

PUBLIC



PREH COMPANY PRESENTATION

Visit of company SANDEN

27.09.2022 | Norbert Bauer | Bad Neustadt

AGENDA



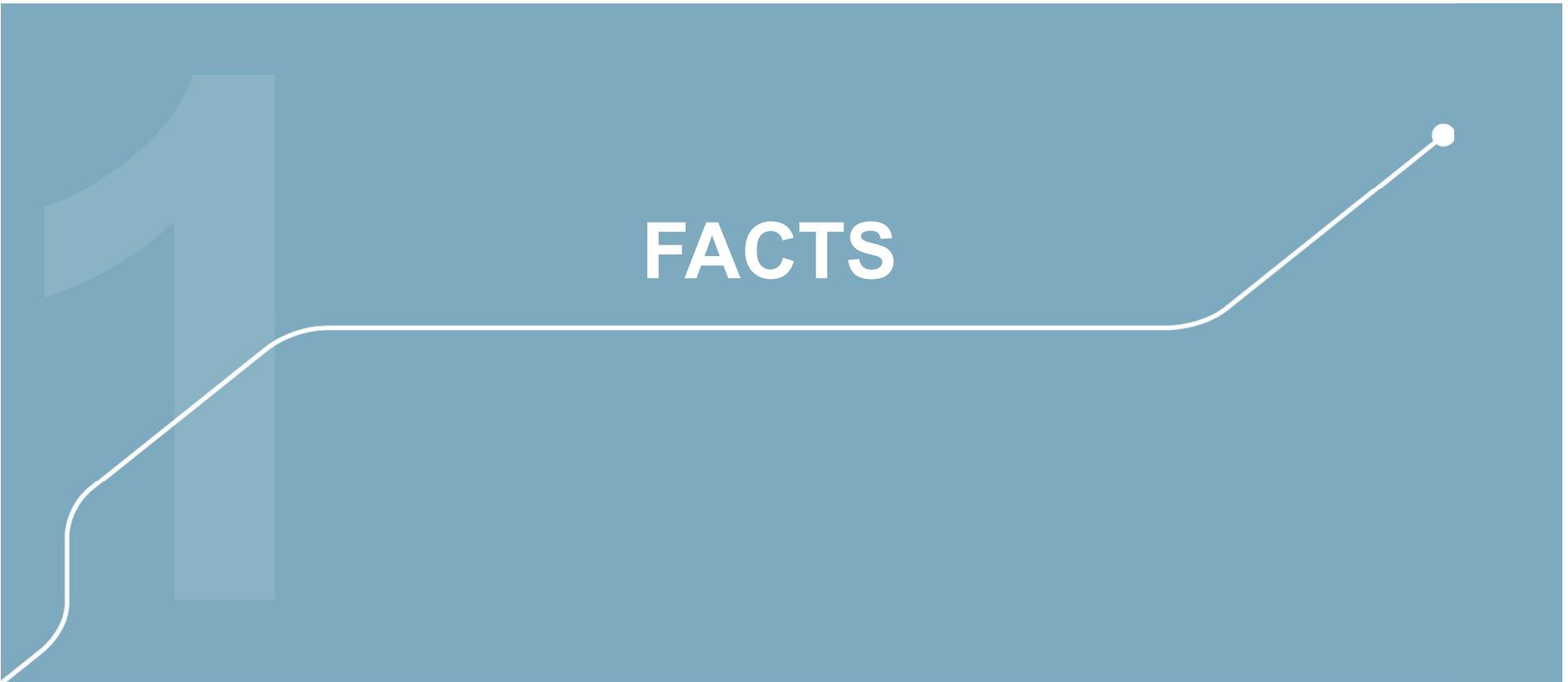
1
FACTS

2
PRODUCTS

3
COMPETENCIES

4
CUSTOMER
SATISFACTION

FACTS



Facts

WHAT IS SPECIAL ABOUT PREH



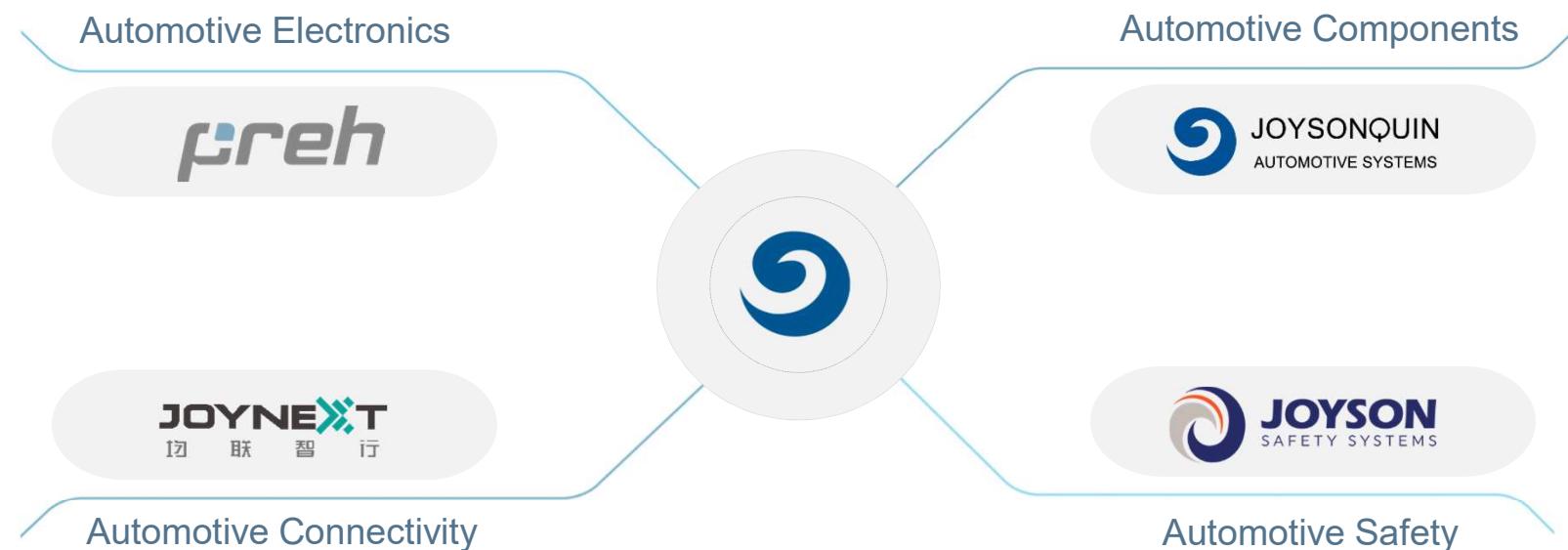
A German –
Chinese
Company

100
Years

Experience in the
electronics industry

More than
30 years
automotive
experience

