

WE MAKE ID EASY

TRANSPONDER | READER | APPLICATION
www.aegid.de

ACCESS & SECURITY



ANIMAL IDENTIFICATION



INDUSTRY & LOGISTICS



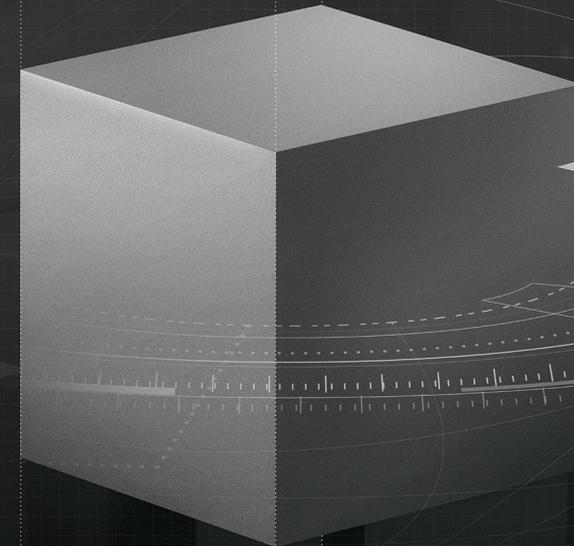
KEG & CONTAINER



SERVICE & INVENTORY



INDIVIDUAL SOLUTIONS





WE MAKE ID EASY

Our team lives and breathes RFID.

Together we develop intelligent identification systems – since the inception of RFID as a technology. We work in all RFID frequencies and applications – all the while concentrating on optimally solving specific tasks. Our products work seamlessly together to enable easy to use, individual solutions.

We do care for your challenge – through one on one consulting and straightforward processes – to make it as easy as possible for you.



SIMPLY MAKING EVERYTHING POSSIBLE

What distinguishes AEG ID is our knowledge that has grown over decades and our unique vertical range of manufacture. Our employees have mastered all production processes – our know-how covers technologies ranging from chips and transponders to readers and antennas. This comprehensive approach and state-of-the-art manufacturing technologies enable us to develop products and solutions that we can really call innovative with a clear conscience. We have a production capacity with which we can handle product quantities ranging from extremely small to large international orders. We are active worldwide with a network of regional sales partners. AEG ID has employees at its Ulm site in Germany and at its Vrchlabi production site in the Czech Republic.

Ulm/Germany

Vrchlabi/Czech Republic



START OF PRODUCTION

1989
(AEG AG)



INAUGURATION OF AEG ID

1996



HEADQUARTERS

ULM
Germany



PRODUCTION LOCATIONS

ULM
Germany
VRCHLABI
Czech Republic



CERTIFICATION

DIN EN
ISO 9001
since 1993



SUSTAINABILITY



AEG ID produces transponders and readers for LF, HF and UHF frequencies. The transponders, whose housings are optimized for every application, meet all requirements such as compact size, easy mounting, long reading distances, insensitivity to moisture, high temperatures and use in harsh environments. In addition to high-quality standard components, tailor-made system solutions are also our trademark.

- TRANSPONDERS 
- READERS 
- ANTENNAS 
- INDIVIDUAL SOLUTIONS 



As a leading full-range supplier, AEG ID develops, produces and sells transponders as well as readers that are ideally adapted to each application. Quickly and easily applicable standard solutions and tailormade system solutions are available in the following areas:

