



***LEADING THE WORLD
IN PALLET STORAGE***





Leading the World in Pallet Storage



Contents

ABOUT US	5
OUR SYSTEM - HOW IT WORKS.....	8
MOFFETT TAXI TM	10
MOFFETT VTU TM	12
MOFFETT RACKING /CONVEYOR TM	13
MOFFETT SOFTWARE TM	14
MOFFETT AUTOMATION BENEFITS	16
CASE STUDIES	23
SUSTAINABLE WAREHOUSING	32
LABOUR SAVINGS	34
WAREHOUSE SAFETY	36
INDUSTRY 5.0	38
CONTACT US.....	39



Leading the World in Pallet Storage

Achieve the ultimate storage potential of your warehouse

Boost your capacity by up to

65%

compared to a VNA layout.



About us

With 7 decades of engineering excellence, the Moffett name is synonymous with innovation, from designing solutions for palletised goods to facilitating international storage.

The Moffett name and tradition is synonymous with engineering and software innovation. Privately held and established by industry experts in 2017, we've been providing businesses across a range of sectors with material handling solutions that are data-driven, fully automated and bespoke to our clients' requirements.

Unlike many storage and material handling providers, Moffett Automation offers an approach that is flexible, dynamic and with built-in redundancy. Our pioneering of the multi-directional MOFFETT Taxi™ System is testament to our commitment to innovation.

The MOFFETT Taxi™ System provides a total re-definition of the concept of a

traditional shuttle in the form of an auto storage retrieval system.

Indeed, our systems' optimisation process continues throughout the growth of our clients' businesses, offering scalability throughout the lifetime of a project. Our success has been built on our reliable backup service, with our intuitive remote login system allowing us to view critical information; including data around heat sensors, motor deceleration and acceleration. We can even operate the system remotely from our premises, allowing us to relate to our client to quickly identify technical issues.





Leading the World in Pallet Storage

The Moffett Name

We pride ourselves on the Moffett family tradition of engineering innovation which dates back to 1945 when Sam's grandfather Cecil Moffett set up business in a small workshop on the family farm in Clontibret, Co. Monaghan. Moffett Automation Ltd. is firmly focussed on continuing in that tradition and our customers can have peace of mind knowing our track record and commitment to providing solutions to their storage needs.



Guillotine



Combilift



Moffett MOUNTY



The Moffett Automation Team

Customers do not just trust us to provide innovative and reliable automated storage systems. They also trust our experienced team and the expertise they have developed in the logistics and materials handling industry. We believe in investing in our people and bringing together some of the industry's top talent to consistently deliver the right result for our customers. We pride ourselves on the strength of our after-sales and customer support team who are available to support with any issues within a 24 hour period. Client satisfaction is our core priority.



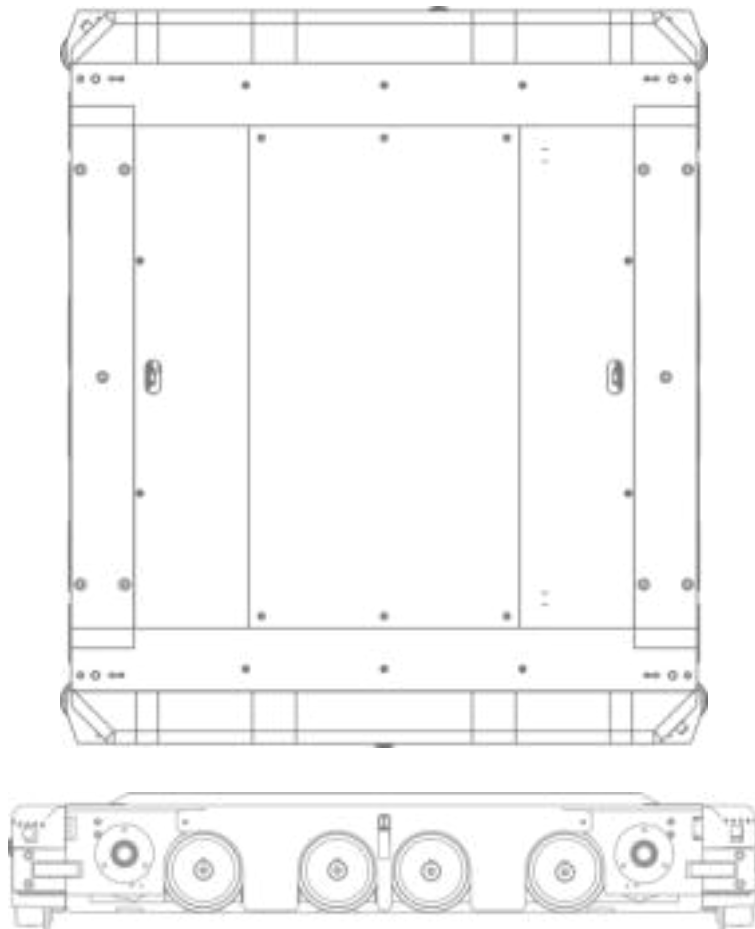
Sam Moffett
Managing Director



Joonas Rynänen
Chief Technical Officer



Leading the World in Pallet Storage



How it Works

The MOFFETT Taxi™ has reimagined automated pallet storage. We study the needs of each customer and provide a bespoke pallet storage solution. The design of our equipment allows our taxis to move in X, Y and Z directions thanks to Moffett Automation VTUs (vertical transfer units) enabling them to travel between levels, allowing any taxi to carry any pallet to any storage space within the system. Pallets are inbounded through a size and quality verification system which checks that the pallet size falls within the accepted tolerances before being taken to its storage space. Each system is tailor-designed to meet the needs of each customer which may include order picking, accommodating peak periods of inbounding or outbounding, pallet buffering, integrating with different manufacturing processes or already existing storage technologies.



