aviation security

record product range overview
With over sixty (60) years in the automatic sliding door industry and over seventeen (17) years experience in exit lane technology, record has the solutions for your airport needs. With automatic sliding door systems, portals, revolving doors and a proven exit lane technology we can provide a high level of security to meet a variety of requirements.

- Portals are a great product for employee entrances. The employee would badge themselves in and out, giving the airport an audit trail.
- The record K.31 revolving door (three leaf) is a perfect application for passenger entrances with disabilities.
- The record K.41 revolving door (four leaf) is commonly used at main entrances and/or exits from baggage claim.
- The record FlipFlow SINGLE (with or without gates) is a great space saver for breach control either from baggage claim or used to separate international gates from domestic gates. The system can also be used from the gate area to baggage claim.
- The record FlipFlow TRIPLE or TWIN Extended is specifically used where security is a premium. Passengers will pass through these going from the airside (secure) to the land side (non-secure).
- Customer specific lane designs possible (record FlipFlow CUSTOM)
- The record system 20 sliding door offers convenience, safety and an energy efficient solution for main entrances to the airport.
record your global partner for entrance solutions

3 aviation security

TRANSFER GATE
One-way door system record FlipFlow TRIPLE or TWIN

EXIT TO LUGGAGE BELT
4-leaf revolving door record K.41

CUSTOMS / IMMIGRATION
One-way door system record FlipFlow WIDE

TRANSFER GATE
One-way door system record FlipFlow TWIN

Bi-parting sliding door

One-way door system record FlipFlow TRIPLE

Telescopic sliding door for larger opening width

TRANSFER GATE
Security gate record R.62

EXIT DOMESTIC
4-leaf revolving door K.41

STAFF ENTRANCE
Security gate record R.62

ACCESS TO TRANSFER DECK
Bi-parting sliding door

EXIT FROM GATES
One-way door system record FlipFlow TRIPLE or TWIN

EXIT LUGGAGE BELT
4-leaf revolving door K.41

CUSTOMS / IMMIGRATION
One-way door system record FlipFlow WIDE

TRANSFER GATE
One-way door system record FlipFlow TWIN

Bi-parting sliding door

One-way door system record FlipFlow TRIPLE

Telescopic sliding door for larger opening width

TRANSFER GATE
Security gate record R.62

EXIT DOMESTIC
4-leaf revolving door K.41

STAFF ENTRANCE
Security gate record R.62

ACCESS TO TRANSFER DECK
Bi-parting sliding door
your partner for entrance solutions
How to improve security and safety

record FlipFlow

The record FlipFlow family provides a high level of security and improved passenger flow that is tailor-made to a wide range of applications. It provides safety and security options at the desired level whilst being user friendly and easy to maintain. Read on and learn more about our record FlipFlow product range.

Passenger Flow and Safety

Maximize your throughput and ensure a smooth passenger processing without compromising security or safety. Our systems are equipped with innovative sensor technologies to fulfil application-related requirements.

Security

We offer a high-performance breach-detection and anti-return prevention solution, which is configurable to meet your local requirements.

We use a range of technologies e.g. TOF 3D image tracking to ensure real time detection of any sort of breach attempts within the corridor.

Further devices prevent unauthorized access. The system also scans the interior of the door system to detect the presence of objects left behind inside or are passed through the corridor. The collaborating sensor technologies ensure a detection rate of > 99%.

Upgrades and retrofitting

To ensure the highest security and safety level in your airport, we also offer product upgrades and retrofits in order to raise all your FlipFlows to the same technology and security level.

record REAL TIME

A record FlipFlow management software to monitor, control and maintain all FlipFlows centrally in one system.

Exploit the full potential of your security concept

- alarm call functions via web, mail allow an immediate call of security staff

Understand and optimize people flow and security concept

- various counting statistics available
- automatically sent reports

Attain high FlipFlow uptimes

- allow quick troubleshooting due to real-time status of all relevant safety and security sensors
- our record service specialists can immediately support through a temporary remote access (after OK of airport operator)
your global partner for entrance solutions

aviation security
The record FlipFlow family

With over twelve years' experience the record FlipFlow family provides a high level of security for a wide range of applications.

Some facts about FlipFlows

→ Worldwide success and results with over 1,000 proven installations
→ Life safety / emergency exit concerns which can be addressed with exit devices and battery backup options
→ Varying widths, lengths and clear opening dimensions to provide for complete freedom and accessibility of all intended users
→ Customer specific solutions possible (e.g. 90° tunnel or other angled execution, side-by-side solutions, frosted glass)
→ Access to all repair components from inside the breach unit – no need to have work in awkward, unsafe or confined ceiling areas

Features

→ record offers object detection on side panels, floor and ceiling as an option
→ Volumetric monitoring
→ 3D image recognition
→ Traffic signals at entrance and exit doors
→ Option: LED stripes at the entrance or in the tunnel for better people guidance
→ Interior maintenance hatches
→ 8 relay outputs for integration in e.g. Building Management Systems
→ Customizable voice module

Operation modes

→ Flow – allows constant “flow” of passengers achieving the highest throughput
→ Interlock – controls each segment individually
→ Flow to Interlock – effectively managed throughput by automatically changing from flow to interlock depending on traffic
→ Cleaning mode
→ Bidirectional use of authorized airport staff possible