The perfect combination of access to growth markets,
high-tech know-how and cost efficiency



Joyson Electronics Group is one of the largest automotive suppliers globally:
>100 locations in 30 countries; more than 50,000 employees; turnover about € 6 Bn (2021)

Facts

PREH GROUP SALES & EMPLOYEES

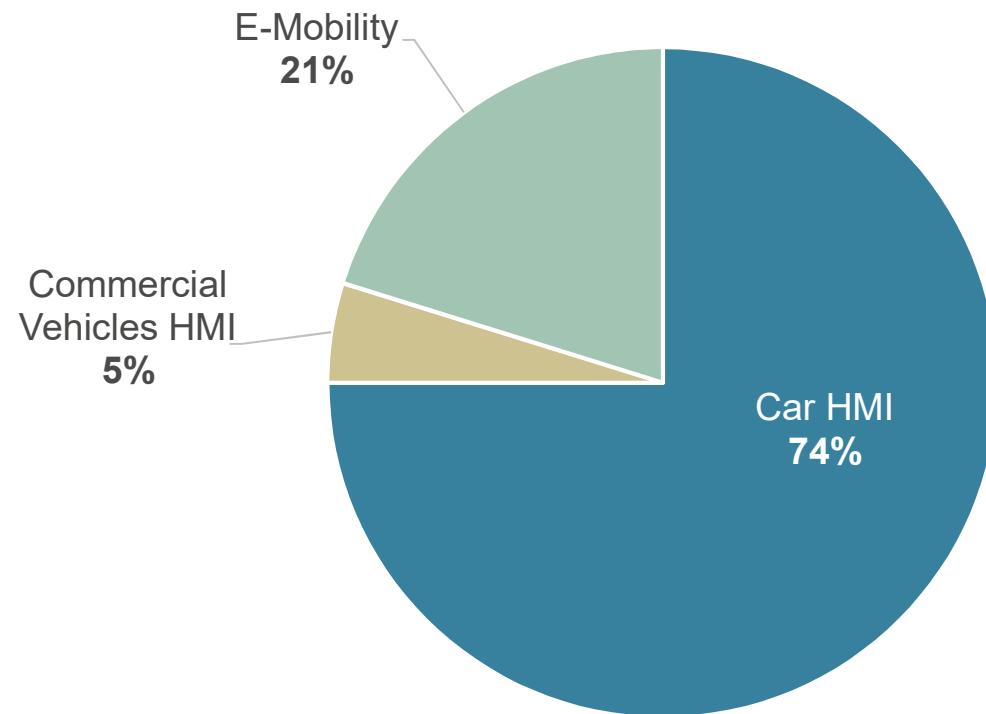


about
7,000



* Figures 2016 - 2019 include Preh Car Connect (today: „Joynext“)