Key Benefits of Automation

- Increased storage density while maintaining optimum throughput
- Significant energy savings in cold storage
- Less personnel, reduced salary overheads
- Higher throughput rates
- Reduced factory lead times
- Creating a more sustainable storage solution
- INDUSTRY 5.0 Ready
- Elimination of damage to product and racking
- Easily integrated into existing WMS systems
- Interconnected racking structure - ensuring total stability
- Pallet security
- Efficient and ergonomic order pick face system
- Long lifespan
- Super flat flooring not required
- Turn-key solution fits existing Brownfield

65%
Compared to a VNA layout

Less Than
1%
Operational Downtime

100%
Stock Accuracy



Leading the World in Pallet Storage



MOFFETT TAXI™

Discover the future of warehouse automation with the Moffett Taxi™: a revolutionary system that travels throughout your warehouse at a speed of 1.8 m/s, accessing any pallet, at any level, at any time.

Featuring a fully electric drive and lift system powered by a lithium 100AH battery, the Moffett Taxi™ helps your company lead the way in sustainable logistics. Each Taxi is capable of carrying heavy pallet loads of up to 1500kg to any storage space, allowing access for optimum utilisation of the system - all with fully automatic opportunity charging.

Aesthetically pleasing, ecologically friendly and designed & manufactured in-house, this system features regenerative braking and communicates through a meshed Wi-Fi network, with an operational time period of 8 hours in ambient storage and 6.6 hours in chilled storage. Essential to its operation Moffett

Software®, which enables remote monitoring and control of the system. This includes adjustments for heat sensors, motor deceleration, acceleration and even remote operation, ensuring rapid response to any technical issues and maintaining system integrity.



SCAN FOR INFO





Benefits

The benefits of the Moffett Taxi™ are significant. By integrating our system, companies can store more products per square metre than any other solution on the market, boosting their capacity by up to 65% compared to VNA warehouse layouts.

Aside from that, this Industry 5.0-ready solution guarantees 100% stock accuracy, with a range of features that speed up your throughput, increase your pallet storage, enhance safety levels and reduce many of the costs associated with human labour and energy consumption.

As your business grows, so do your storage requirements. That's why the Moffett Taxi™ system has been engineered for scalability. Need to increase your capacity or further streamline your fulfilment operations? Look no further. All you have to do is add more Taxis to your warehouse.



Moffett Taxi™ Specifications

- **Weight Capacity:** 1500kg
- **Operating Temperature:** -27°C to +50°C
- **Top Speed:** 1.8m/s
- **Charging:** Automatic Opportunity Charging
- **Battery:** Lithium 100AH
- **Communication:** Wi-Fi



Leading the World in Pallet Storage



MOFFETT VTU™

(Vertical Transfer Unit)

To allow any Taxi to travel to any level to access any storage space, Moffett VTUs™ are integrated into every system. Capable of carrying heavy loads up to 2000kg, Moffett Automation will design each system with enough VTUs to achieve the required throughputs.

VTUs can be built up to 40 metres high.





MOFFETT RACKING™

Moffett Automation have collaborated on special inter-connected racking which accommodates existing pallet dimensions ensuring optimum storage density. The racking structure is designed and installed to a high tolerance, ensuring total accuracy and utilisation of the space available. The design adheres to EN 15512 and FEM 10.2.19 standards, while tolerances and deformations are controlled in line with FEM 9.831, guaranteeing accuracy and structural reliability.



MOFFETT CONVEYOR™

To facilitate inbound and outbound pallet transportation from the storage system, Moffett Automation design, manufacture and install conveyor units. Each conveyor is tailor-made to meet customers' exact specifications and can also be integrated with existing processes within the facility, such as AGVs or existing conveyor systems.



Moffett Software®

Our powerful software solution is built on a foundation of rigorous testing and validation protocols, ensuring reliable performance and seamless integration with existing systems in your warehouse.

Before our software is implemented on your site, we replicate live conditions through emulation testing, using various scenarios to simulate the challenges your Moffett Taxi™ may encounter. We even employ a fully functional system in our own HQ to test our software on actual machinery and control systems.

Our development team monitors software performance across your site and rolls out updates to ensure optimum functionality, debugging issues on your live systems as they arise.

We provide a REST API as the interface between our Warehouse Control System (WCS) and your Warehouse Management System (WMS). This allows for real-time communication between systems, with your WMS sending requests to Moffett Automation endpoints for various operations, such as pallet movements, inventory updates, and system health checks.

Each API endpoint is designed with clear request and response formats, ensuring your WMS receives all relevant information for smooth operations. The standard integration is unidirectional, meaning our Warehouse Control System processes incoming requests from your WMS without posting information back. However, the flexibility of our API allows for bidirectional communication when required.

The Benefits of Moffett Software

WMS Integration: Seamlessly integrate within any WMS or ERP system.

Route Scheduler: Determines the most efficient way for material handling within your warehouse.

Traffic Manager: Coordinates the movement of the Taxis within your warehouse based on proximity and availability.

Barcode Scanner Integration: Reads pallet IDs upon entry.

Automatic Charging: Automatic charging feature for the Taxi systems in your warehouse.

