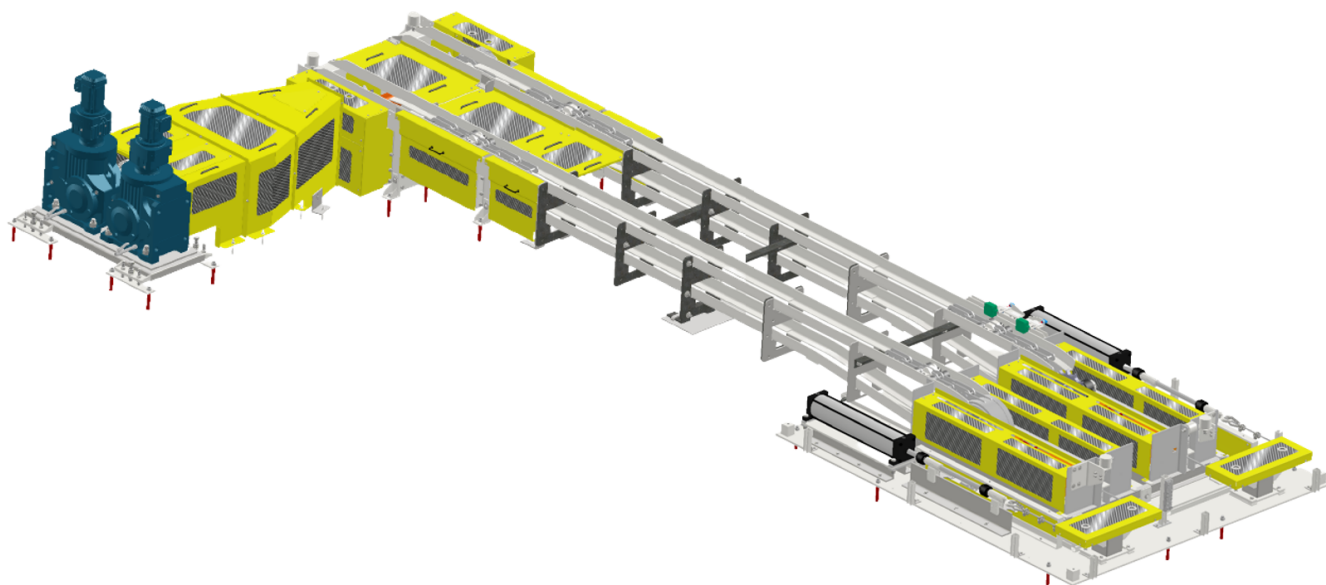


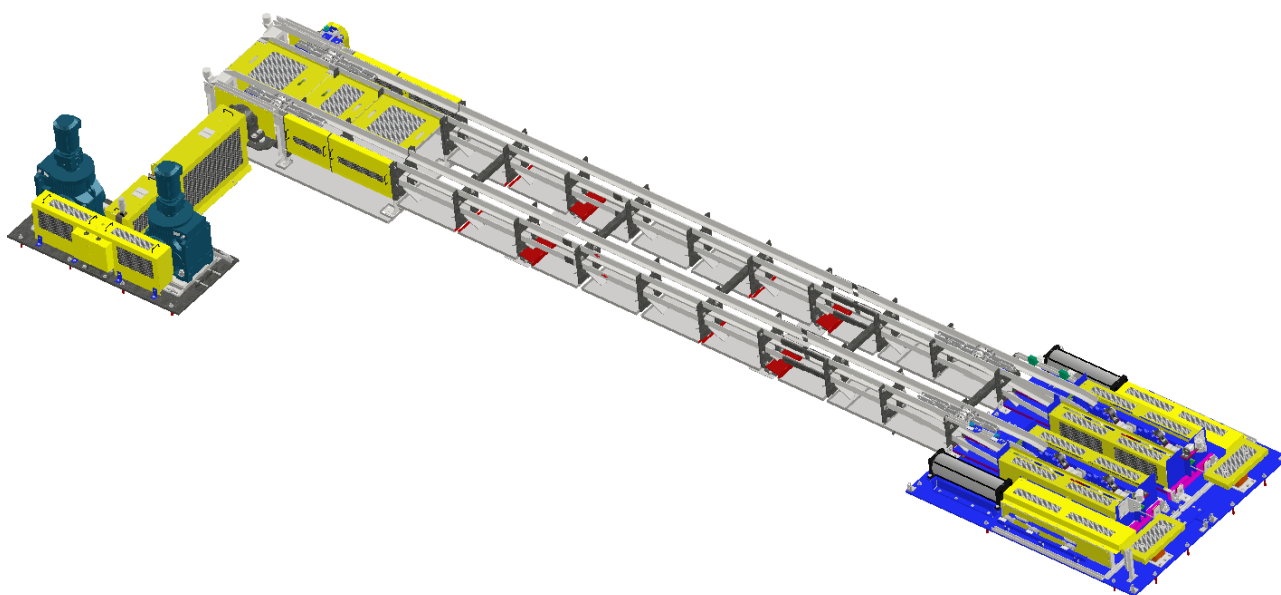
2-Strand Oven Chain System Components

Your Asset system contains the following major components:

