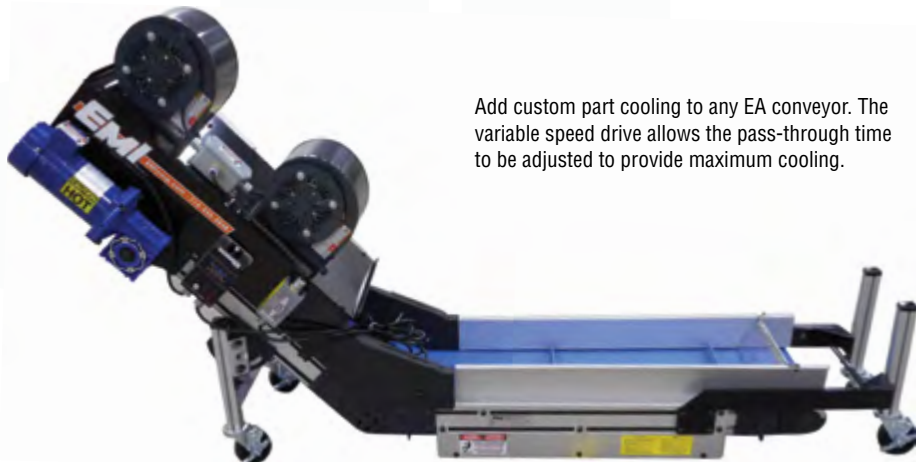
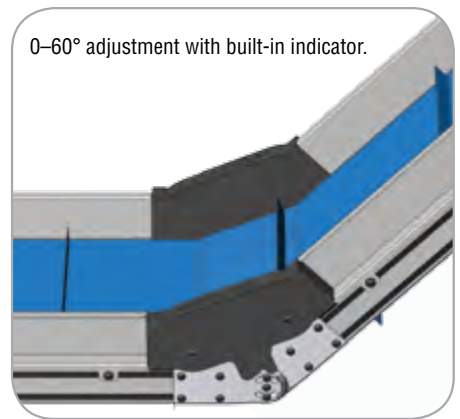
### Standard lengths: 5'–15' at 1' (300mm) increments\*

