

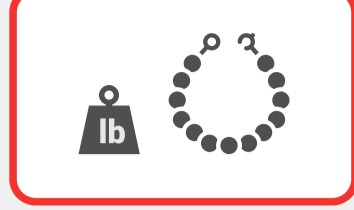
WHAT ARE TIMING BELT CONVEYORS?

THE BEST WAY TO TRANSPORT PRODUCTS PRECISELY AND ACCURATELY

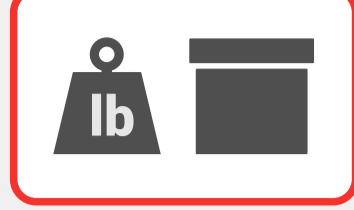
LIGHT AND DAINTY

&

HEAVY AND BULKY

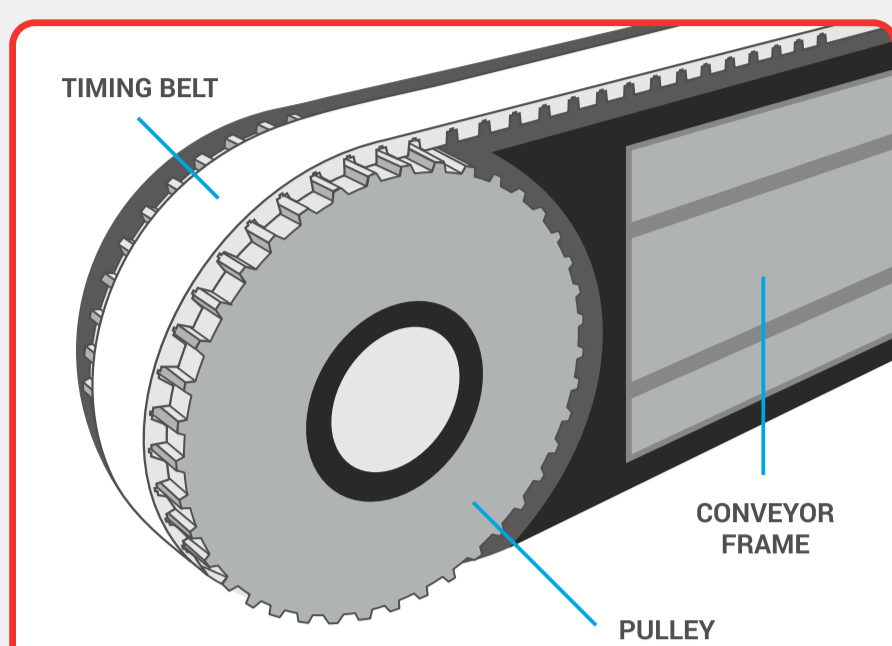


+ EVERYTHING IN BETWEEN +



HOW ARE TIMING BELT CONVEYORS CONSTRUCTED

- 1 TIMING PULLEY (toothed)
- 1 IDLER PULLEY (often another toothed pulled)
- a TIMING BELT (looping around them)



Timing Belt and Pulleys:
Both have teeth, that match each other

Conveyor Frame:
The structure to support the belt and hold the pulleys in place

Electrical Motor:
To power the conveyor

Accessories:
Belt tensioning and tracking, side rails, supports and motor controls

What makes them different from other types of conveyors is THEIR PRECISE TRANSPORT AND POSITION OF PRODUCTS

