

FUTUREPROOF YOUR OPERATIONS

Rapid shifts in consumer behavior are placing a huge strain on all aspects of supply chain. Flexible automation systems allow your organization to react nimbly to the ever-changing environment while getting your operations ready to respond to whatever comes next.

Stop losing ground and get started quickly with these out-of-the-box packages with no upfront costs. Begin with a simple installation to learn the system's capabilities, evaluate the use case, adapt and scale.

Through Vecna Robotics' Quick Start program, you will:

- > Identify the best use case(s) for using AMRs in your facility
- > Determine fleet sizing for production rollout
- > Integrate automation into your workflows, and train staff on new processes
- ▶ Gather data and gain insights into simple workflow efficiencies
- ▶ Get site-and operation-specific feedback to inform your future automation strategy

PROGRAM OVERVIEW

No Upfront Costs: Get started with our Robotics as a Service pricing model and pay no upfront costs. CapEx budgeting and leasing payment options are also available. Let's work together to find a financing solution that works best for you.

Proven Applications: There are many ways to use AMRs in your facility, but we're making it easy to get started by offering a select number of pre-defined project packages with proven ROI. Choose from some of our three most frequently deployed use case scenarios, including Dynamic Milk Runs, dock-to-stock, and other non-value added transport. Read on to learn more.

Remote Deployment: Vecna Robotics' Customer Success team can stand up your equipment without stepping foot in your facility, within four weeks from PO.

ALL PACKAGES INCLUDE:

AUTONOMOUS MOBILE ROBOTS:

- > Up to 3 autonomous mobile robots
- ➤ Customized user interface

FLEET ORCHESTRATION:

- > Pivotal Insights analytics dashboard
- ➤ Pivotal Orchestration Engine
- > Server Instance

ENTERPRISE GRADE SERVICES:

- > Remote deployment services
- ➤ User training
- ➤ Virtual Classroom
- > 24/7 US-based support



QUICK START PROGRAM
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OXEN SERIES | AUTONOMOUS TUGGERS

From assembly lines to sortation hubs, the autonomous tugger is best suited for high throughput long-distance hauls and heavy payloads. Robots can skip destinations, and travel only where they are needed, intelligently maximizing throughput.

Best Used For:



Just in Time Parts Delivery to Assembly Line



Full pallet dock-to-storage, storageto-dock, and dock-to-dock transport



Transport of carts of non-conveyable packages for parcel sortation



High density transport of replen pallets or pick carts to packout



Non-value add transport of waste, totes, dunnage, QA or rework











STATS:

FACILITY

> 9 assembly lines > 300,000 sq ft site

assembly line.

LINE-SIDE REPLENISHMENT

IN A MANUFACTURING

One large manufacturer of

industrial boom cranes uses

Vecna Robotics' self driving tuggers to deliver parts to the

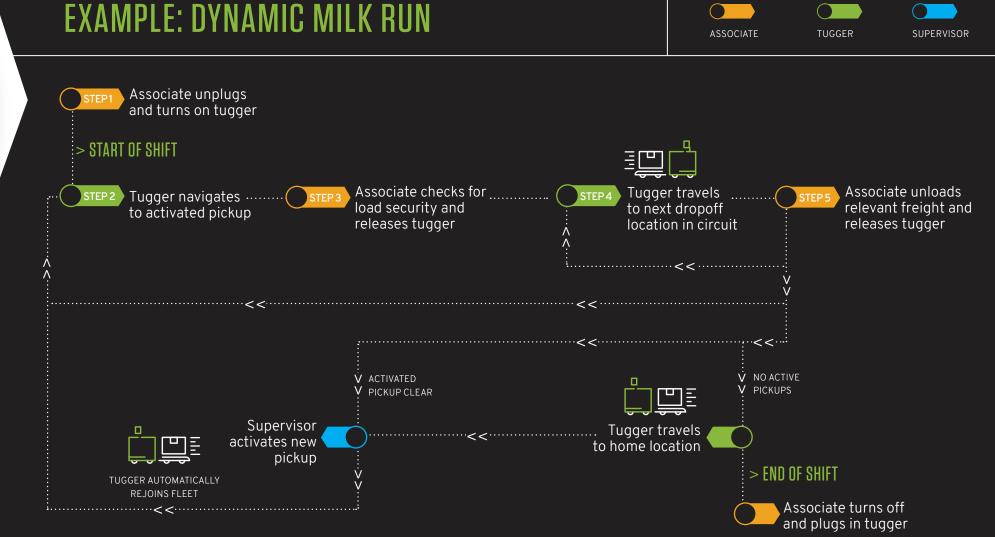
Material is requested via web based application on PCs at 9 different assembly stations. At the staging station, a 55-in monitor lists the request, and a team member loads material on the tugger's carts. Once delivered to assembly line, the cart is unhitched, left, and the tugger returns to staging to satisfy another request. Rather than follow a set path every time, the tuggers use intelligence to visit only the assembly stations with deliveries on that run, saving time and increasing efficiency.



PACKAGE DETAILS

Number of Pick and Drop Points: Up to 20

Number of AMRs: 3 tuggers



OXEN SERIES

WORKHORSE SERIES | PALLET TRUCKS

For warehousing and distribution, the autonomous pallet jack eliminates pallet shuttling and improves picking and put-away efficiency for lift operators.