Available lengths: 5'–15' at 1" (25mm) increments\*

\*Consult your EMI representative for longer lengths

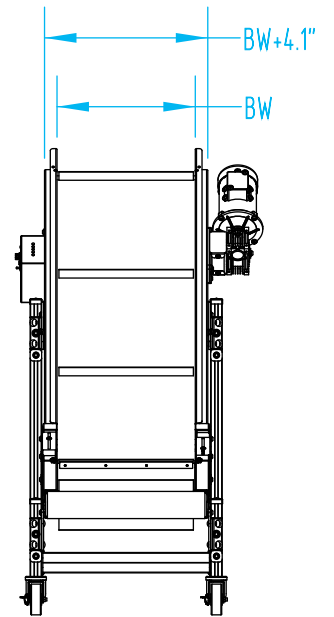
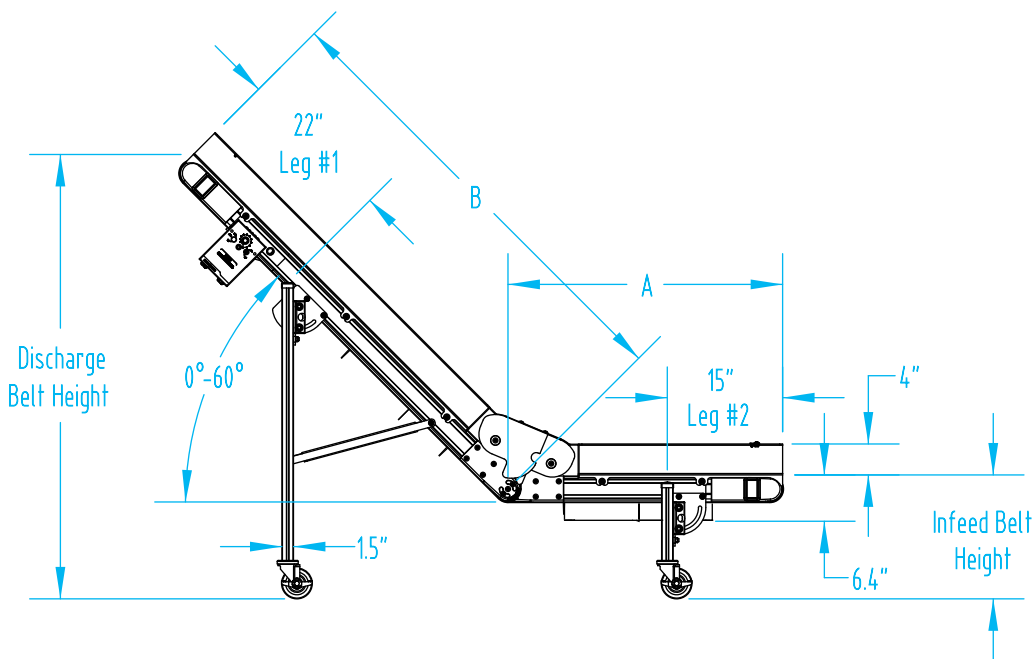
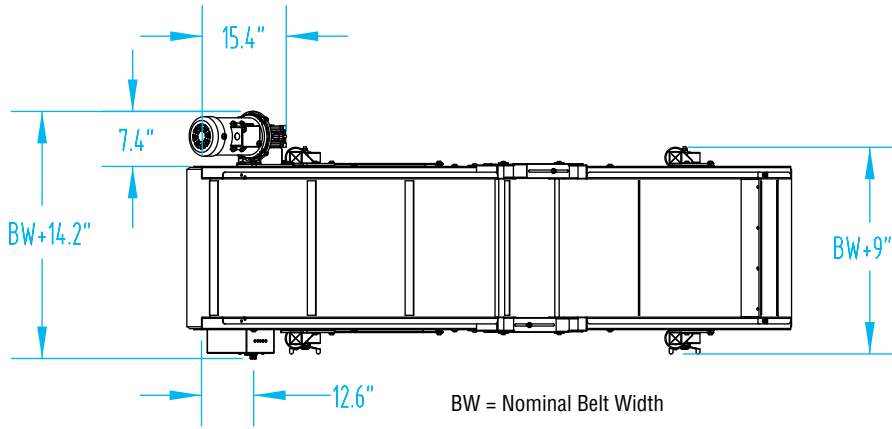
## Features

- Anodized extruded aluminum frame with side channels that accept standard 3/8" hex head bolts/nuts.
- 0–60° adjustability from horizontal to incline sections with built in angle indicator.
- Anodized aluminum side rails 4" high, 90° overlapping the belt 1¼" per side.
- Easy adjusting extruded aluminum leg sets with 4" locking swivel castors.
- 1/3hp 90V DC TEFC motor.
- Gear reducer is sealed and permanently lubricated requiring no service
- 6-20 FPM variable speed drive (12-40 FPM or 21-70 FPM are available at no charge).
- Timing belt power transmission is enclosed within the conveyor frame.
- 50 lb. maximum load.
- V-guide belt guidance.
- Automatic spring loaded belt tensioning.
- Laced\* polyurethane belting (blue) with 1½" high cleats on 18" centers, FDA approved material. \*(Endless belting is available at no charge)
- 175°F belt temperature resistance.
- Units up to 20' long are shipped fully assembled.

