

Welcome

2nd October 2024

Plant - WEMDING

LEADERSHIP IN DRIVING ASSISTANCE

ADAS ACCELERATION

FLEXIBLE - SUSTAINABLE - SMART

SMART TECHNOLOGY FOR SMARTER MOBILITY

Agenda

WHEN

08:30 - 08:55

08:55 - 09:15

09:15 - 09:50

09:50 - 10:25

10:25 - 11:00

11:00 - 11:35

11:35 - 12:10

12:10 - 12:45

12:45 - 14:15

14:15 - 16:00

WHAT

Welcome & Site Presentation

Preparation for Production

SMD

USV (incl. AI Projects / Funding)

Front Cam

IP Next (incl. Scalable Standard Cells)

Lidar

Logistics (incl. Smart Electronic Storage)

Lunch / Q&A Session

Transfer from Wemding to Airport Munich

WHO

Markus Hein

All

Tobias Cislaghi

Klaus-Stefan Lehner

Gregor Wichary

Jochen Vallon

Tobias Vogel

Carina Ritter

All

WHERE

Meeting Room "Nürburgring"

Meeting Room "Nürburgring"

Genba

Genba

Genba

Genba

Genba

Genba

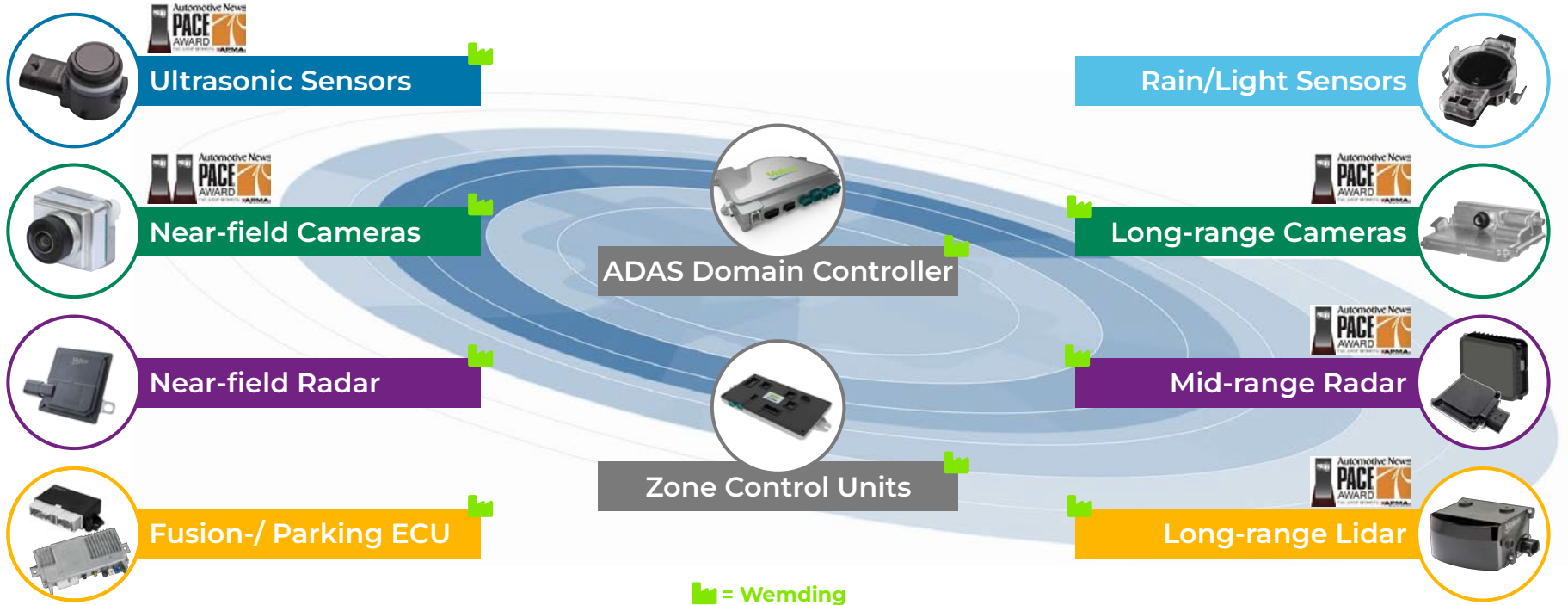
Meeting Room "Nürburgring"

