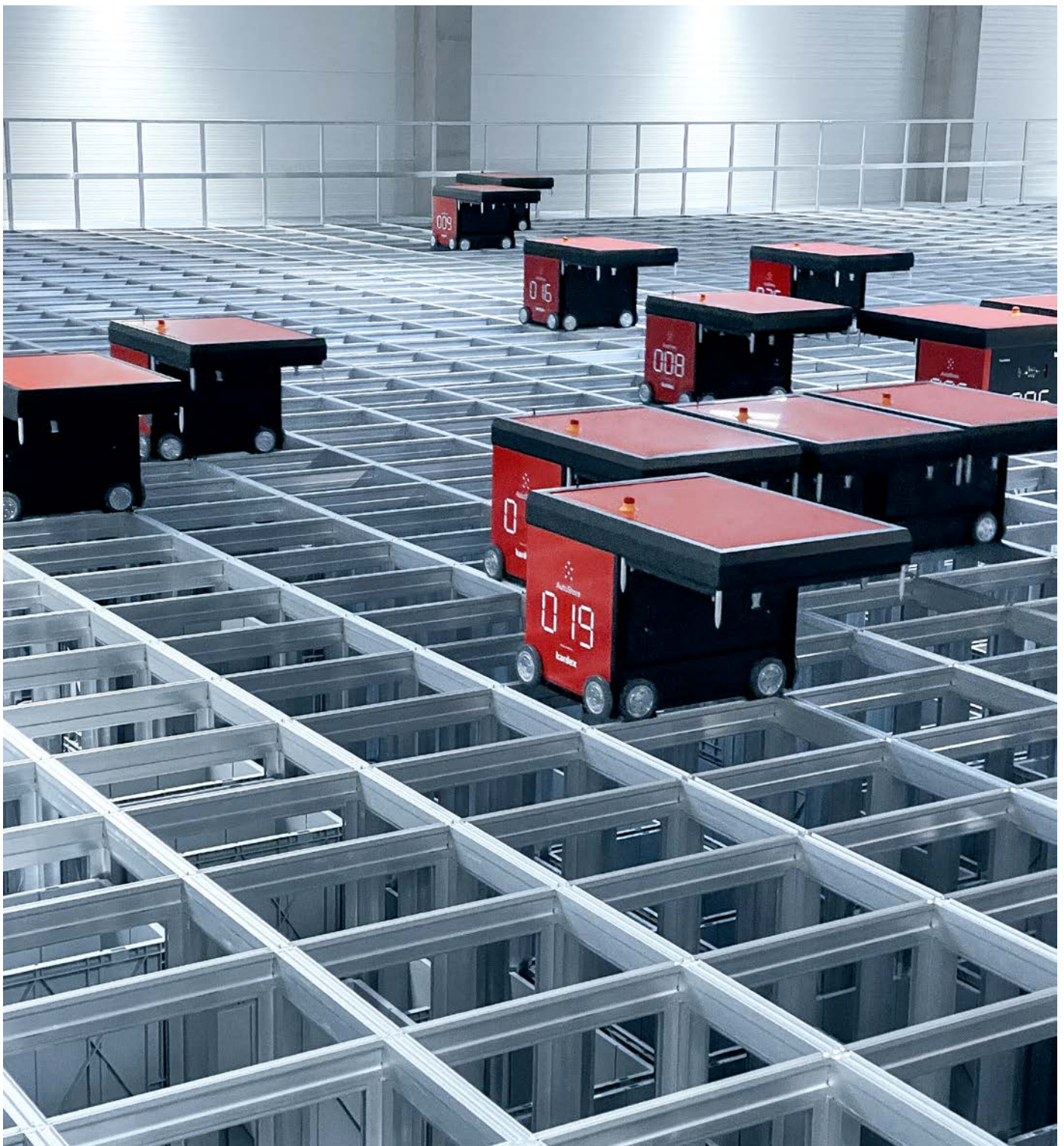


Solution Guide

AutoStore Cost Justifications



StoreX Calculator

Evaluate your investment decision in AutoStore with our interactive cost & performance calculator. Enter your operational data inputs into the calculator to generate:

- Estimated cost & ROI
- Overall system footprint size
- Performance/throughput metrics
- Storage capacity
- FTE reduction
- Annual cost savings

 Use the calculator



Try StoreX Calculator:
Your AutoStore™
cost & performance tool

Calculate the cost of efficiency

At first the thought of automation seems daunting. The misconceptions surrounding costs might persuade warehouses to continue with outdated, manual practices leaving them unable to manage business demands and ultimately facing disgruntled customers and stagnant growth. However, businesses can make a pivotal step towards a profitable future by adding automation and high speed robotics.

AutoStore empowered by Kardex offers an expected ROI of 2-3 years. The fully automated storage and retrieval system expands storage capacity four times, increases performance ten times and easily scales without impacting ongoing operations. In fact, AutoStore is the fastest order fulfillment system per square foot on the market. It reduces costs associated with labor, inaccurate order fulfillment and unpredictable demand spikes. It is a 24/7 solution for operations that cannot physically keep up with fulfillment demands and those that want to prepare for the future.

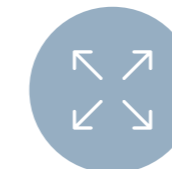
Adaptable to a building's shape and size, AutoStore high-speed robots pick and deliver inventory along an aluminum cubic grid system. Providing full transparency, the corresponding software knows every bin, robot, port and SKU location. Warehouses can connect an existing WMS/ERP or use the Kardex WMS/WCS and the AutoStore controller.




Reduce labor costs and associated challenges including recruitment, training, retention and temporary labor



Increase picking performance significantly by decreasing mispicks and adjusting throughput based on daily demands



Expand capacity without additional real estate investments or relocation expenses

 Ready to see the numbers? **Use the StoreX Calculator**, and take the first step toward a smarter, more scalable operation!

Stabilize labor costs

Historically, labor is one of the highest line items and the list of expenses relating to it is quite lengthy. Considering all costs from recruitment, training and uniforms to electricity, break rooms and overtime; it can be difficult to pinpoint one number to encompass all labor-related costs. Recently, labor has also become widely unavailable and operations are struggling to find enough workers.

A recent study surveying 250 supply chain and distribution managers across the United States, United Kingdom, France and Germany found “distribution centers are losing an average of nearly \$390,000 per year due to mispicks.”¹ A substantial and unnecessary loss not shared by AutoStore customers.

With AutoStore, inventory is securely held within the system and then logically associated with a unique ID to ensure every piece of inventory within the system is accounted for at any given time. AutoStore robots significantly reduce labor requirements and the costs and challenges that go alongside them, which stretch far beyond the benefits of saving an hourly paycheck. It also saves and restores service commitments to its end customers.



Hedge against labor volatility

In another survey, Supply Chain Dive found that 62% of manufacturers and distributors named finding, hiring and retaining labor as a top challenge.² Adding fuel to this fire, labor is one of the most expensive costs for warehouses - gobbling up 50 to 70% of the overall budget. The financial amount this percentage translates to has escalated in recent years. According to the U.S. Department of Labor's (DOL) Bureau of Labor Statistics (BLS) current figures, companies in the Warehousing and Storage subsector have seen labor compensation rates rise nearly 23% over five years.³

The line items relating to labor costs are quite extensive. For example, seasonal peaks often require 1.5 to 3 times the number of workers, which may extend over a month and even incur a higher fee than a regular worker. A recent survey showed that “35% of warehouses have a seasonal surge in the number of workers they employ of over 20%”.⁴ On the contrary, AutoStore robots work any hour and any day of the year under the same conditions and can easily scale up or down based on seasonal demands. They eliminate vacation and pension overhead expenses while increasing performance. Yes, charging is essential, but even this is very efficient with robots charging themselves only as needed using energy-efficient technology.