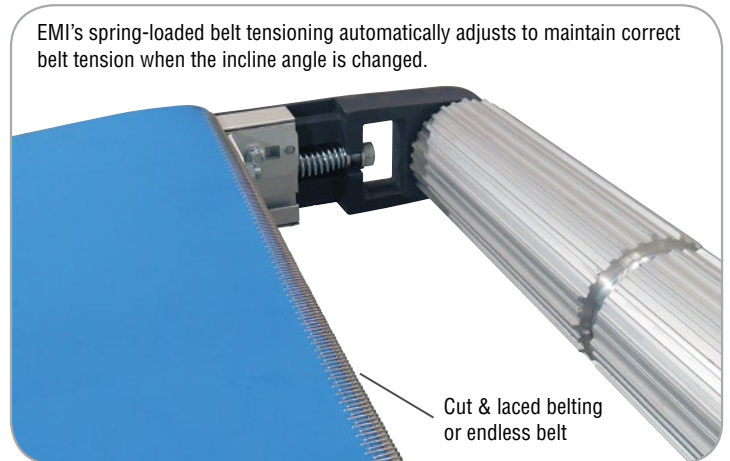


Add custom part cooling to any EA conveyor. The variable speed drive allows the pass-through time to be adjusted to provide maximum cooling.

**QUICKSHIP** 



The EAK and EAZ conveyors have an optional angle adjustment rack which allows you to change the conveyor angle with no tools.



# EAR Model – Flat to Decline Belt Conveyor

## Extruded Aluminum Frame

**Standard widths: 6", 12", 18", 24", 30"**

Available widths: 4"–30" at 2" (50mm) increments

**Standard lengths: 5'–20' at 1' (300mm) increments\***

Available lengths: 5'–20' at 1" (25mm) increments\*

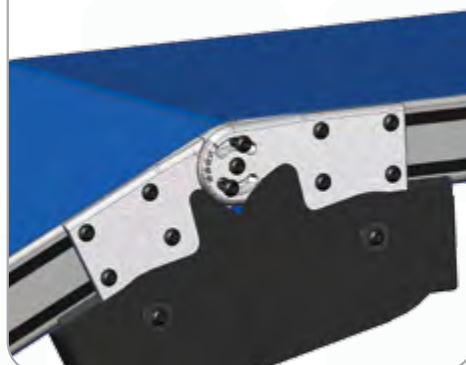
\*Consult your EMI representative for longer lengths



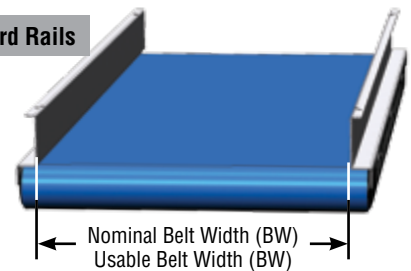
### Features

- Anodized extruded aluminum frame with side channels that accept standard 3/8" hex head bolts/nuts.
- 0–60° adjustability from horizontal to decline sections with built in angle indicator.
- Anodized aluminum side rails 4" high, 90° overlapping the belt 1¼" per side.
- Easy adjusting extruded aluminum leg sets with 4" locking swivel castors.
- 1/3hp 90V DC TEFC motor.
- Gear reducer is sealed and permanently lubricated requiring no service.
- 6-20 FPM variable speed drive (12-40 FPM or 21-70 FPM are available at no charge).
- Timing belt power transmission is enclosed within the conveyor frame.
- 100 lb. maximum load.
- V-guide belt guidance.
- Automatic spring loaded belt tensioning.
- Laced\*, flat PVC belting (blue) with non-slip top surface, FDA approved material. \*(Endless belting is available at no charge)
- 212°F belt temperature resistance.
- Units up to 20' long are shipped fully assembled.

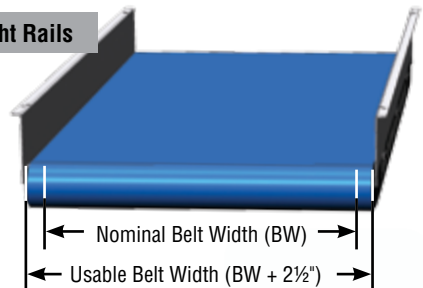
0 to 60 degree adjustability on horizontal to decline models with built-in angle indicator.