Best Used For:



Pallet pick and put-away



Staging for VNA induction and extraction



Delivery to and from packaging, kitting, and other value-add service areas



Full pallet replenishment and cross dock



Non-value add transport of waste, totes, or empty pallets



STAGING LANES TO PUT-AWAY AT A LARGE RETAIL WAREHOUSE

One of the largest retailers in the US uses Vecna Robotics' self-driving pallet trucks to transport pallets from receiving to storage.

STATS:

- ≥ 2.5 million sq ft facility
- > 46 inbound staging areas
- ⇒ 7 outbound staging areas

A team of associates performs a quality check at the dock doors and scans the incoming pallets to confirm receipt. Receivers place the pallets in the staging area for AMR pickup. Pivotal™, Vecna Robotics' Orchestration Engine, assigns an AMR which travels to pallet staging area. The autonomous pallet jack scans the pallet to validate its mission, and pick ups the pallet to deliver it to the targeted destination.







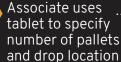


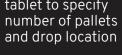
> START OF SHIFT

Associate stages pallets in designated lane

Associate unplugs and turns on AMR







AMR AUTOMATICALLY REJOINS FLEET UPON WORK ALLOCATION

NO WORK **ENTERED**

AMR picks up ... front-most pallet

> END OF SHIFT

PALLET JACK

AMR travels to

specified drop

TEP6 AMR drops pallet

location

Associate turns off and plugs in tugger

PACKAGE DETAILS

Number of Pick and Drop Points: 20

> Number of AMRs: 3 pallet trucks

WORKHORSE SERIES

RAPID DEPLOYMENT

Get up and running with mobile robots in four weeks.

- 1. Connect: While robots are in transit, our deployment team connects to your network to ensure IT is in place. When the AMRs arrive, simply turn them on to sync to the network.
- 2. Map: Introduce the AMRs to your facility with a guided tour.
- **3. Configure:** Optimize the AMRs to your facility by programming destinations, waypoints, drop spots, staging areas restricted zones, and more.

EVALUATION

Vecna Robotics' Customer Success team will review the results and key performance indicators of your implementation at regular intervals. Success indicators include:

- > Fleet performance
- ▶ Robot performance
- > Traffic patterns
- ▶ Staff adoption

These insights are the key to unlocking major productivity gains. Use ongoing evaluation to pinpoint opportunities for expanding your fleet of AMRs, their application within your workflows, and their role within your IT ecosystem. The results of incremental adoption of automation in your facility will speak for itself.



WE'LL BRING THE ROBOTS. YOU SUPPLY THE FOLLOWING:

CAD DRAWING OF FACILITY:

Indicate locations where robots will be deployed

ACCESS TO WIRELESS NETWORK:

Pre-deployment access to your wireless network will enable us to set up your cloud server while robots ship.

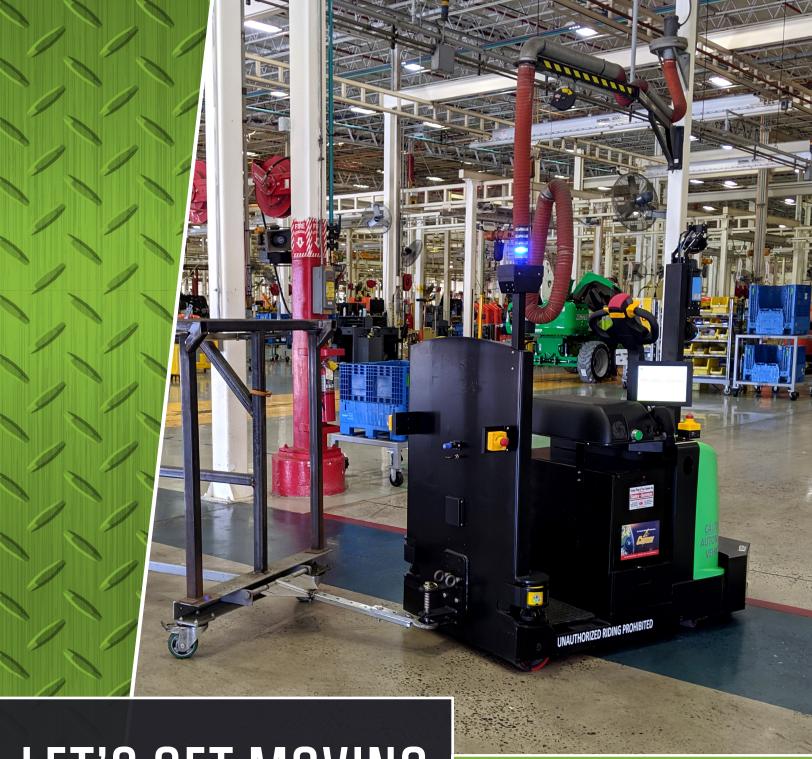
BENCHMARKS: Share your throughput and productivity benchmarks

DESIGNATED AREA: Up to 200,000 sq ft operating area

ACCESSORIES: Tablets for mission assignment and quad-steering carts

SITE CHAMPION: Appoint one staff member to work closely with the Vecna Robotics team. This person will oversee the implementation, training, and testing during the program.

RAPID DEPLOYMENT RAPID DEPLOYMENT



LET'S GET MOVING

CONTACT US TO DISCUSS YOUR PROJECT GOALS. FROM PO TO GO-LIVE IN FOUR WEEKS.

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