¹ “Unlocking Hidden Cost in the Distribution Center,” accessed May 5, 2021 <https://country.honeywellaidc.com/CatalogDocuments/unlocking-hidden-costs-distribution-center-research-paper-A4.pdf>

² Learning to live with the manufacturing and distribution labor shortage. <https://www.supplychaindive.com/spons/learning-to-live-with-the-manufacturing-and-distribution-labor-shortage/608196/>. Supply Chain Dive. October 18, 2021

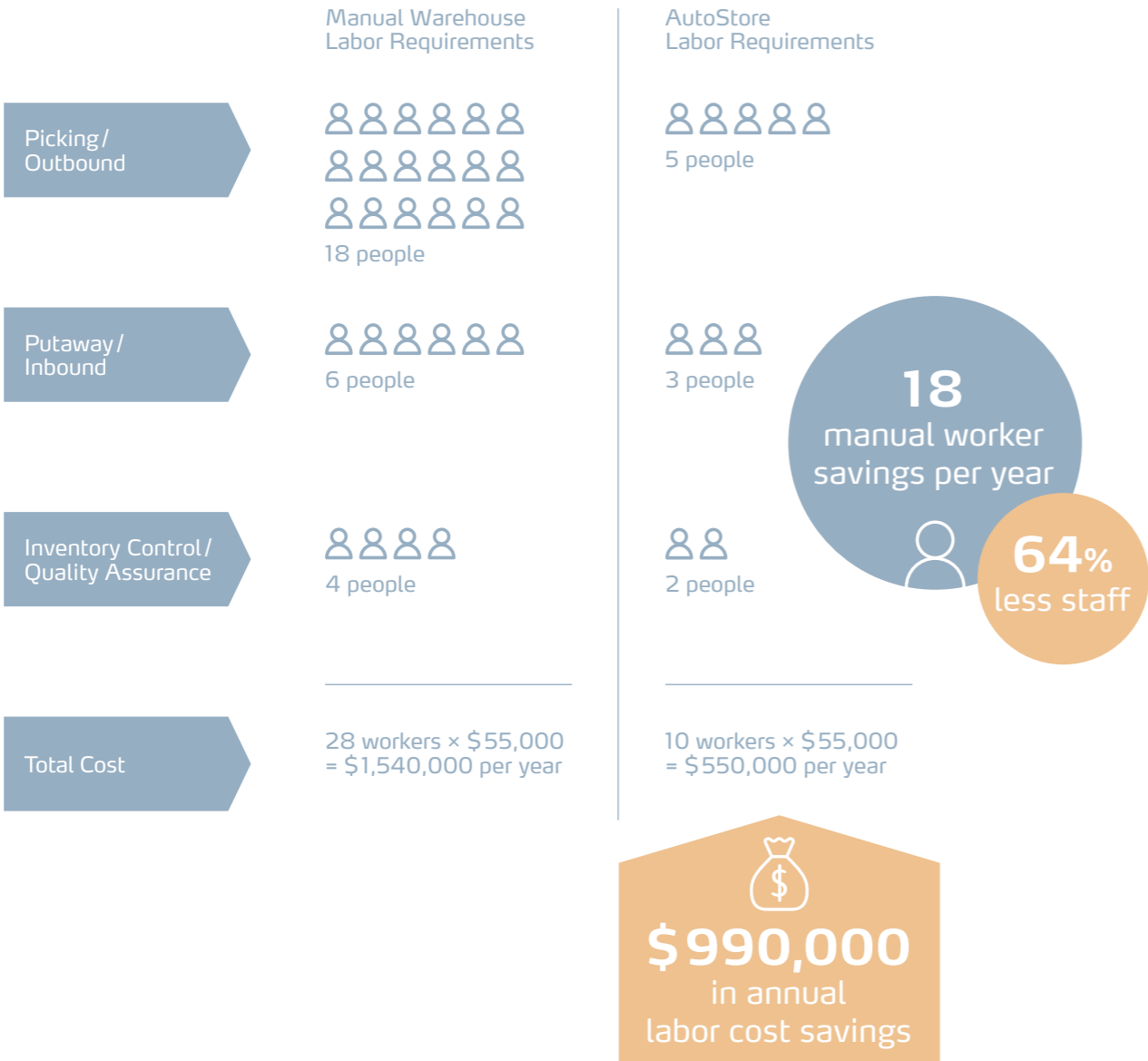
³ U.S. Department of Labor > Bureau of Labor Statistics. “Databases, Tables & Calculators by Subject: Labor Force Statistics from the Current Population Survey > Unemployment Rate.” Accessed May 5, 2021. <https://www.bls.gov/iag/tgs/iag493.htm>

