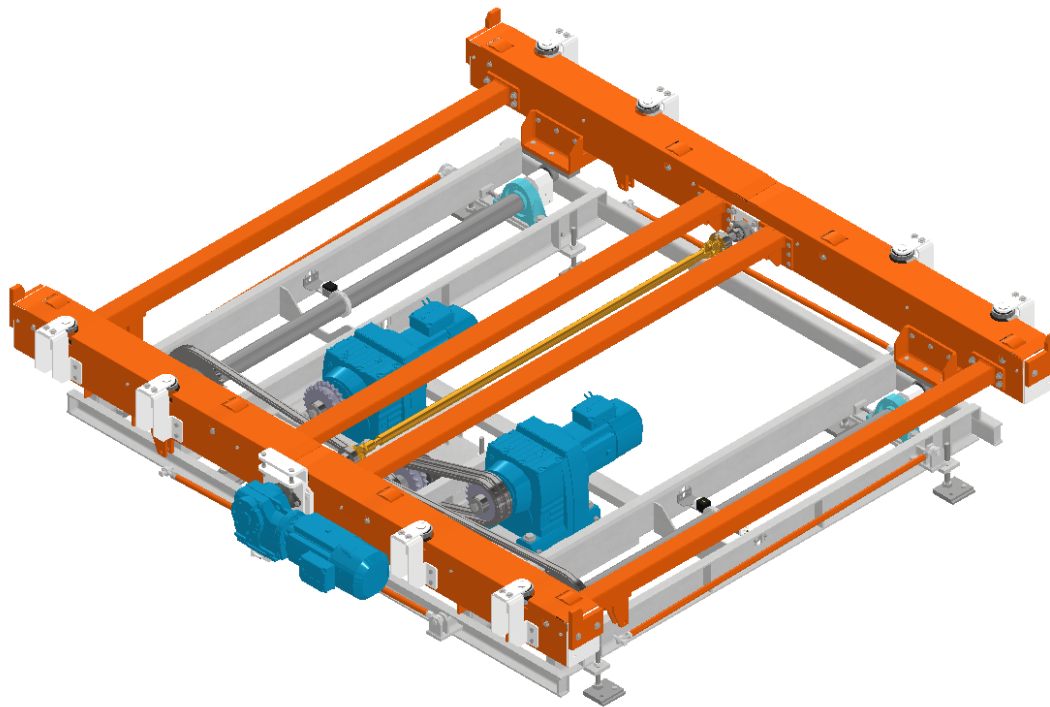


# Right Angle Transfer - Components



## Right Angle Transfer Overview

The Right Angle Transfer (RAT) consists of an Eccentric Lift Table with a Skillet Power Roll Bed mounted on it.

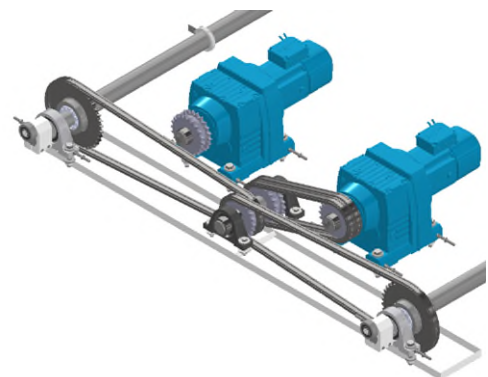
The frame consists of box section and angle steel that is fixed to the floor by adjustable feet. It holds the pillow block bearings for the shafts, the roller brackets of the guide rollers, and the drive motors.


The eccentric shafts are supported by pillow block bearings and are equipped with chain pulleys, eccentrics, and cam rollers. The cam rollers move within rails mounted to the attached Power Roll Bed.

At drive side cam rollers are eccentrically screwed with drive pulleys. The twofold distance between cam roller and the center of drive shaft is the height of stroke of the table.

