



LAUBNER®
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Auto-ID Solutions

Fast, Flexible Fulfillment

Featuring the latest FlexShelf AMRs and FetchCore fulfillment software

Today's warehouse operators are caught between soaring demand and critical labor shortages. They desperately need to increase throughput and improve efficiency—and the Fetch fulfillment solution from Zebra can be the workforce multiplier they've been looking for.

In early deployments, Fetch automated mobile robots (AMRs) under the direction of FetchCore software enabled warehouse operators to double and nearly triple their picking productivity. The Fetch solution empowers pickers to work much more quickly and accurately, with reduced training time and fewer returns.

Together, Zebra and Fetch deliver a versatile, adaptable solution that can be configured easily for a wide range of fulfillment operations, picking activities and material movement. The cloud-based open architecture of FetchCore software works seamlessly with major Warehouse Execution System (WES) and Warehouse Management System (WMS) installations, as well as Zebra's extended product portfolio. And because Fetch AMRs do not require extensive infrastructure modifications, a functioning fulfillment solution can be up and running with minimal disruption.



Fetch FlexShelf Fulfillment AMR

Highly configurable picker interface:

- Zero, one or two interactive touchscreens
- Integrated barcode scanner
- NFC reader for fast, no-touch login
- Four-port USB hub for accessories (e.g., printers)

Supports order and batch picking waves with assignable priority

Pick to either side with two pickers or one picker with robot rotation

Integrates with existing WES and WMS installations



Adjustable shelves accommodate a variety of totes, bins and boxes

Compatible with handheld, voice and vision systems for enhanced collaboration

Dynamic LED lighting improves pick accuracy with put-to-light guidance

67% more capacity and 60% faster than the closest competitor

Fulfillment Use Cases



Directed Each and Batch Picking

Fetch AMRs augment the existing workforce by automating repetitive tasks and minimizing unproductive travel and dwell times, enabling experienced personnel to remain on task and productive in their respective zones.

Benefits

- Dynamically deliver orders to workers
- Keep workers in a specific zone to reduce congestion in aisles
- Enable workers to pick and sort multiple orders at once via visual prompts
- Verify every pick and sortation through a hands-free scan
- Coordinate picking activity so robots arrive as needed as part of the workflow
- Eliminate travel time and the need to push carts to pack areas
- Reduce dwell time spent waiting for robots
- Enable urgent orders and hot picks
- Improve speed, accuracy and productivity

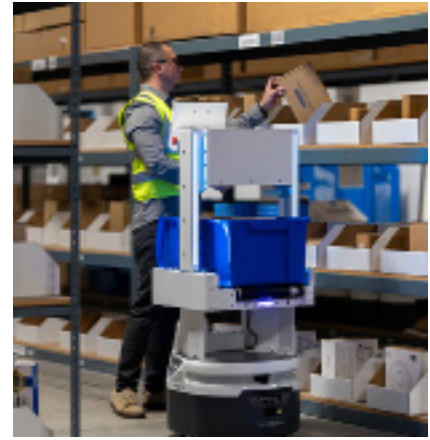


Pick to Tote with Automatic Conveyor Transfer

Automation reduces congestion in storage aisles, which helps limit interactions between workers and potentially hazardous heavy loads and equipment, enhancing safety as well as performance and productivity.

Benefits

- Automated tote induct / discharge to conveyor
- Optimize worker movements
- Reclaim up to 13% of warehouse space by removing conveyors
- Extend the life of a facility by up to five years
- Speed up delivery of orders to put walls
- Lower worker dwell and wait times for robots



Interleave Pick and Replenishment

Introducing automation into fulfillment operations improves coordination between picking and replenishment activities, maintaining inventory levels for optimum productivity.