⁴ Banker, Steve. Forbes. Warehouse Labor Woes are Worse than Ever; October 12, 2021

Real labor savings

Let's dig deeper – As an example, if a company has 18 people performing outbound/picking earning \$55,000 annually each, the company is spending nearly a million dollars a year just in salaries and benefits. If AutoStore can increase picking rates from 50 lines per hour to 225 lines per hour in this example, the persons required for picking reduces to only 5, consequently saving over half a million dollars in salaries alone. This same equation applies to labor performing putaways and cycle counting tasks. Although headcounts in these sub-processes are typically more modest, similar efficiency gains are realized with AutoStore. A real world example is shown in the infographic below.

 Calculate your labor savings with StoreX Calculator



Cutting-edge performance

Has the lack of qualified staff forced your business to miss a shipment deadline, stop a production line or disappoint a customer? Perhaps the lack of a qualified workforce didn't allow operations to handle a sudden spike in orders? Is your company's growth plan in jeopardy of succeeding due to fulfillment inefficiencies? Fulfillment operations are living in an era of unprecedented shipment and delivery deadlines made further challenging by a global labor shortage. It is time to rethink logistics!

AutoStore equips warehouses with innovative strategies to navigate today's murky waters. With density, speed, accuracy and efficiency as core values, AutoStore redefines order fulfillment.

