

Solutions. It's in our name.

Reducing Costs in the Automobile Industry

In automobile manufacturing, all large parts are transported in specialized containers of distinctive shape that fit the parts exactly.



Without these containers, parts cannot be transported, which may result in automobiles not completing production. This leads to down times and idle times as well as costly alternative solutions for packaging and transport. To avoid this happening, many manufacturers rely on redundancy and they purchase more containers. A costly solution to a real dilemma, and one that does not always work. IDEN TEC SOLUTIONS offers a simpler and substantially more economical solution: equip the expensive specialized containers with small radio frequency tags which can be identified automatically up to 100 meters away. That way, the location of the containers is always known.

The following is an example of how the automobile industry uses IDEN TEC SOLUTIONS' technology to optimise the process, avoid errors and substantially reduce costs.



IDEN TEC SOLUTIONS' technology
also assists in:

- Access control
- Safe transport of valuable goods
- Location of vehicles...

But that is
a whole other story...

Knowing what, where, when and how... Do more with less.

With IDEN TEC SOLUTIONS you always know what is located where and when, and in what condition. As a result, production and logistics become easier, and the supply chain becomes transparent. Inventory is done on-line and you are always informed on quantity and quality of your assets. You know where your goods are located, whether in the warehouse or during transport; you monitor the traffic or even the entire cold chain, and you ensure that the goods arrive in a timely manner where they are needed.

How ILR® Works

Nothing is hidden from our technology. Inconspicuous electronic databanks with transmitters, so-called "tags" are mounted in or on an object. Information stored in these tags can be collected by readers via radio waves and new information can be written to the tags.

ILR® (Intelligent Long Range®) is an extension of **RFID (Radio Frequency Identification)** and can identify stationary or moving objects at distances of up to **100 meters**; these objects can be registered, tracked and data can be written to them at that distance and while in motion.



Tried and tested in the field

Special data transmission allows for the rapid, collision-free reading of many stationary or mobile tags simultaneously in a particular area. The readers can be fixed or mobile and can easily be linked to existing computer systems. The ILR®-specific minimal transmit power has no adverse effects on health, environment or pocket-book and the ILR®-specific minimal power usage allows tag operation for up to 7 years without battery replacement.

With ILR® Technology from IDEN TEC SOLUTIONS you always have:

- the right goods
- in the right quantity
- of the right quality
- at the right time
- in the right place
- with the right information
- and all at the right cost.

Tagged ■ captured ■ processed

ILR®- Transponder



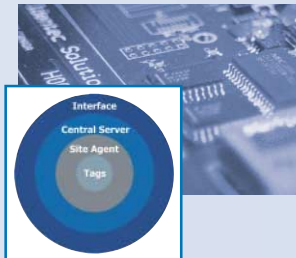
i-Q Series with up to 32 kBytes of memory and a range of up to 100 meters; Options: LED as well as temperature measurement and recording ability.
i-D Series with 64 Bytes of memory and a range of up to 6 meters; Option: LED.

ILR®- Read/Write- Equipment



i-PORT fixed terminal with Ethernet and RS232 interface, rapid real-time operating system, 4 antenna connections with 4 concurrent senders/receivers with field strength measurement and 4 digital inputs and outputs.
i-CARD as complete ILR® read/write module in PCMCIA card format converts every laptop or handheld computer into an ILR® device; drivers for all popular operating systems available.

ILR®- Software



i-LINKS configurable middleware acts as a "bridge" between the ILR® reader and the company's existing computer infrastructure (database, ERP system, etc.); has a variety of filter and pre-processing functions; executable on various systems and platforms.

The IDEN TEC SOLUTIONS Approach to: Container Management in the Automobile Industry

Savings in the millions are possible when the right parts in the right amount are located at the right place at the right time and of the right quality—a platitude? No... a reality!



Put your money on Container Management by IDEN TEC SOLUTIONS.

The special containers are automatically registered by readers distributed throughout the factory. Information about quantity, location and status of the contents of each individual container is available at any time. Production receives on-line notification ahead of time, on-line, of what is on its way. Wastage, delivery errors and mistakes in loading are almost non-existent; search, idle and downtime belong to the past.

Additional advantages: ▶

- Shorter cycle times; fewer circulation days
- No costly searching or repacking; no oversized loads
- No oversized load

Why Container Management?

The problems are the same throughout the entire automobile industry: "Where did those containers go?" "We just bought new ones!" "Where are the parts I need?"



With IDEN TEC SOLUTIONS, you won't hear this anymore. You will always know where your transport containers are located, how many and of what type they are, and what they contain. Your investment will see returns in just a few months due to the high savings potential.

Identifiable ▶

Equipping the containers with ILR® tags identifies them explicitly. The containers are automatically registered by ILR® readers distributed throughout the factory and the data is transmitted to a host computer. Information about location, quantity, type or contents of each container is available on-line at any time.

Intelligent ▶

Important data about the container and its contents is stored on the ILR® tag. This guarantees the right goods in the right quantity at the right place—brought about by the continuous flow of information accompanying the goods.

Trackable ▶

Even the transport vehicles are equipped with ILR® tags, which allow them to be identified and tracked as well. During the loading of the containers a bill of lading is automatically created; likewise a bill of delivery at time of unloading.

Quick and Secure ▶

The transport vehicle is automatically registered as it enters the gate; access is controlled and scheduling gets notification that the truck has arrived. By the time the truck reaches the ramp, the forklifts are ready to unload.

Monitored ▶

Production knows at any time what goods are arriving and when, and how many are in use. Wrong information or wrong deliveries are now practically unheard of.

Available ▶

When bottlenecks are detected, the system automatically requests additional parts. Large buffer storage and expensive back-up inventory are eliminated. This results in lower investments for start-up and follow-up procurements, as well as lower costs for searching, organizing and special solutions. Production proceeds more quickly and smoothly.



Tagged ■ captured ■ processed

