

## **OSD Packaging Center**

This project consisted of converting an existing warehouse into a OSD packaging facility complete with offices, change part storage, finished product staging and fork truck charging. Project Associates was contracted to provide preliminary engineering, space planning, total project cost estimating, detail design, construction supervision, start-up services, Installation and Operational Qualification protocol development and report implementation and software programming. Renovated facility consisted of six packaging lines (two relocated bottle lines, one relocated powder line, one relocated blister line and two new blister lines), 9,000 square feet of office space, 25,000 square feet of air-conditioned finished product staging, 1,700 square feet of change part storage, charging station for ten fork trucks and two floor cleaners. Overall filling rooms totaled 11,000 square feet, secondary packaging area totaled 23,000 square feet and packaging entry end totaled 8,000 square feet

Project Associates worked with the customer's engineering, validation, safety, production and maintenance resources and equipment suppliers to develop the facility layout from concept to final design. Project Associates also provided the programming, construction supervision, start-up services and required validation for the HVAC and dust collection systems. Utilities included HVAC (low humidity filling rooms), compressed air (plant and validated), steam, condensate, chilled water, domestic water (hot and cold), sanitary drains, dust collection, electrical power (including 3,000kva substation), HVAC controls, fire protection, and plant information system.

The entire project from concept through detailed engineering, construction, start-up, validation to the first day of production took 14 months. The total project cost was approximately \$11,000,000.