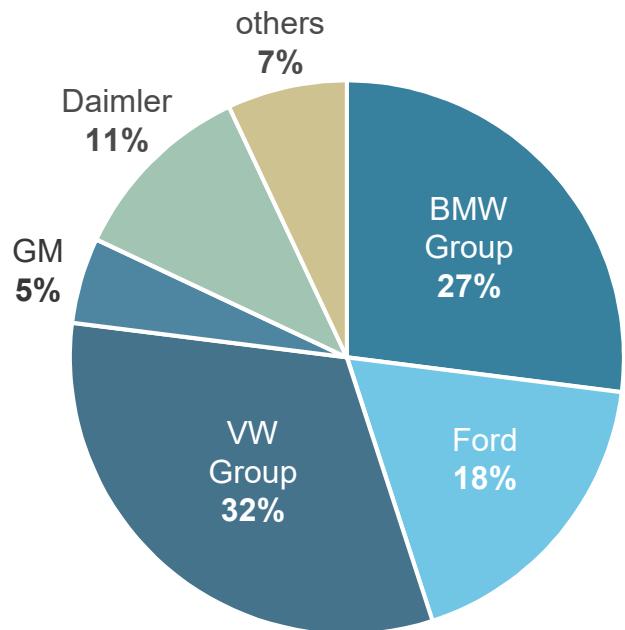
SALES BREAKDOWN BY PRODUCT DIVISION



HMI = Human Machine Interface

Facts

PREH GROUP CUSTOMERS



Facts

OUR LOCATIONS



3 Sales Regions / 6 Production Plants / 4 R&D Centers

PRODUCTS

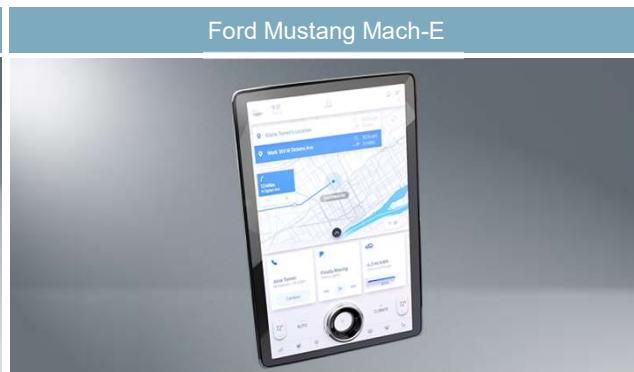




PRODUCT DIVISION CAR HMI

Center Stacks

- With integrated touch displays, including software
- Functional Bookmarks
- With high-end surfaces, e.g., genuine glass with black panel effect
- With capacitive sliders



Climate Control

- TOP 5 in the global market
- Market leader in North America
- Development of climate control software



Multifunction Switches for Steering Wheels

- TOP 3 in Europe
- All complexity levels of switches, including connection boxes
- Integrated (active) haptic feedback



Central Controls

- Technology leader worldwide
- Touchpad integration with script- and gesture recognition
- Active haptic feedback, magnet haptics and high-end surfaces, e.g. glass, ceramics





PRODUCT DIVISION
COMMERCIAL VEHICLE HMI

System solutions for the commercial vehicle market

- Separate product area specialized in truck & off-highway solutions
- Customers:
 - Off-highway: John Deere, AGCO / Fendt, CLAAS, SDF, ...
 - Truck: Daimler Trucks, MAN, Paccar/DAF, KnorrBremse, ...



Innovative system partner for truck & off-highway HMI solutions

Systems/Consoles

- **Consoles:**
 - Drive lever, multi-use knob, shifter, rotary knob, fingertip rocker, rocker, switch arrays with displays, structural parts, trim wiring, CAN-network, customized platforms
- **Steering wheel systems:**
 - Instrument cluster, reverser, steering column switch, light switch, trim parts

