AIRPORTS

Reliable partner for value-added logistic process automation
We have established a global reputation over the past six decades as a highly reliable partner for airports, and use our experience to implement the optimal baggage handling solution for your needs. Our passionate, highly skilled project managers will cooperate closely with you at every stage of the process, from the design to the ultimate handover. They are continually proactive and supportive, even during the most challenging times. This ensures that we never fail to deliver on our promise to you, and your operations remain competitive for the full lifetime of the system and beyond.

Vanderlande’s baggage handling systems are proof of this commitment. They move 3.7 billion pieces of luggage around the world per year, in other words 10.1 million per day. These systems are active in 600 airports, including 13 of the world’s top 20. They range from the world’s largest hubs – such as Atlanta Airport, London Heathrow Airport, Singapore Changi and Amsterdam Airport Schiphol – to large and expanding mid-size international airports.

However, we don’t simply deliver systems, but instead focus on the optimisation of our customers’ business processes and competitive positions. Our extensive portfolio of integrated solutions – innovative systems, intelligent software and life-cycle services – results in the realisation of fast, reliable and efficient automation technology. Continuous innovation, based on customer feedback and market analysis, is the key to success in a rapidly changing world and Vanderlande is steadfast in its supply of future-proof, tailormade solutions.

**Reliable partner**

Vanderlande is the global market leader for value-added logistic process automation at airports. This ranges from the design of the departures hall itself to the check-in and bag drop systems, through to automated passenger security checkpoints. At all times, we are dedicated to designing solutions that facilitate the efficient and smooth transit of both passengers and luggage, and optimising the experience for all travellers.

“We’re lucky to have a world-leading provider in handling systems. The true test of a partnership is when things don’t go according to plan and in those situations Vanderlande has been there as a true partner.”

Steve Hankinson
VP of Operations and Maintenance,
Vancouver International Airport
Added value

Several factors drive investments in the automated hold baggage and passenger checkpoint solutions at airports. These include the growth of worldwide passenger volumes, the need to optimise your offer to attract airlines and facilitate more transfer flights with shorter connection times. These developments increase the relevance of – and dependence on – high throughput automated passenger checkpoints and high-capacity, full track-and-trace baggage handling systems.

Such factors also drive the demand for greater security and increased performance levels. Therefore, airports of all sizes expect value-added systems as standard, with the highest available levels of reliability. The design must be permanently focused on achieving the maximum efficiency of all functions and processes, while factoring in tight airline turnaround times, and capacity and automation level requirements.

As the market leader, Vanderlande has extensive experience in designing and installing a wide range of systems all over the world. We develop solutions with the capacity to handle peak times, as well as adapt to any future expansion. With high levels of performance and availability, these solutions are proven to reduce costs, and enhance the management of your operation.

However, we do not believe in ‘standard’ designs, but make sure you have the most reliable and best total solution to match your needs. We actively listen to your requirements to ensure our designs improve the passenger experience and reduce costs. In addition, as you continually seek to minimise any downtime, we ensure there are no disruptions to your live operations during the installation of new equipment, or the maintenance of existing systems.

Regardless of your geographical location, or the size of your operation, we always deliver our solutions to specification, on budget and on time. At every stage, you can be confident of first-rate support from one of our customer centres around the world. We cooperate closely with you to overcome challenges together and forge longstanding partnerships. In addition, we are proud to continually develop innovative and sustainable solutions that minimise your footprint and strengthen the competitiveness of your business.
Innovative systems

Vanderlande can meet any airport’s demands in full – from bag drop and passenger security checks, through to onward conveyance, storage, sortation, flight make-up, and baggage reclaim. We are the market’s largest OEM supplier of logistic process automation for airports, with the broadest range of total solutions. Vanderlande has also established many successful partnerships to ensure that we continue to surpass customer expectations, optimise the passenger experience and enhance an airport’s proposition to its stakeholders.

All baggage handling systems must incorporate a number of standard functions and procedures. These include check-in and flight make-up areas, as well as the multi-level screening process required by authorities worldwide. However, the passenger experience needs to be optimised and each journey managed seamlessly.

