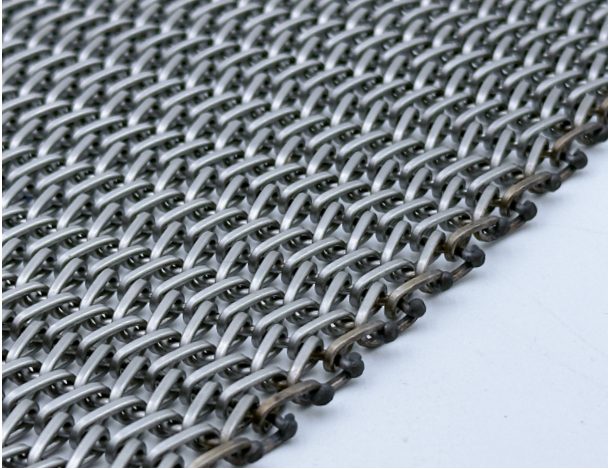


PRECISION BELTING

INSTALLATION GUIDE



The precision belt series of conveyor belting is a complete package of pre-engineered and custom designed mesh belts, positive drive sprockets and machined rolls.

The following information will assist in helping to maximize the smooth operation and long life.

Section 1:

Preparation for installation

Proper conveyor preparation before installation of the precision conveyor belt will ensure trouble free operation in a wide range of applications.

Conveyor Alignment

- Check the conveyor unit to be sure that all rolls, shafts, and supports are **square**, **parallel**, and **level** with the unit and in relation to each other.
- Repair or replace all worn or damaged system components as required.

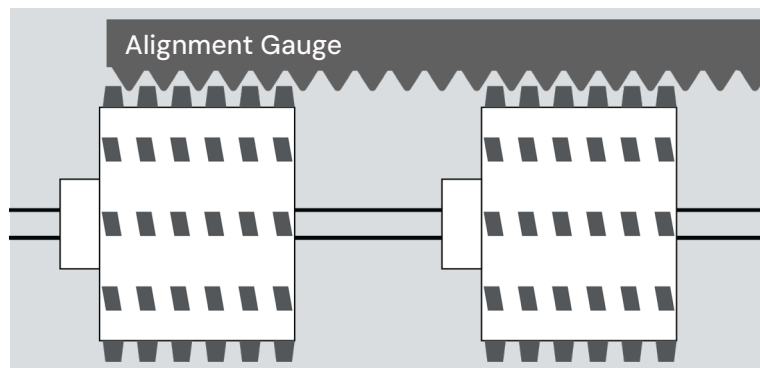


Diagram 1



MAR-CON
— Wire Belt —

Head Office

sales@marconwirebelt.com
604-278-8922
1-877-962-7266

North American Sales

Ken Docktor
ken.docktor@marconwirebelt.com
209-968-0669

Section 2:

Sprocket and Belt Installation

Sprocket Installation

- Slide sprockets on shaft with sprocket hubs facing the same direction (see diagram 2 below).

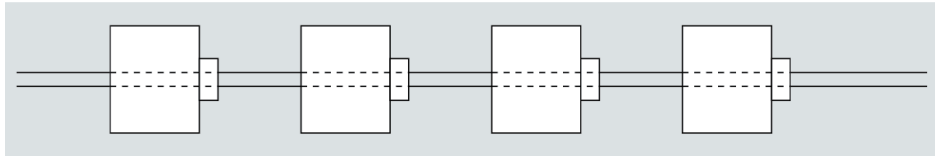


Diagram 2

- Sprocket spacing requirements may vary depending on your application. However, sprockets **should not be spaced more than 6"** apart on the centers. To determine the minimum number of sprockets required per shaft, divide the belt width (inches) by 6, then add 1.
- Utilize a full width section of the mesh belt to align sprockets on the shaft making sure sprocket teeth are located in the center of each mesh opening. Do not use the last mesh opening on either edge of the belt unless instructed to do so.¹
- At the drive end, insert keys and tighten set screws on the drive shaft after the mesh alignment is certain. Recheck with full width mesh belt.
- If sprockets are used on idler shafts, secure sprockets using set screws or set collars. One sprocket is keyed on the center of tail shaft to turn shaft.

¹ Temperatures above 250°F, consult Mar-Con Wire Belt for proper sprocket positioning.