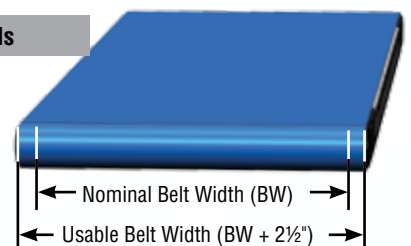
**Standard Rails**



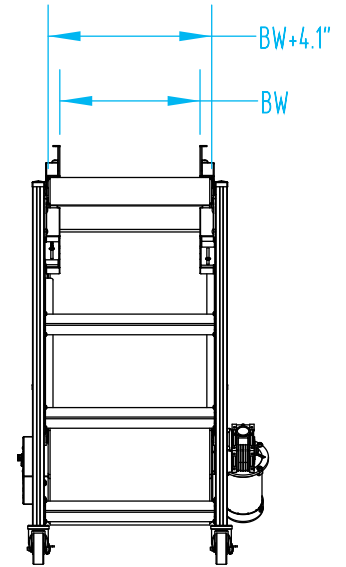
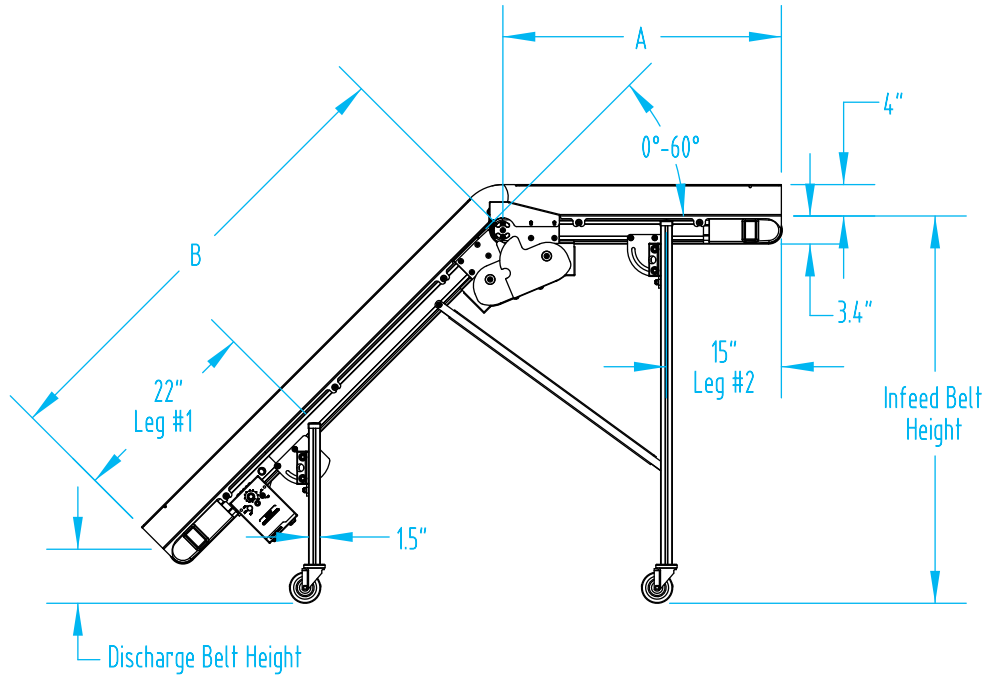
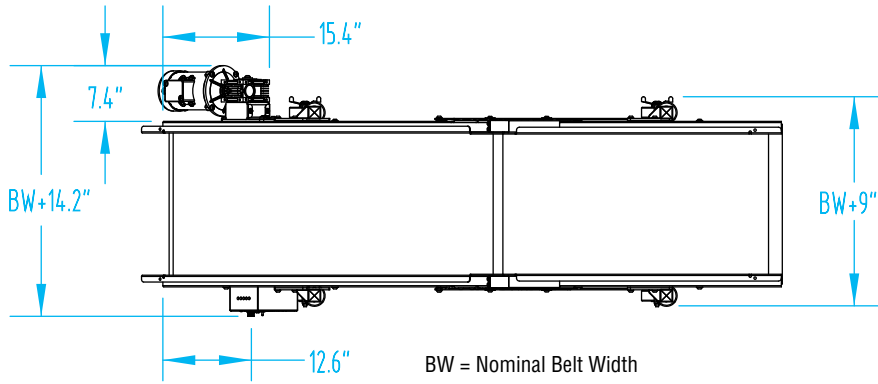
**Straight Rails**