- **2-Strand Oven Chain**
- **2-Strand Oven Chain Direct Coupling Drive Unit**
- **2-Strand Oven Chain Indirect Coupling Drive Unit**
- **2-Strand Oven Chain Take-Up Unit**

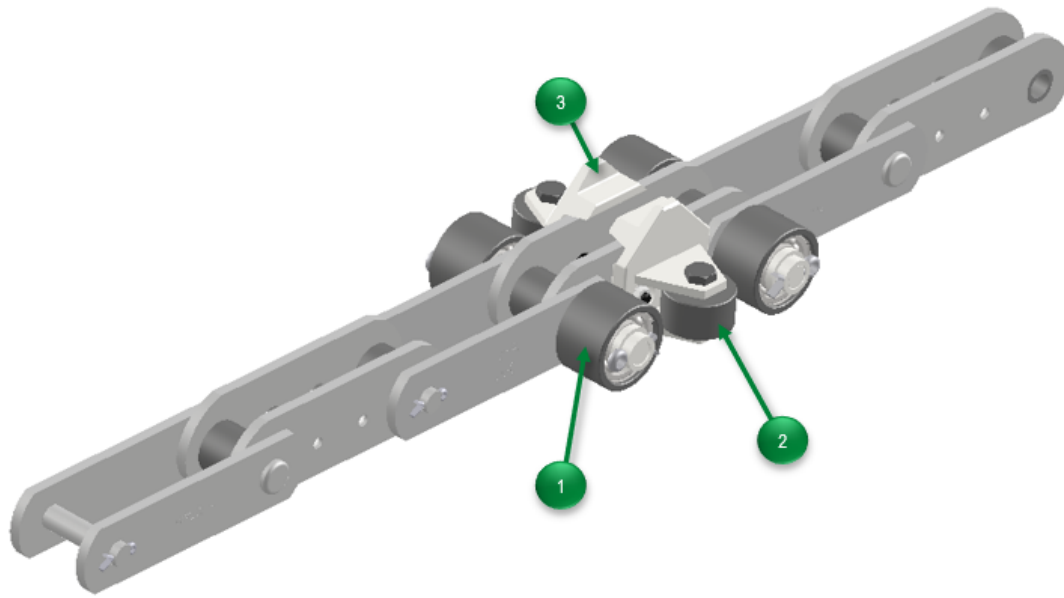


▲ 2-Strand Oven Chain Direct Coupling Drive Unit



▲ 2-Strand Oven Chain Indirect Coupling Drive Unit

2-Strand Oven Chain



1 Roller

2 Guide Roller

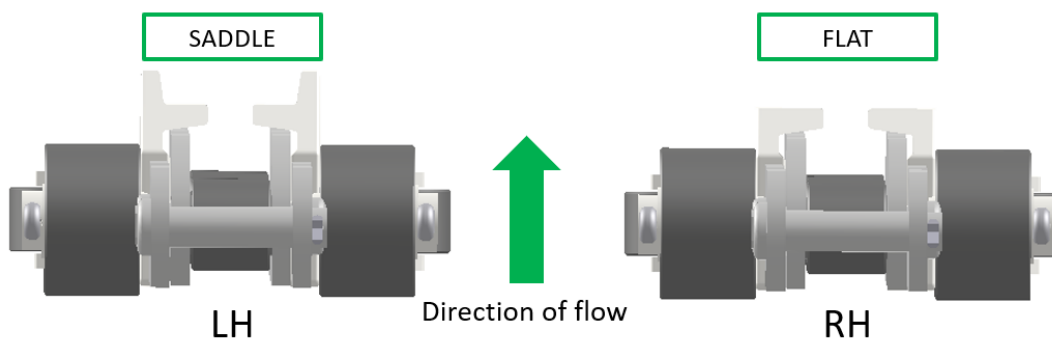
3 Skid Guide

2-Strand Oven Chain Overview

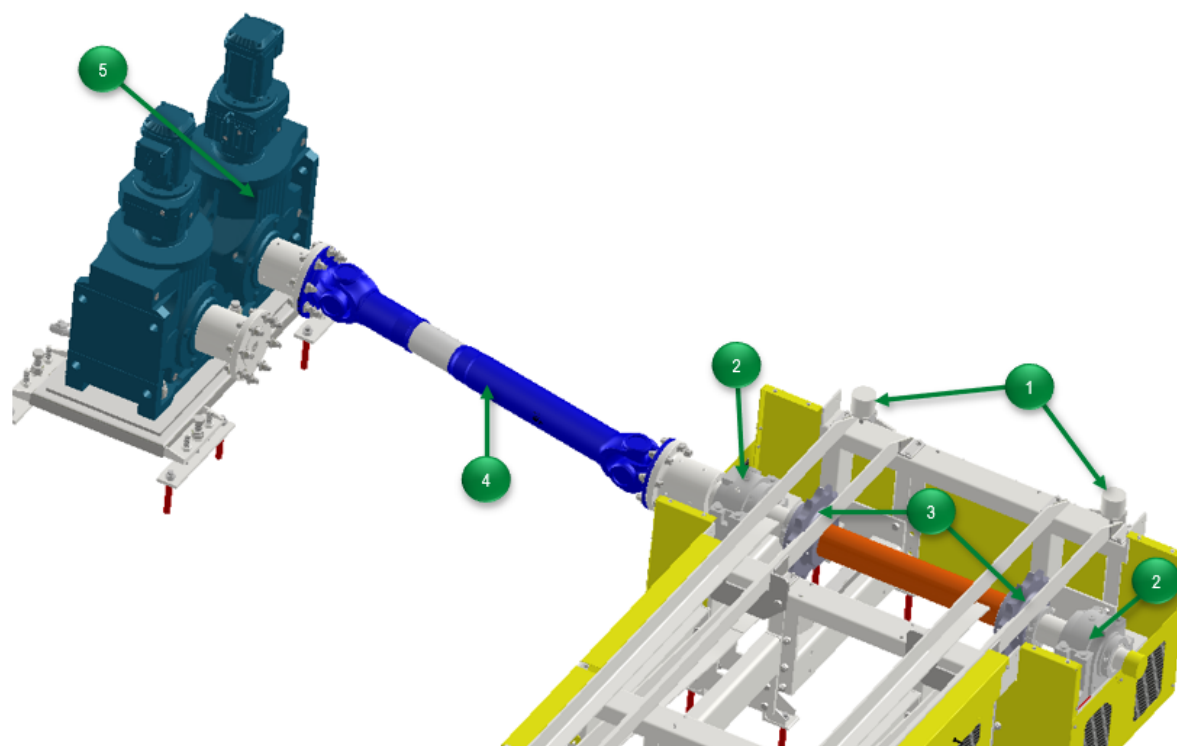
The chain for this conveyor is specific to the oven and runs on two tracks. The skid engages with the skid guides that are mounted to the top of the chain as it traverses the length of the conveyor. The left-hand and right-hand chains have two different skid guide styles outlined in the diagram below. Each unit of the chain has a pair of ball bearing rollers secured in the front and rear of each bracket. On the sides are guide rollers that may interact with the walls of the track as the chain is pulled along.



