To meet the ever-increasing demands of the air cargo sector, manufacturers of detection and inspection systems use equipment that makes the inspection process as efficient as possible. One of the global market leaders in the field – Smiths Detection – relies on a specially developed 300 kV x-ray tube from COMET.
Security is always the top priority in the international transport business, and especially the air cargo sector. As legal requirements become ever more stringent, increasingly accurate inspections of consigned goods are demanded. At the same time, the flow of shipments is also growing as a result of globalization, which means there are more goods to be inspected. This places especially high demands on the manufacturers of detection and inspection systems. “Consigned goods have to be inspected as quickly as possible,” explains Joachim May, Vice President of Global Operations at Smiths Detection in Wiesbaden. This can either be achieved by maximizing the size of packaging units for scanning, or through efficient handling. “The goal is to create processes that are as efficient as possible in order to guarantee quick and secure handling, which saves our customers time and money. The integration of x-ray inspection equipment is becoming increasingly popular in the process chain when it comes to meeting the rising demands on throughput and data recording.”

As one of the global market leaders in the field of detection and inspection systems, Smiths Detection leads the global market in the production of detection and inspection systems for military applications, transportation and internal security. With the help of a wide range of technologies, dangers such as biological and chemical agents, toxic industrial chemicals, explosives, drugs, weapons and illegal objects can be quickly identified. Smith Detection is a separate operating division of Smiths Group plc, which has around 23,000 employees in 50 countries.

Learn more: www.smithsdetection.com
Smiths Detection (see box) boasts an extremely broad portfolio of security technologies that can be combined and linked as required. Air cargo is a very important segment, with a customer base that includes qualified shipping agents and freight forwarders alongside airlines and airports throughout the world. Goods shipments have to be x-rayed in their entirety. Smiths Detection developed the Hi-Scan 180180 product range specially for the high demands placed on Consolidated and Palletized Cargo (CPC). This uses 300 kV x-ray tubes to inspect pallets and air cargo containers. The dual-view systems primarily used in air cargo make the inspection process as efficient as possible. For these systems, Smiths Detection uses 300 kV x-ray tubes from COMET. “We were on the look-out for a second source. We already knew that COMET was a professional and reliable partner. The design of the tubes offers other benefits too, so our decision was an easy one,” recalls Joachim May. As the products from Smiths Detection have to meet stringent demands in terms of functionality and availability, the reliability of purchased components and cooperation between the companies both play decisive roles. “We are also extremely satisfied on these points. Our working relationship with COMET is based on mutual trust. Any problems which arise are dealt with jointly and expertly, so they are overcome in the end. We are bound by a true partnership characterized by expertise, openness, flexibility, reliability and a passion for confronting and resolving challenges.”

One example of this is the cooperation on the CIP-300 project (Car Inspection Portal). This system allows for the quick and efficient inspection of cars and delivery vehicles while delivering exceptional image quality. The radiation dose is so low that the driver (depending on local legislation) does not have to leave the scanned vehicle, and the inspection can be made in transit. For this purpose, a special 300 kV tube was developed in partnership with COMET which could be integrated into an existing 300 kV electronics system in special housing with no significant alterations. “A joint project team developed a prototype and brought it to the production stage together,” comments Joachim May. “There were many positive aspects, but we particularly valued the high level of technical expertise at COMET and the flexibility to work out solutions quickly in the event of unexpected problems.”

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