AUTONOMOUS DRIVING LEVEL ILLUSTRATIONS vs. SYSTEM COMPLEXITY



TECHNOLOGY FOR RANGING, VIEWING AND COMPUTER VISION

Product Family Strategy - Global Process Standard



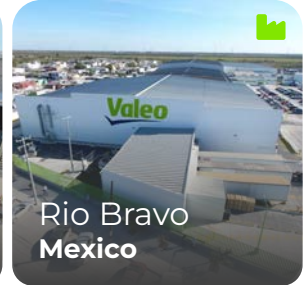
Covering 360° around the vehicle from Near-field to Long-range

A WORLDWIDE PRESENCE*

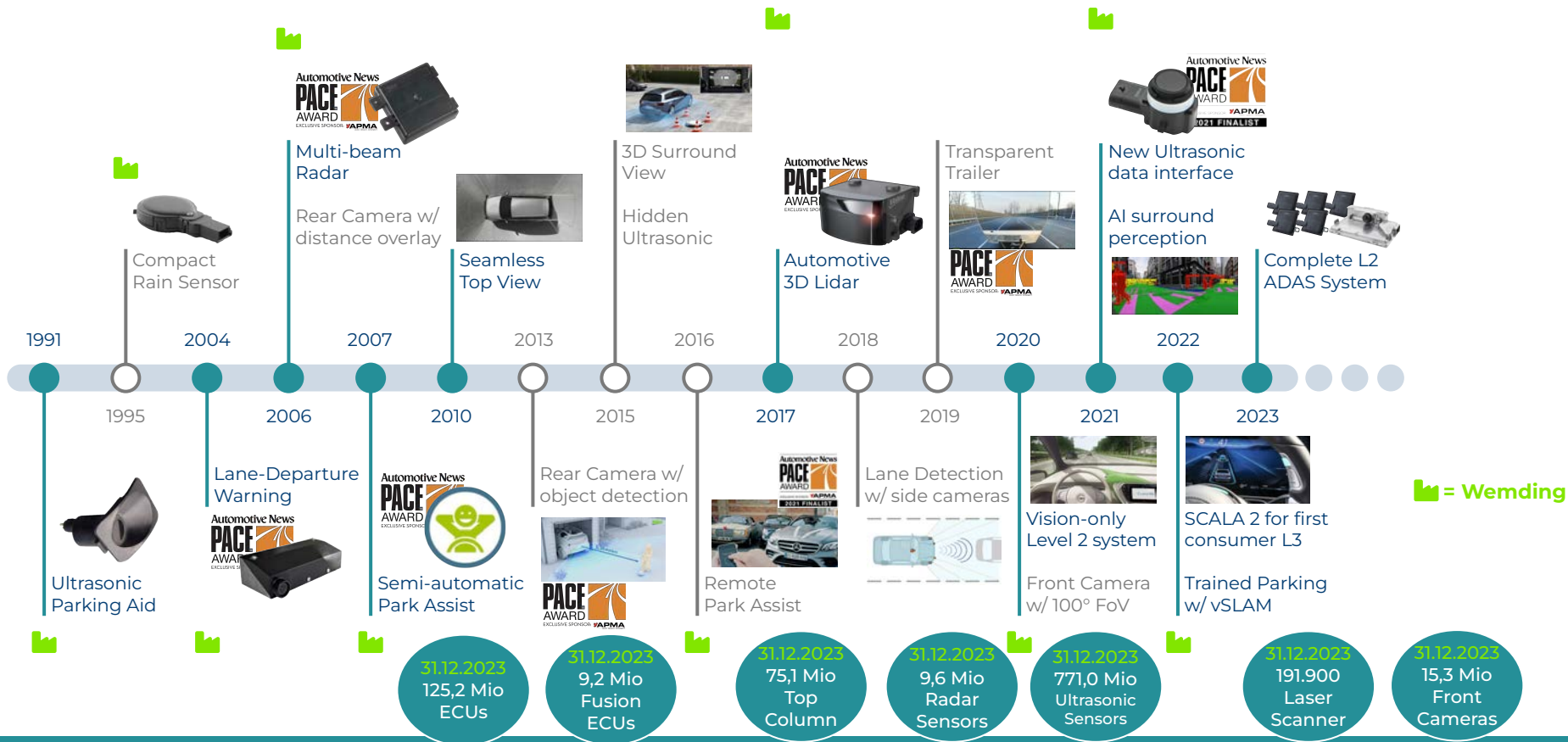
MAIN R&D SITES



MAIN INDUSTRIAL SITES



A HISTORY OF INNOVATION - FIRST to PRODUCTION



30 years of innovation with 15 world's first in the past 10 years

Mother-Daughter Know-How Transmission

WEMDING - CDV Industrial Competence Center for Global Know-How Transmission



