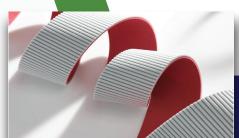


# Timing Belts for Conveying, Packaging and Food Processing Applications







Available Options and Factors to Consider

# Timing Belts for Packaging Applications – Available Options and Factors to Consider

Not all timing belts are alike. Pitches, construction types, profiles, backings and machining help to tailor the belt to the specific needs of packaging and food processing machine manufacturers and end users.

BRECO*flex* CO., L.L.C. recommends spliced and welded timing belts conveying, packaging, and food processing applications knowing that they must exceed the demands of both the packaging machinery OEMs and end users. BRECO*flex* offers timing belt solutions that are proven to be the longest lasting and high-quality on the market today.

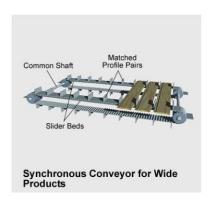
You will find BRECO*flex* belts in machinery for all phases of the packaging process including processing, handling, filling, sorting, labeling, check weighing, packaging, conveying, and more. Polyurethane timing belts can be functionally enhanced with backings, coatings and profiles in any custom configuration.

The most common timing belts for special applications are belts with backings or profiles for conveying, stepping and indexing. Also, form-fill-seal belts, and timing belts made of FDA approved polyurethane for food processing and medical processing.

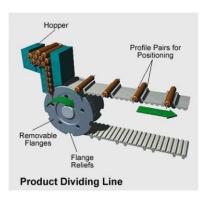
# **Profiles for Conveying, Stepping and Indexing**

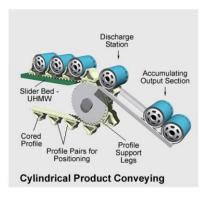
For tasks such as conveying, stepping, indexing, sorting and other similar functions, BRECO*flex* offers over 4000 profile molds which allow for innovative design solutions. Profiles are made of the same abrasion resistant polyurethane as BRECO*flex* belts. Due to their high precision and accuracy, BRECO*flex* timing belts are often used in synchronous conveying applications.

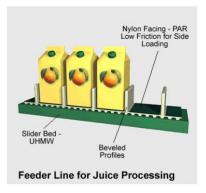
### Some examples include:

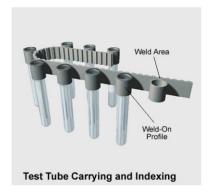


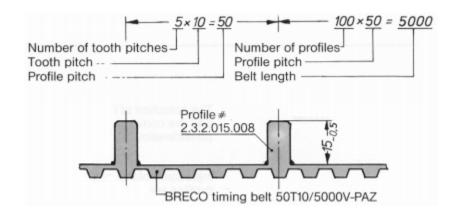












Specifications & Ordering Example

Attaching profiles is commonly done in multiples of the tooth pitch. For example, the weld-on profile position is ideally opposite the tooth, rather than opposite the tooth gap, or in between the tooth and tooth gap.

**Tolerances** - Profile location accuracy is +/-0.5mm (+/-.020") over a belt tooth. Profile height tolerance is -.5mm (-.020")

**Ordering** – For profile belts we highly recommend that you submit a drawing with exact measurements.

Example: 50T10 / 5000 V-PAZ with weld on profile #2.3.2.015.008, number of profiles 100, profile pitch 50mm, weld-on position opposite tooth.

To learn more about design considerations you can view our Profile Video: <a href="https://youtu.be/">https://youtu.be/</a> KyWSmlQwb18?si=Jg3cY2Ol5tZyzKfg or download the Profile Considerations bulletin



# **Backings**

Timing belts with backings offer many different coefficients of friction and hardnesses for conveying any type of product on both flat and inclined planes. Likewise they are suited for multiple other applications such as labeling, marking, feeding, extruding and accumulating.

BRECO*flex* CO., L.L.C. offers backings for general conveying, food processing, high temperature applications and reduced friction applications.

BRECOflex can machine backings to your specifications. Depending on the type of machining, we can reduce lateral movement, or increase friction. We can create lateral notches for incline conveying, or longitudinal grooves for longitudinal conveying. We can also make grooves and holes for vacuum applications.