The biggest challenge for airports is to incorporate all of these functions and processes. These must also be combined with airline turnaround times and capacity, and automation level requirements in an efficient and cost-effective way. Using our first-class consultative and design skills, Vanderlande is able to supply the optimal solution to match the requirements of any airport.

We are the only supplier with a complete range of in-house process solutions available for all airport applications. In addition, we are able to draw on our extensive experience in other industries, such as the warehousing and parcel markets, for the creation of unique solutions.

We can utilise every available form of baggage handling technology and possess the know-how to design, implement, integrate and maintain it effectively. Our flexible and modular products reduce any element of risk and lead times to an absolute minimum, including:

- **BAGSTORE** – by making use of racking and cranes, it allows an item to be retrieved individually according to priority. This makes it ideal for facilitating a baggage ‘on demand’ – or ‘pull’ – concept, maximising an airport’s flexibility and control.

- **BLUEVEYOR** – the world’s first conveyor free of harmful or toxic chemicals has been designed for reuse at the end of life, and minimises energy consumption.

- **STACK@EASE** – highly flexible and ergonomic loading aid solution that takes the heavy lifting out of baggage loading in flight make-up environments.

Vanderlande is also active in solutions for the improvement of the passenger experience, as well as ULD management. For example, our automated passenger checkpoints (APC) consisting of SCANNOJET, the world’s most advanced tray return system, and eVelocity remote screening solutions for the screening of passengers and their hand baggage in airports or other secured areas.

Vanderlande’s APC solutions have been designed to achieve the highest screening capacity, provide a constant flow of passengers, and offer an outstanding level of security and ergonomics. They have already been selected for use at airports around the world, including Brussels, Rome Fiumicino, Larnaka and Keflavik.
Airport operators are facing numerous challenges due to tougher security checks, customs and border control, and tighter and frequently changing flight schedules. They are also under pressure to meet increasingly higher expectations from airports that want to deliver a world-class service to airlines, and in turn to their passengers.

As well as keeping pace with developments in mobile technology, self-boarding and self-service check-in, airports are required to minimise costs and optimise aircraft turnaround times. Therefore, effective asset management is crucial in the provision of excellent service levels.

To cope with these demands, Vanderlande has developed its state-of-the-art VIBES software. Designed to meet the needs of airport operators, handling agents, passengers and airlines, it provides the flexible, effective and integrated control of baggage handling operations with:

- an estimated 20% reduction in workload for special bag handlers
- a 40% decrease in the number of missed bags (flow control module)
- a 10% reduction in handler costs (peak shaving module)
- a 30% increase in throughput at check-in/bag drop
- a 20% reduction in mishandled bag costs (flight services module).

VIBES is a smart solution that helps you assume complete control of airport baggage handling operations, from the point of entry at check-in through to final baggage reconciliation and loading. It enables you to analyse baggage handling performance, ensures that fewer bags miss their flights, less operators are needed and minimal floor space is required.

Its highly accurate tracking-and-tracing functionality – capable of locating any individual bag – means passengers can be kept informed of the status of their belongings at all times. It handles all aspects of airline departure control system communication and message distribution. The result is a better service for baggage handlers, enabling enhanced security and customs processes, and an improved experience for passengers.

With its integrated and modular structure, VIBES can be configured to seamlessly match all types of business processes. The core functionality is available within VIBES Essentials. This controls the complete Vanderlande solution, such as screening, scanning and sortation, and ensures seamless tracking, monitoring and reporting of all bags. Several optional modules are available that provide further features and benefits: flow control, terminal services, process improvement, passenger services and flight services.

VIBES is the most advanced solution on the market, and can be fully integrated with your existing systems and security controls. Aimed at optimising your assets, it provides real-time information allowing you to make further improvements to your operation. VIBES can also locate any bag in the system with pinpoint accuracy, resulting in fewer delays, a reduction of mishandled bags and accelerated turnaround times. It is already yielding positive results at airports around the world, including Amsterdam Schiphol, London Heathrow and Houston George Bush.
In today’s constantly evolving business environment, you need the support of reliable partners committed to your specific needs. Changing requirements and regulatory demands mean you may have to adapt your logistic processes and systems.