**No Rails**



**QUICKSHIP** →



**Optional indexing control and robot interface**



- Indexing, reversing, and 6-70FPM variable speed functions
- Continuous run mode
- Accepts momentary or maintained signals for indexing and reversing
- Easily adjustable digital timers
- English and Spanish language



EMI designs and builds conveyor mounted custom enclosure cages to your specifications.

# EAZ Model – Z Belt Conveyor

## Extruded Aluminum Frame

### Standard widths: 6", 12", 18", 24"

Available widths: 6"–26" at 2" (50mm) increments

### Standard lengths: 7'–15' at 1' (300mm) increments\*

Available lengths: 7'–15' at 1" (25mm) increments\*

\*Consult your EMI representative for longer lengths

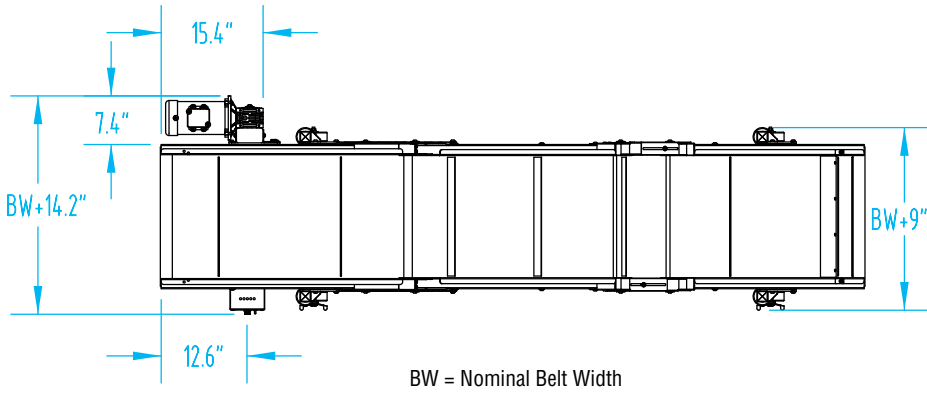
## Features

- Anodized extruded aluminum frame with side channels that accept standard 3/8" hex head bolts/nuts.
- 0–60° adjustability from horizontal to incline sections with built in angle indicator.
- Anodized aluminum side rails 4" high, 90° overlapping the belt 1¼" per side.
- Easy adjusting extruded aluminum leg sets with 4" locking swivel castors.
- 1/3hp 90V DC TEFC motor.
- Gear reducer is sealed and permanently lubricated requiring no service.
- 6-20 FPM variable speed drive (12-40 FPM or 21-70 FPM are available at no charge).
- Timing belt power transmission is enclosed within the conveyor frame.
- 50 lb. maximum load.
- V-guide belt guidance.
- Automatic spring loaded belt tensioning.
- Laced\* polyurethane belting (blue) with 1½" high cleats on 18" centers, FDA approved material. \*(Endless belting is available at no charge)
- 175°F belt temperature resistance.
- Units up to 20' long are shipped fully assembled.