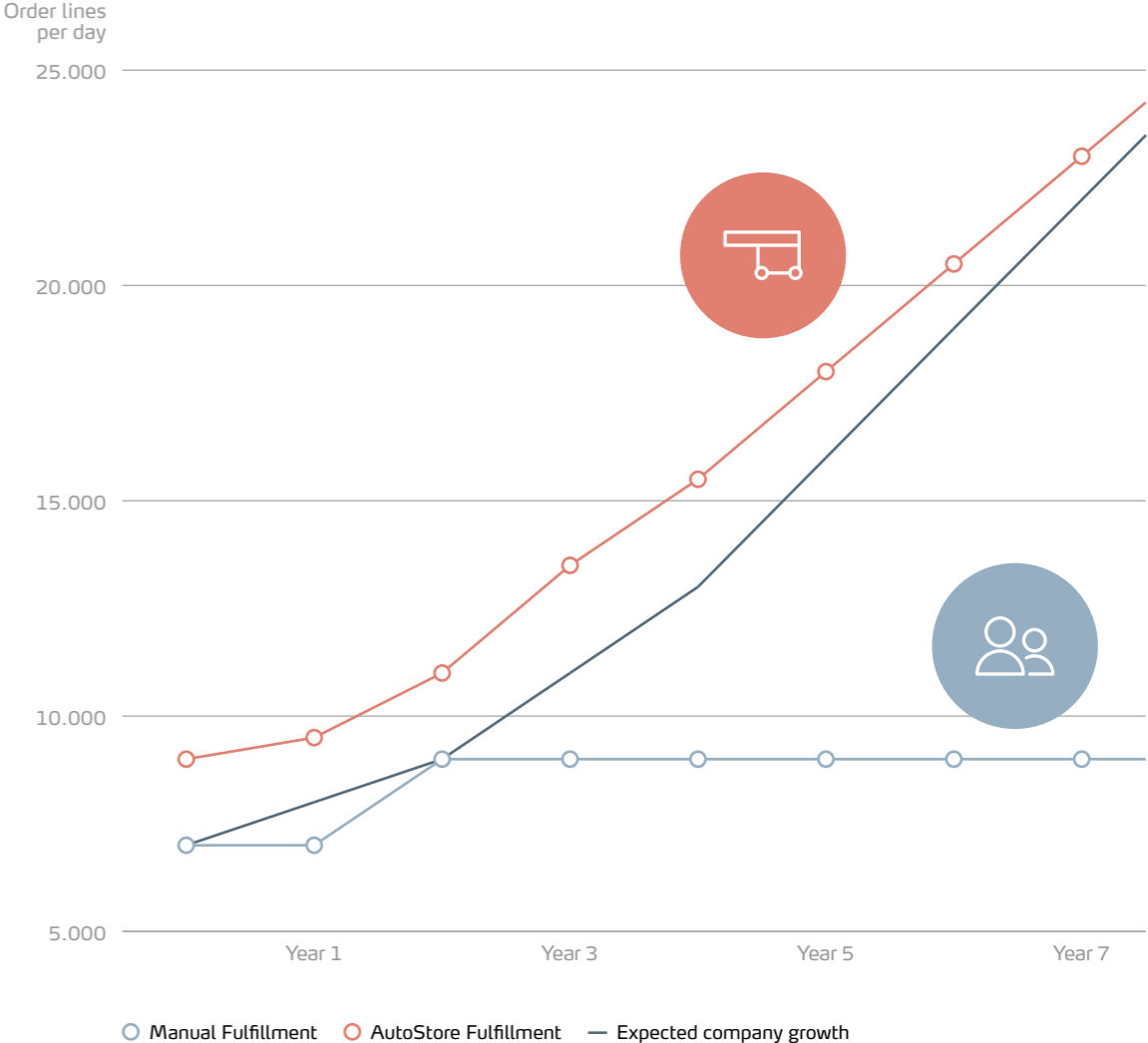
Enabling growth through speed and precision

AutoStore provides the tools to take warehouse performance to the next level. It is the fastest order fulfillment system on the market with the ability to efficiently manage complex orders – an essential tool in this age of mass customization and the transition to piece picking. It provides precise picking while offering an accurate count of inventory at all times – a key to avoiding stock outs, inefficiencies, and simply maintaining a smooth order fulfillment process.

What will drive your company's growth in the coming years? Same-day shipments or ultra short lead-time demands? Volume increases or increased SKU counts? All of these considerations require fast (yet accurate) throughput as a fulfillment priority. For companies that strive for growth in the near future, AutoStore is an investment that delivers immediate labor savings while preparing for future throughput needs.

AutoStore vs. manual warehouse solution

In the infographic below we evaluate manual order fulfillment vs AutoStore order fulfillment, and how each keeps pace with the expected company growth while staying in your current facility.



Space-efficient storage

AutoStore well surpasses competing automated systems in terms of space efficiency. It is the densest order fulfillment system available on the market and has the ability to quadruple a warehouse's capacity. Whether you're adding a product line, bringing on a new client or diving into e-commerce, AutoStore easily scales up operations as demands increase.

AutoStore is extremely flexible and optimizes a facility's space. Through detailed design, the Kardex team molds and shapes the system to fit a specific space or size and configures the layout to a company's unique business operations, including working around facility obstacles. The Kardex team can also build AutoStore systems on a mezzanine or across different floor levels to fully optimize the available space. The average AutoStore system holds 34,000 bins, but this can vary. AutoStore solutions have been built with only a few hundred bins or, in some cases, with more than 300,000 bins. It's an ideal system for a wide variety of applications and operations.