▲ Skid guide flat style



2-Strand Oven Chain Direct Drive Unit



1 Guide Roller

3 Drive Sprocket

5 Gearmotor

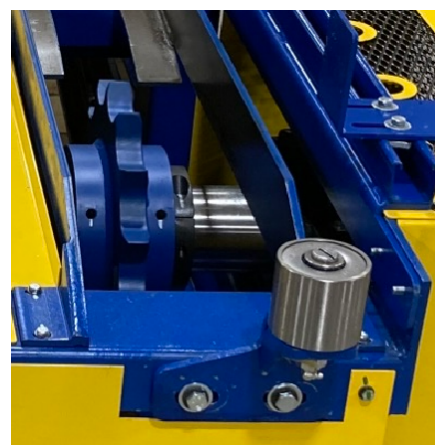
2 Split Block Bearing

4 Cardan Shaft

2-Strand Oven Chain Direct Coupling Drive Unit Overview

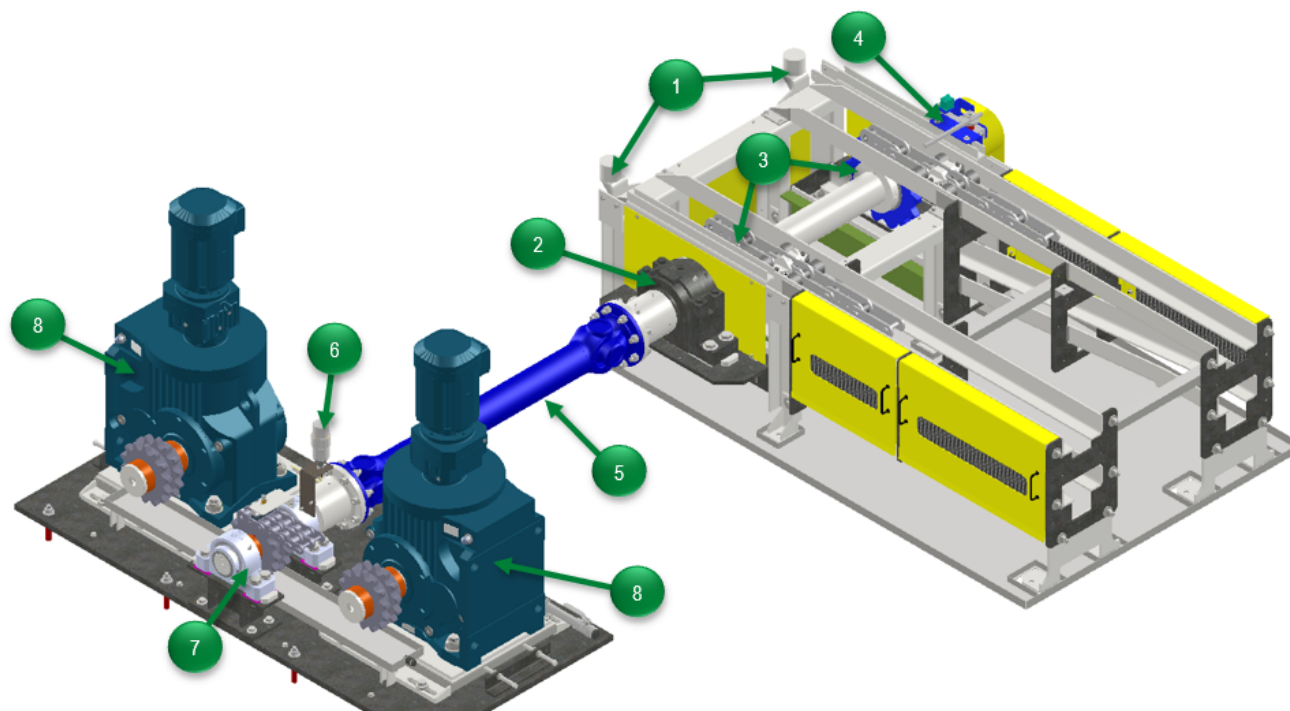
This chain conveyor style can be found in the Top Coat, Prime, and Color ovens. These conveyors have a double chain that is driven by one of two external mounted gearmotors. The gearmotors are identified as a main and standby. The active gearmotor can be changed by mounting the cardan shaft to the appropriate gearmotor companion flange. The cardan shaft transfers momentum to the drive shaft that is supported by two split block bearings mounted on either end of the shaft.

The chain underside engages with the teeth on the drive sprockets to provide forward momentum on the conveyor. As the chain is pulled along the track, the chain rollers move along the frame that run the length of the conveyor. As the skid leaves the chain conveyor, a pair of guide rollers correct alignment if needed for proper transfer to the next part of the system.



