

## Application Information

## Timing Pick & Place Robots on Indexing Conveyors

Electro Cam Corp. Controls are often used on Indexing Pick & Place Robotic Machinery to increase production and quality!

## A Common Problem

A problem common to most manufacturers of indexing conveyors, especially those used with pick & place robots, is finding a cost effective method of "timing" all the functions that the machine performs.

Traditionally, electromechanical snap switches have been used, but they are difficult to locate, require installation of actuators to trip them, and require separate wire runs for each switch. They can also vibrate loose, get contaminated or damaged (since they are generally mounted near the work piece) and require periodic replacement.

Adjustable cam operated controls that employ electromechanical switches have many of the same inherent problems.

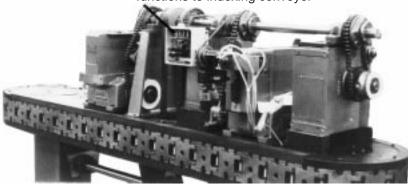
## Electro Cam's Solution!

The solution to the problem is a single Electro Cam solid state cam control!

Electro Cam controls feature interruptor discs and photo-electric sensors to give non-contact switching and easy adjustment. Whether the Electro Cam actuates the grippers and other control functions directly, or through a Programmable Logic Controller, the units are initially cost effective, simplify installation/setup, and minimize maintenance.

For assistance with your application, please contact the factory.





Camco (the Commercial Cam Division of Emerson Electric) is a leading manufacturer of precision indexing conveyors and pick & place robots.

They selected an Electro Cam (8) output unit (EC-3008) as the control for a machine they built for a customer that assembles automotive windshield wiper motors. The Camco machine has (4) linear pick & place stations. The (8) outputs from the centrally mounted Electro Cam unit synchronize all gripper and other central functions performed by the robots. The robots install magnets around the motor core, assemble the housing around the motor, inject adhesive to hold the assembly together, and perform the unload of the assembly onto another conveyor.

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