

New solutions in logistics

We are manufacturer-independent software developers who implement logistics solutions in materials flow for our customers, for the entire range of warehouse administration from goods-in through pick orders and shipping.

Currently, the identification of goods and packaging for transport is primarily accomplished using barcode labels. The barcode



has become the information tag of choice in warehouse and distribution logistics. Logistics procedures are managed by modern technological tools such as radio links, scanners and mobile terminals.



IAL's independent terminal interface **DataBridge** can be used with all scanner terminals and radio

solutions available on the market. Existing external systems are integrated into the whole system concept. Our solutions allow a high degree of integration in ERP-managed business processes (such as in SAP).



.Our experience shows that new technological innovations profoundly influence the shape of logistics solutions.

This is true, for instance, of instruments like handhelds and for scanner and radio technology.

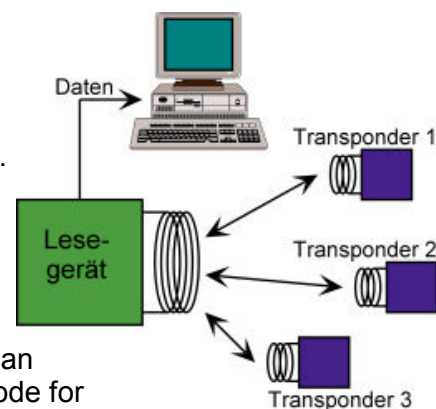
Windows-based mobile instruments are chosen increasingly often. Radio communication is achieved through wideband access points. The logistics systems implemented by IAL make possible the creation of a complete supply chain.

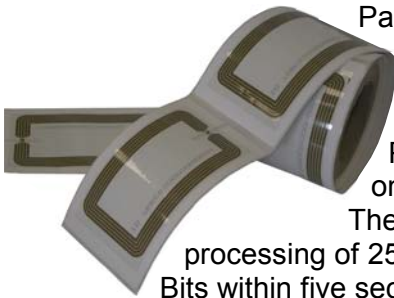


Logistics and RFID technology?

Radio Frequency Identification (RFID Technology) occupies an increasingly important place in logistics.

In comparison to barcodes which depend on physical readability, transponders (TRANSMITTER and resPONDER) can be read faster and without visual contact, even through outer packaging layers. Because of faster and better readability, and also because of the larger data quantity that it can transmit, the transponder is always superior to barcode for paper-less business processes, and fast order picking, where reliable and error-free handling and increased transparency of the individual processing steps are required.

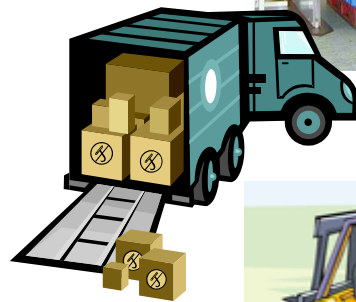




Passive transponders compose the largest sector in the field of RFID technology. A further advantage of the transponder is simultaneous identification. Using anti-collision techniques a large quantity of transponders can be read at the same time. Products can be identified as they pass by the reading station on their way to the packing station / loading dock.

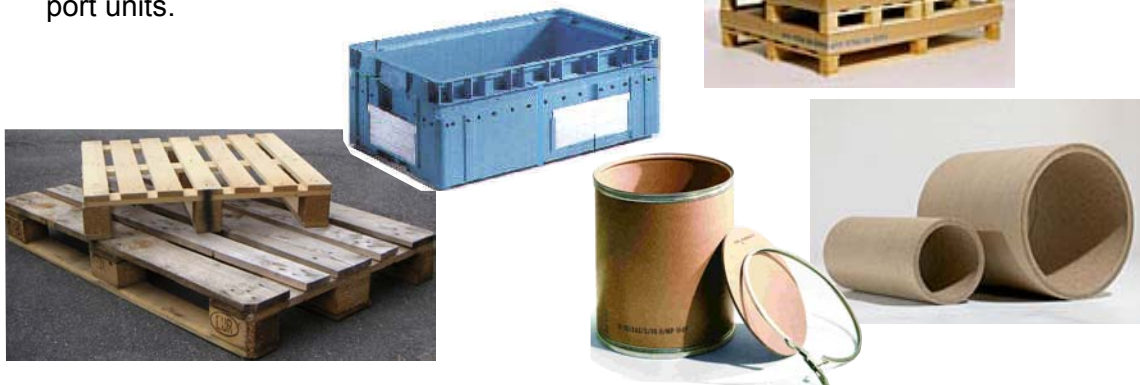
The EAN-RFID standard recommends the processing of 250 tags with a storage capacity of 128 Bits within five seconds as a norm.

Every transponder has an internationally unique number and a writeable working memory. IAL uses "Smart-Label" with the Europe-wide defined frequency of 13,56 MHz and 868 MHz. These transponders are usable world-wide, due to the EAN standards. Smart labels are available in various sizes. They can be integrated into the transport unit.



RFID technology makes possible new solutions for materials administration throughout the supply chain. Using transponder-equipped transport units enables the logistics managers to maintain a secure and reliable monitoring and documentation of components and materials.

Examples of intelligent packaging and transport units.



RFID technology opens up additional new possibilities for data storage and processing, and for both internal and external materials movements. Using transponders provides additional chances for rationalization and a new dimension in product and distribution security.

IAL supports you throughout the entire logistics process, beginning with the counting of temporary containers and drums through the inventory of goods all the way to the scanning of entire pallets. For the handling and processing of rolled materials such as carpets, the intelligent core provides logistical transparency.



The IAL way to a successful transponder solution

Feasibility review

Product

- Product identification
- Packaging identification
- Shipping method identification, pallet, drum, core
- Label configuration
- Label position
- Bundle: Product / Packaging / Pallet

Materials transport / shipping

- Business Process Review
- Local requirements
- Equipment and positioning of antennas
- Testing reading capabilities

List of functions / ERP Integration

- Integration / connection to ERP
- Integration materials movements and shipping

Pilot solution

Specification of quantity parameters

- Quantity of products / packaging / transport types
- Quantity of data entry stations

Technological specifications

- Transponder
- Reading stations
- Antennas

Implementation

- Purchase of reading stations, antennas, transponder
- System test
- System go live

Support

- Local / remote
- Documentation
- Training

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