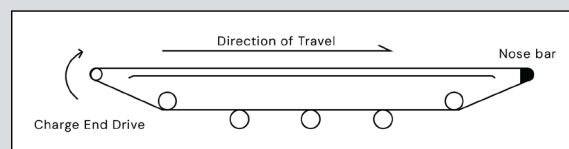
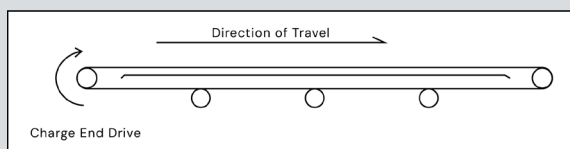
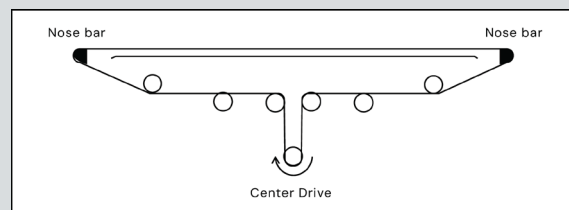
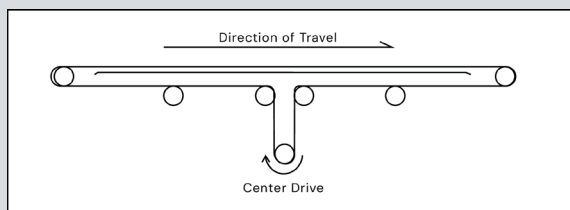
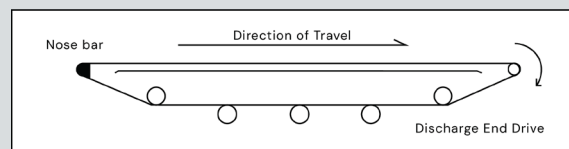
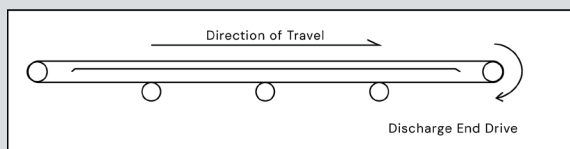


Belt Installation

Belt installation requires care to prevent spirals from rotating and not laying flat on the connector rod. If this occurs, do not apply tension. Instead, gently turn the spiral or shake the belt until the spiral falls into the proper position.

- Feed the belt through the unit **noting the proper direction of travel** indicated by the tag affixed to the belt.
 - Bring the right and left hand spirals together, and connect with a crimp rod supplied with the belt.
Right hand spirals are wound **clockwise**.
Left hand spirals are wound **counter clockwise**.
 - Trim the connector rod back to the edge of the belt. Weld or silver solder the rod to the end of the spiral in a fashion similar to the finish on the rest of the belt.
- ⚠ *Do not bend connector rods into belt unless the belt pitch can be maintained. Spirals are required to bottom out the crimp connector rods in order to match the sprockets.*
- Be sure the wrap of the belt around the sprockets is between 120° to 170°. Wrap should be no more than 170 degrees. This allows maximum drive with smooth engagement and release characteristics from the sprockets.
 - Precision belting is a low tension system. Counter tension is not normally required. Apply just enough tension to the belt to take the slack out of the system.

Typical System Configurations

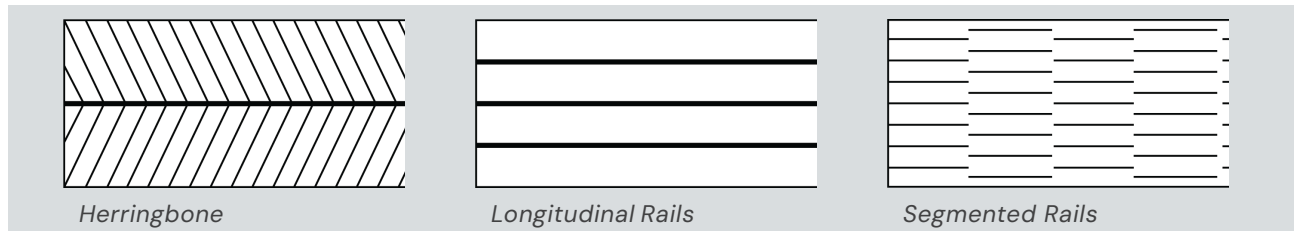


Section 3:

Technical Bulletin

Support Structure

Precision Systems provide the best service when the belt is uniformly supported across both the width and along the length of the system. Examples of typical belt support configurations are shown in diagram 3.



Temperature

Precision Systems can be incorporated in a variety of applications over a great range of temperatures, from cooling and freezing to oven and fryer applications. The amount of heating (expansion) or cooling (contraction) the belt undergoes in the application determines whether precision sprockets or a precision machined roll is required for use in the system.

Speed

Precision Systems can be utilized over a wide range of speeds. The exact minimum or maximum is a function of the configuration of the specific system.

Precision Rolls

Precision rolls are machined from solid stainless steel or steel to exact specifications by computer-controlled milling machinery. This manufacturing process guarantees that precise tolerances are held to ensure an exact match between the belt and precision rolls. The individual teeth of the roll are machined to allow for expansion or contraction of the belt during the application thus ensuring the proper engagement of the teeth into the mesh of the belt. Starting in the centerline of the roll, the individual tooth width is progressively reduced by an amount necessary to accommodate the expansion or contraction of the belt.

Sprocket Information

Precision Sprockets are machined from T-303 stainless steel, UHMW and Acetal Plastic (other materials are available upon request). Face widths range from 2" to 3" generally (up to 6" face widths are available on a custom order basis). Standard hub widths are 1/2". Bore range from 1" to 3" normally, depending on the sprocket diameter. Larger bores are available for large sprockets. Metric bores are readily available. Two set screws are supplied standard with on keyway. Variations in set screws and keyways are available as needed.