ACCESS & SECURITY



ANIMAL IDENTIFICATION



INDUSTRY & LOGISTICS



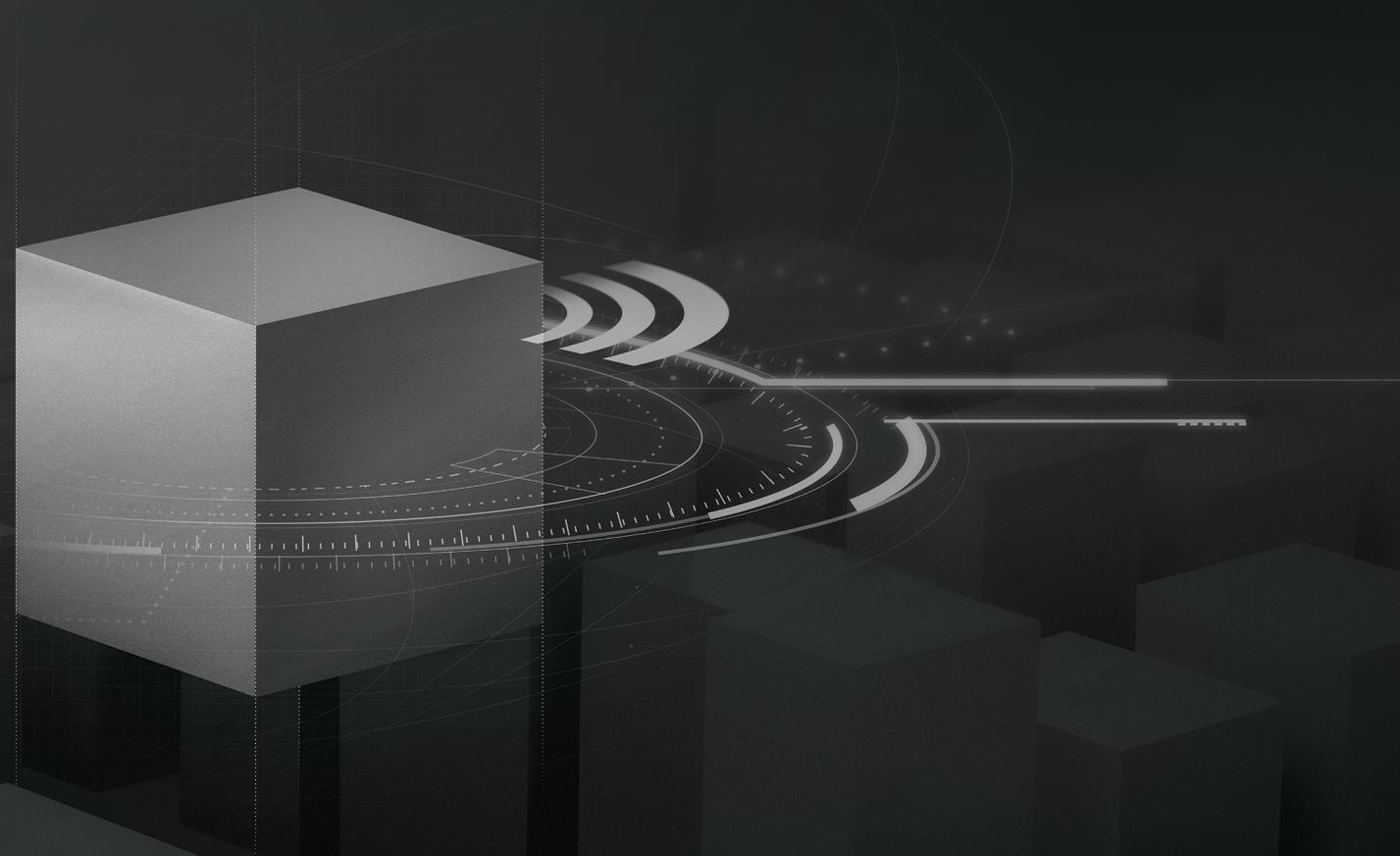
KEG & CONTAINER



SERVICE & INVENTORY



INDIVIDUAL SOLUTIONS





ACCESS & SECURITY

AEG ID produces to the very highest quality standards – all products are manufactured in Germany and the Czech Republic and are tested for 100 % functionality before delivery. This standard is essential, especially in the area of access and security solutions.

Our portfolio includes ISO cards and keyfobs, which are used not only for access applications in buildings, but also for time recording, billing, vending and events. High-quality media with one or more transponders are available. Magnetic stripes, signature fields, thermal foils, contact chips, laser engraving and clip holes are available for cards.





Keyfob L
Keyfob metal
ISO Card
Clamshell Card
PET Transponder
PVC Transponder



ARE DT1 LF
ARE DT1 HF



The latest production technologies within AEG ID enable us to offer optimized cards and keyfobs for your application. From special geometries of the card coils up to combinations of different chip types in a single medium, we offer you tailor-made solutions with our complete range of vertical integration. AEG ID develops and produces the complete media in its production sites Ulm/Germany and Vrchlabi/Czech Republic.

Due to our high quality standards, every single card and keyfob is 100% tested for function as well as visually prior delivery.

Our ISO cards are produced on the latest fully automated production lines, with the highest quality standards in regards of function and appearance. Thanks to innovative printing technologies, even small quantities can be produced economically and in high print quality. With coil geometries tailored to your existing installation, we offer cards for simultaneous and optimized use:

- Wall mounted readers
- Terminals
- Offline cylinder
- Desktop readers



The benefits of the new keyfob family at a glance:

KEYFOB L / METAL

- optimized proximity range
- fast transmission time
- durable
- non breakable eyelet
- protection class IP 67
- possibility to combine several chips
- wide visual variety with the option "3D-Logo"

KEYFOB METAL

- improved durability
- attractive design



The following options are available for cards:



- Combi cards LF / HF / UHF
- Offset printing
- Digital printing
- Single card offset printing
- Tampon printing
- Thermal transfer printing
- Retransfer printing
- Inkjet printing
- Magnetic stripe
- Signature field
- TRW foil
- Clip hole option
- Contact chip
- Holograms
- Adhesive back
- Laser marking
- Personalization
- Chip encoding

The following options are available for keyfobs:

- 3D logo for keyfobs
- Laser marking
- Tampon printing
- Combination LF / HF or HF / HF
- Personalization
- Chip encoding



More informations:

www.aegid.de/en/keyfob_configuration/

The combination of our ARE DT1 with cards or keyfobs of AEG ID enables our customers to implement a wide variety of applications. Especially for the authentication of operators on machines and production equipment, the ARE DT1 is ideally suited. The simplest integration into the machine control and customer-specific design – even in the smallest quantities – offer a solution that can easily be retrofitted to existing factories. The ARE DT1 is already prepared for a machine assembly and is operated via a USB HID interface.