Benefits

- Interleave picking and replenishment tasks
- Prioritize picking and replenishment tasks
- Minimize full-time employees dedicated to replenishment
- Fill open positions and ease labor shortages
- Diminish unproductive human movement throughout the facility

FlexShelf Specifications



	FlexShelf	FlexShelf Guide	FlexShelf Guide Dual
Size and Weight			
Weight (with 2 shelves installed)	194.9 lb (88.4 kg)	200.7 lb (91.1 kg)	206.2 lb (93.5 kg)
Length	24.1 in (61.1 cm)	24.1 in (61.1 cm)	24.1 in (61.1 cm)
Width	20.8 in (52.8 cm)	20.8 in (52.8 cm)	20.8 in (52.8 cm)
Height	Standard: 54 in (137.1 cm) Tall: 59.3 in (150.6 cm)	Standard: 59.1 in (150 cm) Tall: 64.4 in (163.5 cm)	Standard: 59.1 in (150 cm) Tall: 64.4 in (163.5 cm)
Freight100 Base Length	22.6 in (57.3 cm)	22.6 in (57.3 cm)	22.6 in (57.3 cm)
Freight100 Base Width	20.8 in (52.8 cm)	20.8 in (52.8 cm)	20.8 in (52.8 cm)
Payload			
Max Total Payload	165 lb (75 kg)	165 lb (75 kg)	165 lb (75 kg)
Bottom Shelf Max	165 lb (75 kg)	165 lb (75 kg)	165 lb (75 kg)
Shelf Position 1–18 Max	66 lb (30 kg)	66 lb (30 kg)	66 lb (30 kg)
Shelf Position 19–25 Max	55 lb (25 kg)	55 lb (25 kg)	55 lb (25 kg)
Max Payload Width	16.6 in (42.2 cm)	16.6 in (42.2 cm)	16.6 in (42.2 cm)
Max Payload Length	23.8 in (60.5 cm)	23.8 in (60.5 cm)	23.8 in (60.5 cm)
Max Payload Height	Up to 34.6 in (88 cm)	Up to 34.6 in (88 cm)	Up to 34.6 in (88 cm)
Shelves	3 (2 adjustable) Additional shelves available for purchase	3 (2 adjustable) Additional shelves available for purchase	3 (2 adjustable) Additional shelves available for purchase
Adjustable Shelf Intervals	25 positions in 1 in (25.4 mm) increments	25 positions in 1 in (25.4 mm) increments	25 positions in 1 in (25.4 mm) increments
AMR Hardware Features			
Multicolor LEDs for Order Priority Identification and Put-to-Light Guidance	Yes	Yes	Yes
Interactive, Glove-Friendly Touchscreen with Multi-Language Support	0	1x	2x
NFC Reader	0	1x	2x
Barcode Scanner	0	1x	2x
USB Hub for Custom Peripherals	12x – USB-A 2.0, 0.5 A	8x – USB-A 2.0, 0.5 A	4x – USB-A 2.0, 0.5 A
Power			
Nominal Continuous Runtime	~9 hrs	~9 hrs	~9 hrs
Charging	Autonomous docking	Autonomous docking	Autonomous docking
Charge Time	3 hrs to 90%	3 hrs to 90%	3 hrs to 90%

FlexShelf Specifications (continued)



