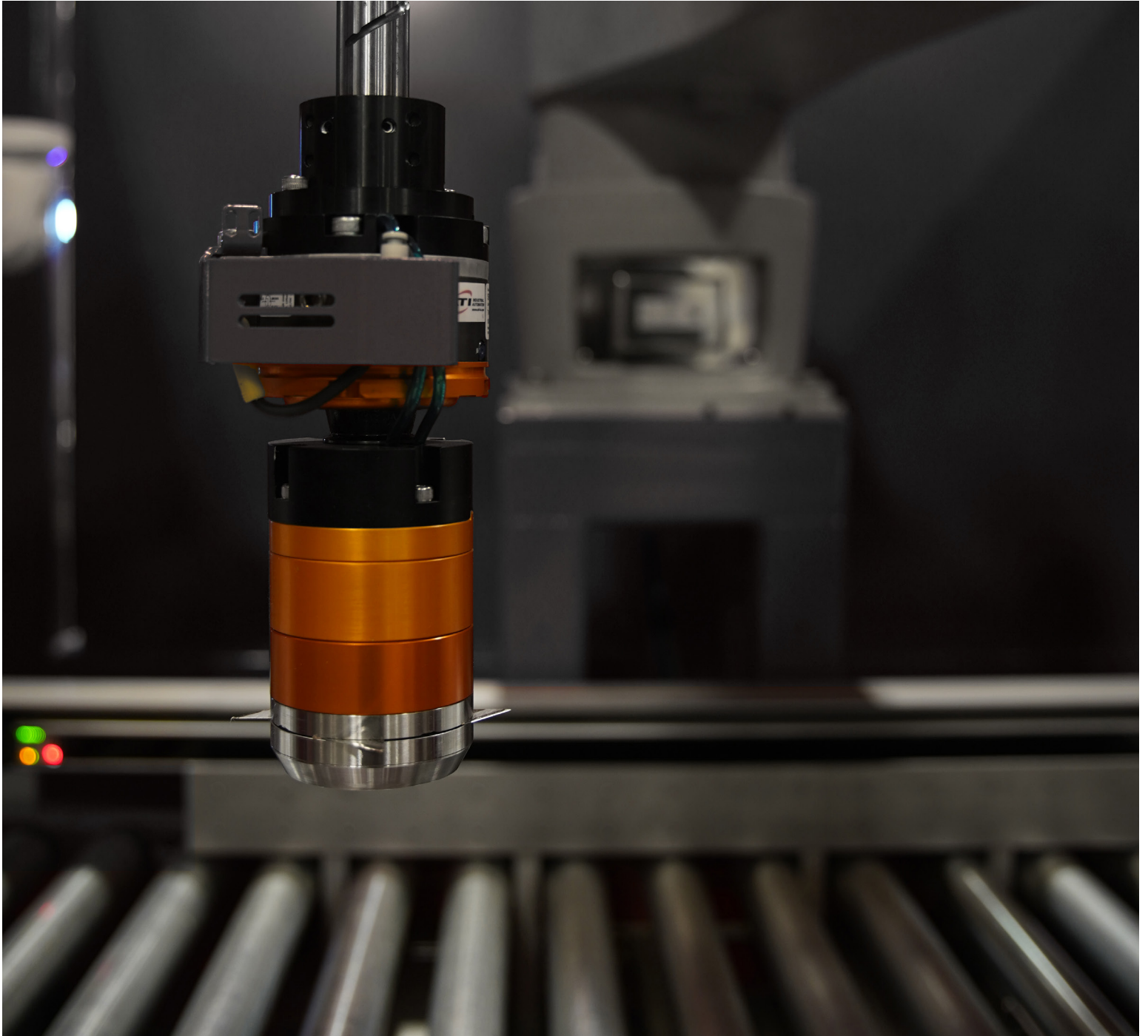


# CASi-IBOD



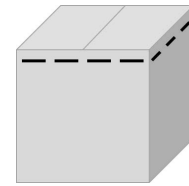
# Intelligent Box Opening Device

## Advantages of the CASi-IBOD

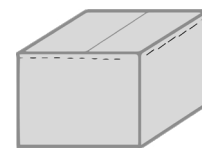
The patented Intelligent Box Opening Device (IBOD) is an in-line, pass-through box cutting machine, capable of completely automating manual box cutting operations. Each CASi-IBOD has built-in intelligence, dynamically measuring the size of every incoming case in real-time to automatically find the programmed cut lines. Boxes can be fed in pre-set size order or in mixed order without the need to run same-size batches.

