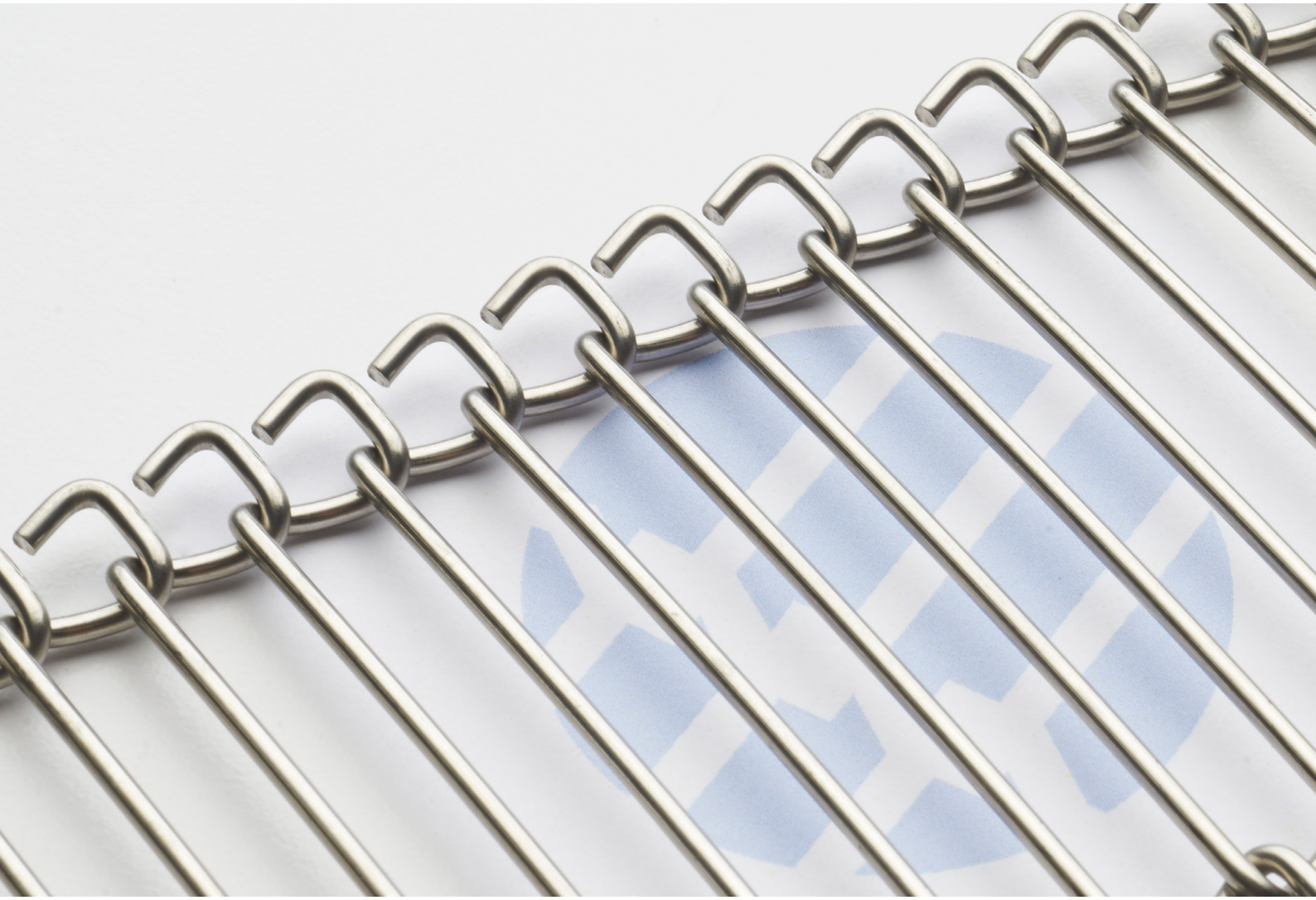
wirebelt®

THE TRUSTED METAL CONVEYOR BELT MANUFACTURER™



FLAT-FLEX® SINGLE LOOP EDGE (SLE)