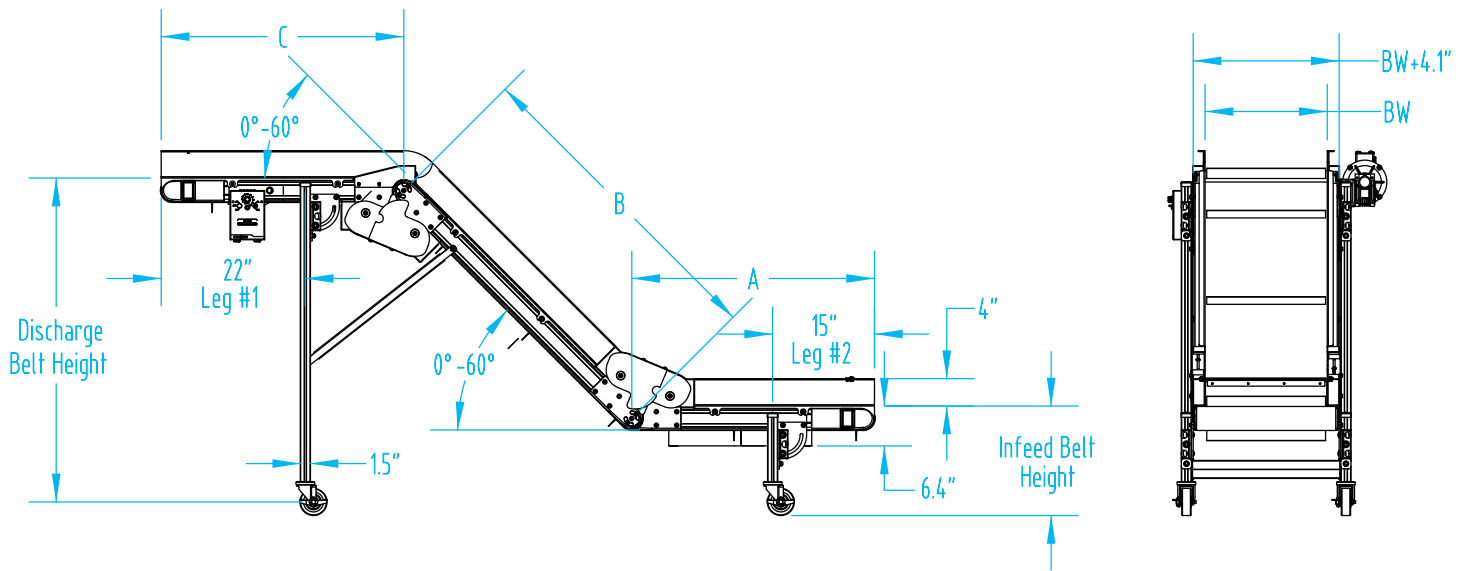


The adjustable angle models (EAZ shown here) can be adjusted to a flat configuration.

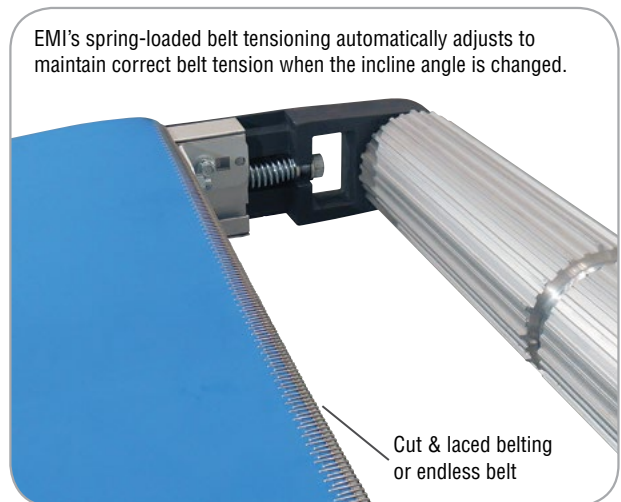
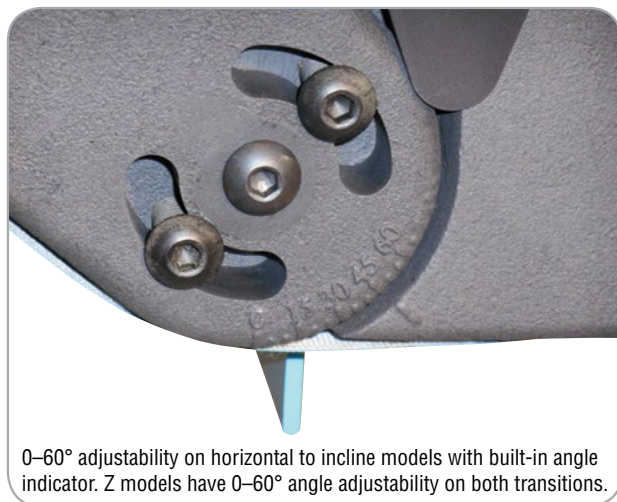