The CASi-IBOD is available in two variations: The CASi-IBOD Single, which cuts up to 550 cartons per hour, and the CASi-IBOD Duo, which can cut up to 950 cartons per hour. Standard cuts include; 3-sided top cut, 4-sided top cut, & tab cuts. Tape cuts are available as a non-standard. It is completely automatic, self-feeding and self-aligning. The CASi-IBOD uses photo optic and linear displacement measurements to derive the dimensions of each box as it is automatically captured and positioned for cutting.

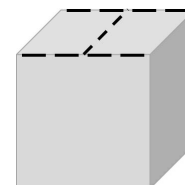
Blade stops and a box snigger are used together to give the cutting robot a squared and stationary target. Once a box is ready to be cut, the CASi-IBOD uses software-controlled automation to cut boxes according to precise specifications defined by the customer.



Top Cut  
3-Sided  
4-Sided



Tab Cut



Tape Cut  
Non-Standard



Beverage  
Cuts

\*Other Custom Cuts Available



Box Flipper  
(Optional)



Automatic Blade Changer  
(Optional)



Automatic Lid Remover  
(Optional)



Extended service hours and  
24/7 support options available

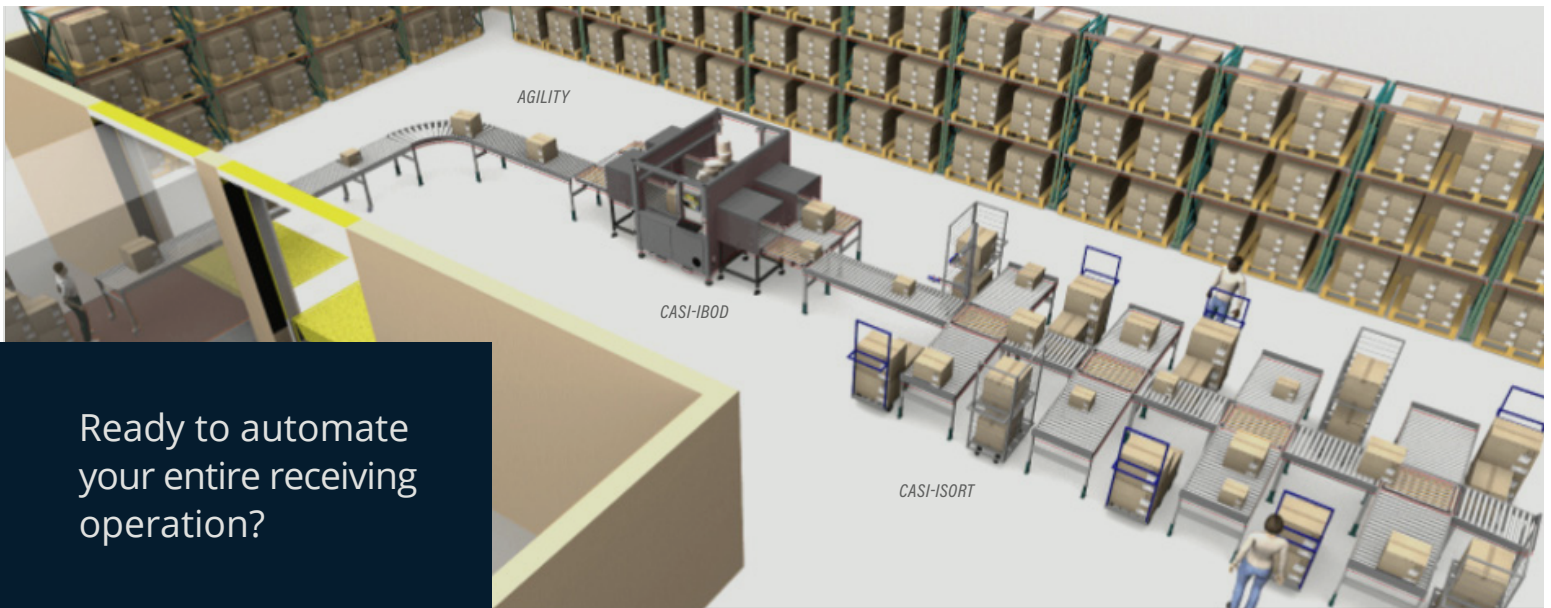
CASi's IBOD improves productivity, minimizes damaged product, & eliminates injuries associated with manual box-cutting.