ANIMAL IDENTIFICATION



WE MAKE ID EASY



FOR THE FIELD OF ANIMAL IDENTIFICATION, WE PRODUCE HIGHLY DEVELOPED ANIMAL TRANSPONDERS, INJECTION DEVICES AND READING DEVICES FOR BOTH PETS AND LIVESTOCK.

PIGEONS & FISH

We offer specially developed rings with built-in transponders to identify birds. They are used in research and in pigeon racing. A special reader detects the returning carrier pigeon at the moment it flies into its loft. Transponders in fish allow their migration to the spawning grounds to be tracked and are used especially in salmon farming.

PETS

To identify dogs and cats, we offer both glass transponders in sterile packaging and the corresponding injection devices in compliance with ISO 11784 / 11785. This identification is valid for the EU pet passport, which is needed to cross borders. Most pets are fitted with a transponder so that they can be returned to their owner if they are lost.

LIVESTOCK

The electronic identification of farm animals is carried out via an ear tag or a so-called bolus, a ceramic unit located in the animal's stomach. The electronic identification of farm animals is not only increasingly required by the authorities (EU regulation for sheep and goats) but also offers farmers advantages in controlling the feeding and milking processes.





ISO Glas ID 162
ID K162
Single use implanter
Multiple use implanter
Pigeon ring



ARE H3
ARE H5
ARE H9 LF
ARE H15



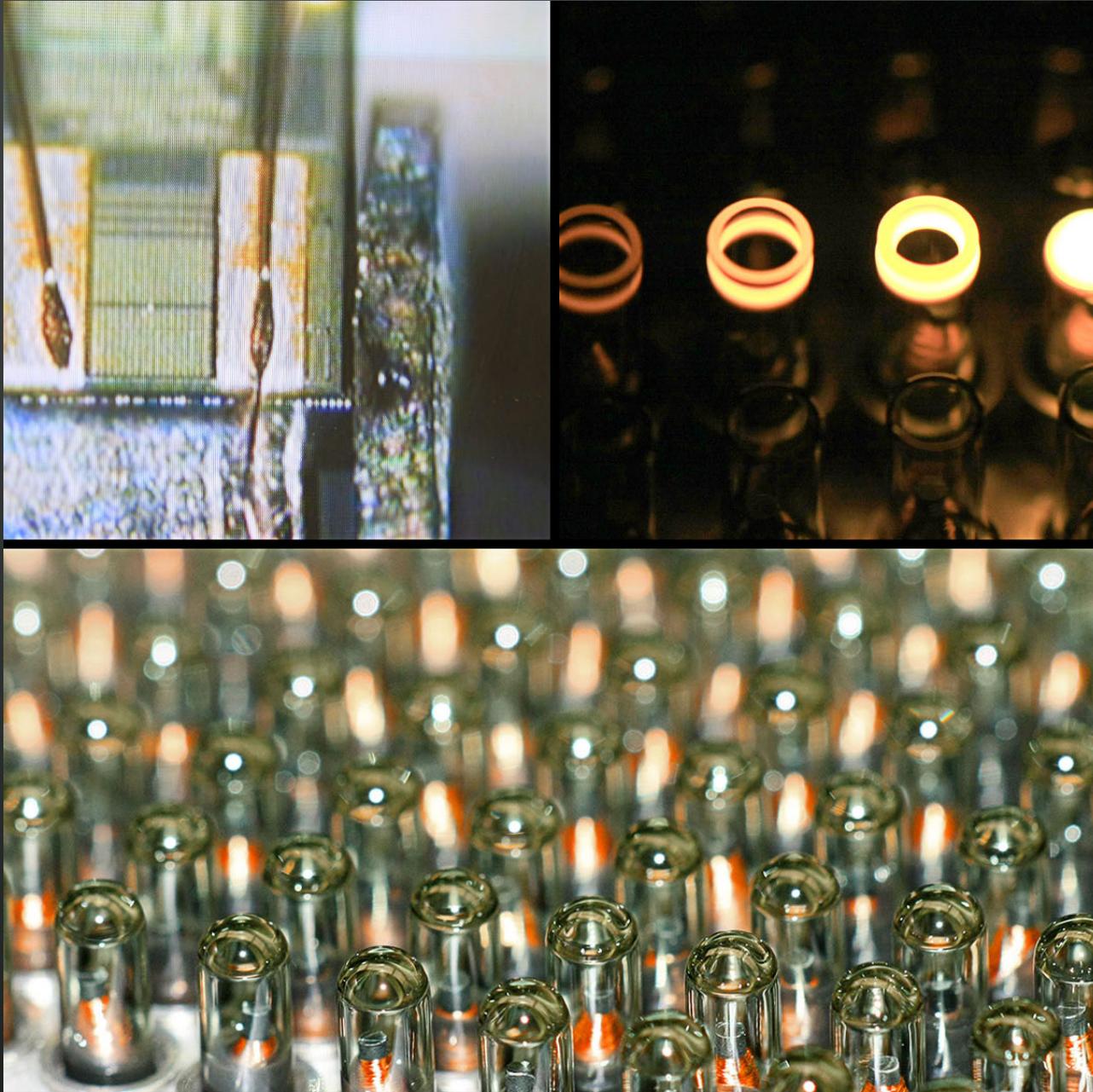
AAN PT1

AEG ID supplies transponders with its ISO manufacturer code C968 or as a programmed version according to the release of the national database.

