Battery Assembly and Storage System
Automated Cell Zero Pressure Motor Driven Roller Conveyor System

When a custom battery handling solution was needed, Omni Metalcraft Corp. along with MMCI worked together to provide a solution integrating numerous pieces of material handling equipment to provide an efficient and easy to assemble system.

The Challenge:
An expanding battery manufacturer needed an automated cell system to assemble batteries. After assembly, the batteries needed to be gently placed into a storage area for curing. The battery was then brought out of storage in the proper sequence and placed back into the assembly line. The system design needed to be reliable, compact and able to convey 350 lb. batteries.

The Solution:
Omni Metalcraft Corp. worked with Materials Management Concepts, Inc. to design a dual tier, four lane wide, compact, heavy duty Motor Driven Roller Conveyor system. Batteries were assembled and placed on a pallet by a robot. The pallet was then positioned utilizing a crowder and transferred to a conveyor mounted to a scissor lift on a transfer car that transported the battery to the correct storage level and lane for curing. As batteries were added, they accumulated on Zero Pressure MDR and conveyed to the last zone for forklift pick up. The entire system was built in modular sections and wired for easy set-up and assembly. Device Net modules were used to give the plant full system visibility.

Case Study Details:
The Product: Batteries
The Industry: Battery
The Components: Motor Driven Roller Conveyor, Chain Transfers, CDLR, Scissor Lifts, Transfer Cars

The Providers:
Integrator
Materials Management Concepts, Incorporated
900 S. Highway Drive, Suite 102, Fenton, MO 63026
636.349.3400
Website: www.mmci-systems.com

System Conveyors
Omni Metalcraft Corp.
Alpena, Michigan 49707

P.O. Box 352 Alpena, Michigan 49707
Phone 989.358.7000
Fax 989.358.7020
info@omni.com
www.omni.com