SPECIFICATIONS	CASi-IBOD SINGLE	CASi-IBOD DUO
Maximum Rate	550 per hour	950 per hour
Minimum Box Size (LxWxH)	6" x 6" x 5" (153mm x 153mm x 115mm)	6" x 6" x 5" (153mm x 153mm x 115mm)
Minimum cut height on any box size	4.75" (from top of conveyor)	4.75" (from top of conveyor)
Maximum Box Size (LxWxH)	30" x 21" x 19" (762mm x 533mm x 483mm) (30" H possible with customization)	30" x 21" x 19" (762mm x 533mm x 483mm) (30" H possible with customization)
Power Requirements	230V - 3ph - 30 amp	230V - 3ph - 30 amp
Air Requirements	2.2 CFM @ 90 psi	5 CFM @ 90 psi
System Footprint	11.5' x 5.5' x 6.4'	11.5' x 8.3' x 6.4'

If you're going to automate - why stop at cutting? Regardless of which CASi-IBOD model you pick, the Automatic Blade Changer and Automatic Lid Removal options will save you valuable time and money after every use. Software in the CASi-IBOD tracks the blades' usage over time, and will throw an alert when the blades start getting dull. Automating this step will significantly decrease the time it takes to change the blades, maximizing throughput and minimizing downtime.

The Automatic Lid Removal option speaks for itself- and pays for itself, too! After boxes move through the CASi-IBOD, the tops of the boxes are removed using independent vacuum cups. After the vacuum cups attach to the top of the box, it is lifted up and disposed of automatically.





Ready to automate your entire receiving operation?

## Get the most out of your CASi-IBOD with the following CASi solutions

### Powered Flexible Conveyor



#### Bendable

Bends right into the truck, for easy loading & unloading every time.

#### Expandable

Reaches the back of the trailer with ease. When you're done, AGILITY compresses for compact storage.

#### Intelligent

Programmable features, such as self-adjusting speed, automatic gapping, and other customization options.

#### Modular

Attaching to the CASi-IBOD, or another piece of Expandable Conveyor takes just seconds.

#### Motorized

Once boxes are placed on the conveyor in a singulated flow, they'll be fed into the CASi-IBOD automatically.

### Intelligent Sortation for Receiving



#### Scan

Prior to entering the CASi-IBOD, packages are scanned and receiving reports are generated.

#### Sort

After packages exit the CASi-IBOD, they are sorted to put-away zones.

#### Customize

Priority sort out-of-stock and sensitive SKU's.

#### Move

When you're done unloading, just fold up the wings, unclip from the CASi-IBOD, and move it to the side for easy storage.