The CEO and shareholder of AEG ID Mr. Reiner Wagner is the official delegate of Germany in the ISO/TC23/SC19/WG3, and also a member of the ISO/TC23/SC19/WG3/TWG. In this function Mr. Wagner is defining and approving together with the other country delegates all technical guidelines in the Working Group 3 (WG3). AEG ID is an active member of the Technical working group (TWG) which is a part of the WG 3 within the ICAR organization.



THE GLOBAL STANDARD
FOR LIVESTOCK DATA



What distinguishes AEG ID is our knowledge that has grown over decades and our unique vertical range of manufacture. Our employees have mastered all production processes – our know-how covers technologies ranging from chips and transponders to readers and antennas. This comprehensive approach and state-of-the-art manufacturing technologies enable us to develop products and solutions that we can really call innovative with a clear conscience. We have a production capacity with which we can handle product quantities ranging from extremely small to large international orders.

Our full automatic glass transponder production in Ulm/Germany



INDUSTRY & LOGISTICS

WE MAKE ID EASY



In the industry & logistics sector, we develop transponders and readers for delivery logistics and industrial automation solutions. These systems are used in various sectors, such as in the automotive industry to control production logistics and generally to track trays and containers for goods. Other applications include immobilizers, NFC solutions and waste disposal.

RFID transponders and readers from AEG ID have become a reliable contribution to industry 4.0 solutions. The disk transponders used in this segment can withstand the toughest industrial processes, humidity, chemical exposure and extreme temperatures from $-40\text{ }^{\circ}\text{C}$ to $+200\text{ }^{\circ}\text{C}$.



