



Imagine the impact of real-time intelligence to your business.

IDENTEC SOLUTIONS

I-CHEM Active-RFID Solution Saves Time and Money
for Chemical Logistics Facilities by Managing Truck
Traffic

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Leading Provider of Wireless Technology Platform (active RFID)

- **Award-winning, patented SensorSmart®** Technology Platform
- Identifies, locates, tracks and communicates with assets at a **distance of up to 500 meters**
- Award winning deployments in Logistics Applications in Marine & Intermodal ; Oil and Gas and Chemical Industry
- **World class customers:** BASF, Bayer, DP World, ConocoPhillips,



Key Facts

- Established 1999 in Austria
- 102 employees (75 EMEA, 14 North America, 13 Australia)
- 1 million “smart assets”, 30.000 readers in use

Business Locations

Centers of Excellence

- Lustenau, Austria (Product Center) – HQ
- Kristiansand, Norway (Solution Oil, Gas & Mining)
- Melbourne, Australia (Solution PORTS)

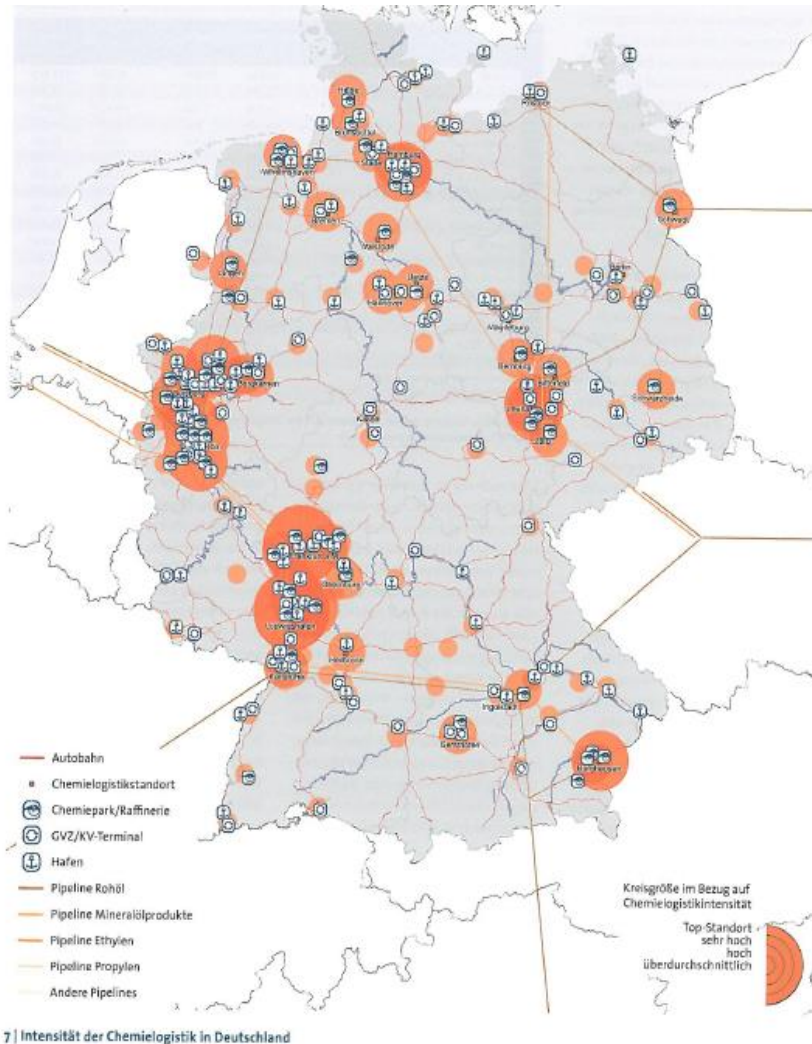
Sales and Service Centers

- Dallas, USA
- Hirschberg, Germany (Solution Chemical Logistics)



LOGISTICS IN CHEMICAL INDUSTRY GERMANY

INTENSITY



37 Sites (Chemparks and Chemical plants)

158 Mio t chemical products transported in Germany

Modal mix

Rail 15%, Ship 3% Truck 82%

40% are hazardous materials

BASF approx. +2.000 truck movements / day

Chempark (Bayer / Lanxess) approx. 500 to 700 truck movements/site/day

Source: BVL 2013 „Chemielogistik Bedeutung; Strukturen, Dynamik

LOGISTICS IN CHEMICAL INDUSTRY GERMANY

CHALLENGE IN TRUCK MANAGEMENT



- Increased volume of transports
VCI / BVL: increase of 30%-50% until 2020
- Increased traffic at gates and within plants
- Lack of educated drivers
- Limited capacity /space at the gate areas / plant sites
- Increased requirements for safety and security
- Reduction of CO2
- Supply Chain complexity

LOGISTICS IN CHEMICAL INDUSTRY GERMANY

HOW THE INDUSTRY REACTED



BASF started the pilot Project DRIVE in 2008 RFID Identification of Trucks at the Truck Gate and Loading Stations

Positive decision and start rollout in 2012 at the plant in Ludwigshafen - Gates and Loading Stations

