Customer: EWAB
Application: Automotive Conveyor System
Product Used: PositionServo Drive

Synchronized PositionServos Move Heavy Production Line

EWAB Engineering’s CS2000 conveyor system is designed for moving heavy objects up to 3306 lbs. along a production line process. A recent project required a carrier system for the automotive industry capable of moving very precisely and with variable speed.

Due to the fact that high loads require high power, EWAB encountered a space issue. The space available allowed for a series of small motors. Fitting a normal standard motor was not possible due to the limited space. Another constant on the carrier system was component cost which had to be kept under control to meet the target pricing of the entire conveyor system.

Four Lenze-AC Tech PositionServo drives provided the simple solution. The motors had to be driven at exactly the same speed to ensure a smooth conveyor movement. The PositionServo drives are used in electrical shaft mode in order to remain completely synchronous. A frequency inverter would not allow the precision of control, but the low purchase cost of the PositionServo drives meant that they provided the perfect cost-performance solution.

Controlling speed of the line between .13 - 5.25 in/sec was also made easy by controlling the drives via a Siemens S7 PLC. The project consists of both a “driving the chain” conveyor and assembling carriers moving around the track.

All EWAB material flow systems are modular in design, on this system Lenze-AC Tech equipment allowed the company’s engineering specialists to meet individual requirements in relation to layout, work piece carriers, speed, positioning and flexibility of material flow.

PositionServo Benefits:

- Precise synchronized control
- Electronic shaft function
- Cost-performance of servo drives
- PLC control
- Compact system
- Global sales and technical support