Disc Transponder
ID 200
PET Transponder
PVC Transponder

DISC TRANSPONDER

GLASS TRANSPONDER

TRANSPONDER

MOBILE READERS

STATIONARY READEREES

READER ARE I2

ANTENNAS

DISC TRANSPONDER



GLASS TRANSPONDER

TRANSPONDER

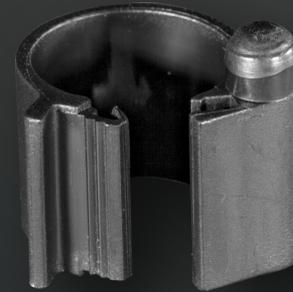
MOBILE READERS

STATIONARY READERS

READER ARE I2

ANTENNAS

DISC TRANSPONDER
GLASS TRANSPONDER



Fit Plug
Cable Clip
Cable Flex
Metal Flex



TRANSPONDER

MOBILE READERS
STATIONARY READERS
READER ARE I2
ANTENNAS

DISC TRANSPONDER
GLASS TRANSPONDER
TRANSPONDER



MOBILE READERS
STATIONARY READERS
READER ARE 12
ANTENNAS

ARE H9 LF
ARE H9 HF
ARE H5
ARE H15

DISC TRANSPONDER
GLASS TRANSPONDER
TRANSPONDER
MOBILE READERS

ARE K1
ARE i5
ARE DT1
AMP 2 TWIN
AMP 4 TWIN



STATIONARY READERS

READER ARE i2

ANTENNAS

DISC TRANSPONDER

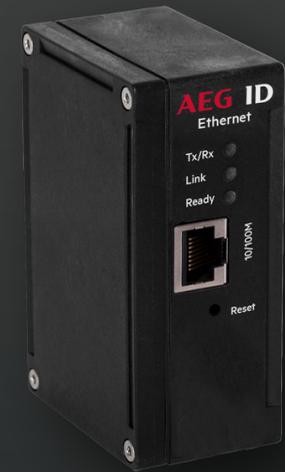
GLASS TRANSPONDER

TRANSPONDER

MOBILE READERS

STATIONARY READERS

ARE i2 LF
AMP 4
AMP 8
ARE i2 HF
AMP 4 HF
AMP 8 HF
Ethernetconverter



READER ARE i2

ANTENNAS

DISC TRANSPONDER

GLASS TRANSPONDER

TRANSPONDER

MOBILE READERS

STATIONARY READERS

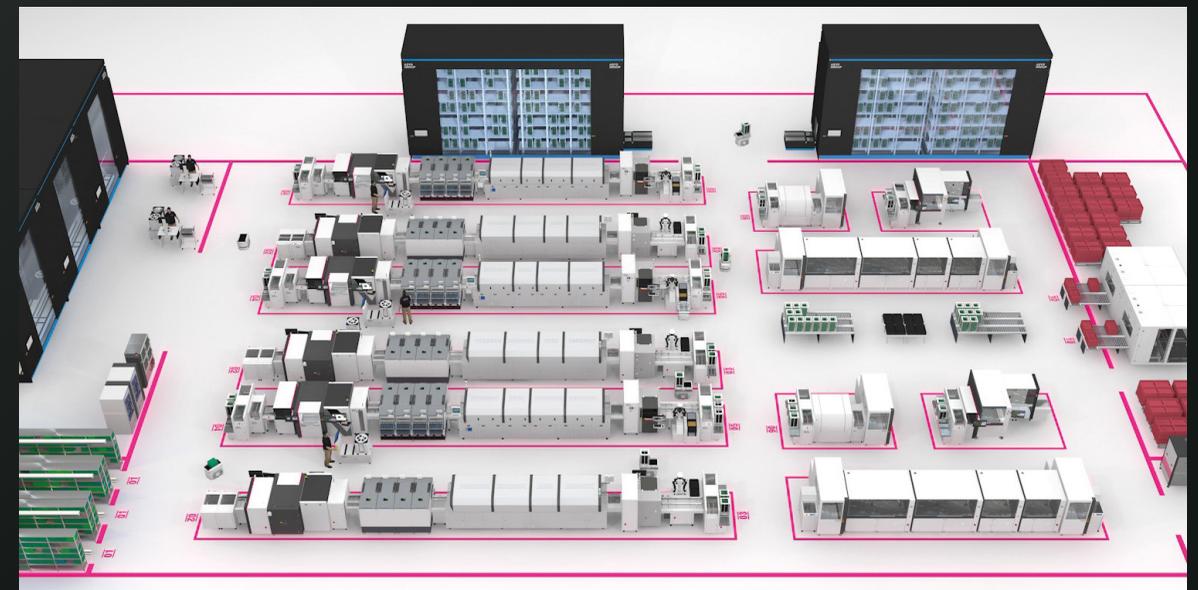
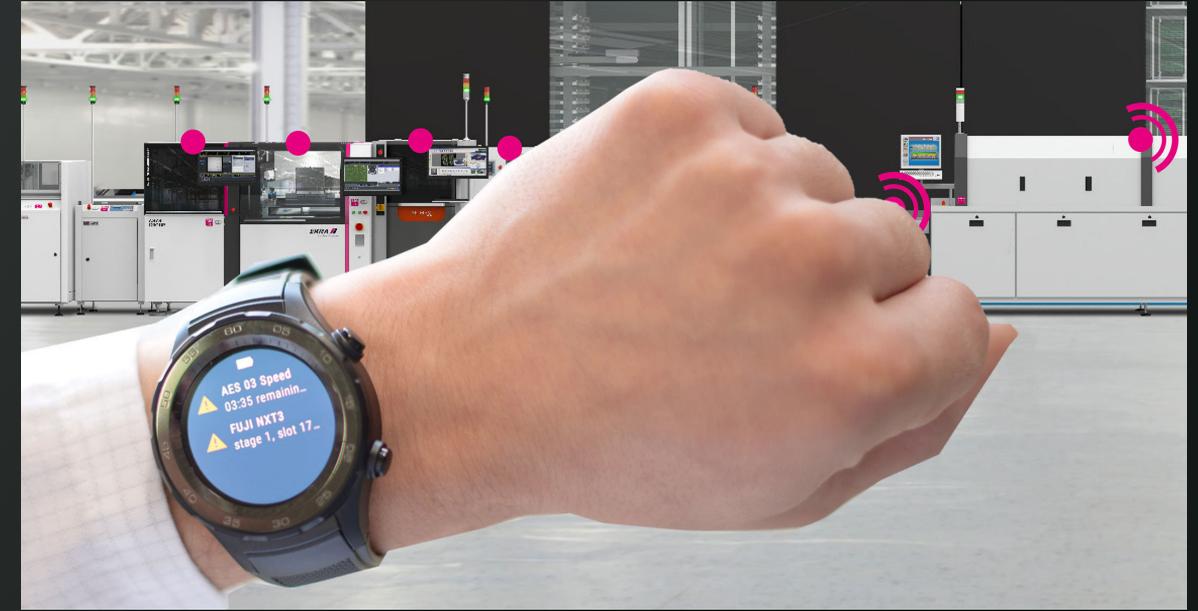
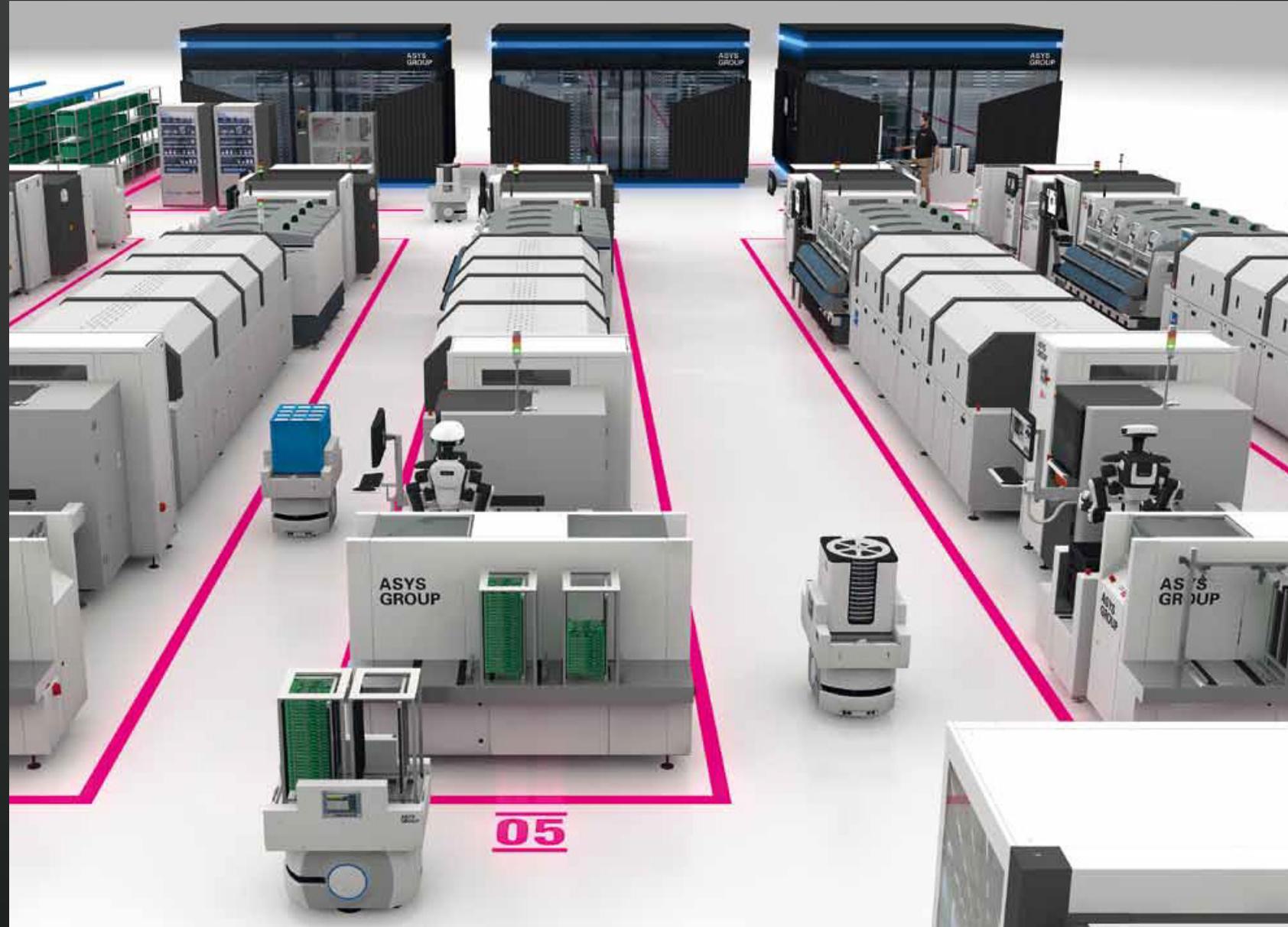
READER ARE I2

