

SMART GUIDANCE

>> **BE SMART**

>> **CONTROL THE FLOW**



SMART QUEUE

>> Digitalisation of passenger flows

In many years of working with airports, Via Guide has realised that queuing needs to be [treated as a process](#) in order to proactively manage passenger flow. Over the past few years, Via Guide has developed the SMART QUEUE concept with two of Europe's leading airports. This concept helps airports achieve their efficiency goals by reducing the need for staff intervention and increasing throughput. It also improves the passenger experience.

The SMART QUEUE uses real-time data from people counting sensors or other third-party devices and continuously calculates [the ideal passenger flow](#). Either the unique Smart Gates are triggered to dynamically direct passengers in the queue, or passengers are automatically called to counters, desks or security checkpoints.



TRANSFORMING QUEUES FROM A NECESSARY EVIL TO A LOGISTICALLY OPTIMISED PROCESS

ADVANTAGES

- Increased throughput
- Enhanced efficiency
- Reduced resource idle time
- Improved passenger experience
- Standardised passenger flow management
- Real-time use of sensor data

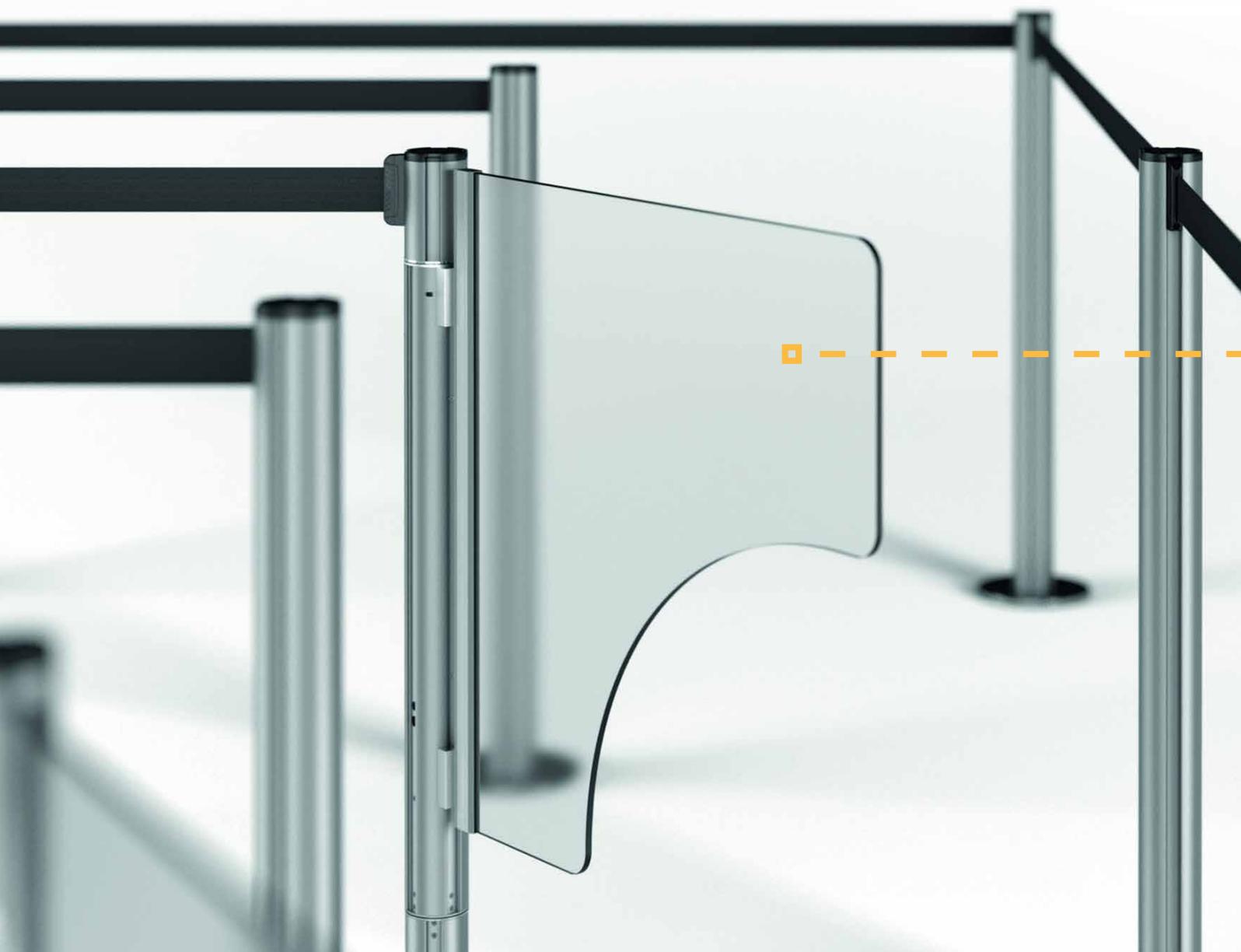


SMART SHORTCUT

>> Efficient (re)routing of queues