Storage Manager: Optimises the allocation and retrieval of all pallets within your warehouse.

Multi SKU Lane Storage: Allow different SKUs to be stored in the same line if accessible from multiple aisles.

Priority Orders: Adjust the priority of orders on the fly, accommodating urgent needs without any disruption to overall workflow.

Order Manager: Streamline the management of outbound orders, directing them to specific conveyors or picking stations.

Safety Controllers: Integrated with industry-standard PLCs and sensors to manage all safety aspects.

Inbound Buffer Zone: A temporary staging area for incoming pallets, facilitating rapid unloading.

Outbound Buffer Zone: Aggregates all relevant pallets for an order for quick loading onto delivery vehicles.

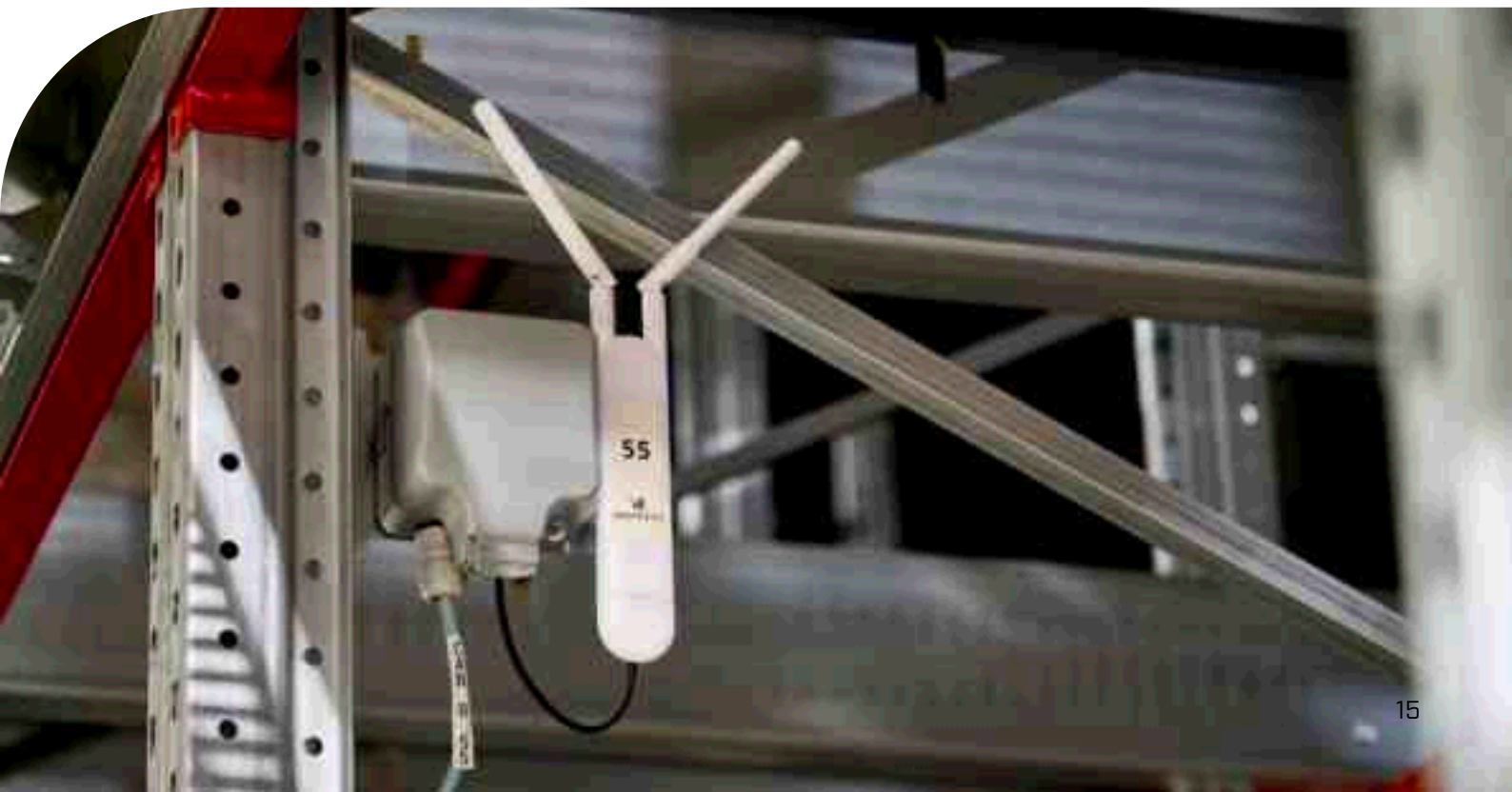
Multi-Size Pallet Storage: Accommodate different pallet dimensions within the same storage facility without compromising on space.

Housekeeping: Routinely organise stored pallets to optimise space and maintain order accuracy.

RFID Scanner Integration: Ensure high accuracy in stock levels and reduce the potential for errors during audits.

Picking Stations: Facilitate efficient order picking by directing pallets to designated picking stations.

Airlock Door Integration: Minimise air exchange during pallet transfers, preserving internal conditions and reducing energy consumption.