- AAN X1
- AAN X2L
- AAN X3L
- AAN X4F
- AAN X6L
- AAN X9L
- AAN X1L HF
- AAN X9L HF
- AAN PT8
- AAN FK2
- AAN FK6
- AAN PT1



ANTENNAS





WE MAKE ID EASY







KEG & CONTAINER

AEG ID develops high-quality transponder and reader solutions for applications used in a variety of tasks, ranging from filling containers to managing logistics for barrels and kegs. The transponders are particularly suitable for tracing containers, as confirmed by a VLB study. Transponders are available for all common stainless steel barrels and PU kegs.





Disc Transponder
ID 200
Keg Transponder



ARE H5
ARE H9 LF
ARE H15
ARE K1



AAN FK2
AAN FK6



ID 700 for stainless steel kegs



ID 200 for PU kegs



Keg filling line



for a midsize brewery

(100,000 hl p.a. / 30,000 stainless steel kegs (50 l), 20,000 PU-kegs (30 l))

source: study cost-benefit-analysis for a RFID-based keg identification system in the German brewery industry (VLB/2008)

TOTAL INVEST

- transponder + re-fitting + data input
- Readers (3 stationary readers for the filling machine + 3 handheld readers)
- Brackets for the antennas
- Exclusion at empties incoming
- Assembly (5 M/D)
- Production logistic (PC-Hardware + Software)
- Project management

T € 303

ONE-TIME SAVINGS

through reduction of keg inventory

T € 155

ANNUAL SAVINGS

- Keg loss (reduction from 3% p.a. to 1,5% p.a.) T € 59
- Complaints (reduction by 20–80%) T € 10–40
(currently approx. 500 complaints p.a. per case 100 Euro)
- Reduction of costs for the keg pool T € 6
(decreasing the time of circulation by approx. 4%)
- Payback of beer tax T € 2

T € 77–107

ADDITIONAL EXPENSES

- anual costs for administration and data management,
plus additional costs through more intense maintenance

T € 14

ANUALLY REFLUX OF CAPITAL

(depends on quantity of reduce complaints)

T € 64–94

ROI

1,6–2,3 YEARS

Brasseries Alken-Maes
Badische Staatsbrauerei Rothaus AG
Brauerei Baumgartner
Brauerei Chimay
Coca-Cola (6 filling lines)
Brasserie D'Achouffe
Distelhäuser Brauerei
Duvel-Moortgat
Flensburger Brauerei
Forst Brauerei Meran
Fürstlich Fürstenbergische Brauerei
Herzoglich Bayrisches Brauhaus Tegernsee
Brauerei Hirt, Kärnten
Karlsberg
Obermurtaler Brauereigenossenschaft
Brauerei Palm
Privatbrauerei Reissdorf
Brauerei Ried im Innkreis
Brauerei SAKU
Schlossbrauerei Kaltenberg
Schneider Weisse
SINALCO (2 filling lines)
Störtebeker Braumanufaktur
Brauerei zur Malzmühle
Privatbrauerei Zötler