The SMART SHORTCUT solution is based on [Smart Gates](#), which are placed at decision points in the queue. Each gate looks like a normal belt post but is filled with electronics and gears and holds a wing. It can rotate and close walkways to [redirect passengers](#). Smart Gates are certified by DEKRA to ensure safe use in sensitive areas. An algorithm triggers the Smart Gates to change the walkways when the flow of passengers increases.

The available space is used more efficiently, and unnecessary walking is avoided, resulting in a better passenger experience. Simulations indicate a reduction in idle time for resources.



KEEP QUEUES „AS SHORT AS POSSIBLE AND AS LONG AS NECESSARY“



— SMART GATE

The Smart Gate is a revolving gate that consists of one or more polycarbonate plates that rotate round a Beltrac post. The positions for the gate can be programmed anywhere within 360° of a circle, so that passengers are guided in the right directions.

FEATURES

- Integrated to Beltrac post
- Diameter post: 70 mm
- Height: min. 1,014 mm
- Rotation time: 2 sec for 90°
- Position control for 360°
- Acoustical alarm
- Integrated safety features

CONTROL OPTIONS

- Remote, Web interface or fully automated with sensors
- As part of an access control system the Smart Gate can be triggered by any ID card reader or other access control system.

CHARACTERISTICS OF THE BLADE

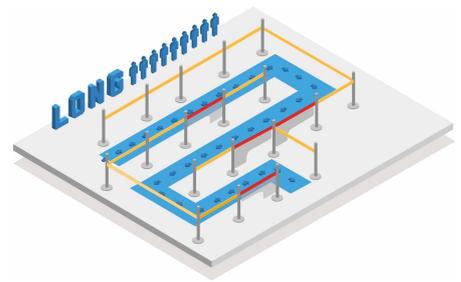
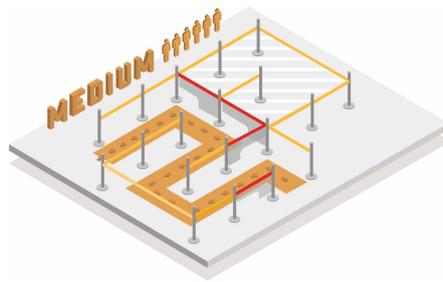
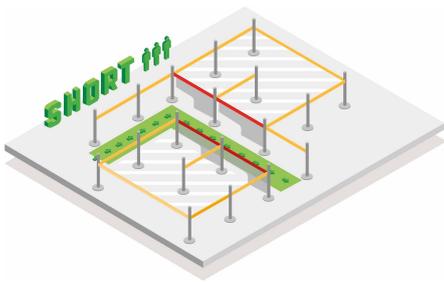
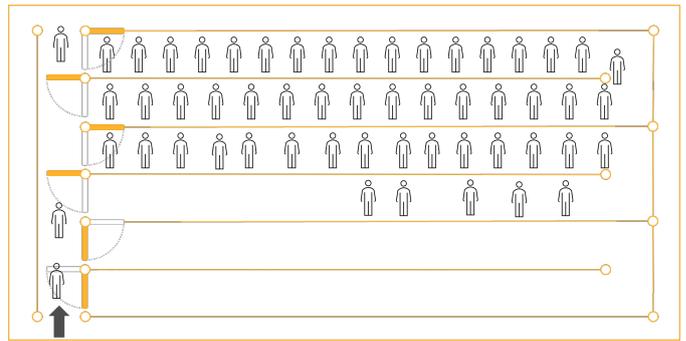
- Width: max. 1,500 mm
- Material: Polycarbonate or aluminium tube