A DEEPER LOOK INTO TIMING BELTS

TIMING BELTS COME IN A VARIETY OF PITCHES AND SERIES

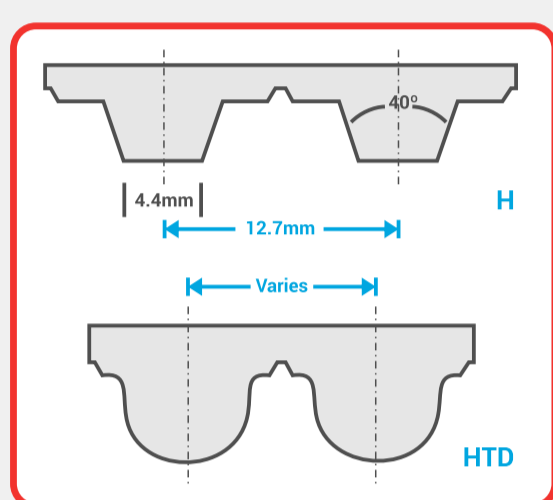
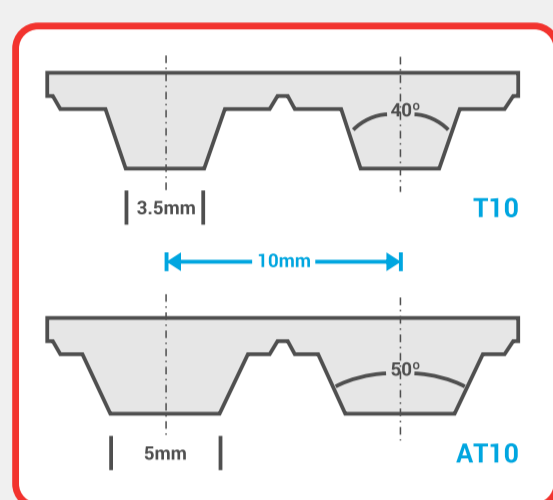
PITCH

&

SERIES

Refers to the spacing of the teeth, from center of tooth to center of tooth.

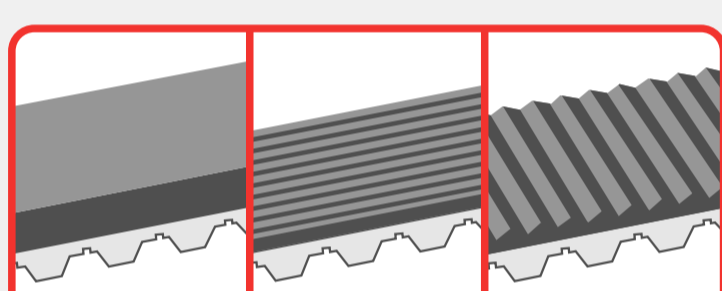
Refers to the style or profile of the tooth which also helps classifying the belt.



The belt strength in timing belts is achieved via tension members (can be aramid or steel) located within the belt's mid-section. FDA approved belts may have stainless steel tension members.

TIMING BELT COVERS AND ATTACHMENTS

CAN HAVE SPECIAL COATINGS AND TOP SURFACES



SPECIAL COATINGS ON THE TOOTH SIDE
To increase belt life and decrease friction.

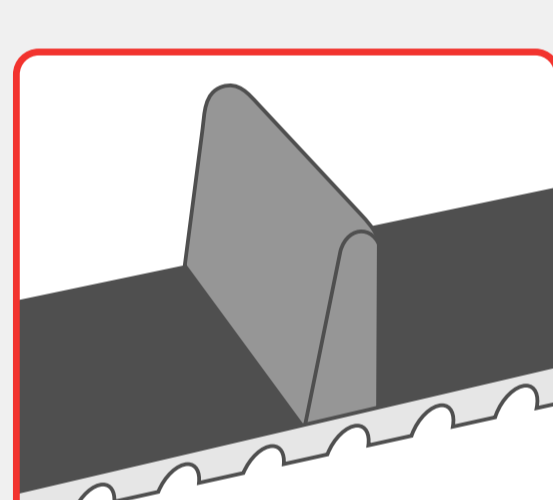
VARIETY OF TOP SURFACES
Everything from a nylon skim coating (for accumulating product) to foam (in a variety of densities) to highly conductive materials.