Remote Access Support

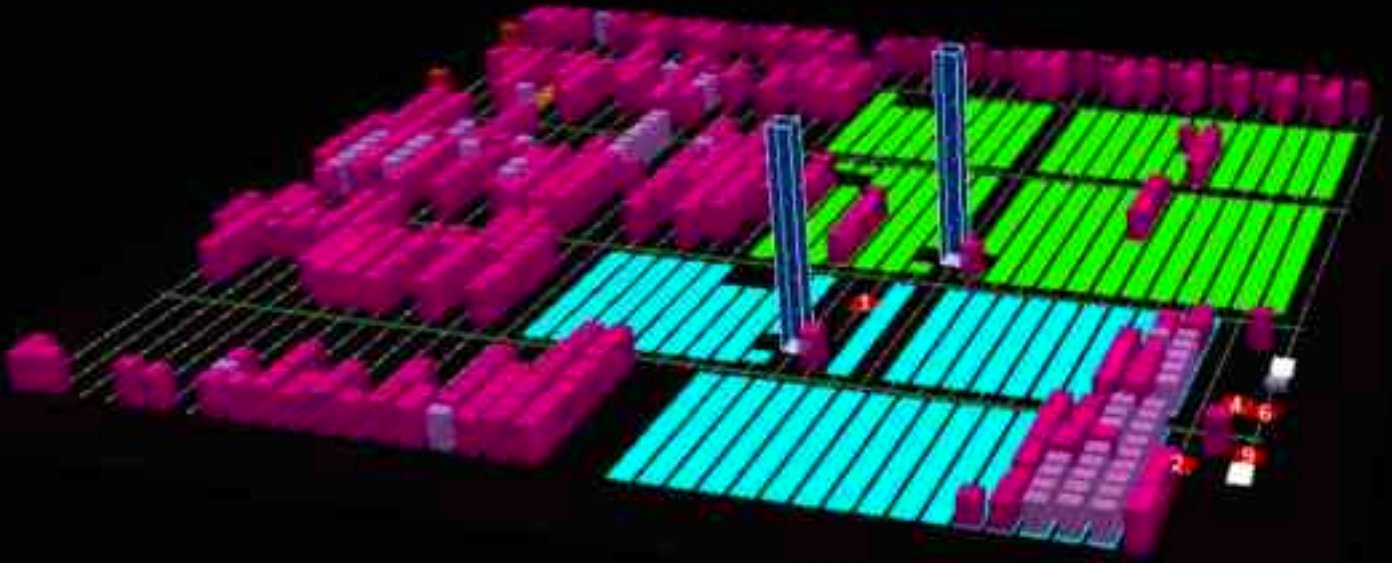
All our systems are supported by our software support team based in Monaghan, Ireland. Our support team operates 24/7, ensuring that downtime is minimised and your operations run smoothly. Through the use of a VPN, our remote access support team can maintain and monitor live systems for any potential issues, allowing for rapid intervention and troubleshooting. This ensures that even in the rare case of system faults, problems are resolved swiftly without significant operational impact. The support team also ensures that each live system is always up-to-date with the latest software, offering continuous improvements in functionality and security.

For more complex challenges requiring hands-on expertise, Moffett Automation provides on-site services to further minimise disruptions. Our systems, including the Moffett Taxi™, can be operated remotely to diagnose and resolve technical issues efficiently, often before they impact operations. Additionally, our on-site team can visit your facility to address more critical problems or make personalised adjustments, ensuring your systems are tailored to your evolving business needs. This combination of real-time remote monitoring and expert on-site service guarantees maximum system uptime and productivity, supporting businesses across sectors such as healthcare, logistics, and manufacturing.

Picking Tunnels

To allow for order picking, Moffett Automation can install pick tunnels and pick stations into each automated storage system. Products can be picked safely off pallets eliminating the need to outbound the full pallet. Our software team can tailor the picking stations to suit the demands of the business and auto-replenishment can be integrated which allows for the automatic changeover of pallets once they are picked to empty.