SITUATIONAL QUEUE LAYOUT

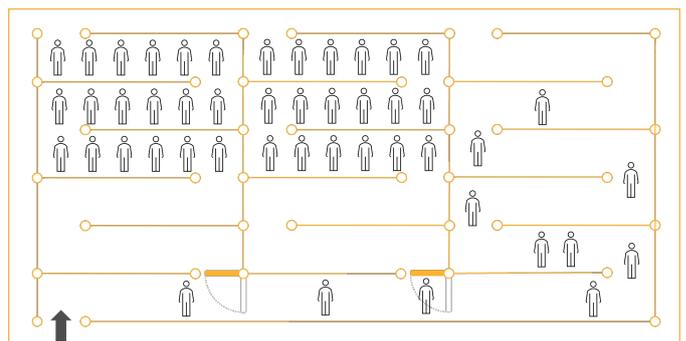
WALKWAY CONTROL

Shorter walkways within airports, can significantly enhance the passenger experience. Reducing idle times is crucial for improving efficiency. The real-time sensors identify the current passenger flow and trigger the Smart Gates for redirecting passengers within the queue.

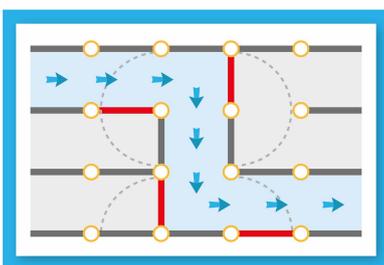


SEGMENT CONTROL

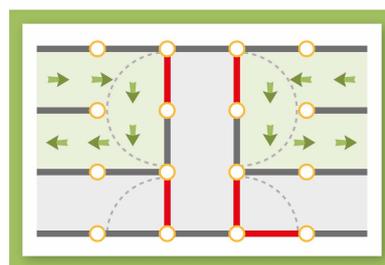
With this improved decision making you can also balance passengers from one part of the queue to another by using the Smart Gates.



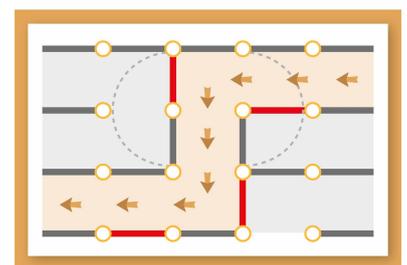
WEST TO EAST



WEST AND EAST ISOLATED



EAST TO WEST



TECHNOLOGY

BELTRAC INTEGRATION

The Smart Gate fully integrates to the other products of Via Guide's Beltrac line. The gear for the Smart Gate is built into a Beltrac post which is fixed with the magnetic base to the metal plate and then to the floor, guaranteeing sturdiness. Like on a regular belt post, the Smart Gate can be the receiving end for Beltrac belts.

GEAR

The gear turns the blades in both directions to any predefined position. It has an overload release to guarantee security and an integrated position control. The speed for a position change of 90 degrees is only 2 seconds, and lights and sound can be used to warn passengers when the gate is changing position.

WINGS

The wings are made of polycarbonate glass. The design can be completely customized to meet corporate design or to improve the passenger flow with arrows and/or stop signs.

