To increase aviation security, national and international authorities increasingly require 100% inspection of hold baggage. Vanderlande Industries offers multilevel Hold Baggage Screening solutions that comply with regulations and meet your specific requirements.

**All bags secure**

The Hold Baggage Screening process can be subdivided into a number of levels. Level 1 screening of bags is carried out automatically by a screening machine. This is basically a pre-sortation to determine whether a bag is potentially suspect. At Level 2, the machine-generated images of uncleared bags are examined by trained operators or processed automatically by a Level 2 machine. The small fraction of uncleared bags remaining after this level is routed to a Level 3 machine. Here, trained operators examine the detailed images of these bags. Bags that are still not cleared after Level 3 examination are investigated manually in the presence of their owners (Level 4). Bags that are not cleared at Level 4 become suspect bags. Regulations determine how these will further be dealt with (Level 5).

<table>
<thead>
<tr>
<th>HBS level</th>
<th>definition of screening within level</th>
<th>cleared baggage directed to</th>
<th>reject baggage directed to</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>fully automatic Explosive Detection System (EDS) inline X-ray machine</td>
<td>automatic or manual baggage sortation system</td>
<td>HBS level 2</td>
</tr>
<tr>
<td>2</td>
<td>staff operated X-ray screening image processor workstation using enhanced image processing software</td>
<td>automatic or manual baggage sortation system</td>
<td>HBS level 3</td>
</tr>
<tr>
<td>3</td>
<td>(CT) X-ray machine or staff operated Electronic Trace Detection (ETD) system</td>
<td>automatic or manual baggage sortation system</td>
<td>reconciliation of higher threat status baggage with passenger</td>
</tr>
<tr>
<td>4</td>
<td>reconciliation of threat baggage with passenger (pax and bag brought to special area).</td>
<td>automatic or manual baggage sortation system</td>
<td>very high threat baggage sent to baggage bomb disposal unit</td>
</tr>
<tr>
<td>5</td>
<td>bomb disposal unit called to dispose of baggage which cannot be reunited with passenger</td>
<td>bag destroyed</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Which concept meets your specific requirements?

There is more to Hold Baggage Screening than just buying Security Screening machines. ‘All bags secure’ requires a baggage handling concept that carefully integrates Security Screening machines to keep your operation efficient and life cycle costs acceptable. Vanderlande Industries has the experience and expertise to design and implement a solution that matches your requirements.

Right from the start

The layout of the screening area, the screening machines themselves and the operators all influence the flow of bags and therefore capacity. The system design can take into account flexibility - since security regulations can differ from country to country, the need to maintain security even if a screening area fails, and maintenance and system upgrades. The security status of a bag can be added to the Baggage Source Message for tracking and tracing purposes. This also allows for interfacing with systems at other airports. Screening baggage inside tubs is feasible if the tubs are made of the right material and have the right shape, and simulating the security concept can be an integral part of the design.
In cooperation with

References

Vanderlande Industries has carried out more than 100 Hold Baggage Screening integration projects. Selected references:

- Abu Dhabi, United Arab Emirates
- Amsterdam, The Netherlands
- Antalya, Turkey
- Bahrain, Bahrain
- Bergen, Norway
- Borispyl, Ukraine
- Boston, USA
- Bremen, Germany
- Chicago, USA
- Cologne, Germany
- Dusseldorf, Germany
- Domodedovo, Russia
- Gothenburg, Sweden
- Hanover, Germany
- Helsinki, Finland
- Hong Kong, China
- Kuwait, Kuwait
- Leipzig, Germany
- Lisbon, Portugal
- London, United Kingdom
- Manchester, United Kingdom
- Munich, Germany
- Nice, France
- Nurnberg, Germany
- Oslo, Norway
- Paris, France
- Prague, Czech Republic
- Sydney, Australia
- Stuttgart, Germany
- Tampa, USA
- Tunis, Tunisia
- Vienna, Austria
- Zurich, Switzerland

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