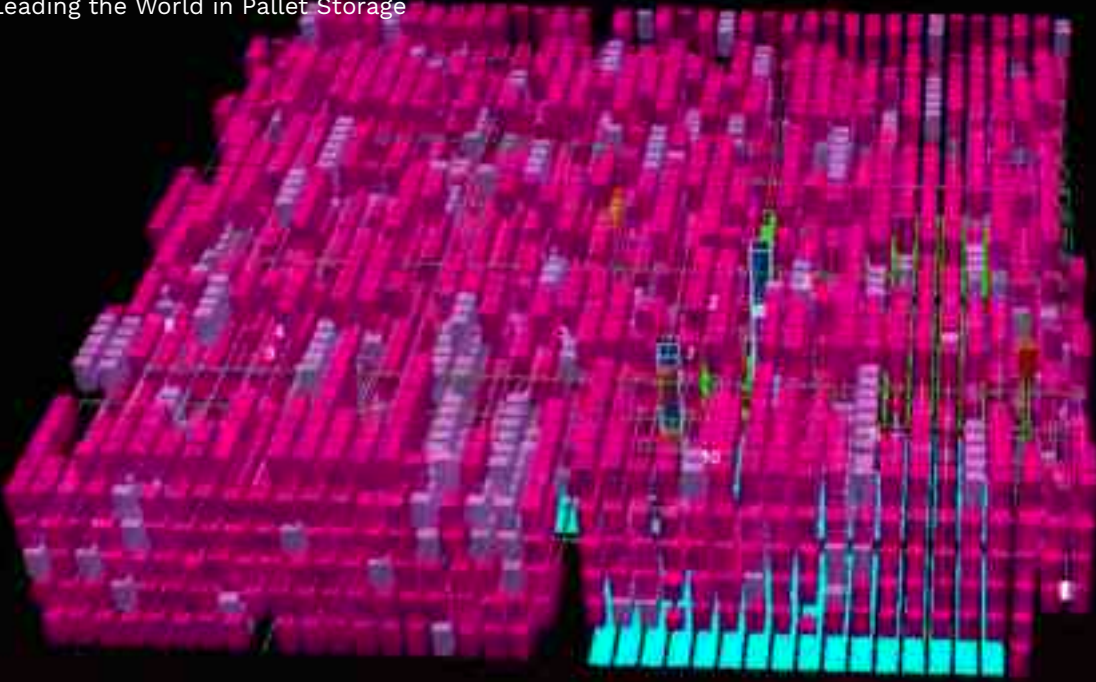
Staging of Loads

In order to meet peak periods, Moffett Automation can designate areas around the inbound and outbound zones to accommodate pallet buffering. This means that pallets are directed first of all to an area close to the inbound conveyor so that large volumes can be inbounded during peak periods and then taken to different storage locations during quieter periods. For outbounding, prepared orders are all transported close to the outbound area before the peak outbounding period so that the speed is greatly increased.

Zoning Spec:

Ability to store specific products in specific areas of the warehouse.

Developers will code SKU (Stock Keeping Unit) to automatically go to a predetermined area of warehouse to satisfy client's requirements. Speeds up order processing by ensuring products are readily available in their assigned locations.



Scalable

MOFFETT Taxi™ systems are fully scalable. As business expands, and as throughput requirements increase more pallets can be moved by adding more taxis to the system. This is a quick and easy process which ensures that business growth is not hindered and that the automated storage system can expand and accommodate future growth.



Time to Delivery



The race to deliver goods as quickly as possible has become an unrelenting demand in the warehousing sector. Customers require their products as soon as they are ordered and it is up to the storage and logistics companies to deliver these products in a timely manner.

The MOFFETT Taxi™ system guarantees a very rapid pallet throughput. Our system is capable of operating 24/7, allowing distribution companies to maximise efficiency and reduce response time to delivery demands. Automation also guarantees lower labour costs, particularly when a warehouse operates 24/7.

Maximise Storage Space



Real estate close to shipping ports and prime locations can be expensive. To increase storage capacity without breaking new ground, warehouses are being built up rather than out. It is therefore vital that companies maximise the space in their existing warehouse and what better way to do it than by introducing automation.

A MOFFETT Taxi™ system helps warehouse operators to increase their storage density and can be built to a height of up to 30 metres, compared with traditional warehousing solutions within the same footprint.



SKU Analysis

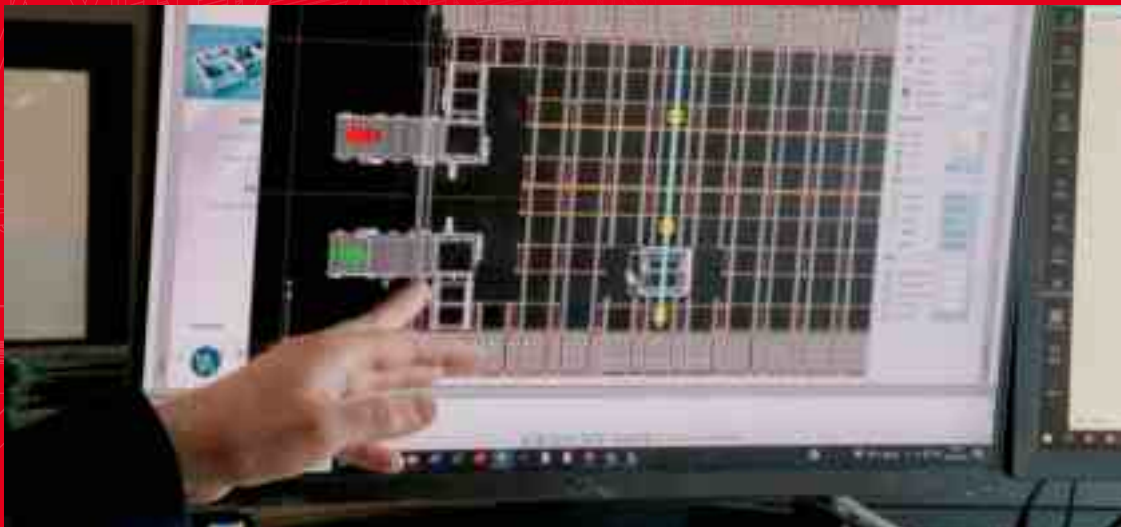
As part of the scoping exercise Moffett Automation need to understand the exact warehouse dimensions and product specifications and will send out a 'Request for Information' questionnaire to be filled in. The following information will be required:

- Number of SKUs
- Number of batches per SKU (if applicable)
- Average throughputs required
- Peak throughputs required
- Picking required
- Storage environment



Warehouse Layouts

Once the pallet details are available, the Moffett Automation warehouse planning team can begin to design the automated storage system. The information supplied will determine the amount of travel aisles, VTUs, MOFFETT Taxis™ and conveyors that are required in order to meet the required specifications.



Cold Storage

The MOFFETT Taxi™ system can operate from temperatures of +50 degrees Celsius to -27 degrees Celsius. For cold storage operators, our system provides significant benefits, including;

- Elimination of need for personnel in cold storage, no one working in harsh environments
- Significantly reduced temperature loss during transfer
- More pallets in same cooled area
- Reduced downtime due to no human presence in the storage area



RAPID ENVELOPE DOORS

To help minimise energy loss when transferring pallets in and out of cold storage, we integrate rapid Envelope Doors. They can be much smaller than the doors used in traditional warehouses, as they only require to accommodate the dimensions of the pallet and taxi.