CAN HAVE DIFFERENT CLEATS AND ATTACHMENTS

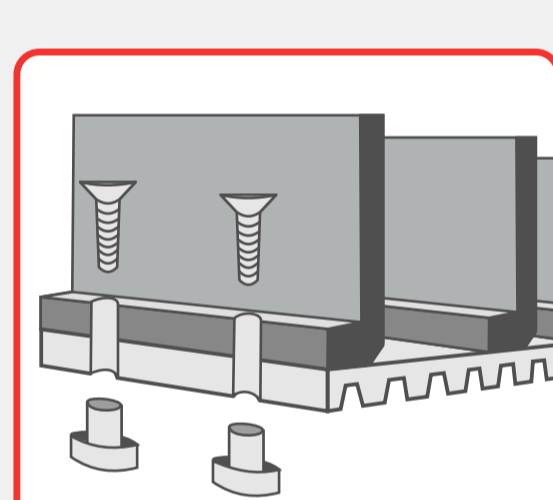
Welded

VS

Convertible



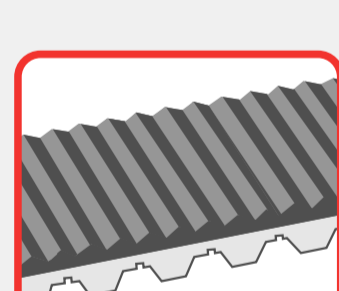
STANDARD or CUSTOM
Cleats and attachments are ultrasonically welded to the belt.



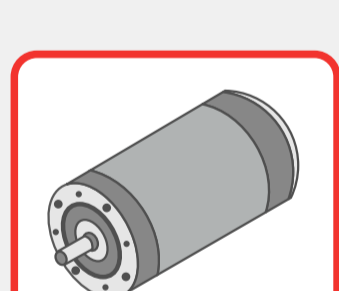
Has a pocket in the tooth of the belt where a threaded insert is placed.
MANY ADVANTAGES:
Replace the attachment vs the whole belt
Change the attachment shape
Change the spacing of the attachments

PRECISION INDEXING CONVEYOR SYSTEMS

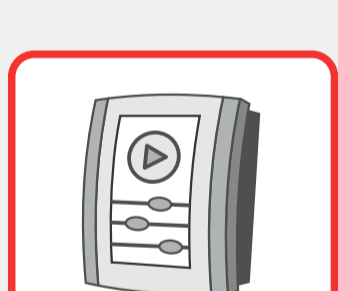
THE OVERALL TOLERANCE, ACCURACY AND REPEATABILITY WILL DEPEND ON MANY FACTORS.



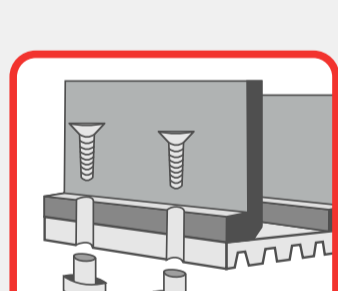
BELT TYPES
Different belt types can provide different levels of precision.



MOTOR CHOICE
Can impact the precision of the conveyor system.



CONTROLS
To create specific motion patterns.

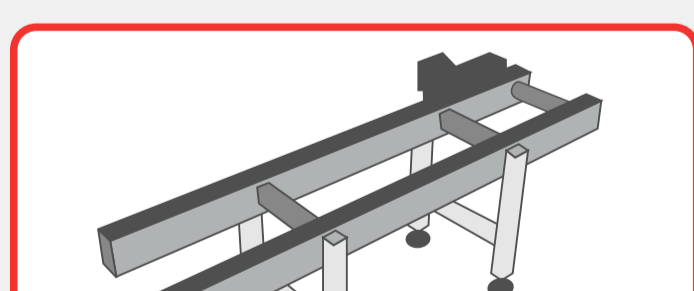


CLEATS & FIXTURES
Products located within fixtures have higher positioning accuracy.

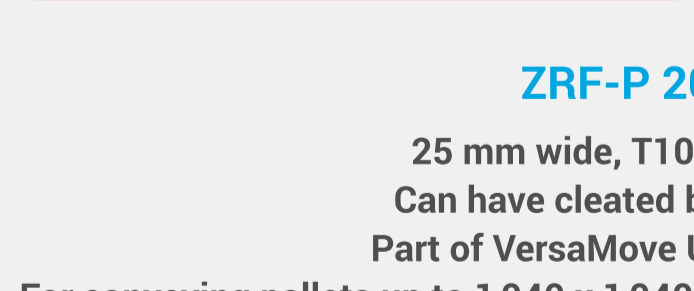
That's why it's best to start the conveyor ordering process, by having a full design review with the conveyor manufacturer.