Increase storage capacity 4 times

As a modular system, operations can easily add robots and workstations based on increased demands with very limited interruptions to daily operations. As a warehouse starts to outgrow its facility, instead of building or leasing an additional facility, it can expand its AutoStore - a simple and efficient solution. It's why globally more than 40% of all AutoStore systems have been expanded at least once. With AutoStore, an operation can stay in its current facility longer.

This is extremely appealing from a cost-perspective when considering how facility availability is decreasing while rental prices are increasing. In the United States, vacancy rates fell to 3.3% in Q1 2022 (an all-time record low) and is projected to remain below or near 4% over the next few years.⁵ To amplify this situation, warehouse/distribution rents in the United States rose 15.7% in the first quarter of 2022 to \$7.24 per square foot. This is the first-time overall net asking rents for warehouse/distribution space surpassed the \$7 per square foot mark⁶ and for only a standard industrial warehouse building – not taking into account cleanroom or climate considerations.

Let's dig deeper – “The industrial construction pipeline reached an unparalleled 660.8 manufacturing square feet (msf) in Q1 2022, the first time the pipeline has exceeded 600 msf. Of the industrial projects under construction, 626.8 msf (94.8%) is a warehouse/distribution product”.⁷

In short, available warehouse space is harder to find than ever, industrial rents are rising drastically, and the industrial construction pipeline is the largest it's ever been. With AutoStore, you can maximize the space you have, stay in your current facility and increase your operational efficiencies to support your growth goals.

 See how AutoStore works

⁵ Cushman & Wakefield, Marketbeat. U.S. National Industrial Q1 2022. <https://www.cushmanwakefield.com/en/united-states/insights/us-marketbeats/us-industrial-marketbeat>

⁶ Cushman & Wakefield, Marketbeat. U.S. National Industrial Q1 2022. <https://www.cushmanwakefield.com/en/united-states/insights/us-marketbeats/us-industrial-marketbeat>

⁷ Cushman & Wakefield, Marketbeat. U.S. National Industrial Q1 2022. <https://www.cushmanwakefield.com/en/united-states/insights/us-marketbeats/us-industrial-marketbeat>

Calculate your savings

In the end, there are many cost justification factors that support purchasing an AutoStore solution. It is important to consider which apply to your operations. Don't forget to consider the non-tangible aspects such as how an ergonomic work environment will lead to fewer injuries and higher staff satisfaction.

Curious about how AutoStore can improve your operations and boost your bottom line? Our automation experts are here to help! We offer a complimentary cost analysis tailored to your needs, showing you exactly how AutoStore can drive efficiency and savings.