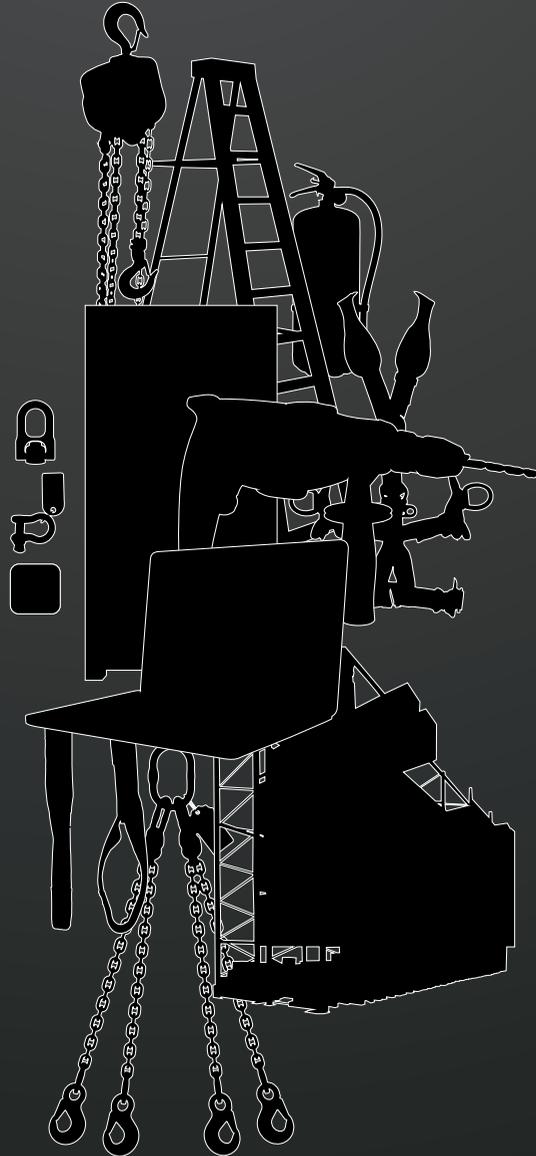




SERVICE & INVENTORY

The unambiguous identification and assignment of electrical and mechanical equipment to the appropriate test protocol often causes difficulties. Serial numbers are usually long, difficult to read or no longer available. Numbers or barcode labels affixed subsequently become just as difficult to read, get bleached, rubbed off, soiled or lost over time.

In cooperation with well-known test and measurement companies, manufacturers and software providers, we have developed products and solutions for clear and permanent identification that are easy to integrate and that cover all areas.



In such cases, the post-processing of the data then required by law and the effort needed to ensure that test results are correctly allocated to the relevant test units account for up to 50% of total testing time.

AEG Identifikationssysteme GmbH has addressed this problem and, working together with renowned measuring and testing companies and manufacturers of operating equipment, test equipment and personal protective equipment as well as software providers, has developed various widely applicable solutions for the unambiguous and permanent identification of test units.

- FAST INSTALLATION AND DATA ACQUISITION
- FAST ASSIGNMENT TO AN EXISTING DATABASE
- READERS WORK INDEPENDENTLY OF SOFTWARE
- EASY INTEGRATION OF THE UID INTO VARIOUS SOFTWARE SYSTEMS (E.G. "ELEKTROMANAGER" FROM MEBEDO)
- SPECIAL FUNCTIONS, E.G. FOR "ELEKTROMANAGER" (F12 FUNCTION)
- COMPATIBLE WITH THE MOST COMMON VDE TEST EQUIPMENT (USB OR RS232 INTERFACE)
- CAN BE USED IN MANY FIELDS
- TRANSPONDERS ARE AVAILABLE IN MANY ROBUST DESIGNS
- THE READERS ARE EASY TO USE AND CAN BE OPERATED IMMEDIATELY WITHOUT ANY INSTALLATION
- TRANSPONDERS ARE VERY SMALL AND CAN BE INSTALLED IN THE OPERATING EQUIPMENT (E. G. CONSTRUCTION SITE EQUIPMENT)
- PERMANENT LABELLING
- NO DOUBLE ASSIGNMENT OF NUMBERS
- READ/WRITE VARIANTS





– LABELLING FOR COMPLIANCE WITH LEGAL TEST REQUIREMENTS FOR:

- + Electrical equipment and machinery
- + Sockets
- + Personal protective equipment
- + Ladders and steps
- + Slings and lashing equipment
- + Shelving and storage systems
- + Fire extinguishers
- + Emergency exit & fire safety doors

– OBJECT AND EQUIPMENT ASSIGNMENT / IDENTIFICATION

– INVENTORY / STOCK CHECK

– WEAK POINT ANALYSIS / BATCH MONITORING



Glass Transponder
Disc Transponder
ID 200
Cable Clip
Cable Flex
Metal Flex
PET Transponder
PVC Transponder