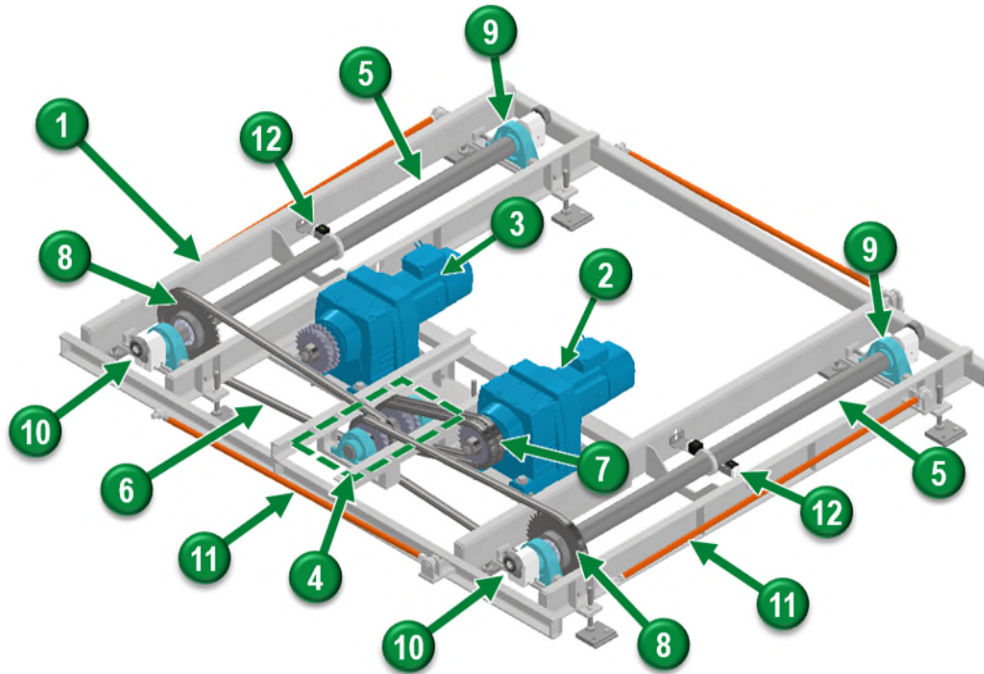
The two shafts are driven by two chains which are both driven by the central jack shaft assembly. The jack shaft is in turn driven by the drive pulley fixed to the motor.

Typically, the 2-position eccentric Lift Table or Hold Table is mounted between the two belts of the Cross-Transfer conveyor. The Lift Table descends to its lowest position to accept the transported goods, so that the Cross-Transfer conveyor can place the skid above the Power Roll Bed on the Lift table.



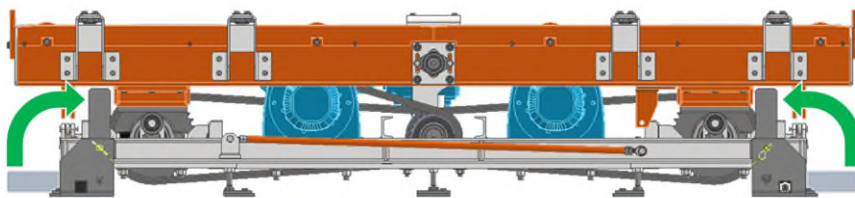
 *Render of the chain structure.*

## Right Angle Transfer – Lift Table Components

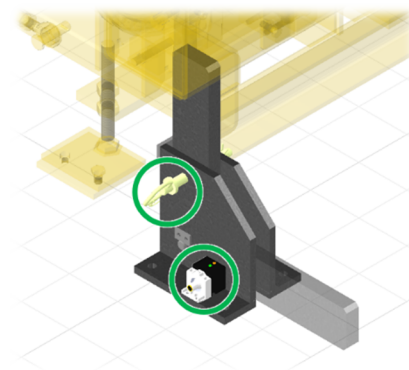


- |                              |                          |                               |
|------------------------------|--------------------------|-------------------------------|
| <b>1</b> Frame               | <b>2</b> Main Gearmotor  | <b>3</b> Standby Gearmotor    |
| <b>4</b> Jack Shaft Assembly | <b>5</b> Eccentric Shaft | <b>6</b> Chain                |
| <b>7</b> Drive Sprocket      | <b>8</b> Driven Sprocket | <b>9</b> Pillow Block Bearing |
| <b>10</b> Boggie Wheel       | <b>11</b> Push Rod       | <b>12</b> Proximity Switches  |