THE PROVEN CONVEYOR BELT TECHNOLOGY

Full Strand Joining Instructions

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FLAT-FLEX® SINGLE LOOP EDGE (SLE) USING FULL STRAND JOINING METHOD

INSTRUCTIONAL VIDEO

BEFORE YOU BEGIN JOINING

- Slacken any belt take up adjuster to allow the maximum take up capability when belt is fitted.
- If possible move the two ends of the belt to be joined to the discharge end of the conveyor unit. This may help to hold the belt in position while joining.
- Confirm that the edge loops are curving back away from the direction of belt travel (as shown in Diagram 1). If not, check to be sure the belt is not threaded backwards on the conveyor.
- Remove a strand (joining strand) from one end of the belt, or spare belt roll. Lay the strand down between the two belt edges and check to see that the edge loops are going in the same direction as the belt's edge loops. (The strand must also be "right side up" for it to lay flat. You will know immediately if you have installed the joining strand "wrong side up" and will have to start over.)
- If necessary you may want to attach the two ends of the belt together, to maintain stability, using cable ties, soft wire or string in the outside spaces (see diagrams 1&2 below).

Setup

Tools you will need :

- **Safety glasses**
- **Side Cutting (Flat Nose) Pliers**
- **Needle Nose Pliers**
- **Cable ties/soft wire/string (optional)**
- **Universal Cutting Pliers**
- **Wire Straightener**
- **Necessary tools for conveyor belt take up adjuster.**

1 BEGIN JOINING IN THE CENTRE

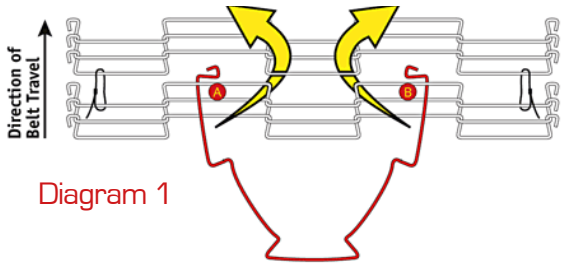


Diagram 1

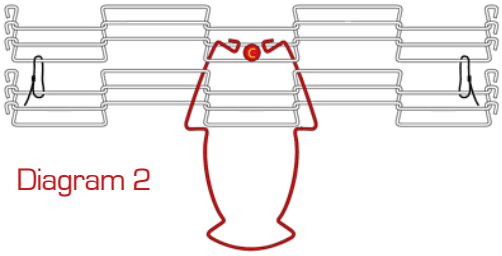


Diagram 2

- **FLEX** the strand from each side enough to INSERT the ends into the two spaces next to the centre space (Spaces A and B - Diagram 1).
- **INSERT** the strand ends up through the centre space of the opposite near side edge (Space C - Diagram 2).
- Pull the ends of the strand through until the centre space "locks" in place.
- Use pliers or the Wire Belt wire straightening tool to **STRAIGHTEN** the wire in the centre space (Once the centre is connected, you may remove the ties holding the belt edges together).



WIRE STRAIGHTENERS 017007

High quality wire straightening tool that removes distortions in the wire and adjust Z bends.

2 WEAVE STRAND TO ONE SIDE

Diagram 3

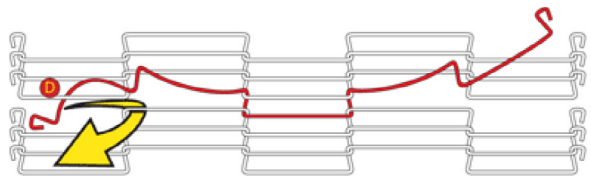
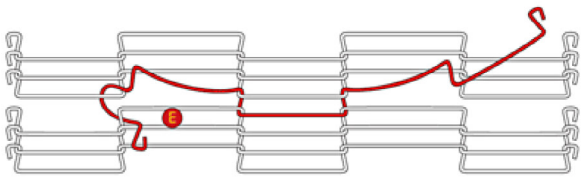


Diagram 4



- FLEX or BEND in the centre of the next space and INSERT it down through and around the Z-bend in this space on the belt end wire closest to you (Space D on Diagram 3).