▲ Drive Sprocket and Guide Roller

2-Strand Oven Chain Indirect Drive Unit



1 Guide Roller

4 Limit Switch

7 Pillow Block Bearing

2 Split Block Bearing

5 Cardan Shaft

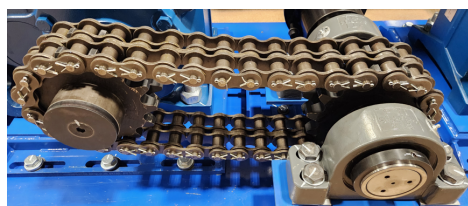
8 Gearmotor

3 Drive Sprocket

6 Lubrication Cartridge

2-Strand Oven Chain Indirect Coupling Drive Unit Overview

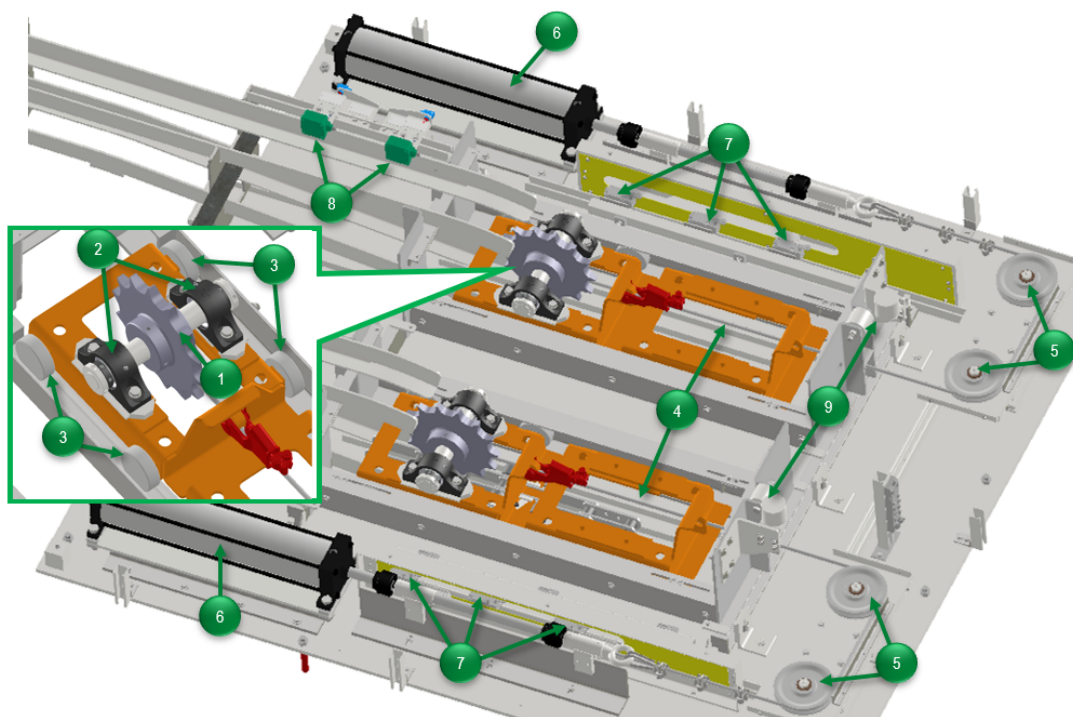
This chain conveyor style can be found in the ED ovens. These chain conveyors have a double chain that is driven by one of two external mounted gearmotors. The gearmotors are identified as a main and standby. This style of chain conveyor is different in that there are additional components at the gearmotors for the coupling. There is a chain coupler with an installed lubrication cartridge. The active gearmotor can be altered by disconnecting the coupler chain from the main and reconnected to the standby. A set of pillow block bearings are installed on either side of the coupler sprocket to maintain stability.



▲ Drive Sprocket and Guide Roller

The cardan shaft transfers momentum to the drive shaft that is supported by two split block bearings mounted on either end of the shaft. The chain underside engages with the teeth on the drive sprockets to provide forward momentum on the conveyor. As the chain is pulled along the track, the chain rollers move along the frame that runs the length of the conveyor. As the skid leaves the chain conveyor, a limit switch is engaged to monitor the skid as it exists to the adjacent conveyor. A pair of guide rollers correct alignment if needed for proper transfer to the next conveyor of the system.

2-Strand Oven Chain Take-Up Unit



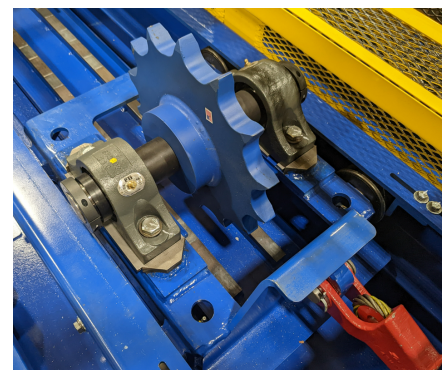
- | | | |
|-------------------------|-------------|------------------------|
| 1 Take-Up Sprocket | 4 Wire Rope | 7 Tension Limit Switch |
| 2 Pillow Block Bearing | 5 Pulley | 8 Prox Switch |
| 3 Floating Frame Roller | 6 Cylinder | 9 Guide Rollers |

2-Strand Oven Chain Take-Up Unit Overview

The take-up unit is the beginning of the chain conveyor where the tension of the chain is maintained. The chain engages with the teeth of the take-up sprockets and begins its journey to the drive unit. The take-up sprockets are mounted on separate float frame assemblies each with a shaft, pair of pillow block bearings, and a set of four rollers. These floating frames will adjust the tension of the chain as it grows over time.

Each float frame is secured to wire rope via a terminal connector. The wire rope is fed through two pulleys and anchored at a connector for each cylinder that ultimately maintains the chains tension. Several tension limit switches are installed to monitor the tension via a weldment on the cylinder terminal connector.

As the skid begins its travel, it engages with the chain for forward momentum and as it enters the take-up unit, the skid is lined up via the guide rollers for proper alignment as it travels.



▲ Take-up float frame assembly