



## Tomorrow's world

Having an automated BHS system that no longer requires workers to manually load baggage into ramp carts or flight containers is no longer a vision but a reality, due to pioneering work by companies such as Grenzebach Automation GmbH.

By using standard industry components such as robots and sensors in their fully automated bag loading systems, the German-based industrial automation specialist has all but made the need for airport staff to physically handle luggage – and potentially put themselves at risk of injury – a thing of the past. The system can reliably handle all kinds of luggage (including overweight bags) and can be configured to suit the specific needs of an airport, both in terms of bag flow dynamics and physical layout. After several years of successfully trialling the technology, the first large scale installation of 'robots' has been completed at a leading European airport and is about to enter commercial service. "Increased automation of our baggage handling process is necessary for our future plans, which are very much dependent on increased capacity, lower costs per bag and improved working conditions," says Frank van den Bosch, robot project manager Amsterdam Schiphol.

"In 2005, the first pilot with a robot for automated baggage loading was built up at Amsterdam Schiphol. As a result, six robots for baggage loading are placed in a newly built baggage handling area, which will become operational in 2010."

Dr Joachim Döhner, Grenzebach's director of airport logistics adds: "In addition to the drastic improvements in handling cost, space consumption and workplace ergonomics, the robotised bag loading system provides a variety of additional benefits, such as automatic reconciliation, full process integration and traceability of bags all the way into the loading unit and enhanced security."