POWER

The Smart Gate is either powered with our internal rechargeable battery or with permanent power. The typical battery lifetime is approx. 3,500 opening cycles.

CERTIFICATION

The Smart Gates has been certified by DEKRA. It guarantees being safe in the usage with passengers.



SMART CALL

>> Digital call system

SMART CALL automatically calls passengers to the next available positions, security lanes or counters. The system's algorithm can *operate lanes of different priorities*, such as economy, priority, and slot booking, using the same resources and prioritising the dedicated lanes. Depending on the volume, the corresponding number of service positions is reserved and returned to the remaining queue after appropriate use. This makes it possible to have priority lanes without needing to reserve extra resources.

The solution *supports different types of signage*. For example, screens at the end of the queue indicate the next available positions, and LEDs are used at the positions or above the divest points. This automation ensures high throughput and a balanced workload using available resources without human intervention.

SCREEN

- Screens on belt posts or totems
- Visualisation: number, direction animated object
- Opposite of queue exit



SEND YOUR CUSTOMERS **DIRECTLY** TO THE NEXT AVAILABLE SERVICE POSITION



LED BAR



MINI-QUEUE



LED CUBE



LED BAR

indicates if a divest position is available or not.

LED CUBE

displays the status of a counter or mini queue, indicating whether it is open or closed and showing when a counter has been called.

MINI QUEUE

acts as a buffer between the queue and the security checkpoint, reducing idle times and ensuring high throughput.

SMART ACCESS

>> Designing access control digitally

Our SMART ACCESS system is a flexible system that [intelligently manages access](#) to queues or areas.

Passengers present their credentials, such as a boarding pass or QR code, to a scanner. If the access is correct, the Smart Gates open to allow access. Alternatively, we offer unique Virtual Gates, where a sensor monitors access and triggers an alarm if access is unauthorised.

The system also manages targeted access to queues based on a logic. This is done by placing one or more Smart Gate pairs within the system and opening them according to a specific logic. This could be based on a random logic for different types of security checks (ETD vs. X-ray) or based on passenger characteristics, such as destination or departure time. This allows passengers to be [sorted according to operational requirements](#). For these use cases, it is also possible to use the virtual gates instead of the Smart Gates.



FLEXIBLE MANAGING THE ACCESS AND SORTING PASSENGERS



APPLICATIONS

- Queue access: e.g., slot booking, business class...
- Sorting of passenger (depending on departure time, destination...)

- Screening Randomizer

The randomiser decides in real time whether a person should be screened for explosives or at the metal detectors.

- Wrong way detection

One or more Qmetrix Ranging Sensors (QRS) are placed on the ceiling or a door and used to identify people and the direction in which they are walking. If those walking the wrong e.g. in a one-way system, a visual and/or audible alarm is triggered.

- Lounge access

VIA GUIDE

>> From Arnsberg into the world

Since 2004, Via Guide has been producing passenger guidance systems in Arnsberg, Germany. Through years of close co-operation with airports throughout Europe, technical solutions have been developed that today set the industry standard. These include the magnetic base, the rotatable head on the belt post and the modular partition wall system. The products are carefully sourced in Europe and manufactured with precision in Germany to ensure a fast pace of innovation and high quality.

- Certified with the international environmental management system ISO 14001
- Nearly CO2-neutral production process using hydropower. Any excess capacity is fed into the grid as a contribution to the regional energy transition.
- We not only pay attention to environmentally friendly belt printing in our own belt printing plant, but we also rely on regional suppliers.

SAFETY & CLEAR WALKWAYS MAKE THE DIFFERENCE



- >> MADE IN GERMANY
- >> SHORT DELIVERY TIMES
- >> ISO CERTIFIED

We show possible solutions for guiding people in numerous sectors, drawing on our many years of experience from many international projects.

We have our own engineering and production departments which allow for fully developed solutions, earning us the title of an industry leader. This includes the successful realisation of customerspecific requirements.