TIMING BELT CONVEYORS FROM mk North America

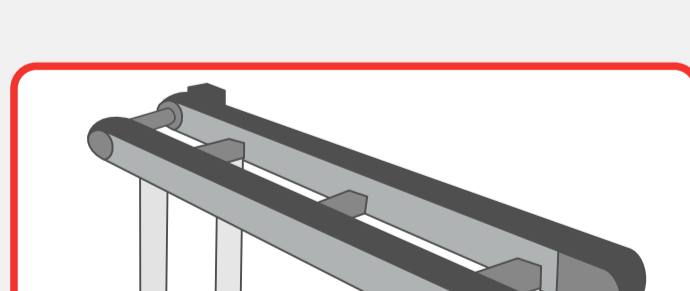
WE HAVE 4 DIFFERENT STYLES



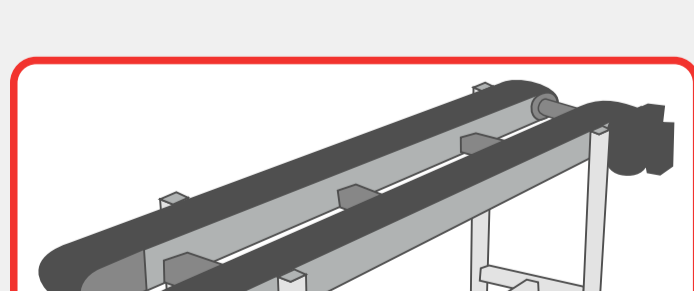
ZRF-P 2045
25 mm wide, T10 belt
Part of VersaMove Standard
For conveying pallets up to 400 x 400 mm
Belt returns within the frame for safer conveyor



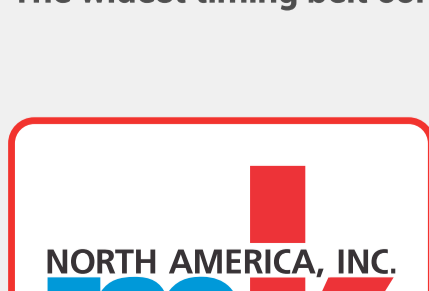
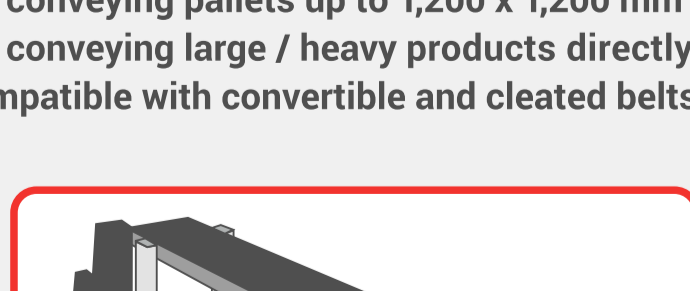
ZRF-P 2010
25 mm wide, T10 belt
Can have cleated belts
Part of VersaMove Ultra
For conveying pallets up to 1,040 x 1,040 mm
Belt returns within the frame for safer conveyor



ZRF-P 2040
AT10 belt
Can have cleated belts
Part of VersaMove Ultra
For conveying pallets up to 1,200 x 1,200 mm
For conveying large / heavy products directly
Compatible with convertible and cleated belts



ZRF-P 3000
WT10 belt
Up to 24-inches wide
Can have cleated belts
For conveying products of all sizes and loads
The widest timing belt conveyor in the industry



All of our timing belt conveyors can be offered in a single lane or with two or more belts driven off one motor. We also offer custom timing belt conveyor to meet specific belt pitch requirements.

To learn more about mk North America's timing belt conveyors or to get started on your next timing belt conveyor project... Contact Us Today!