# **Modification Examples:**



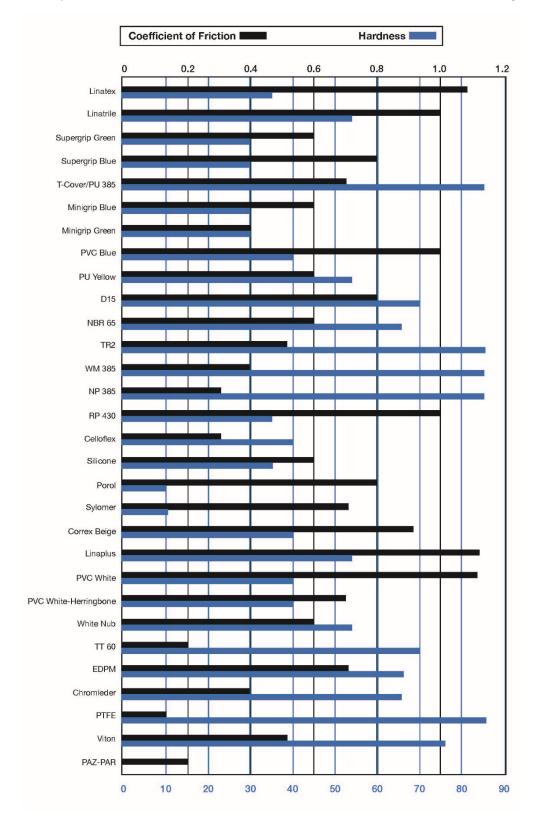




Our Backings Video will give you some insight on factors to consider when choosing a timing belt backing: <a href="https://youtu.be/hMOpE\_P7Xow?si=90jjhFXo40cdKelj">https://youtu.be/hMOpE\_P7Xow?si=90jjhFXo40cdKelj</a>



Coefficient of friction and material hardness is vital in determining the correct backing. The following chart specifies the coefficient of friction and hardness of the most common backing materials:



For complete specs sheets on all backings, download the B208 Backings Catalog or Click Here.

# **Custom Machining on Tooth Side**

Utilizing the tooth side of the belt for conveying applications is also an option. This can include tooth removal, grooves, holes or highly customized shapes. Below is an example of a custom shaped pocket that was machined to hold metal latches in place as they pass over a surface grinder.



# Form-Fill-Seal-Belts



BRECOflex supplies woven endless flat belts are that are specified by many OEMs in their form-fill-seal machines. The available coatings include polyurethane, rubber and silicone with the option of having a single material or combination of materials. They feature seamless backings that provide high functional reliability with a consistent coefficient of friction and excellent wear resistance. There is no minimum order required.

Get replacement belts for Bosch, CFS Aquarius, PMB UVA, Rovema, Ishida and TNA. You can download the list of FFS machines and corresponding belt part numbers <a href="here.">here.</a>

If you are designing new machinery, look to our flat belt solutions as the most flexible option. The combination of carcasses, coatings and machining is virtually unlimited.

To design a custom woven flat belt or toothed belt, use this Application Guide.

# **Food Processing Belts**

<u>BRECOprotect</u><sup>®</sup> timing belts are designed for linear drives, indexing and conveying in the food and medical industry. They are particularly suited for wash-down applications because **BRECOprotect**<sup>®</sup> belts have fully encapsulated high carbon steel tension members making the belt impervious to water, oils and greases. Furthermore, the blue polyurethane is FDA approved and suited for vision inspection systems.



the **B208 Catalog** 

### Features and Benefits:

- Fully encapsulated cords for use in wash down applications.
- Blue polyurethane for food inspection vision systems.
- Easy-to-clean smooth outer surfaces with sealed edges.
- Length tolerance and pretension consistency with varying humidity.
- Steel cord belt strength and stiffness.
- Resistant to oils and greases.
- The ideal solution for linear drives, indexing, conveying food or pharmaceuticals.
- Blue polyurethane for food inspection vision systems.

BRECO*flex* also manufactures FDA approved backings, in several material and texture options to meet customer specifications. Please see pages 10 and 11 of

# BRECOprotect® Timing Belt Availability

BRECO <i>protect</i> available (see below)	16 mm	25 mm	32 mm	50 mm	75 mm	100 mm
AT5 PRO (M/V)	-	X	-	Х	Х	х
AT10 PRO (M/V)	-	х	Х	х	Х	х
AT15 PRO (M/V)	-	X	Х	X	Х	х
AT20 PRO (M/V)	-	X	-	X	Х	х
T10 PRO (M/V)	Х	X	Х	X	Х	х
T20 PRO (M/V)	-	X	-	X	-	-
F3 PRO (only M)	-	x	-	x	-	-

Machine design requires the highest quality components and precision engineering to build a machine that will perform as it needs to. Furthermore, the availability of replacement parts to the end user will keep the machine running as it was designed to.

BRECO*flex* provides the high precision linear drive, conveying and power transmission timing belts and drive component that machine designers demand. For more information or design assistance, you can speak for an application engineer by calling (732)460-9500 or emailing eng@brecoflex.com.