ARE H5
ARE H9 LF
ARE H9 HF
ARE H15
ARE DT1 LF
ARE DT1 HF

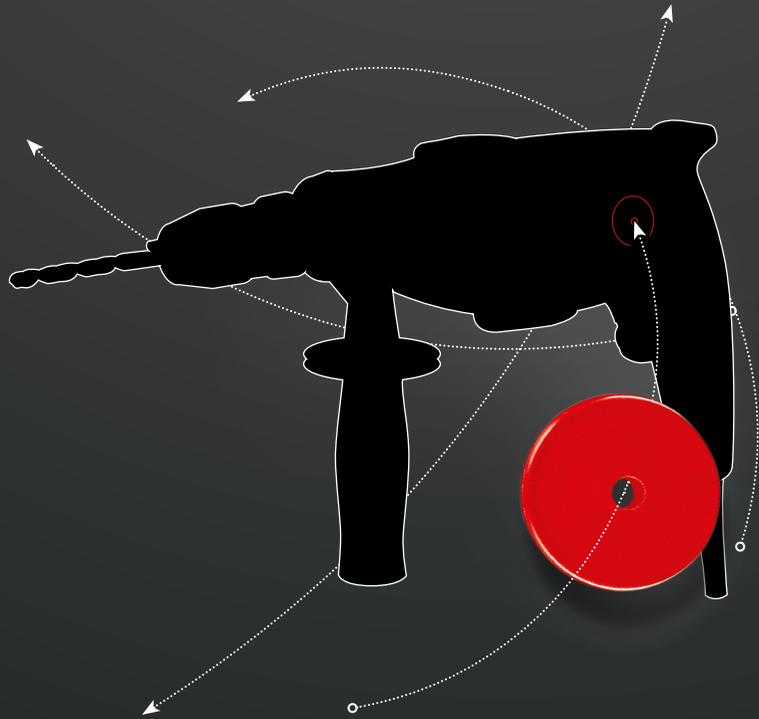


AAN PT 1





The RFID readers are compatible with the most common test devices such as B. from Gossen Metrawatt Secutest, Fluke 6500, Benning ST750.



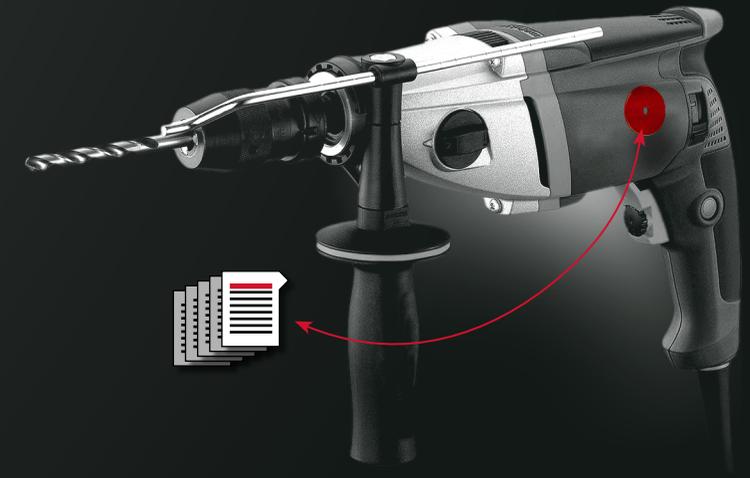
THE INSTALLATION

A transponder will be identified on or in your object attached. With a broad range of transponders, different mounting options are available.



CHECK AND DETECT

When the object is first recorded, the transponder is linked with the corresponding data and stored in your database. Through this assignment you can check the product status or load all relevant data quickly during recurring tests and clearly record the changes.



THE PROTOCOL

By comparing previous tests with the current exam, the solution ensures that none objects are forgotten to be tested.

**SAVINGS
EXAMPLE FOR A
MEDIUM-SIZED COMPANY**

(5,000 TEST UNITS IN THE COMPANY)

CURRENT ANNUAL COSTS:

- + Average time required per equipment item: approx. 6 min.
- + Material costs for testing: approx. € 0,10/item
- + Post-processing costs: approx. 35 %

APPROX. T € 27

ONE-OFF RFID COST: LABELLING & DATA ENTRY:

- + Average time required per equipment item: approx. 2 min.
- + Material costs for testing: approx. € 1,70/item
- + Post-processing costs: approx. 15 %
- + Software to read equipment data

APPROX. T € 17

ANNUAL COSTS AFTER RFID LABELLING:

- + Average time required per equipment item: approx. 4 min.
- + Material costs for testing: approx. € 0,10/item
- + Post-processing costs: approx. 15 %

APPROX. T € 15

ANNUAL SAVINGS AFTER RFID LABELLING:

APPROX. T € 12

AMORTISATION PERIOD:

APPROX. 1,4 YEARS

With our software tool, we can create a plan for you based on your key figures.
This covers: number of test items / hourly rate for electricians / postprocessing time / transponder / RFID reader / software / other material costs

We can offer you the option of having tailor-made products designed entirely according to your ideas and technical requirements. In this way, you benefit from our many years of experience in the development of RFID components. The process used is simple and efficient. As we develop and produce both transponders and readers, we are able to offer complete hardware solutions to meet your individual needs.



THE FUTURE IS IN ULM, HERE AND NOW.

You too want to create new realities,
then come and visit us
and experience fascinating insights
into the world of RFID.

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