DUAL ACTING DOORS

In order to ensure no changes in temperature during pallet transfers, Moffett Automation can integrate airlocks into dual-acting doors when inbounding and outbounding pallets.



Fun Fact: It would take just 5 people in a cold storage room to lose 1 kilowatt of energy



Leading the World in Pallet Storage



- *Automotive*
- *Healthcare*
- *Manufacturing*
- *Food & Beverage*
- *Logistics*

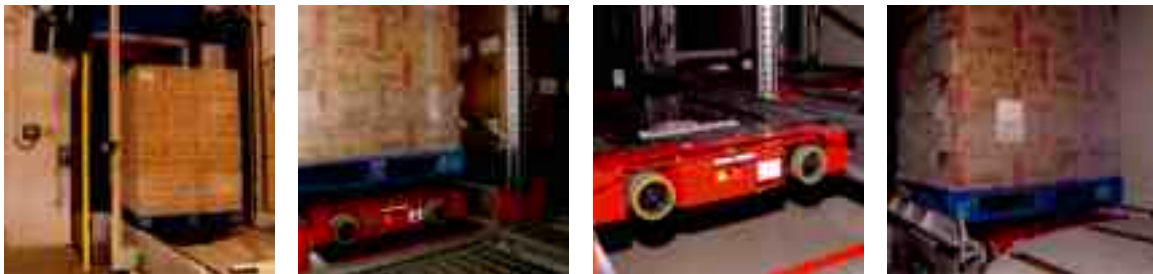
Case Studies

C&M Coldstores

Location: Ireland

Commissioned: 2020

Industry: Third-Party Logistics



This 64,800 sq ft warehouse is split exactly in two 32,400 sq ft operating using VNA aisles and VNA forklifts, with the other 32,400 sq ft operating using our MOFFETT Taxi™ system. The system delivers an increase of over 60% in storage spaces, 9,052 spaces compared to 6,250, and since this facility is operating in temperatures of -22 degrees Celsius, significant energy savings are achieved. In terms of labour needs, it takes 5 operators to operate the VNA layout which are fed with pallet trucks whilst only one operator and forklift are needed to operate the Moffett Automation layout.

System Specifications

- Taxis: 10
- VTUs: 2
- Racking Spaces: 9,052
- Entry points: 1
- Exit points: 1
- Pallet Weight: 1,300kg
- Outbound: 60pph
- Inbound: 60pph





Case Studies

Total Packaging

Location: The Netherlands

Commissioned: 2024

Industry: Production



The system installed in The Netherlands is one of the busiest MOFFETT Taxi™ systems with high throughputs achieved, allowing us to showcase to the world our innovation capabilities as the client demanded the ability to move high volumes of pallets. The incoming pallets are directly fed from the production into the MOFFETT Taxi™ system which operates at temperatures of -25 degrees Celsius. The system operates 24/7, 365 days per year. The customer also integrated deoxygenated cold storage eliminating the need for sprinklers in the warehouse.

System Specifications

- Taxis: 4
- VTUs: 2
- Racking Spaces: 6,700
- Entry points: 2
- Exit points: 2
- Pallet Weight: 1,000kg
- Outbound: 16pph
- Inbound: 33pph



Case Studies

Dixon International Logistics

Location: Ireland

Commissioned: 2024

Industry: Third Party Logistics



This complex project required a solution that could connect two existing storage chambers together, groundworks redesign and a dedicated inspection area. Moffett Automation met all of these objectives and more, creating a bespoke package that would ultimately boost this customer's storage capacity from 26,000 pallets to 46,328 pallets, with a throughput of over 250 pallets per hour. With the sustainability benefits of our system, we were proud to assist Dixon International Logistics in becoming a NET 0 energy facility.

System Specifications

- Taxis: 20
- VTUs: 6 (Dual Entry)
- Racking Spaces: 46,328
- Entry points: 3 (Reversible)
- Exit points: 3
- Pallet Weight: 1,000kg
- Outbound: 80pph
- Inbound: 80pph





Case Studies

A-Safe

Location: England

Commissioned: 2024

Industry: Manufacturing

This system was a specialised project which included Moffett Automation installing a traintrack like structure from the manufacturing building through a tunnel across a public road to the warehouse building. This allows pallets to be transported directly from one building to the other via MOFFETT Taxis™, resulting in a quick and easy storage solution for the customer. With a picking area on a mezzanine floor which allows specific orders to be put together quickly and efficiently, all aspects of the customers needs are fulfilled by the MOFFETT Taxi™ system. This system has a number of entry and exit points which will become busier as the requirement for higher throughputs increase with continued growth.

System Specifications

- Taxis: 23
- VTUs: 6
- Racking Spaces: 14,186
- Pick Area Locations: 14
- Entry points: 6
- Exit points: 9
- Pallet Weight: 1,200kg
- Outbound: 45pph
- Inbound: 44pph



Case Studies

Axis Decor

Location: England

Commissioned: 2021

Industry: Paint & DIY Supplier



Located in the midlands of England, this 2,094 pallet space system focuses specifically on order picking and preparation. One of the requirements of this client was the elimination of forklifts at inbound and outbound zones and to achieve this we designed the innovative Moffett Automation Pallet arm which allow a the pallets to be moved by a PPT (powered pallet truck) instead of a Forklift truck. A picking tunnel was incorporated into this system allowing the customer to meet picking requirements in a quicker and more efficient way than with standard warehousing.