John Deere, several models

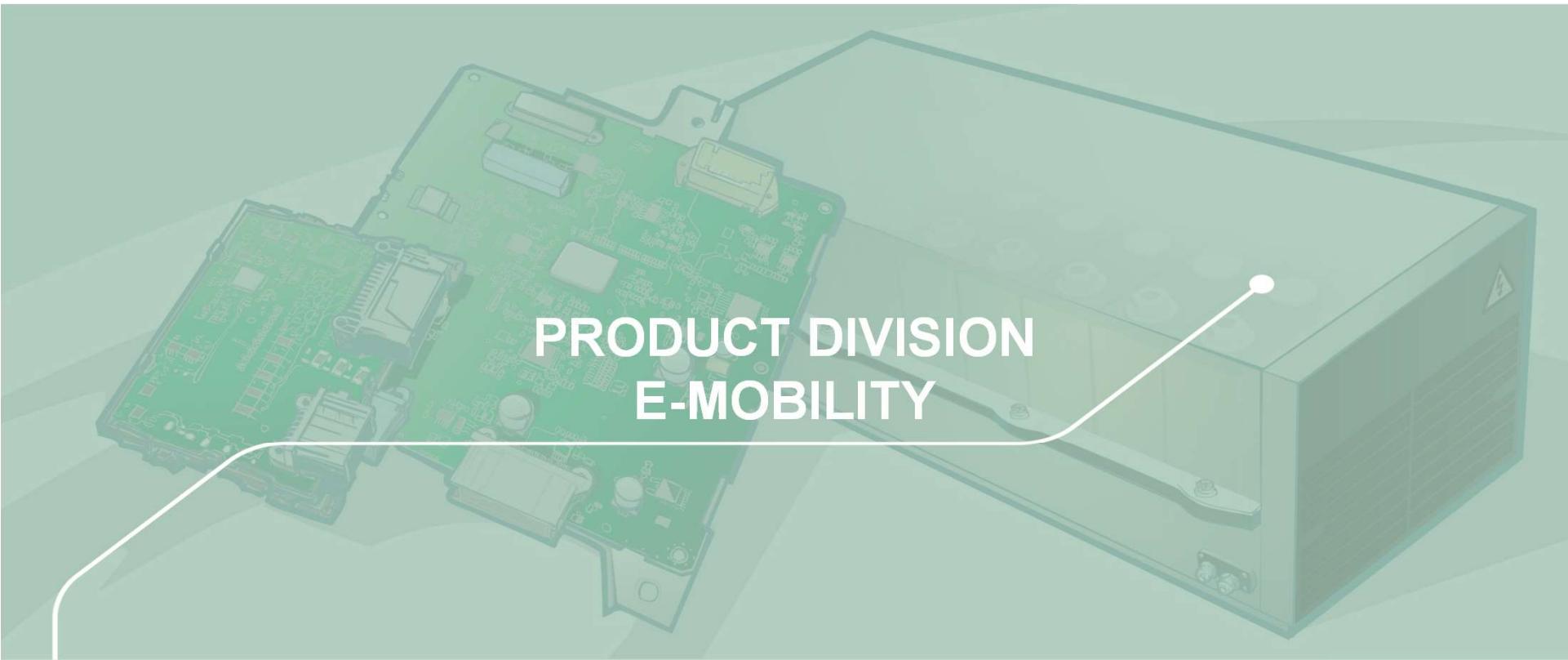


Fendt, FendtONE platform



Preh future concept console





PRODUCT DIVISION E-MOBILITY

Strong investments in E-Mobility

- Innovation partner for Porsche
- Booster for charging 800V cars at 400V fast charging stations
- DC/DC converter for 400V / 48V / 12V
- Power electronics from Preh Sweden AB (takeover of the Kongsberg Epower division) in series production:
Generic On-Board Charger for Ferrari, Volvo, Geely, Lynk & Co., Volvo busses and trucks



© Porsche Newsroom



© media.volocars.com

PRODUCT DIVISION E-MOBILITY

Long-Time Experience in BMS

- Control units for battery management in series production for BMW since 2011



© BMW AG

High-Tech Development Partner

- 48V BMS in series for Mercedes-Benz (various models with a 4- or 6-cylinder engine)



© Daimler Mediasite

Mass Production Partner

- 400V BMS Supplier for MEB Platform (China Market)



© Volkswagennewroom.com



COMPETENCIES



Continuous Innovation

- Integration of touchscreens
- All touch elements with haptic feedback
- High-end surfaces, for example real glass with black panel effect
- Decorative part with information display and touchfunction „on demand“
- Functional decor surfaces



Development

- Advanced Development
- Assembly
- Electronics hardware
- Software

Prefabrication

- Tooling
- Plastics injection molding
- Painting
- Electronics
- manufacturing

Production

- Mounting
- Final inspection



- High vertical integration in production
- Broad range of R&D know-how
- Own tool shop

Early involvement of production process aspects into product design for innovation
and pre(h)mium quality



CUSTOMER SATISFACTION

Highest quality is a core-element of our mission statement, which is part of our Preh Group Guiding Principles for the daily work of all Preh employees:



„With highest quality and competitiveness we create cutting-edge technology for HMI and e-mobility!“

- Our corporate policies form the framework for setting our goals
- With their commitment our employees and the management ensure the achievement of these goals
- This way, highest quality and product conformity are ensured
- Accordingly, our employees are an essential key to customer satisfaction

Preh employees strive for excellence in everything they do!

AWARD OVERVIEW





PASSION
FOR
EXCELLENCE