The invaluable work carried out by more than 100 of our site-based service teams and many other personnel actively supports system maintenance, logistics management and business improvement processes on a global basis. Our life-cycle services are a key part of our full value proposition.

These solutions result in optimal baggage flows, supporting favourable aircraft turnaround times and reductions of minimum connection times for passengers. Perfect planning and execution of operations and maintenance also reduce the missed bag rate, leading to positive passenger experiences and lower costs for airlines. Customers gain invaluable insight from Vanderlande’s transparent data and information about end-to-end baggage performance, enabling continuous improvement.

Vanderlande’s service solutions are focused on managing and executing baggage operations and maintenance. Our expertise can further enhance our customers’ baggage handling performance through clear life-cycle plans, helping airports to stay secure and be prepared for the future, as well as achieving the highest possible return on investment.

As a reliable partner for more than 65 years, Vanderlande believes that delivering industry-leading services tailored to your needs is the only way to add real value. These integrated future-proof solutions provide efficient and sustainable benefits to ensure your airport runs smoothly and profitably. In boosting your performance and competitiveness in the market, we allow you to focus on achieving your strategic goals.

To achieve this, we offer three types of partnership based on your scope and requirements:

- as a partner in **asset services**, we focus on your complete system and deliver certainty in technical performance. We share our expertise as a logistic process automation supplier by providing a range of support and maintenance solutions to keep your system in excellent condition.
- as a partner in **logistic services**, we enable you to reach excellence in material handling logistics. We can take over full responsibility for your operations to simplify the overall process and deliver the desired performance targets. The focus here lies with your processes and system operation.
- as a **business services** partner, we develop a close partnership with you to make it easier to improve your competitiveness, adapt business models and future-proof business performance.
Developing sustainable solutions through continuous innovation

Vanderlande is continuously investing in innovative and sustainable technology and solutions in response to your needs. Optimising energy efficiency is a must for any business looking to lower operational costs, but also reduce its carbon footprint. Through our products and solutions, we aim to contribute to your objectives in terms of your responsibilities to stakeholders, and to the environment in general. Innovation is at the heart of what we do, and we proactively assess the market and absorb customer feedback to ensure the solutions we provide continue to surpass expectations.

After each project, we strive to close the loop, which means utilising all available feedback to: conceive new products and improvements; research, develop and launch them; and continuously improve these solutions. However, this is not the sole responsibility of any one group within the company, but is a combined effort on behalf of all Vanderlande departments in upholding our commitment to quality. As a result we invest 3% of our yearly revenue on innovation, and research and development.

This has produced a wide range of innovative developments for airports covering the full range of activities. These include automated passenger checkpoints, high-speed individual carrier systems TUBTRAX and BAGTRAX, BAGSTORE, BLUEVEYOR and BAXORTER. Our STACK@EASE lifting device enables handlers to maintain high levels of productivity for sustained periods. This creates a fatigue-free working environment, which significantly reduces the likelihood of RSI. Sustainability is also an important factor in Vanderlande’s range of products and services. We redesign products inspired by the Cradle to Cradle® principles, which assesses materials not only on their physical properties, but also on their effects on humans, the environment and their capacity for being recycled. This enables and promotes the repeated re-use of materials, closing the loop and continuing the cycle with minimal use of energy.

These efforts will support the sustainable airport concept and Vanderlande is committed to helping you achieve your environmental goals. The best example is BLUEVEYOR, the world’s first Cradle to Cradle conveyor, which lowers maintenance costs and reduces energy consumption by up to 80% compared with traditional conveyors.

“The added value is that Vanderlande has been able to cooperate so efficiently with my team. Ultimately, our whole brand image and standing has been enhanced through what is essentially a behind the scenes operation.”

Bob Hammacott
Operational Maintenance & Facilities Services, Cardiff Airport