  NOTE: Always try to avoid bending the wire at the Z-bend!

- **BEND** the wire toward the centre and **INSERT** up through and around the Z-bend next to the centre space (Space E on Diagram 4).
- Pull the strand wire through the mesh and **STRAIGHTEN** it with your pliers or wire straightener.

TECH TIP **Pull the strand in the direction that it goes through the Z-bend links.**

- Repeat these three moves until you reach the side edge of the belt (Diagram 5).

3

Diagram 5

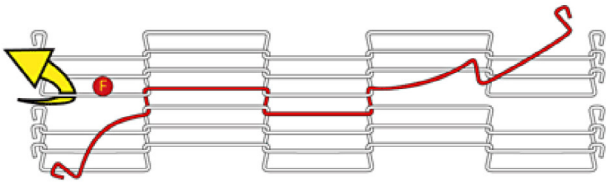
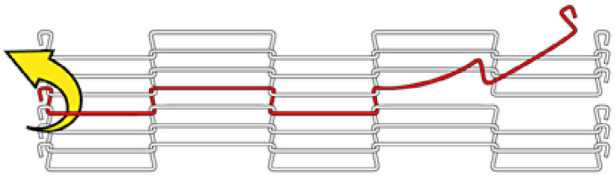


Diagram 6



- Using your pliers, connect the join strand's edge loop to the belt's edge loop on the near edge by hooking the edge loop up through Space F on Diagram 5.
- Connect the edge loop on the far edge of the main belt to the strand's edge loop by gently flexing the outer space strand up through the connected join strand using your Flat Nose or Needle Nose pliers (Diagram 6). For accurate results use offical Wire Belt Side Cutting (Flat Nose) Pliers - 017003.

- **STRAIGHTEN** the strand with your pliers.



SIDE CUTTING (FLAT NOSE) PLIERS 017003
The jaws remain parallel throughout thier range of movement



NEEDLE NOSE PLIERS 017018
Slim, elongated design allows easy access to confined spaces during belt installation.

4 WEAVE STRAND TO THE OTHER SIDE

- Repeat number 3 above, going in the opposite direction, weaving to the other side edge of the belt (Diagrams 3 through 6).
- If you are installing a new belt, you are finished joining. ***See Important notes below.**

5 CHECK DRIVE SHAFT SPROCKET ALIGNMENT

- There should be a typical 3-5mm clearance between all sprockets (and/or blanks) and the Z-bends next to them.
- Check alignment of sprocket teeth with a straight edge (only necessary if the sprockets are not keyed to the Drive Shaft).
- Drive shaft set up should be according to the Standard Arrangement.

Standard Arrangement



6 CHECK DRIVE SHAFT SPROCKET ALIGNMENT

- Z-bends should NOT come in contact with ANY conveyor component (including end rolls, wear strips, transfer support rails or nose bars, etc.).
- Adjust as needed.

7 ADJUST TENSION

- Flat-Flex® is a low tension belt. Use minimal tension... only enough so that drive sprockets properly engage the belt.
- Run conveyor and check to be sure it runs smoothly.

NOTE: Too much tension will cause premature belt failure!

IMPORTANT NOTES

- Avoid permanent deformation of the 'Z' form links when joining. To assist it may be necessary to place a bend in the wire space adjacent to the space being woven; however you must ensure that this wire bend is straightened before continuing the joining operation. Restraightening of wires at this stage or at the end of joining can be achieved using the flat end or needle nose pliers or wire straightener.
- Avoid any bending of the join strand wire in their vertical plane. Any necessary bending of the wire strand should take place in the horizontal plane.
- For wider belts it may be necessary to secure the 2 ends together at more regular intervals across the belt which can be removed as the strand is woven towards the outside edge.



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