# Intelligent Receiving doesn't have to end at the CASi-IBOD.

## Custom Engineering Services

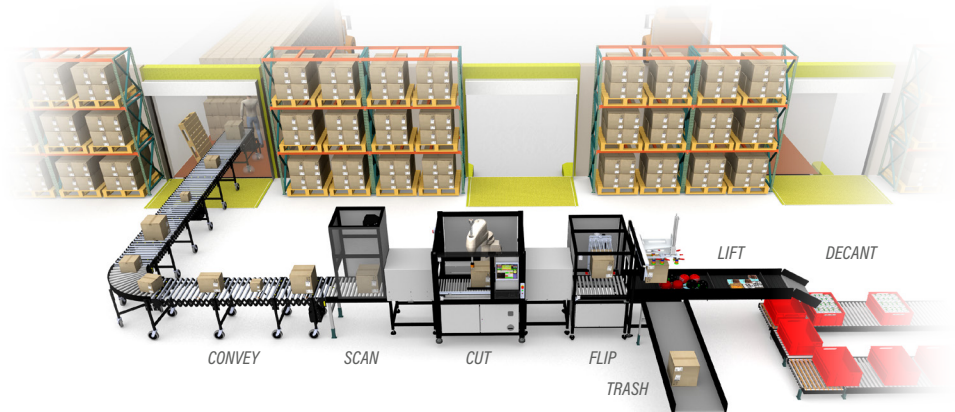
CASi designs, builds and services intelligent automation for receiving, order fulfillment and logistics. Our responsive sales and engineering team starts by understanding our customer's unique processes and needs.

From there, we develop a tailored solution that delivers maximum return and efficiency.



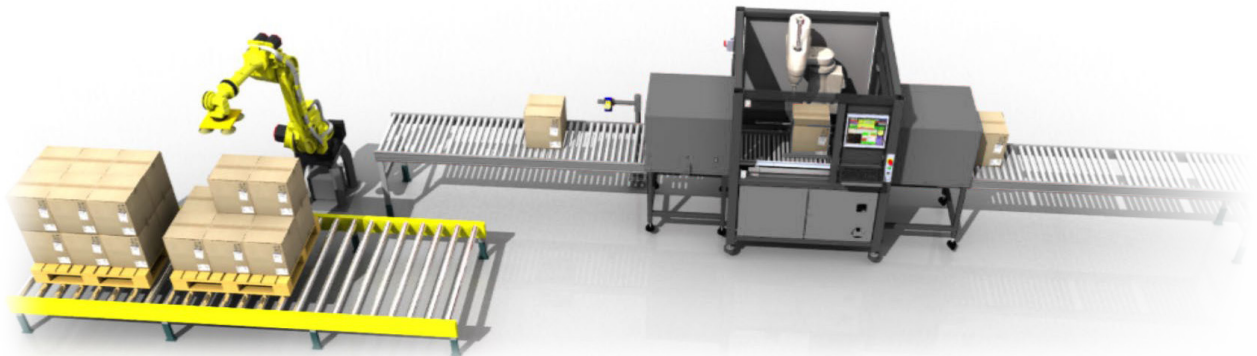
## Make your operator even more efficient

by utilizing CASi conveyor for loading and unloading.



## Automatically decant products into ASRS bins

## Add palletizing or de-palletizing to the CASi-IBOD for complete automation



# Manual Boxing Cutting

## Dangerous | Expensive

### Inefficient

#### Advantages of the CASi-IBOD

The most common way to unpack merchandise is also the most costly. Physical lacerations, lost labor and damaged goods are just a few of the major risks associated with using hand-held box cutters. The annual costs of such accidents are in the Billions.



**70%** OF THE

**3.6M WORK RELATED INJURIES TREATED IN EMERGENCY ROOM ACROSS THE US**

hands & fingers are the most commonly treated body parts.

**\$15B/YR**

Damaged & unsaleable products cost mfg. on average 1-2% of total operating expenses.

(All of which are preventable expenses)

ON AVERAGE  
**SINGLE CUT/  
LACERATION  
COSTS  
EMPLOYERS  
\$36,500 PER YEAR**

Besides the personal cost of a work accident

**BUSINESSES MUST ABSORB FINANCIAL LOSSES THAT RESULT FROM LACERATIONS**

CAUSES OF  
**MANUAL CUTTING LACERATIONS**

- Personal protective equipment not provided  
Cut-resistant gloves are not cut-proof  
(Does not completely eliminate the potential for cuts)
- Pulling cutting utensil toward self
- Catching falling utensils
- Inability to keep fingers out of the way



## CASi-IBOD Single



### Standard CASi-IBOD System

- ✓ 9' In-feed/Out-feed Roller Conveyor (Qty: 2)
- ✓ Replacement Blades (Qty: 100)

### Additional Options

- ✓ Automatic Blade Changer
- ✓ Automatic Lid Remover
- ✓ Box Flipper
- ✓ Extended hours service support or 24/7 service support.

