

MORE VOLUME SAME SPACE

Next-Generation Pallet and
Container Storage – modular,
scalable, hyper-efficient.



ABOUT

Founded in 2017 in Dresden, Volume specializes in cutting-edge automated storage solutions. Our first patented development, Volume WAVE, revolutionized pallet shuttle systems, winning the IFOY Award in 2021 for its ultra-compact, scalable design with direct access to every pallet.

Now, we are setting new global standards in tote storage with Volume DIVE. This innovative system offers maximum storage density, high-speed order processing, and unmatched installation flexibility, making it a game-changer in warehouse logistics.

WHY CHOOSE VOLUME DIVE?

With innovative technology at its core, Volume DIVE optimizes logistics, dramatically increases storage capacity without expanding warehouse space, and seamlessly adapts to customer-specific needs.

HIGHLIGHTS

01

More Storage

Maximize space with a compact, modular design that stores up to 5x more products.

02

Faster Processing

Achieve high-speed order fulfillment with AI-driven robots handling up to 4,000 totes/hour.

03

Scalable & Flexible

Easily expand capacity and adapt to any warehouse layout without disrupting operations.

04

Easy Installation

Quick and hassle-free setup on any industrial floor with no downtime or major construction.



KEY COMPONENTS OF THE DIVE SYSTEM

At the heart of Volume DIVE are three core elements, working together to create a fast, efficient, and compact storage system.



01

Snappers – Robotic Tote Handling Units

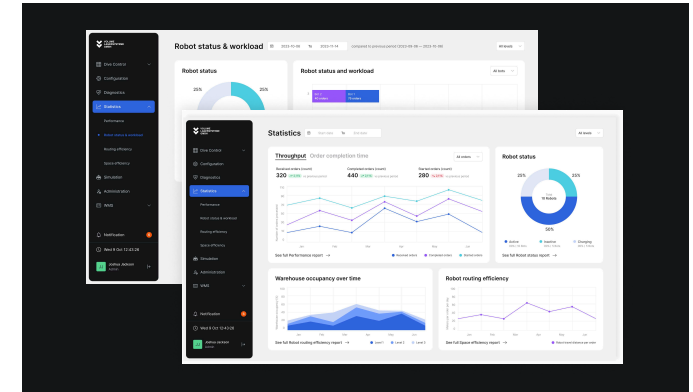
Snappers are autonomous robots that navigate horizontally between Dive modules, picking and transporting containers to the designated picking station. Thanks to 360° moving grippers, they can access every tote on a level without additional equipment. They operate at up to 3 m/s, handle up to 35 kg per tote, and work 6 hours autonomously, recharging wirelessly in just 30 minutes.



02

Speed Rack – Ultra-Fast Storage Modules

The modular steel frame of Speed Rack is engineered for rapid installation and high storage density. Each module holds up to 180 totes, with 20% of containers immediately accessible, 40% reachable with one restacking, and 60% within two movements. With maximum system height of 14 meters, Volume DIVE maximizes warehouse efficiency by having smallest system footprint on the market.



03

Smart Software – Intelligent System Control

Volume DIVE software offers two flexible configurations: Material Flow Computer (MFC) for optimized routing and AI-driven tote management, and Warehouse Management System (WMS) with real-time inventory tracking, AI-optimized replenishment strategies, and advanced simulation tools.

UNMATCHED BENEFITS OF DIVE

01

Storage Density

Volume DIVE allows businesses to store up to 5 times more products in the same space, making it ideal for retail, FMCG, pharmaceuticals, auto parts, and more. The compact, modular design fits any warehouse height, while each module accommodates up to 180 containers, ensuring optimal space utilization.

02

High Throughput

Each Snapper robot processes up to 40 totes per hour with zero time wasted on deep digging. The system scales effortlessly, handling up to 4,000 totes per hour, ensuring seamless order fulfillment even in peak demand periods.

03

Adaptive Storage for Any Product Mix

Unlike traditional systems, DIVE works efficiently with a mix of fast- and slow-moving products. With small, shallow stacks of just 5 totes, 20% of all items are directly accessible, while 60% can be reached in just two movements. The system dynamically optimizes placement based on AI-driven analysis, eliminating the need for pre-configured storage zones.

04

Scalable and Future-Proof

DIVE grows alongside your business. New modules and Snappers can be added without disrupting operations, instantly expanding capacity. The system adapts to any warehouse layout, allowing for step-by-step implementation without costly renovations.





EFFORTLESS INSTALLATION, SAFETY & SEAMLESS INTEGRATION

05

Flexible Installation – No Warehouse Downtime

Unlike conventional systems, DIVE requires no complex construction work. The self-supporting modules install easily on any industrial floor, without grinding concrete or interrupting ongoing warehouse processes. In a 100m² corner, you can start with 28 modules for 4,400 totes, gradually expanding to a 20,000-tote system without pausing operations.

06

Fire Protection and Safety

DIVE is designed for enhanced fire safety, with modular spacing for integrated sprinkler systems. Snappers use LFP batteries, which are resistant to mechanical damage, water, and short circuits—eliminating fire hazards. The system also supports oxyreduct technologies for additional protection.

07

Direct Interaction with AGVs, AMRs & Conveyors

Snappers can directly place totes onto external equipment, allowing seamless integration with AGVs, AMRs, and conveyor systems. Automatic data exchange between DIVE WMS and external software enables real-time analytics, full automation, and maximum efficiency, bringing your warehouse to the Industry 4.0 standard with minimal investment.

VOLUME LAGERSYSTEME GmbH
Kleine Brüdergasse 3
01067 Dresden

Tel. +49 351 899 934 -50
Fax +49 351 899 934 -79
Mail info@volume.eu

www.volume.eu