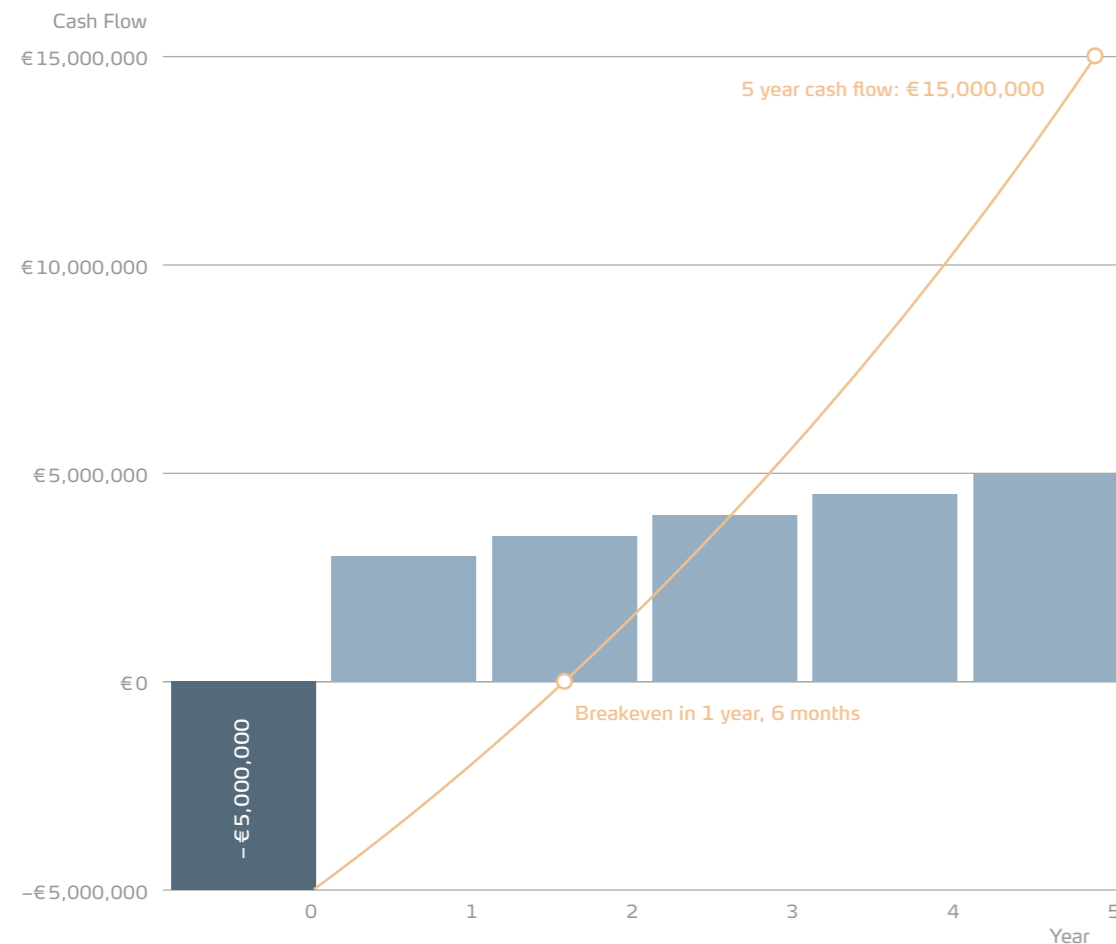
Want to see the impact for yourself?

Try our StoreX Calculator to get instant insights based on your own operational metrics. Then, connect with us to dive deeper into your results!

 [Try our StoreX Calculator](#)

Return on Investment

Spend vs Annual Savings with straightline breakeven



Why partner with Kardex for AutoStore?

When selecting an intralogistics partner, it is critical to ensure a seamless relationship from the start. With AutoStore and Kardex, customers receive a customized solution specific to their unique industry or business requirements and a commitment to transparency in the design process.

Implementing AutoStore can be a major change for any organization. This is why the Kardex team works hand-in-hand every step of the way ensuring a smooth integration with existing systems and minimizing operational downtime. Once live, Kardex offers expert support throughout the entire systems' lifecycle. Having a highly-experienced partner with local customer care and the flexibility to scale systems when needed as business evolves is essential!

As your dedicated intralogistics partner, Kardex offers

- Dedicated project management and ongoing project support for integration with existing systems
- Guaranteed installation and onsite ramp-up support to ensure the business case/ROI is met on-time
- Attainable and accountable project plans with constant communication and a pro-active approach to solving problems before they occur
- Several and ongoing options for onsite and remote training, onsite and remote support and long-term Life Cycle Services



We understand you. Now let us support you on your journey.

Navigating today's customer demands and innovative purchasing outlets forces warehouses to rethink internal operations. Companies, regardless if they are an established industry leader or small start-up, will not be able to surpass competitors in today's market without flexible, fast and high-density storage and order fulfillment solutions. AutoStore allows warehouses to expand storage capacity four times without moving warehouses, increase performance ten times without hiring and unlock new order fulfillment potential.

 [Contact a specialist](#)