This custom, automatic Tray Handling System was designed and manufactured to lift, transfer and stack 30-1/2" x 16" x 4" product trays. The system was designed to accommodate trays and transport dollies currently used by the customer. Each dolly, as shown, holds 28 trays (two stacks of 14). The opposite side of the system is identical to the side shown, allowing for a total of four dollies holding 112 trays. The system automatically transfers to the opposite side on both the input end when a dolly has been emptied, and the output end when a dolly has been filled.

On the input end, the entire load of trays is raised one tray height. The top two trays are placed on transfer plates and indexed one at a time into the infeed conveyor. The conveyor transports a tray to a midway stopping point where another of the customer’s systems fills the tray. It then is released and travels to the output end. As filled trays reach the output end, the first tray is indexed to the side where it awaits a second tray. When two trays are side-by-side, they are indexed down to the cart. The system automatically shifts to begin loading filled trays on the opposite side while the filled dolly is removed and an empty one put in place.

The equipment is built from heavy duty painted steel. All product surfaces are U.H. M.W. This system will be able to run independently to any other existing systems. Operational noise levels of this system will not exceed 85 dbs at 3 feet away from the equipment. The system design will maintain applicable OSHA standards and the National Electrical Code for Industrial Machinery.