Airport Operator Relies on Rapid Link



With today's state-of-the-art conveying systems being configured in distribution centres as modular and decentralised systems, reputable system suppliers for warehouse systems are already using Rapid Link in a number of projects. At the same time, system builders and operators are constantly confirming its outstanding benefits in terms of planning, installation, flexibility and reliability. Suppliers of baggage handling systems and airport operators have also discovered the benefits of Rapid Link as a decentralised drive system which fully meets their requirements.







The current example is one of the largest airport projects in Europe. The airport intends to doubles its assets with a new terminal. Moeller's Rapid Link decentralised drive system is playing a key role in the baggage handling system. No wonder, since customer satisfaction largely depends on the availability of the system.

What passenger likes baggage to arrive late or not at all...

As an international transit hub, the airport handles over 65 million passengers a year, and the trend is increasing. To meet this growing passenger volume in the next 20 years, the airport is adding a new terminal and three satellite buildings to its airport site. Work was started in the summer of 2002. Operation will start in 2008 once the first building phase has been completed.

When it is finally completed in 2011, up to 30 million passengers from all over the world will pass through the terminal every year, an area the size of around ten football pitches. Aircraft will be able to dock at 60 stands, a quarter of them will be able to take the new A380 Airbus. Due to its complexity, the terminal project consists of 15 major projects and over 100 subprojects.





Rapid Link: Decentralised and modular

More than 4000 Rapid Link motor control units will be used for the decentralised control of the 18 km baggage handling system. In comparison to motor integrated drive systems, Rapid Link has become widely accepted. The benefits of Rapid Link are already apparent in the planning stage: motor starter and speed controller are controlled in the same way from the PLC. At the same time, the implemented logic functions of the Rapid Link modules reduce the control program. For example, Rapid Link can process time-critical functions, such as eccentrically operated points, autonomously at the required speed and precision. High-speed processing at the PLC inputs is no longer required.

Complex systems can be created from standard materials handling modules such as linear conveyors, curves etc. Rapid Link supports the creation of functions in standard software modules. The fully pluggable Rapid Link units are installed on site or are already supplied pre-assembled and functionally checked as complete conveying units. The power and data bus integrates insulation piercing technology to ensure time saving and error free installation. The manual operation facility on the Rapid Link unit is a benefit for commissioning, since the conveyor module can be commissioned electrically and mechanically before the control system is in operation. This considerably shortens commissioning times.

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Rapid Link also offers considerable benefits for the airport operator, particularly in troubleshooting and maintenance. By installing units close to the motor, status and diagnostics messages, for example, are clearly visible and can be clearly assigned to drives. Manual operation enables fast intervention, even if the control system has failed. Each Rapid Link Unit can also be replaced in a few minutes, thanks to their plug connector design. Airport operators only have to keep a few spare units since the integrated electronic motor protection allows Rapid Link units to be adjusted to the required motor rating.

Moeller was able to optimally adapt its Rapid Link system to the specific requirements of airport baggage handling systems.

Consequently, Rapid Link now offers a range of different messages for maintenance and technical troubleshooting. The digital inputs have likewise been upgraded for tracing the route of all baggage items via a PPI encoder.

CONCLUSION

Moeller has not only geared the product to the requirements of the airport sector. A key account management unit that has been specially set up for the airport and logistics industry is able to deal with the requirements of global suppliers. The first successes in this area have already been achieved. Rapid Link Units have now been installed at the airports in Doncaster/Sheffield and Bucharest, providing reliable service together with other Moeller components. Other airport operators are already impressed by Rapid Link and are planning to use it.