System Specifications

- Taxis: 3
- VTUs: 1
- Racking Spaces: 2,094
- Entry points: 1
- Exit points: 1
- Pick Area Locations: 112
- Outbound: 30 pph
- Inbound: 40 pph
- Pallet Weight: 1,000kg





Case Studies

JMC Warehouse

Location: Ireland

Commissioned: 2018

Industry: Third-Party Logistics



With 3,015 pallet spaces, located in Dublin, Ireland, this system was the first commercially installed MOFFETT Taxi™ system in the world. Picking tunnels have been installed in this system to allow for easy order picking.

System Specifications

- Taxis: 3
- VTUs: 2
- Racking Spaces: 3,015
- Entry points: 1
- Exit points: 1
- Pick Area Locations: 132
- Outbound: 30 pph
- Inbound: 40 pph
- Pallet Weight: 1,200kg



Case Studies

Compagnie Fruitiere UK

Location: *England*

Commissioned: *2020*

Industry: *Banana Ripening*



The MOFFETT Taxi™ system installed in England is the first fully automated banana ripening system in the world. This was an incredibly specialised project which Moffett Automation carried out in association with a ripening company. Completing this project allowed us to showcase to the world that we are an innovative company and can design systems for more than just a standard warehouse.

System Specifications

- Taxis: 8
- VTUs: 2 (chain drive)
- Racking Spaces: 1,800
- Entry points: 1
- Exit points: 1
- Pallet Weight: 1,150kg
- Outbound: 42pph
- Inbound: 42pph



Leading the World in Pallet Storage

Manufactured In-House

***INTEGRATORS
WANTED***

Contact us for more information





Sustainable Warehousing

Sustainability is the buzzword of our times. It applies to all aspects of our lives in the 21st century. The warehousing sector, like all others, has to address this urgent issue and the imperative of 'going green'.

The MOFFETT Taxi™ system has been created with this very much in mind and is fast becoming the 'go to' sustainable solution for warehousing companies and in particular cold storage and freezer facilities. These consume more energy than ambient warehousing and with the MOFFETT Taxi™ system no space is wasted and more storage is available on the same footprint.

The energy required to cool the storage area remains the same while the number of pallets being cooled is greatly increased, sometimes by as much as 40% as compared to standard racking. Additionally people,

forklifts and lighting create heat thereby wasting energy and putting extra pressure on refrigeration systems. Heat/chill loss is further improved by integrating envelope doors into the system thereby minimizing temperature changes as pallets are fed in and out of the system.

Another potential way of decreasing the environmental footprint of cold storage is by installing an oxy-reduced system. This reduces the oxygen content in the air of the warehouse eliminating the need for sprinklers and maximising use of all space in the warehouse. Moffett Automation has successfully installed this in a cold store as part of a recent project, finding that it has helped improve the overall efficiency of the system and has led to overhead cost reductions for the customer. This also allows for the maximisation of the height of the structure without jeopardising high-level safety standards.

Why become a more sustainable warehouse?

For us at Moffett Automation, the question isn't why become a more sustainable warehouse.

The question is Why Not?

1.Reducing your Operational Costs:

Reduction in operational overheads with lower labour and energy costs than with traditional warehousing set ups.

2. Ensuring the quality of your product:

Reduction in manual handling and use of materials handling equipment resulting in less product damage caused by human error.

3. Maximising your warehouse productivity:

The possibility of increasing the number of pallet spaces in the warehouse as the result of eliminating the need for aisles means better space utilisation. Pallet throughput can be varied by adding additional taxis depending on demands on the business at any given time.

4. Significantly Reduced Energy Costs:

No lighting is required in the warehouse as there is no need for personnel to be working within the building. This represents a significant cost saving. Additionally in a conventional cold store there is huge energy loss when the entrance door has to be large enough to accommodate a forklift entering and exiting all day. With the MOFFETT Taxi™ system, the door only has to be the size of the largest pallet and we can install envelope doors that work to minimise the energy loss during pallet movements. These features all contribute to overhead energy cost savings.

5. Reduced Waste Production:

In conventional warehouses utilising forklifts, waste can result from re-packaging and product loss due to damage and mishandling. An automated warehouse eliminates the need for most heavy machinery reducing the likelihood of product damage and loss. A MOFFETT Taxi™ system can retrieve and transport pallets safely and smoothly across the system ensuring less plastic stretch wrap consumption as securing the pallet is less of a concern.





Labour Savings

How automation reduces labour requirements, ensuring businesses maintain their competitive edge.

- Reducing the number of personnel needed to run the facility results in huge cost savings over the long term.
- Improved Health & Safety compliance
- 24/7 Warehouse Operation
- Low cost operators

The MOFFETT Taxi™ system is easy to operate, and warehouse operators can be trained very quickly to use the system. Moffett Automation supply a user-friendly interface to ensure smooth hassle-free operations





Pallet Handling:

The MOFFETT Taxi™ system incorporates numerous unique features, with one of the key elements being the strategically engineered floor design. By minimizing the levelling of the floor surrounding the conveyors, we have eliminated the need for cumbersome forklifts within our Moffett Automation setup. This optimization not only enhances floor space but also improves safety and accessibility for your workforce. Additionally, all Moffett automation components are CE Certified, ensuring they meet the highest international engineering and safety standards, further enhancing operational efficiency and safety.

