



DOUBLING CAPACITY AT UPS SUPER HUB – AHEAD OF SCHEDULE

CHALLENGE

When global parcel carrier UPS opened its Louisville Centennial Ground Operations Hub in 2007, the company already planned to expand and modernize the 257,000 square foot facility. Originally built for loading delivery vans making metro-area deliveries, the facility processed 39,000 packages per hour. By 2013, UPS had marked Centennial for modernization to handle explosive e-commerce shipping volumes, featuring a significant expansion and shift from manual equipment to new, fully automated systems.

UPS CENTENNIAL GROUND OPERATIONS HUB

Louisville, Kentucky

Project Parameters

- Modernize facility with fully automated sortation and conveyor
- Expand footprint from 257,000 to 1 million square feet
- Increase throughput from 39,000 to 85,000 parcels per hour

Timeline

- UPS internal project planning, 2013-2015
- MHS awarded project, late 2015
- Engineering, 2016
- Phased construction and installation, January 2017-April 2019

Outcome

- Modernization and throughput objectives met
- Doubled sortation capacity to 85,000 packages per hour
- Facility completed 6 months ahead of schedule and on-budget

SOLUTION

After evaluating proposals from several integrators, UPS selected MHS to provide a turnkey automation solution featuring conveyors and sorters across the facility that would expand to 1 million square feet. But with papers signed and the plan underway, challenges emerged that forced MHS and internal UPS resources to adapt.

The sortation solution design was improved to include separate systems to accommodate significant package variety – for smalls, standard and large, irregularly shaped packages. Several miles of conveyor and multiple scan tunnels support the sorters, transporting packages from unload to sorting, and outbound loading, providing data necessary for control software to direct routing.

Project installation scheduling was also a significant challenge. With retrofits, new equipment installation and integration part of the scope of work, and the Hub operating 24/7, a phased approach was necessary to minimize disruption. Then, as implementation got off to an especially efficient start, the prospect of getting extra capacity earlier than expected led UPS to inquire about expediting the project. MHS responded with a plan and an experienced, dedicated field services team to make it a reality, working overtime to get the project online in April 2019 – 6 months ahead of the original October 2019 completion target.

OUTCOME

By December 2018, UPS began reaping the benefits of the new facility already with initial phases complete and boosting capacity from 39,000 to 60,000 parcels per hour to help handle peak season.

Just five months later in April 2019, the retrofit of the original facility and installation of the new automated sortation and conveyor systems was complete. With the additional square footage, the Centennial Ground Operations Hub is now more than 1 million square feet and achieves the UPS throughput goal of approximately 85,000 packages every hour – 1,400 per minute – more than doubling their original throughput.

Through careful planning and management, MHS beat the original completion date by six months, completing the facility ahead of schedule and on-budget. Today, UPS considers the facility a “super hub,” one of their ten largest ground-sorting facilities worldwide.