**QUICKSHIP**



\*When Ordering: Minimum length of motor frame section is 3'. Minimum length of intermediate and non-motor sections is 2' each. Total combined lengths of all frame sections cannot exceed 15'.



# Extruded Aluminum Frame Conveyors

The Extruded Aluminum model is EMI's 3rd generation of aluminum conveyors – the culmination of EMI's 20 years experience engineering and building EA conveyors. It utilizes floor space more effectively than other conveyor designs. The new EA conveyor minimizes maintenance and maximizes productivity.

A 3-year limited time warranty is included.



## Extruded Aluminum Features:

**Low Profile External Drives:** Minimize interference when your operators have to work closely around the conveyor.

**Self-Aligning Bearings:** are permanently lubricated and maintenance free.

**Variable Speed:** is standard on all EA conveyor models.

**Automatic Spring-Loaded Belt Tension:** is standard on all models, this keeps the belt properly tensioned and tracking straight and facilitates ease of belt changes.

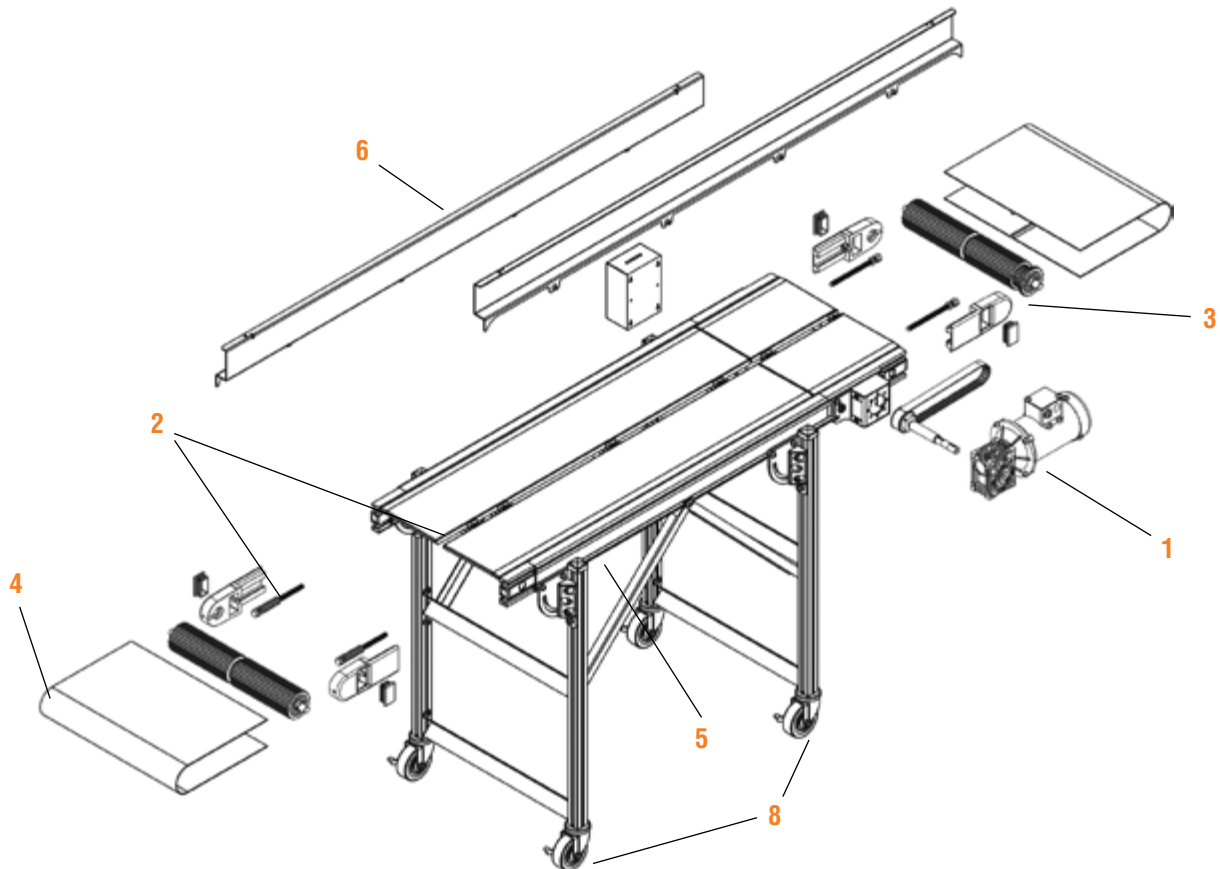
**4 Styles of Power Transmission:** Belt drive is standard. Direct drive, chain drive, and internal drive are also available.

