

OVERVIEW:

G&S Airport Conveyor believes that a comprehensive conveyor control system is vital to a reliable and efficient automated baggage system. Whether a system is newly installed or is integrated with existing equipment, our controls group works closely with our customers to design and build a conveyor control system matching client requirements.

CONTROLS

G&S Airport Conveyor conveyors are controlled using approved, high quality, reputable electric components which are typically selected according to the governing specifications of the project, and those best suited to client needs.

The baggage handling system is typically controlled by a Programmable Logic Controller (PLC) or a PC based control system. The type of controller can be selected based on customer specification, as well as present and future requirements. The control system is typically located in an approved electrical panel which is positioned in close proximity to the system that is being controlled. As an alternate arrangement, the controller could be located in a room designated specifically for controls. In either situation, all wiring to and from the controller is always carefully marked with an identifier, correlated to the supplied working drawings.

Operator interface control stations are located in strategic positions along the route of the conveyor, containing the essential operating controls for the system. Duplicate controls can be located at the system control panel either by mounting parallel buttons or by providing a Man Machine Interface panel (MMI) directly on the panel door. Parallel buttons provide a simple, cost effective solution, whereas the MMI terminal provides both direct control over the system and real time status of both the system and its sub-components.



SPECIAL FEATURES

All G&S Airport Conveyor control systems used in airport terminal buildings can be fully integrated with standard or custom features to ensure a functional, yet flexible system.

All conveyors are provided with simple start / stop controls. To prevent undue load on the electrical system, sequential starting is normally used. This involves starting each drive motor in turn, with an adjustable time delay between each start. Additional features such as variable frequency drives (VFD) and an electronic soft-start can also be fitted to most drive units.

Optical sensing devices (photo eyes) are strategically placed along the length of the conveyors system. Over-height sensors are used to detect any baggage items that are over height. These are adjustable and are usually set during installation to a suitable limit. Similar devices are used to detect jammed baggage. Normally fitted to the power curves, these sensors can be located at any point where a potential baggage jam may occur. If activated, these devices will stop the conveyor belt at once.

When actuated, all safety devices will set off an alarm signal and / or beacon. A reset switch is provided at the control station or control panel, always requiring operator input to re-start the system.

In all cases, before start up, a thorough check of the system must be performed to verify it is ready to operate and free of obstructions. Once clear and ready, an audible alarm will signal that the conveyor is about to operate.

Conveyor run beacons can be provided to show which sections of the system are operating. This feature is particularly valuable if sequential starting is used. A "press to test" switch is provided to test the operation of all warning and run lamps.

Information on other features that may be suited to specific customer needs is readily available from G&S Airport Conveyor, upon request.

CONSTRUCTION AND INSTALLATION

G&S Airport Conveyor designers are involved throughout the manufacturing process, and take an active role in checking each stage. All equipment is thoroughly tested before leaving the factory to ensure it is working correctly. All items are packaged in water tight and shock resistant containers to ensure that they arrive on site in good condition. This results in reduction of unforeseen installation problems to an absolute minimum.

All materials used in electrical construction have been selected for their quality and reliability. Panels, motor controls, motors, and all electrical equipment are the products of approved manufacturers only.

All installations are performed by qualified electricians and controls technicians to ensure a safe and reliable system. Work is carried out according to the installation drawings, which are provided to both the installing electrician and the client.

Upon system completion, a G&S Airport Conveyor technician will provide comprehensive on-site training.

EDS SPECIALIZED CONTROLS

For complex Explosive Detection Systems G & S Airport Conveyor has partnered with Brock Solutions, an Engineering Solutions Company, since 1998. Brock Solutions designs, manufactures and commissions innovative automation systems and control software. G & S Airport Conveyor and Brock Solutions provide a combined site team to offer comprehensive conveyor controls solutions.