## CASi-IBOD Duo



### Standard CASi-IBOD System

- ✓ 9' In-feed/Out-feed Roller Conveyor (Qty: 2)
- ✓ Replacement Blades (Qty: 100)

### Additional Options

- ✓ Automatic Blade Changer
- ✓ Automatic Lid Remover
- ✓ Box Flipper
- ✓ Extended hours service support or 24/7 service support.



# Solutions Designed to be Flexible, Scalable, & Modular

CASI Engineers design solutions to meet peak demand and future growth in fulfillment operations. Our team works to improve our customer's processes, then develop the most economical automation solution. CASI's goal is to seamlessly integrate into existing operations while providing maximum return on investment and improved efficiency.

## Markets We Serve

- E-Commerce
- Warehousing & Distribution
- Order Fulfillment
- 3PL & Logistics
- Retail
- Central-fill Pharmacy



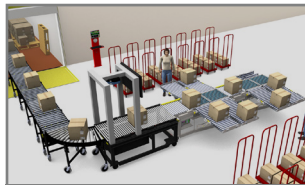
Automation Solutions for Order Fulfillment



Automatic Box Cutting



Automatic Box Resizing



Automated Unloading, Receiving & Sorting



Robotic Palletizing & De-palletizing



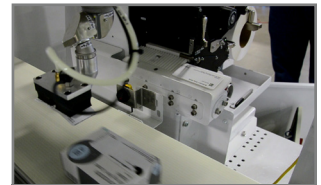
Order Picking



Scan, Print & Apply



Inline Manifest System



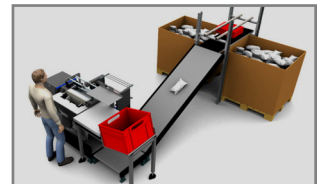
Precision Robotic Labeling



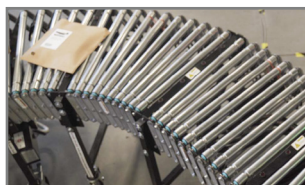
Scanning Solutions



Sortation Solutions



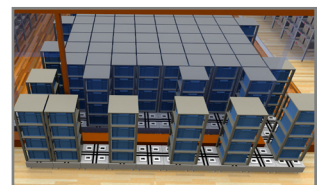
Automatic Bagging Solutions



Powered Flexible Conveyor



24-Volt Conveyor & Zone Routing



CASI-MicroASRS



Custom Manufacturing Assembly & Testing



Software Integration & Expertise



Custom Service Support Plans



# CASi-IBOD Automatic Box-Opener Questionnaire

YOUR COMPANY NAME		YOUR NAME			TODAY'S DATE	
INSTALL CITY & STATE		YOUR PHONE		YOUR EMAIL		
AT WHAT RATE DO BOXES NEED TO BE CUT OPEN?			SMALLEST BOX SIZE? (LxWxH)		LARGEST BOX SIZE? (LxWxH)	
MINIMUM BOX WEIGHT	MAXIMUM BOX WEIGHT	% OF BOXES OVER 50 LBS	WHAT IS THE PRODUCT TYPE WITHIN THE BOXES?			
IN ADDITION TO SENDING US PHOTOS, PLEASE DESCRIBE HOW THE PRODUCT SITS WITHIN THE BOX.						
LOOSE PRODUCT	WRAPPED IN PLASTIC	VERY TIGHTLY IN BOX	OTHER	COMMENTS:		
TYPE OF CUTS NEEDED:						
3-SIDED OR 4-SIDED TOP CUT	TAPE CUT	WINDOW CUT	CORNER CUT	PLUNGE CUT	OTHER	
COMMENTS:						
WILL BOXES INCLUDE STRAPPING OR STAPLES?		WHAT TYPE OF CORRUGATION WILL THE CASi-IBOD NEED TO CUT?				
YES	NO	SINGLE WALL	DOUBLE WALL	TRIPLE WALL	MOIST CORRUGATED	FROZEN CORRUGATED
BOX STYLES:						
TYPICAL RSC WITH TAPED SEAMS	TRAY WITH GLUED LID	FOLD-OVER LID STYLE	OTHER			
ON THE INFEED SIDE OF THE CASi-IBOD, BOXES WILL BE:		CONVEYED FROM YOUR CONVEYOR TO THE CASi-IBOD INFEED CONVEYOR				
MANUALLY PLACED ON THE CASi-IBOD INFEED CONVEYOR		ROBOTICALLY DEPALLETTIZED AND PLACED ON THE CASi-IBOD INFEED CONVEYOR				
ON THE OUTFEED SIDE OF THE CASi-IBOD, BOXES WILL BE:		MANUALLY REMOVED FROM OUR OUTFEED CONVEYOR				
