

## OPTIMIZING CAMPUS LOGISTICS

Central Receiving Automation for  
Growing Campuses & Universities



## Common Challenges

As universities expand, they face growing challenges in managing an increasing volume of parcel deliveries, particularly as reliance on e-commerce for both students and faculty intensifies. Larger universities are projected to experience a significant rise in on-campus residents over the next 5 to 15 years. This surge in population will drive a rapid increase in packages and palletized freight over the next decade.

This trend is accelerating nationwide, as students opt to ship their belongings directly to campus rather than packing them into personal vehicles, and faculty require regular replenishment of critical research materials. The expansion of university campuses further amplifies the demand for efficient and expedited parcel distribution solutions.

## What We Do

Alstef Group offers a comprehensive solution to address these challenges with integrated systems designed to improve logistics operations, reduce congestion, and enhance efficiency. By providing tailored solutions with advanced technologies and scalable systems, Alstef Group helps universities manage increasing parcel volumes and ensures timely and accurate delivery to support the needs of students and faculty.

## Key Metrics



**400% increase in on-campus residents** at larger universities over the next 5-15 years.



**600% rise in parcel volumes** expected over the next decade.



## What We Offer

Integrated technology that enhances accuracy, efficiency, and scalability in the campus courier services.



## Hardware Solutions



### DWS

Accurately measures parcel weight and dimensions, reads barcodes, and captures information such as PO numbers, student or faculty IDs, and addresses.



### OPTICAL CHARACTER RECOGNITION

High-resolution image capture that provides enhanced inbound tracking of packages without the need for a barcode.



### LABEL PRINT & APPLY

Automatically prints and applies a new tracking label to provide real-time tracking updates for the students and faculty throughout the final mile delivery process.



### SORTATION TECHNOLOGY

Uses package data and campus-specific route information to sort packages for accurate and efficient loading of final mile delivery trucks.

## Software Solutions

### FASTlink

A configurable middleware software that integrates with the campus-specific logistics tracking platform. This web-based solution allows users to monitor their systems and make informed decisions on how to improve efficiency and throughput from a remote location.

### FASTsort

A versatile and scalable parcel sortation and allocation control solution that offers real-time tracking, AI-driven insights, and seamless integration with multiple systems, allowing for customizable, efficient, and reliable logistics operations.

# Impact

Benefits of Automated Parcel-Handling Solutions for University Campuses



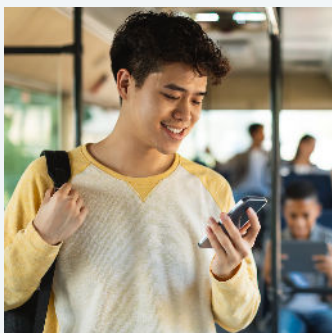
## Reduces Congestion and Enhances Efficiency:

- Significantly decreases traffic caused by third-party delivery vehicles
- Centralized parcel processing allows the campus to execute same-day final mile delivery.
- Allows for more efficient delivery routes by having university drivers, familiar with the campus layout, handle final-mile delivery.



## Supports Sustainability Initiatives:

- Consolidates deliveries into fewer trips, reducing emissions and energy consumption on campus.
- Promotes environmentally friendly vehicles such as electric or hybrid vehicles for final-mile delivery.
- Minimizes the environmental impact of delivery traffic, contributing to the university's broader sustainability initiatives.



## Improves Visibility and Tracking:

- Provides enhanced visibility and tracking of parcels.
- Centralized processing and advanced tracking systems monitor shipments from receipt to final destination.
- Reduces the risk of loss or misplacement of critical shipments.

# How We Work

Consultative Approach to  
Solution Design



## CONCEPTING

Involves comprehensive data collection to fully understand system requirements and priorities. This critical, collaborative step enables Alstef Group to configure the system to meet both current and future needs.



## INTEGRATION AND TESTING

Alstef Group handles all aspects of system integration, as well as the testing of individual components and the overall integrated system.



## START-UP

A thorough acceptance testing test is conducted to ensure that the entire system operates smoothly and meets the specified performance standards before it becomes fully operational.



## SITE SURVEY

A site survey is conducted to ensure that all design requirements, both physical and functional, are thoroughly understood. This step is essential to align the system design with the specific characteristics of the installation site.



## INSTALLATION

We oversee the installation of all system components including mounting frames, conveyors, scales, scanners, printer applicators, and any other necessary hardware.



## POST-INSTALLATION SUPPORT

Alstef Group offers ongoing 24/7 phone support to address both software and hardware needs for every component of the installed solution.



## Past Experience

Central Receiving Automation  
Solutions in Other Campuses



### UNIVERSITY OF CALIFORNIA SAN DIEGO

UC San Diego (UCSD) contracted Alstef Group to optimize material handling operations within the central receiving and distribution center. Due to the significant growth in e-commerce during the pandemic and the continued expansion of the university's research facilities, UCSD needed an efficient way to manage the increasing number of packages delivered. Alstef Group provided a fully automated conveyor and sortation system, which included an inbound camera tunnel, OCR, label print-and-apply technology, and direct integration with UCSD's facilities management software. As a result, UCSD can now process over 2 million packages per year with the same staffing level, and the system is designed to expand as the university continues to grow.

### STANFORD UNIVERSITY

Stanford's growing student population created the need for a central receiving facility off-campus. Alstef Group was tasked with designing and engineering the facility and consulting with Stanford's general contractors to equip the building with an automated conveyor and sortation system. The technology features an inbound camera tunnel, OCR, label print-and-apply, sortation, and integration with the university's facilities management software, and it can be expanded as operations grow. With this new system, Stanford will be able to complete last-mile deliveries using its own environmentally friendly trucks and provide near real-time tracking of packages to their final destinations.



## Past Experience

Central Receiving Automation  
Solutions in Other Campuses



### RENOWNED RESEARCH UNIVERSITY ON THE WEST COAST

The university contracted Alstef Group to optimize material handling operations within the central receiving and distribution center. Due to the significant growth in e-commerce during the pandemic and the continued expansion of the university's research facilities, an efficient solution was needed to manage the increasing number of packages delivered. Alstef Group provided a fully automated conveyor and sortation system, which included an inbound camera tunnel, OCR, label print-and-apply technology, and direct integration with the university's facilities management software. As a result, the university can now process over 2 million packages per year with the same staffing level, and the system is designed to expand as the university continues to grow.

### TOP 5 UNIVERSITY IN THE U.S.

This university's growing student population led to the need for a central receiving facility off-campus. Alstef Group was tasked with designing and engineering the facility, and consulting with the general contractors to equip it with an automated conveyor and sortation system. The technology features an inbound camera tunnel, OCR, label print-and-apply, sortation, and integration with the university's facilities management software, and it can be expanded as operations grow. With this new system, the university will be able to complete last-mile deliveries using their own environmentally friendly trucks and provide near real-time tracking of packages to their final destinations.