**Edge-to-Edge Polyurethane Belting:** has a tougher carcass compared to PVC and is FDA compliant. Laced belting is standard on all models. Endless belting is available at no charge.

**9/16" Slots in Extruded Frame:** accept standard 3/8" hex head nuts and bolts makes it easy to add peripheral equipment onto the conveyor by simply sliding them into the slots then fasten with standard nuts.

## Extruded Aluminum Frame Belt Conveyor Specifications

- 1 Drive Package:** Includes a 1/3 hp 90V DC TEFC motor with a 6-20 FPM variable speed controller (12-40 FPM or 21-70 FPM are available at no charge). The gear reducer is sealed and permanently lubricated requiring no service. Power transmission is by timing belt that is enclosed within the conveyor frame. 15' of SJ cord with a standard three-prong plug is pre-wired to the starter. Control wiring is contained in liquid-tight conduit and connectors. EA conveyors 3'-33' long have 100 lb. maximum load.
- 2 Belt Tensioning and Guidance:** Automatic spring-loaded belt tensioning is standard on all EA conveyor models. This keeps the belt properly tensioned and tracking straight and facilitates ease of belt changes. V-guided True Track Belt Guidance System comes standard on 3'-33' long conveyors.
- 3 Pulleys and Bearings:** EMI's exclusive EA-model pulleys are 3½" diameter with 1" diameter shafts and incorporate built-in belt traction teeth. The self-aligning bearings are permanently lubricated and maintenance free.
- 4 Belting:** The easy to clean belting is made of FDA approved polyurethane and has temperature resistance up to 175°F. Staple-type belt lacing is standard. Endless belting is available at no charge. Inclined conveyors have bonded flexible cleats that have no bolts or rivets that may tear out.
- 5 Frame:** The frame is clear anodized extruded aluminum with side channels that accept standard 3/8" hex head bolts/nuts. This makes it easy to add peripheral equipment onto the conveyor by sliding hex head bolts into the slots then fastening with standard nuts. When requested, EMI can insert nuts or bolts into the channels when building the conveyor.
- 6 Rails:** 4" high rails are made of 1/8" anodized aluminum and overlap the belt 1¼" per side to ensure small molded parts do not get pinched, damaged, or lost between the rail and the belt. When conveying larger molded parts, non-overlapping rails are available that increase the usable belt width by 2½".
- 7 Shipment:** Conveyors 3'-20' are usually shipped fully assembled, pre-wired, tested, and ready to run (except the legs must be attached by the customer). For your convenience, arrangements can be made for longer conveyors to be shipped assembled.
- 8 Leg Sets:** Easy adjusting extruded aluminum leg sets with 4" and locking swivel castors are included as standard on all EA conveyors. Belt height must be specified.





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