MONK OPTICAL

Optical Industry Systems and Modular Equipment

Spectacle Lens Handling

We are one of the leading suppliers to the spectacle lens industry. We have many standard modular units that we use to build an automated handling system. The photo shows a large system where trays are automatically loaded onto a stack storage conveyor at the start of the line on a mezzanine floor. The trays are de-stacked and then conveyed to the ground floor of the factory. They are then fed automatically to all of the process machines. The conveyor system is controlled by a PLC (programmable logic controller) which communicates with all the machines individual PLCs. Sending and receiving signals controlling the loading and unloading of trays.

Automatic Industrial Lifts

Lifts are used for automatically transferring items to overhead conveyors or between floors. Normally in a large installation or production line products are conveyed between machines on overhead conveyors. This allows personnel good access to machines and equipment situated on the factory floor. Our lifts solve the problem of moving products between the two levels, they have a narrow cross section which allows them to be situated in the most restricted spaces. Two types of lift are available. The single lift shown which can cycle on demand for individual items and the continuous lift which is suitable for higher transfer rates.

Tray Store

Trays are automatically loaded into one of five lanes in the storage system where they wait in a queue. There are 16 trays in each lane giving a storage capacity of 80 trays. The tray size is 260mm x 220mm x 70mm deep. One Flex Chain 'Load/Unload Conveyor' transports the trays to one of a number of automatic machines. The control system in each machine calls for the next tray at a precise time so that each machine runs without any downtime.

Trays waiting to enter the line.