24/7 Availability

A major benefit of installing a MOFFETT Taxi™ system is the opportunity to change warehouse working times to run 24 hours a day, 7 days a week with no increase in labour costs. As less labour is needed, the need for shift working hours is reduced compared to a traditional warehouse operating 24/7.





Warehouse Safety

As a workplace, the warehouse can be a dangerous environment with a number of different risks that can cause accidents. According to the Health and Safety Executive in the UK, a worker in the transport and distribution sector suffers a serious injury as a result of the manual operation of warehouses every single day of the year.

Vehicles, such as forklifts, may collide when entering or leaving an aisle. Trucks may overturn, and machines can collide with pedestrians within a warehouse, making these among the most common types of accidents recorded. Warehouse operators are also required to work at great heights, whether operating machinery capable of lifting to these heights or manually picking boxes on upper levels of the racking. This demands skilled individuals with the necessary training to operate these vehicles. Moffett Automation, along with our MOFFETT Taxi™ system, is assisting warehousing companies in reducing these risks and, in turn, creating a more efficient storage solution.

No requirement for heavy materials handling equipment in the warehouse

With a MOFFETT Taxi™ system, there is no need for heavy machinery such as forklifts in the warehouse. Thanks to Moffett Automation equipment, a PPT is sufficient to handle pallets both at inbound and outbound stations. Without the need for heavy machinery and large vehicles, the risk of an accident is greatly reduced, as is the requirement for highly skilled and trained operators. And with the current shortages in warehouse operatives, it is a huge benefit to companies that candidates who are less skilled will be able to operate the system and also that fewer operatives are needed to efficiently manage the system compared with standard warehousing.

No More Forklifting Pallets to Heights

The MOFFETT Taxi™ system requires no further handling within the system. Once the pallet is placed at the inbound point, the pallet requires no further intervention until the order is requested for outbound and the pallet taken out of the system.

No human intervention, either physical or by operating a vehicle is needed to transport pallets to spaces or to move pallets at heights. This greatly reduces the risk of an accident. MOFFETT Taxi™ systems can be built up to 40 metres high, maximising the space available in the warehouse whilst also ensuring a much safer working environment for employees.

And if human interaction is required for repairs, all levels of Moffett Racking™ have access platforms and grating to ensure the

safety of maintenance teams when operating at heights.

Tied Together Racking – No Risk of Collapse

When pallet racking collapses, it can cause huge monetary losses, damaging stock and causing business interruption while also posing a threat of serious injury to anybody present at the time of the collapse. With a MOFFETT Taxi™ system, the racking is all tied together as one structure, which eliminates the risk of collapse. The MOFFETT Taxi™ system also does not need a “super flat” floor and only requires to be of FM2 tolerances.



Industry 5.0

Industry 5.0 takes what was started in the third industrial revolution with the adoption of computers and automation and enhances it with smart and autonomous systems fuelled by data and machine learning. The phrase was first used in 2011 but is seen by many as the future of manufacturing and industry processes.

MOFFETT Taxi™ system: Industry 5.0 Ready

The MOFFETT Taxi™ system is one of the world's first warehousing solutions which does not require human intervention. Once the system understands the warehouse order processes, with our in-house software, pallet movements are automatically updated and each order is positioned so that it can be processed as efficiently as possible.

Multiple Taxis operate around the system at the same time, and our taxi traffic management system ensures that there is never a collision between vehicles. During peak periods the taxis will store pallets on spaces closest to the inbound/outbound area and then during quiet periods the taxis rearrange these pallets to be stored in spaces that will ensure the system can run at its most efficient speed, guaranteeing optimum throughputs.

The taxis are smart, using our “opportunity charging system” which means the taxi travels to a charging space during quiet periods in the warehouse. Unlike other shuttle systems, our taxis have the ability to move between levels and in all directions, meaning any particular taxi on the system can reach any pallet space on any level. With companies struggling to keep up with labour costs

and demands, yet wanting to maximise the pallet spaces in their warehouse and deliver optimum throughputs, the MOFFETT Taxi™ system allows warehouse operators to take advantage of what INDUSTRY 5.0 can deliver and to be the most cost competitive operators in their sector.

The MOFFETT eTaxi™ is the latest innovation from Moffett Automation, and is a frontrunner in adapting to Industry 5.0 standards by harmonising automation with critical human-centric and environmental considerations. Equipped with a Lithium 100AH battery and featuring regenerative braking, this advanced shuttle operates seamlessly across warehouse levels. It supports a load capacity of up to 1500kg and achieves speeds of up to 1.8m/s. Notably, its communication is enhanced by a meshed WiFi system, ensuring robust connectivity. The eTaxi™ also boasts an automatic opportunity charging system and a fully electric drive and lift mechanism, underscoring its commitment to operational efficiency and sustainability.





Contact Us

To learn more about our systems, to understand the feasibility of automating your warehouse, or to make an enquiry, please visit our website moffettautomation.com or email us at info@moffettautomation.com

*Moffett Automation
Listroar, Clontibret,
Co.Monaghan,
Ireland, H18 X231*

*+353 (47) 80300
info@moffettautomation.com*

www.moffettautomation.com



*Scan to
Learn More*



**LEADING THE WORLD
IN PALLET STORAGE**

Moffett Automation
Listroar, Clontibret,
Co. Monaghan,
Ireland, H18 X231

+353 (47) 80300
info@moffetautomation.com

www.moffetautomation.com