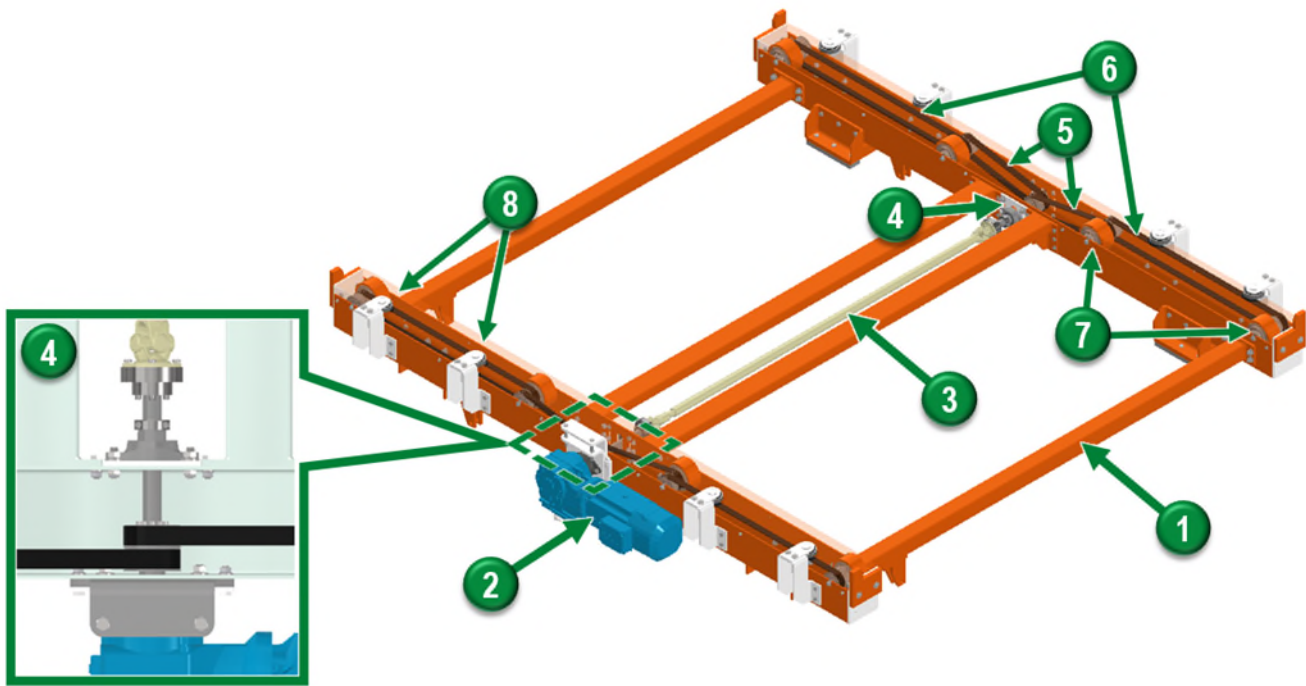
### Right Angle Transfer – Safety Locks



The Right Angle Transfer is equipped with four safety locks located at each corner of the assembly. Each lock is equipped with a locking pin and a sensor to detect when the lock is not in use. The safety locks should be in the DOWN position unless maintenance is being performed on the conveyor.



## Skillet Power Roll Bed Components (Mounted on Lift Table)



▲ Frame X-Rayed to show internal structure.

1	Frame	2	Gearmotor	3	Cardan Shaft
4	Drive/Driven Shaft Assembly	5	Drive Belt	6	Driven Belt
7	Driven Rollers	8	Side Guides		

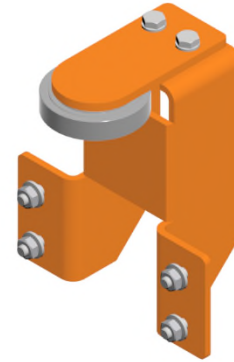
## Skillet Power Roll Bed Overview (Mounted on Lift Table)

Power Roll Beds are a major element of FATA Automation’s Skid Conveyor Systems. The products are modular in design using common components such as motors, belts, rollers, switches, cords, and trunk cables as a complete package.

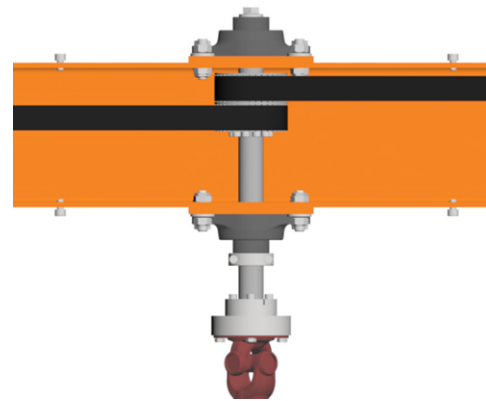
The side frame of a Skillet Power Roll Bed is made of bended C-profile that mounts the carrying rollers.

The gearmotor is connected to adjacent drive rollers with its double tooth pulley fitted to the motor shaft and they in turn are connected to the driven rollers and timing belts to transport skids along the table.

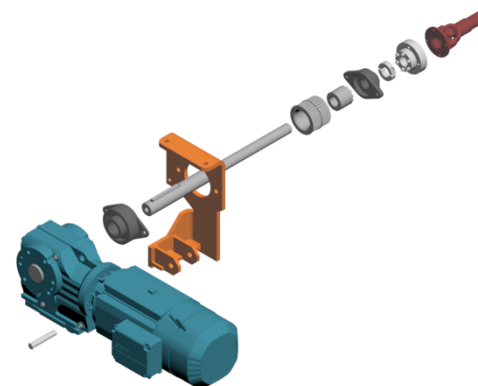
The “Skillet” Power Roll Bed features a cardan shaft connected to the drive shaft which connects to the opposite end of the frame, which features another shaft assembly to turn more sets of rollers and belts.



▲ Side-mounted guide wheel



▲ Top-down view of driven-side shaft assembly.



▲ Exploded view of motor-side drive shaft assembly.