	FlexShelf	FlexShelf Guide	FlexShelf Guide Dual
Sensors and Safety			
2D Laser Sensor	SICK, 82 ft (25 m), 220 degrees	SICK, 82 ft (25 m), 220 degrees	SICK, 82 ft (25 m), 220 degrees
3D Depth Cameras	2x	2x	2x
Run/Stops	3x	2x	3x
Robot Visibility	Floor-illuminated LED and side LED strips on uprights	Floor-illuminated LED and side LED strips on uprights	Floor-illuminated LED and side LED strips on uprights
Performance and Communication			
Max Speed	3.9 mph (1.75 m/s)	3.9 mph (1.75 m/s)	3.9 mph (1.75 m/s)
Turning Radius	Turn in place	Turn in place	Turn in place
Audio	4x – speakers, 10 watts per channel	4x – speakers, 10 watts per channel	4x – speakers, 10 watts per channel
Wi-Fi	Intel AX200 802.11.ax	Intel AX200 802.11.ax	Intel AX200 802.11.ax
I/O on Freight100 base	1x – DisplayPort 2x – USB-A 3.0 1x – Ethernet port	1x – DisplayPort 2x – USB-A 3.0 1x – Ethernet port	1x – DisplayPort 2x – USB-A 3.0 1x – Ethernet port
Environment			
Operating Temperature Range	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating Humidity Range	5% to 95% non-condensing	5% to 95% non-condensing	5% to 95% non-condensing
Environment	Indoors, ADA-compliant	Indoors, ADA-compliant	Indoors, ADA-compliant
Maximum Traversable Floor Step/Ledge	0.5 in (1.27 cm) step	0.5 in (1.27 cm) step	0.5 in (1.27 cm) step
Maximum Traversable Floor Incline	Up to 3% grade (1.7 degrees)	Up to 3% grade (1.7 degrees)	Up to 3% grade (1.7 degrees)
Maximum Traversable Floor Gap	0.59 in (1.5 cm)	0.59 in (1.5 cm)	0.59 in (1.5 cm)
Minimum Aisle Width (One-Way Traffic)	Fulfillment mode: 72 in (183 cm) Non-fulfillment mode: 37.4 in (95 cm)	Fulfillment mode: 72 in (183 cm) Non-fulfillment mode: 37.4 in (95 cm)	Fulfillment mode: 72 in (183 cm) Non-fulfillment mode: 37.4 in (95 cm)
Minimum Aisle Width (Two-Way Traffic, No Leapfrogging)	Fulfillment mode: 72 in (183 cm) Non-fulfillment mode: 74.8 in (190 cm)	Fulfillment mode: 72 in (183 cm) Non-fulfillment mode: 74.8 in (190 cm)	Fulfillment mode: 72 in (183 cm) Non-fulfillment mode: 74.8 in (190 cm)
Certifications			
CE	Yes	Yes	Yes
RIA R15.08 Conformance	Yes	Yes	Yes