AUTOMATICALLY DIVERTED TO SORTATION LANES		ROBOTICALLY REMOVED FROM OUR OUTFEED CONVEYOR				
AUTOMATICALLY SORTED TO WORK-STATIONS		CONVEYED FROM THE CASi-IBOD OUTFEED CONVEYOR TO YOUR CONVEYOR				
AUTOMATICALLY DUMPED SO THE BOX CONTENTS FALL OUT		POSITIONED SO THAT THE BOX CONTENTS CAN BE ROBOTICALLY PICKED FROM THE BOX				
WHAT TYPE OF ENVIRONMENT WILL THE CASi-IBOD BE INSTALLED?						
AMBIENT	FROZEN	REFRIGERATED	WASH-DOWN	OUTDOORS	OTHER	
OTHER COMMENTS:						

NOTE: CASi-IBOD UTILITY REQUIREMENTS ARE:  
 • 2.2 CFM @ 90 PSI  
 • 230 3ph 30 AMP (480 transformer is optional)

# A shared vision towards the future of retail & e-commerce automation

Lozier Corporation and Cornerstone Automation Systems, LLC (CASI) have combined resources to form the largest team effort in retail automation and e-commerce automation.



Together, we are able to provide smart, tech-enabled solutions that increase capacity and throughput while reducing costs. Additionally, our software expertise provides important visibility into your operations through data - such as real-time tracking of orders and inventory in brick-and-mortar stores, dark stores, and e-commerce fulfillment centers.

## ABOUT US

Lozier manufactures products, or components and OEM parts, while CASI provides the technology, testing and assembly, technical support, and service. Lozier manufactured items flow into CASI's 186,000 square foot Texas facility where they are assembled, tested, and shipped.

### LOZIER

- Founded in 1956, privately owned
- Over 4.3 million square feet of manufacturing and distribution space
- Headquarters in Omaha, Nebraska with additional facilities in Alabama, Missouri, Pennsylvania and Indiana
- Industry leader in product, quality, and service
- Manufacturing expertise and capability
- Product development and engineering
- Production of components or OEM parts
- Infrastructure to service and scale
- Installation, training, technical support, and ongoing service

### CASI

- Delivering turnkey systems since 2002
- 186,000 square feet of manufacturing space
- Headquarters in Frisco, Texas
- FANUC Top Robotics Integrator and Innovation Award winner
- Technology design and integration experts
- Software expertise
- Receiving and fulfillment solutions
- System assembly and testing
- Installation, training, technical support, and ongoing service

## PRODUCTS + SOLUTIONS

### LOZIER

- Conveyors
- Pallet Racking
- Widespan, S-Series, and Cube Saver storage systems
- Gondola display shelving
- Checkouts and queuing
- Specialty retail displays
- Extensive range of BOPIS solutions

### CASI

- Automated receiving
- Automated box opening and box-resizing systems
- Order-picking hardware and software
- In-line manifest systems
- Precision robotic labeling
- End-of-line sortation systems
- Robotic palletizing and off-loading systems