### record FlipFlow – system overview

<table>
<thead>
<tr>
<th>Version</th>
<th>WIDE</th>
<th>SINGLE</th>
<th>TWIN</th>
<th>TRIPLE</th>
<th>CUSTOM</th>
<th>Option: extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto flow/interlock*</td>
<td>–</td>
<td>–</td>
<td>✨</td>
<td>✨</td>
<td>✨</td>
<td>✨</td>
</tr>
<tr>
<td>Throughput flow</td>
<td>1,500 – 2,000 per hour</td>
<td>1,500 – 2,000* per hour</td>
<td>no influence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throughput interlock</td>
<td>n/a</td>
<td>approx. 500 per hour</td>
<td>no influence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>record security level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+ 1 ★</td>
</tr>
</tbody>
</table>

* automatic change from interlock to flow mode for higher throughput depending on counting of passengers
Security product portfolio

Exit lane tunnel systems, security portals, security revolvers or security gates offer various security rating levels. Define or choose your level based on your requirements.

Revolving Doors

The revolving door record K41 is designed for passenger access in and out of the terminal. The four leaf revolver provides high throughput for entrances and exits and is suitable for passenger access.

With a larger entrance and a smaller round drum-shaped segment, this revolver is ideal for passenger throughput.

The record K31 revolving door offers the same security and throughput as the four leaf revolver but offers larger segments. The larger segment allows for wheelchair and disabilities access. The K31 also has a switchable control to reduce speed.

The record revolving door range offers individual systems that will fulfill every building requirement. In order to handle large traffic throughputs and provide emergency escape options record is the right choice for your main entrance also.

Portals

The round security portal record R62 offers the highest security level as only one person at the time can pass through.

This small curved security slider works like a man trap where the opposite curved sliding door will open once the door behind has been closed and secured. The throughput is minimal at approximately 6 persons per minute.

<table>
<thead>
<tr>
<th>Security Doors &amp; Portals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record K31 ST</td>
</tr>
<tr>
<td><strong>Version</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

* with optional security equipment different safety levels can be met

Security product portfolio

<table>
<thead>
<tr>
<th>Feature</th>
<th>WIDE</th>
<th>SINGLE</th>
<th>TWIN</th>
<th>TRIPLE</th>
<th>CUSTOM</th>
<th>Option: extended</th>
<th>K41 ST</th>
<th>K31 ST</th>
<th>R62</th>
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</thead>
<tbody>
<tr>
<td>Interlock Mode</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>○</td>
<td>●</td>
</tr>
<tr>
<td>Flow Mode</td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>Object Detection</td>
<td>○</td>
<td>○</td>
<td>●</td>
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<td>●</td>
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</tr>
<tr>
<td>Advanced anti-return detection</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
<td>○</td>
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<td>High Throughput</td>
<td>●</td>
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<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>○</td>
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</tr>
<tr>
<td>Bi-Directional use</td>
<td>○*</td>
<td>○*</td>
<td>○*</td>
<td>○*</td>
<td>○*</td>
<td>○*</td>
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</tr>
</tbody>
</table>

* possible on request in case of emergency for security personnel
Other record automatic door systems

record STA 20 Series Sliding Door Systems
→ Ideal for airport club entrances
→ Virtually silent operation
→ Single slide or bi-part
→ Breakout available
→ All glass, heavy duty
→ Electric locking, back up battery optional
→ Partial open feature – partial opening can be constant or automatic depending on traffic
→ Independent door speeds for opening and closing
→ Safety sensors in the clear opening to prevent door from shutting if a person or object is in the detection zone
→ Safety automatic reverse mechanism if the door leaves are inhibited when closing
→ Green initiative – lower power consumption
→ Utilizes the record BDE-D panel with intuitive interface and visual feedback of door status

record DFA 127 Series Automatic Swing Door Operators
→ Two versions: FULL POWER or LOW ENERGY
→ DIN left or DIN right installation
→ Inswing or outswing
→ Inverse operation
→ lintel depth up to 330mm
→ Push or pull operation
→ Double-leaf door system (Master / Slave)
→ Manual/hold open switch provides as standard
→ Built in interface for electric lock eliminates the need for costly peripherals
→ Push to start operation saves on additional activation devices
→ Latch assist ensures closing to overcome stack and wind conditions
→ Power Assist for motor supported manual opening
→ Virtually silent operation
International references within the aviation business (excerpt)

USA: Sea-Tac (Seattle), WA; Kalamazoo, MI; Eugene, OR; Plattsburgh, NY; Lubbock, TX; San Jose, CA; Sacramento, CA; Sarasota, Fl; Greenville Spartanburg, NC; Charleston, SC // Canada: Halifax, NS; Fort McMurray, AB // Denmark: Billund Airport // France: Avignon Airport; Bastia Airport; Bordeaux Airport; Cannes Airport; Grenoble Airport; Marseilles Airport; Nice Airport; Paris Orly Airport; Strasbourg Airport; Lyon Airport // Germany: Munchen Airport; Nuremberg Airport; Stuttgart Airport; Karlsruhe / Baden-Baden // Netherlands: Amsterdam Airport, Schiphol // Spain: Barcelona Airport; Las Palmas Airport; Tenerife; Bilbao // Greece: Athens // Switzerland: Bale-Mulhouse Airport; Zurich Airport // United Kingdom: Glasgow Airport // Oman: Muscat Airport Oman // Slovenia: Narocil Dobavitelju; Norway; Sandefjord // Belgium: Charleroi // Marocco: Casablanca

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