AvLogix

Capability
Statement

Aviation · Logistics · Solutions

Designing and delivering Innovative solutions

AvLogix Solutions is an independent engineering consultancy firm specialising in the concepting, planning, implementation and operation of baggage, air cargo and parcel freight handling facilities.

With extensive industry experience we offer advisory, design and project management services to airports, airlines and logistics operators around the world. We support our clients through the entire life cycle of their facilities from project inception to realisation and live performance monitoring. Utilising the latest engineering design tools with our proprietary simulation platform we provide global best practice with cost effective and innovative solutions.

01 Planning

- Project Inception
- Operational Gap Analysis
- Master-planning
- Feasibility Analysis
- Business Case Development

02 Design

- Forecast and Data Analysis
- Conceptual Design
- Static & Dynamic 3D Simulation
- Coordinated Detailed Design
- Performance Specification Tender Evaluation

03 Delivery

- Procurement Support
- Detailed Design Monitoring
- Implementation Monitoring
- Training
- Defects Management

04 Operation

- System Capacity Audits
- Operational Planning
- Operational Reviews
- Performance Audits
- Operation & Maintenance Management

05 Project Management

- Project Directorship
- Project Management
- Design Management
- Cost Control
- Risk Management Quality Control

Baggage, Air Cargo and Parcel Freight Handling

AvLogix is a contraction for Aviation Logistics, reflecting our holistic understanding of the logistics industry and with specific focus on the handling of Baggage, Air Cargo and Parcel Freight.

Our depth of experience in delivering complex automation projects enables us to provide a range of services across these fields, examples of these are listed below:

Baggage

- Automated Self-Bag Drop
- Remote and Car Park Check-in
- Passenger Security Screening
- Passenger Cabin Bag Screening
- Hold or Checked Baggage Screening
- Transportation and Sort Systems
- Individual Carrier Systems
- Low Level and High Level Controls
- Application Programming Interfaces
- Simulation / Digital Twins
- Automation of Make-up Operations
- Early Baggage Storage and Batching
- Resource Planning and Management
- Oversize Baggage Systems
- Arrival Baggage Processing
- Reclaim on Demand
- Seamless Transfer
- Courier Pick up and Drop off
- Autonomous Vehicles
- Ground Support Equipment Interface
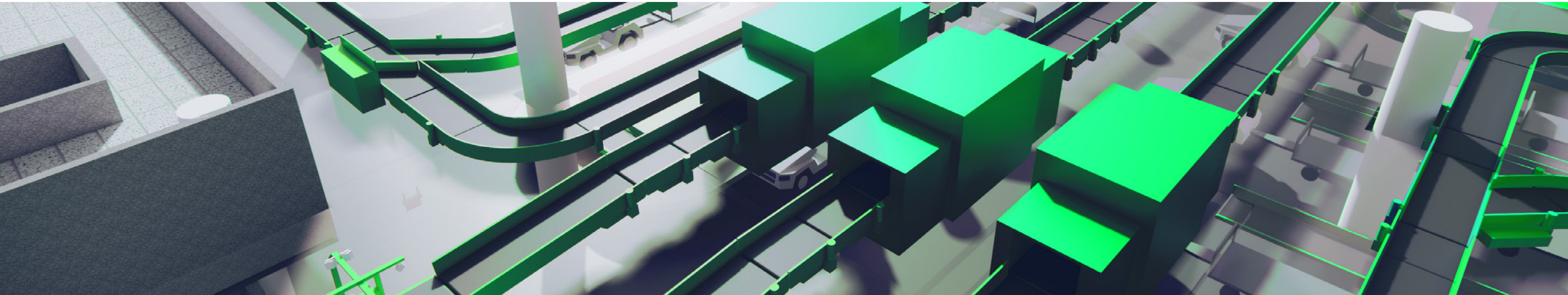
Cargo

- ULD Handling and Storage
- Bin/Pallet Handling and Storage
- Mini-shipment Handling
- Build and Break Workstations
- Empty ULD Handling
- Forklift Management
- Transfer Vehicle, ETV and AS/RS
- Conveying Systems
- Autonomous Guided Vehicles
- Warehouse Management Systems
- Simulation / Digital Twins
- Logistic Controllers and PLCs
- Freight Screening and Volumetrics
- Perishable Freight Handling
- Special Freight Handling
- Truck Docking and Management
- Air Cargo Hub Operations
- Terminal Upgrade and Refurbishment

Parcel Freight

- Parcel Induction and Conveying
- Small and Large Parcel Sortation
- Security and Customs Screening
- Cube Weigh and Scan for Trade
- High Level IT and Controls
- Simulation / Digital Twins
- Consolidated Small Parcel Handling
- Non-conveyable Items Handling
- DG's and Perishables Processing
- Airside and Landside Segregation
- ULD and Profile Staging
- PUD Vehicle Management
- Vehicle Loading and Unloading
- Truck Docking and Management

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