ONE CDV

Nogent-Le-Rotrou

- Ultrasonic Sensors
- ...

Wemding as Expert Academy for Industrialization, Process Development & Digitization

Rakovnik

- Front Camera
- Ultrasonic Sensors
- SMD - Electronic Production
- ...

Valeo
Wemding

Kyongju Daegu

- Radar Sensors
- Ultrasonic Sensors
- ...

Shenzhen

- Control Units
- Front Camera
- Radar Sensors
- Ultrasonic Sensors
- SMD - Electronic Production
- ...

Rio Bravo

- Control Units
- Radar Sensors
- Ultrasonic Sensors
- SMD - Electronic Production
- ...

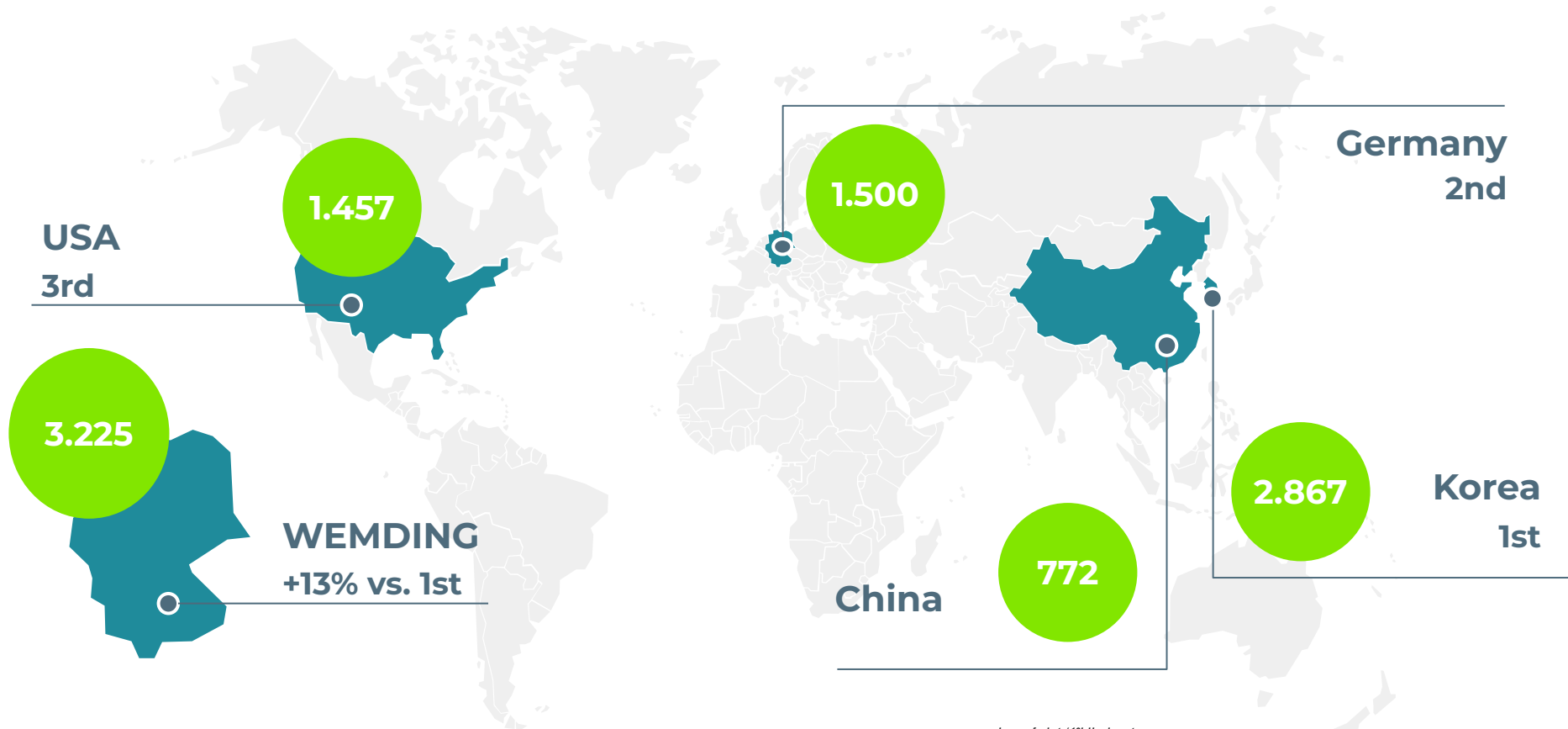
University Cooperations (PhDs, Masters, Students)

