





Facing great challenges at an airport terminal regarding crowd safety, capacity and commerce? Analyze crowd behavior with simulation software!

AIRPORT CROWD SIMULATION

At an airport everything should be perfectly tuned. Therefore, there is no infrastructure where insights into pedestrian flows, waiting times, process times, capacities and the mutual relation between these themes are more important than at an airport. Designers and architects face major challenges when developing the infrastructures of airport terminals. Departure terminals, lounges, corridors and gates should provide sufficient capacity and must be positioned logically. In addition, the infrastructure must meet all safety requirements.

During the operation an airport, it is important to use the current infrastructure in the most efficient way. With the arrival and departure of ten thousands of passengers every day taking several proceedings and procedures within a short time, this is a complex challenge. Based on the analysis of passenger numbers, process times and queuing times, efficiently duty—rosters for the airport staff can be made. However, due to deviations from flight schedules, there is no such thing as an ordinary day.

TECHNICAL KEY FEATURES

- Simulate up to 100,000 individuals
- Quick & easy modelling
- Applicable to every airport
- Analyze an area up to two square kilometre
- Realistic crowd movements with unique agent properties
- Amazing 3D visualization
- Detailed output results
- Import drawing & models based on industry standards

Using simulation software will repay itself by maximizing sales, increasing traveller satisfaction and creating commitment from unions and governments.

SIMULATION SOLUTIONS

Simulation software is the solution for the understanding of the effects of these dynamic environments.

Simulating passengers flows in complex infrastructures is used to evaluate and improve the safety and performance of environments. Using simulation software during the design and operational phase of an airport offers the following benefits:

- Save time and money by evaluating and optimizing the safety and performance of the airport during the design phase;
- Gain insight into the complete infrastructure, passenger flows, waiting times, process times and potential bottlenecks;
- Support the development of evacuation and contingency plans;
- Use it for staff schedules based on expected crowdedness, pedestrian flows and process times;
- Present the infrastructure of the airport in a 2D and 3D visualization to your stakeholders;
- Determine commercial attractive areas on the airport, based on pedestrian flows.

SAFETY, CAPACITY AND COMMERCE ON AIRPORTS

Simulating pedestrian flows gained ground the last few years. The most important reason is that safety and security of visitors has become one of the main issues at airports. In addition it gives answers to complex issues related to capacity management and commerce on airports. Many different parties such as architects, authorities and emergency services are already using simulation software to support their mission.

INCONTROL offers its own state—of the art crowd simulation platform Pedestrian Dynamics®.



EXPERIENCE INCONTROL

The project experience and knowledge of the INCONTROL developers and engineers are used for the ongoing development of the software. Together with the expertise and network of INCONTROL, which will be used optimally at all times and made available for every customer, INCONTROL offers state—of—the—art simulation solutions. Examples of projects include; Simulation application for Amsterdam Schiphol Airport: How can Schiphol Airport optimize transferring passenger flows? Brisbane Airport: What is the best design for a the new terminal?

