

## INSTALLATION FOR CAM-GRID<sup>®</sup> BELTING

*Tools Required: Welding torch, bolt cutters, hacksaw, hand grinder, portable welder or soldering rig, pliers, round file, safety shield, C-Clamp, Vise-Grips, screw driver*

**CAUTION:** Improper installation procedures can cause premature failures, damage to belt or conveyor, reduced performance, or unnecessary downtime.

**SAFETY WARNING:** Never attempt installation or maintenance on a moving conveyor belt. Conveyor must be "off" with the power source locked out. Always wear proper safety equipment when performing installation or maintenance. Keep clear of moving conveyor belts at all times.

1. CAM-GRID Belting is normally shipped in 50-foot rolls. In order to make the belt endless, connect one or more sections of belting together. To obtain optimum performance, it is recommended that the following procedure be used:

- a. The belt should be placed on the conveyor with proper orientation to the direction of travel (*Figure 1*).
- b. Insert the threaded connector through the links (and mesh when present, insuring that the pig tail and mesh wires of the adjacent spirals alternate). Attach nut. Insure that the nut does not protrude farther than the adjacent upset welds. Remove excess thread length with a hacksaw or hand grinder.



*Figure 1*

- c. Using filler material recommended for type 304 (306, 308) or silver solder, weld upset head and nut in the same fashion as the other links and weld (or silver solder) the insides of both links attempting to achieve the same weld size and shape as the factory weld.
- d. Deburr welds to button head surface leaving no sharp edges to cut plastic drive bars (Nut and threaded edges should be melted smooth with a welding torch).

2. Drive Shaft Sprockets:

- a. Sprockets are required on the drive shaft in line with the links. Both sprockets must be keyed.
- b. Intermediate support rollers or discs are required to support the belt between sprockets.

3. Tail Sprockets (if tail sprockets are used):

- a. Install key, setscrew, and locking collars on one sprocket only.
- b. The other tail sprocket should be installed without key or setscrew. Collars should be placed on both sides of each sprocket with 1/32" clearance between collar and sprocket.

# MAINTENANCE

## FOR CAM-GRID® BELTING

Following are some general recommendations for achieving optimum performance from your CAM-GRID Belting.

1. Periodically inspect belt for damage, excessive sag, or interference with the conveyor structure.

**During the life of the belt, it may become necessary to replace a damaged belt section or shorten the belt. In such cases, the following procedure is recommended:**

Separate the belt at a low tension area where it is convenient to work.

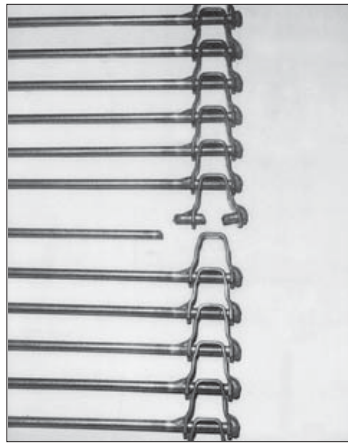


Figure 1



Figure 2

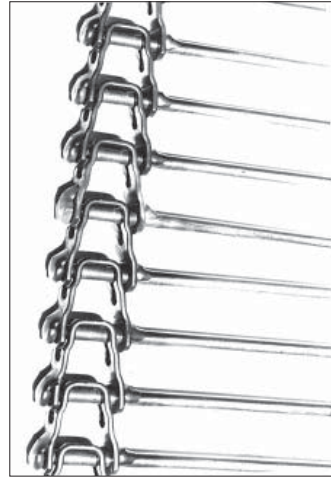
**STEP 1** — Cut through and separate as shown. (*Figure 1*)

**STEP 2** — Grind or saw outside weld (*as shown in Figure 2*). (Fix link with Vise Grip, or screw driver if possible). Grind or saw inside weld in similar fashion.

**STEP 3** — Carefully grind, or file excess weld.

**STEP 4** — Rejoin the belt by inserting the threaded connector through the links (and mesh when present, insuring that the pig tail and mesh wires of the adjacent spirals alternate). Attach nut. Insure that the nut does not protrude farther than the adjacent upset welds. Remove excess thread length with a hacksaw or hand grinder.

**STEP 5** — Weld (or solder) outside and inside welds. Using filler material recommended for type 304 (306, 308) or silver solder, weld upset head and nut in the same fashion as the other links and weld (or silver solder) the insides of both links attempting to achieve the same weld size and shape as the factory weld.



Welded Belt

**STEP 6** — Deburr welds to button head surface leaving no sharp edges to cut plastic drive bars (Nut and threaded edges should be melted smooth with a welding torch).

2. Operation of the belt with severely worn sprockets may result in abnormal belt wear. Sprockets should be periodically checked and replaced when worn.
3. CAM-GRID turn belts and spiral cage belts:

Normally the outer edge of all turn belts will wear faster than the inner edge. Obvious "stretch" on one side of a belt in slack areas indicates the need to "flip" the belt side for side. Under normal conditions, the belts should be flipped to equalize belt stress after 4,000 to 6,000 operating hours. In heavily loaded or high speed operations, the belt should be flipped every 6 months regardless of operating hours. *Note: Not all spiral system belts can be flipped. Edge construction must be the same on both sides to permit flipping. Tight radius belts can not be flipped.*

4. Belt life is directly related to system cleanliness and lubrication. The belt should be kept clean and free from foreign objects. Under certain circumstances wear strips should be lubricated on a periodic basis.

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