

# «Marco Polo» Airport - VCE - Venezia, Italy

<b>Direct Client</b>	One Works spa
<b>Final Client</b>	SAVE spa
<b>Year</b>	2016 - 2018
<b>Traffic forecast</b>	11.2M pax/year
<b>Project Value</b>	39.943.000 € (BHS only)
<b>Provided services</b>	Concept design, final design and construction design with BIM, dynamic simulation, for the new BHS with Standard 3 equipment

**oneworks:**



## Project Description

Expansion and redevelopment project of the passenger terminal at Venice "Marco Polo" Airport, referred to as "Lotto 2A".

AD-ET handled the BHS design on behalf of One Works, fully integrating the development of the new system with the terminal expansion phases.

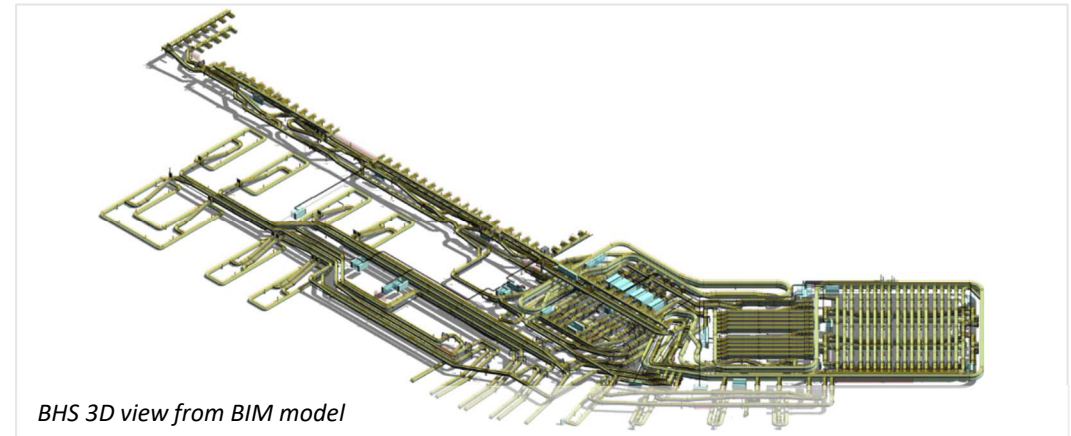
The project has been entirely conducted following the BIM methodology for interdisciplinary coordination and clashes resolution.

Major complexities arose from the necessity to maintain operational continuity in the terminal, the high level of redundancy required (100% after the first failure), and the phased delivery of the system.

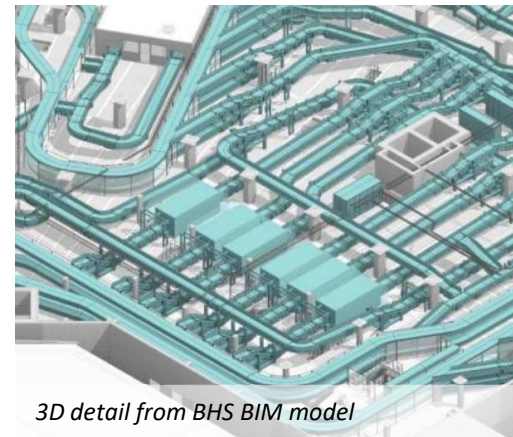
The Baggage Handling System (BHS) has been designed to reach a throughput of around 4000 bags per hour, featuring a fully redundant configuration. It includes:

- Technologies: belt conveyors + cross-belt sorter
- 118 check-in desks;
- 4 + 2 EDS standard 3 machines;
- 2 CB sorters for the HBS sortation;
- 2 CB sorters for the final sortation, with manual encoding stations;
- 12 + 2 make-up carousels;
- 1 Out of Gauge departure line;
- 7 arrival carousels;
- 1 Out of Gauge arrival line;
- 2000 early bags storage positions.

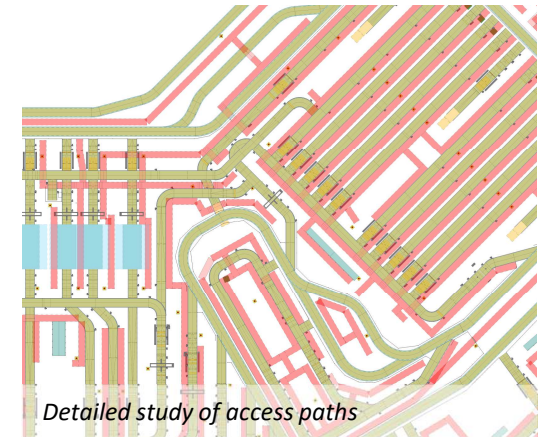
To validate the solution, a dynamic simulation with 4 different scenarios has been performed



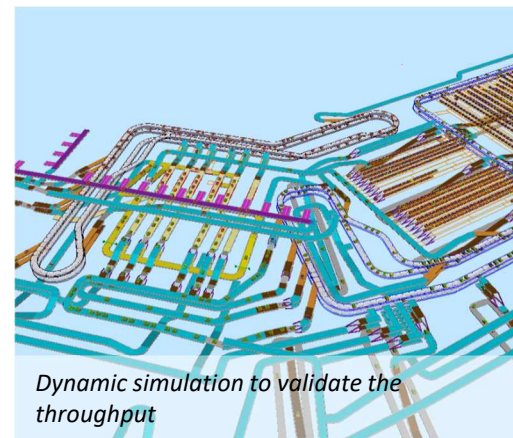
BHS 3D view from BIM model



3D detail from BHS BIM model



Detailed study of access paths



Dynamic simulation to validate the throughput



Building section with BHS by One Works