Chemion decided in 2013 to use the same system for GATE processes of the Chempark plants Uerdingen, Krefeld and Leverkusen (Lanxess, Bayer)

Forwarders can use the same equipment for the automated entry at all sites



LOGISTICS IN CHEMICAL INDUSTRY GERMANY

PROCESS AUTOMATION WITH I-CHEM AND FLOW SOLUTION



ATEX certified active RFID transponder
Ruggedized for truck mounting



RFID reader and antenna Infrastructure at the
Gates and Loading Stations



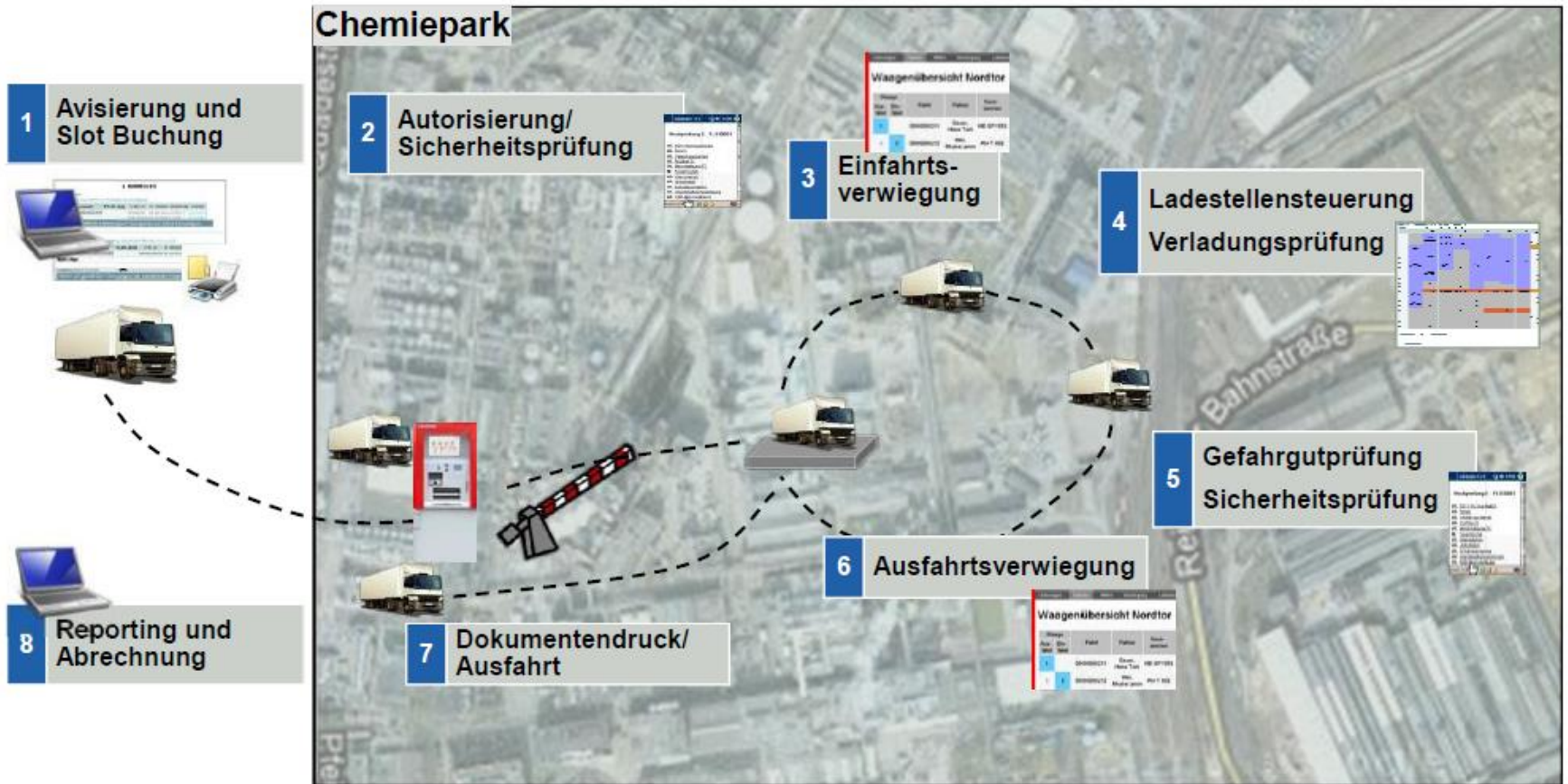
i-SHARE Edgeware for data collection and
pre processing

„Flow“ MES software
Functions: Check In, Slot Booking, Weight Stations
Kiosk, ADR Documentation etc.



LOGISTICS IN CHEMICAL INDUSTRY GERMANY

FLOW SOLUTION



GATE PROCESS IN CHEMICAL PLANT

CHEMION PROCESS



GATE PROCESS IN CHEMICAL PLANT

RESULTS OF PROCESS AUTOMATION AT THE GATES



- Driver stays in the truck, no line up at check in counter
- Time reduction of approx. 1 hr per turn around
- Reduce bottlenecks at the gates
- Automatic process documentation of throughout the process
- Single RFID Transponder at the trucks for multiple business relations
- Real time visibility of the process allows for optimization and control



THANK YOU

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