RollerTop Specifications



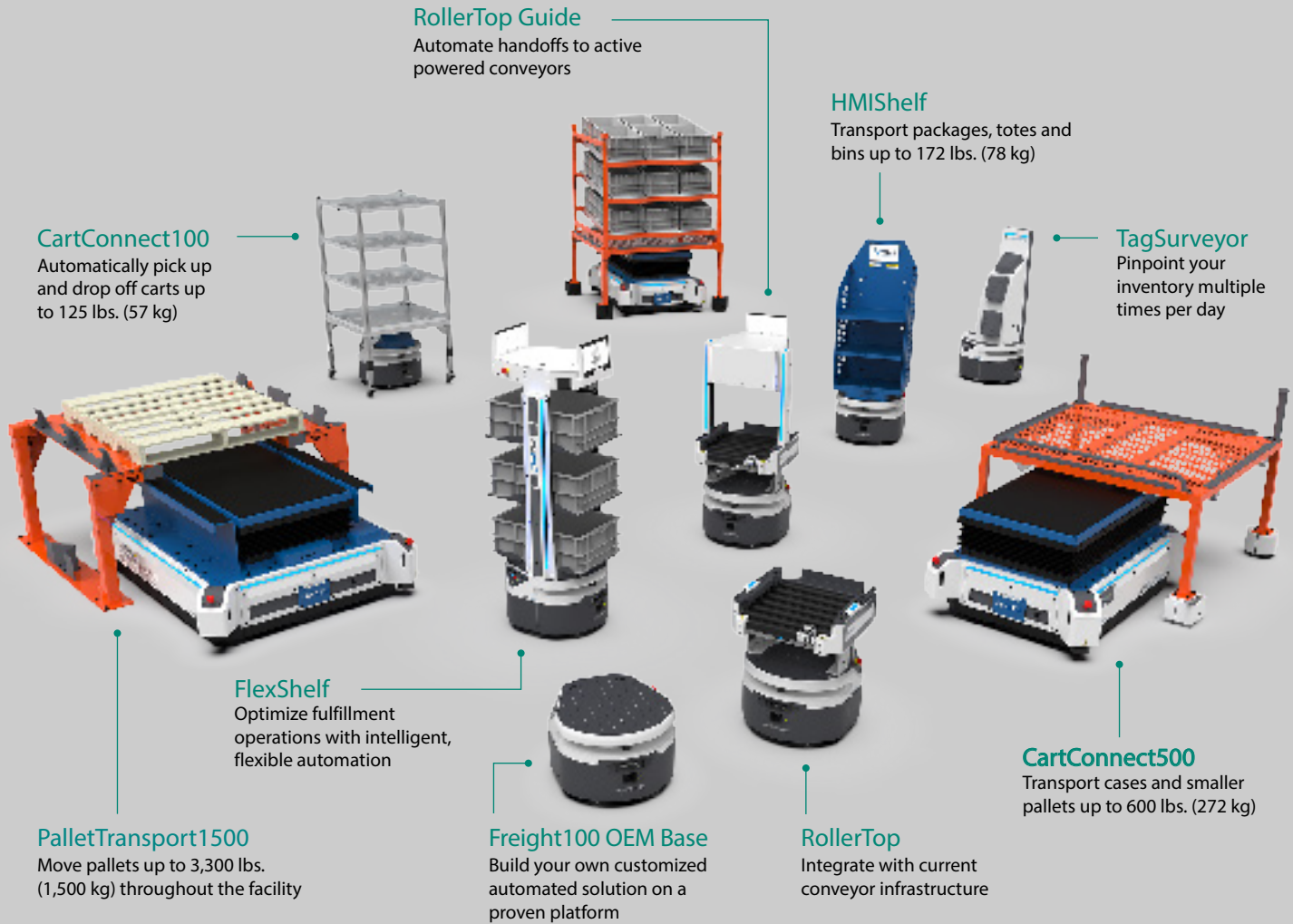
RollerTop Guide

Size and Weight	
Weight	201.8 lb (91.5 kg) Additional weight with riser installed: Riser 1: 5.5 lb (2.5 kg) Riser 2: 6.7 lb (3.0 kg)
Length	23.6 in (59.9 cm)
Width	21.7 in (55.1 cm)
Height	48.8 in – 60.9 in (124 cm – 154.7 cm) (depends on riser height and accessory height)
Freight100 Base Length	22.6 in (57.3 cm)
Freight100 Base Width	20.8 in (52.8 cm)
Payload	
Max Total Payload	Up to 160 lb (73 kg) (depends on configuration)
Max Payload Width	17.1 in (43.5 cm)
Max Payload Length	23.9 in (60.9 cm)
Max Payload Height	17.7 in (45 cm)
Supported Conveyor Heights	18 in (45.7 cm) or 22.75 in – 30 in (57.8 cm – 27.2 cm) in 0.25 in (6.35 mm) increments
Peripherals	
Multicolor LEDs for Order Priority Identification and Put-to-Light Guidance	Yes
Interactive, Glove-Friendly Touchscreen with Multi-Language Support	1x
NFC Reader	1x
Barcode Scanner	1x
USB Hub for Custom Peripherals	8x – USB-A 2.0, 0.5 A
Power	
Nominal Continuous Runtime	~9 hrs
Charging	Autonomous docking
Charge Time	3 hrs to 90%

RollerTop Specifications (continued)



RollerTop Guide	
Sensors and Safety	
2D Laser Sensor	SICK, 82 ft (25 m), 220 degrees
3D Depth Cameras	2x
Run/Stops	2x
Robot Visibility	Floor-illuminated LED and side LED strips on uprights
Performance and Communication	
Max Speed	3.9 mph (1.75 m/s)
Turning Radius	Turn in place
Audio	4x – speakers, 10 watts per channel
Wi-Fi	Intel AX200 802.11.ax
I/O on Freight100 base	1x – DisplayPort 2x – USB-A 3.0 1x – Ethernet port
Environment	
Operating Temperature Range	32°F to 104°F (0°C to 40°C)
Operating Humidity Range	5% to 95% non-condensing
Environment	Indoors, ADA-compliant
Maximum Traversable Floor Step/Ledge	0.5 in (1.27 cm) step
Maximum Traversable Floor Incline	Up to 3% grade (1.7 degrees)
Maximum Traversable Floor Gap	0.59 in (1.5 cm)
Certifications	
CE	Yes
RIA R15.08 Conformance	Yes



Accelerate order, batch, case and pallet picking with a complete fulfillment solution from Fetch and Zebra.

Fulfillment will never be the same.
Visit fetchrobotics.com/fulfillment for more information.

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