Low FLUCTUATION
85% of Engineers with >5 years experience (avg > 10 years)

Cooperation with research institutes



Robotic Density per Employee (Automotive)



Intelligent LEAN - Digitization



Valeo Suite



Traceability

110 SMD & Production Lines connected with & without interlocking

Recording of single components & Process parameters



Production Control

Production Line Interfacing and Orchestrating system

real time production declaration system fully automatic and fully integrated with the production lines

e-KOSU

Automate recording of Line Efficiency

Real Time Data Gathering Tracking on hourly base

Acquisition and monitoring of all production relevant data for all production lines

E-Workstation

Document management system for work-related documents

Verification systems for flexible use of employees (training units for employees)

E-QCDM

Display of all production-relevant data on the production lines (KPIs)

Quick Response Action Plan

Quality-critical and production-critical data accumulation

Recording and correction of machine malfunctions

Source for long term learning and improvement

Truck Time Table

digitalisation of the Truck Time Table monitor fully interfaced with SAP

Valeo Standard Tool Set - developed in Wemding

AI @ Production - Research Projects

ADeUSPro

Anomaly Detection in Ultrasonic Sensor Production

- Research in AI infrastructure
- Predictive Quality in Automotive Ultrasonic Sensor Production



PALIM

Performance Accelerated Learning for Intelligent Manufacturing

- Evaluation of SW Solutions for real-time data-gathering
- Predictive Maintenance in automotive Front Camera systems



AI4CO2Opt

AI to reduce CO₂ emissions through energy optimization of production.

- Research in energy monitoring systems
- Prediction of energy consumption with AI



FEDIMA

Federated Interpretable Modular Machine Learning for Manufacturing.

- Train AI model on distributed data without centralising the data
- Research in the area of explainable AI (XAI) and data privacy in AI



ESD-CLOTHING

You will need:

- ESD-Jacket
- ESD heel strap
- Hair net
- The yellow visitors badge
- Your name plate



PRODUCTION TOUR

3 GROUPS



Markus Hein
Senior Site General Manager

Group 1



Daniel Hopfner
Site Plan -30 Manager

Group 2



Hans-Peter Fischer
Site Plan -30 Manager

Group 3





SMART TECHNOLOGY
FOR SMARTER MOBILITY