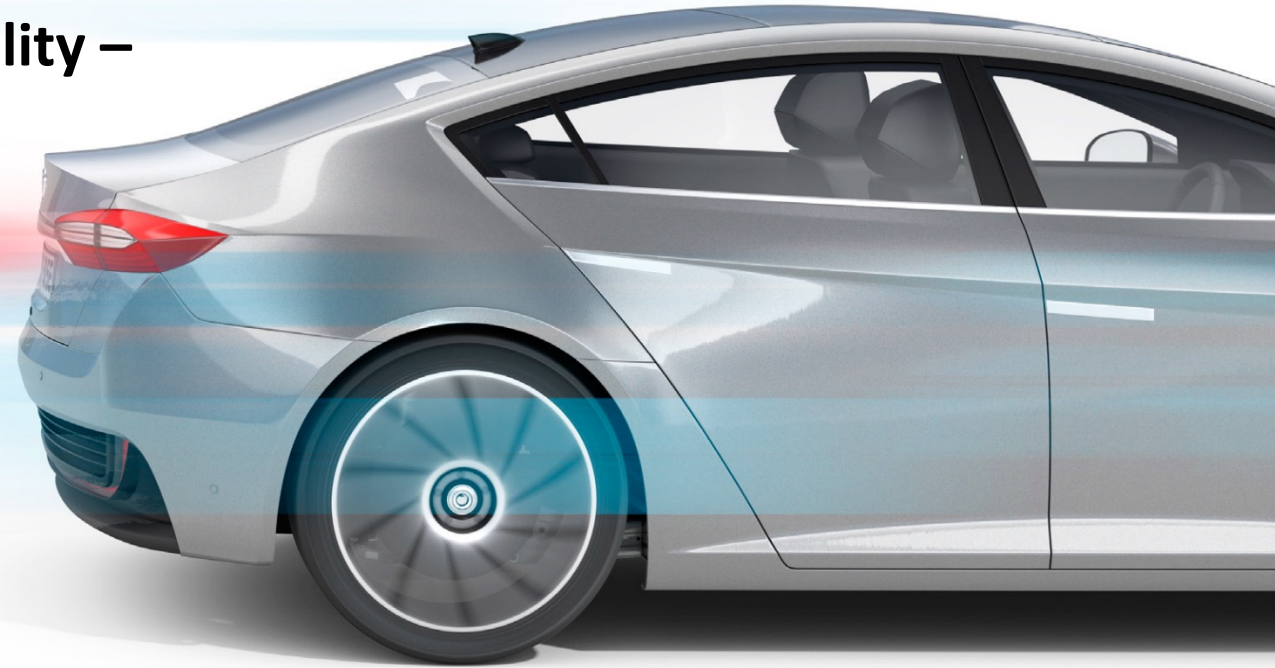


# ZEISS eMobility Solutions



From energy to eMotion.

**Challenges and opportunities in electromobility –**  
NEV // Car Body // Battery Pack

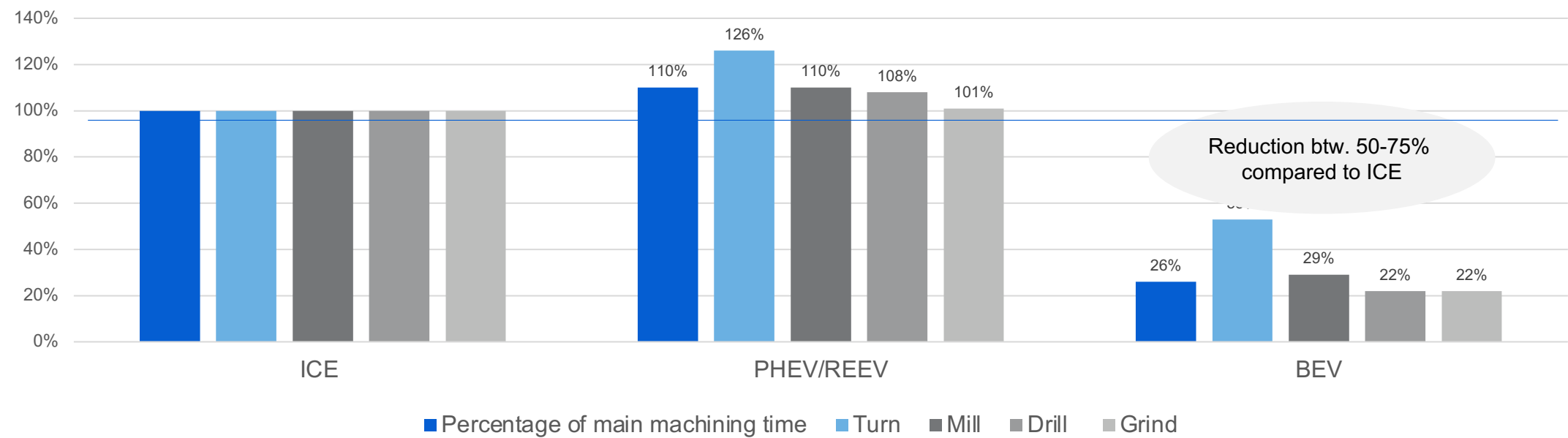


# Electrification effects on production / machining technology:

## NEV will lead to a lower dependency on Machining Technology



Machine time needed to produce vehicles based on the powertrain concept



Introduction of PHEV/REEV will increase the needed machining technology

Producing electric vehicle (BEV) will significantly reduce the requirements on the needed machining technology

Source: [https://www.werkzeug-neu.de/downloads/Maschinenbau Metallbearbeitung PTW Eric von Wihl.pdf](https://www.werkzeug-neu.de/downloads/Maschinenbau_Metallbearbeitung_PTW_Eric_von_Wihl.pdf) (2009)

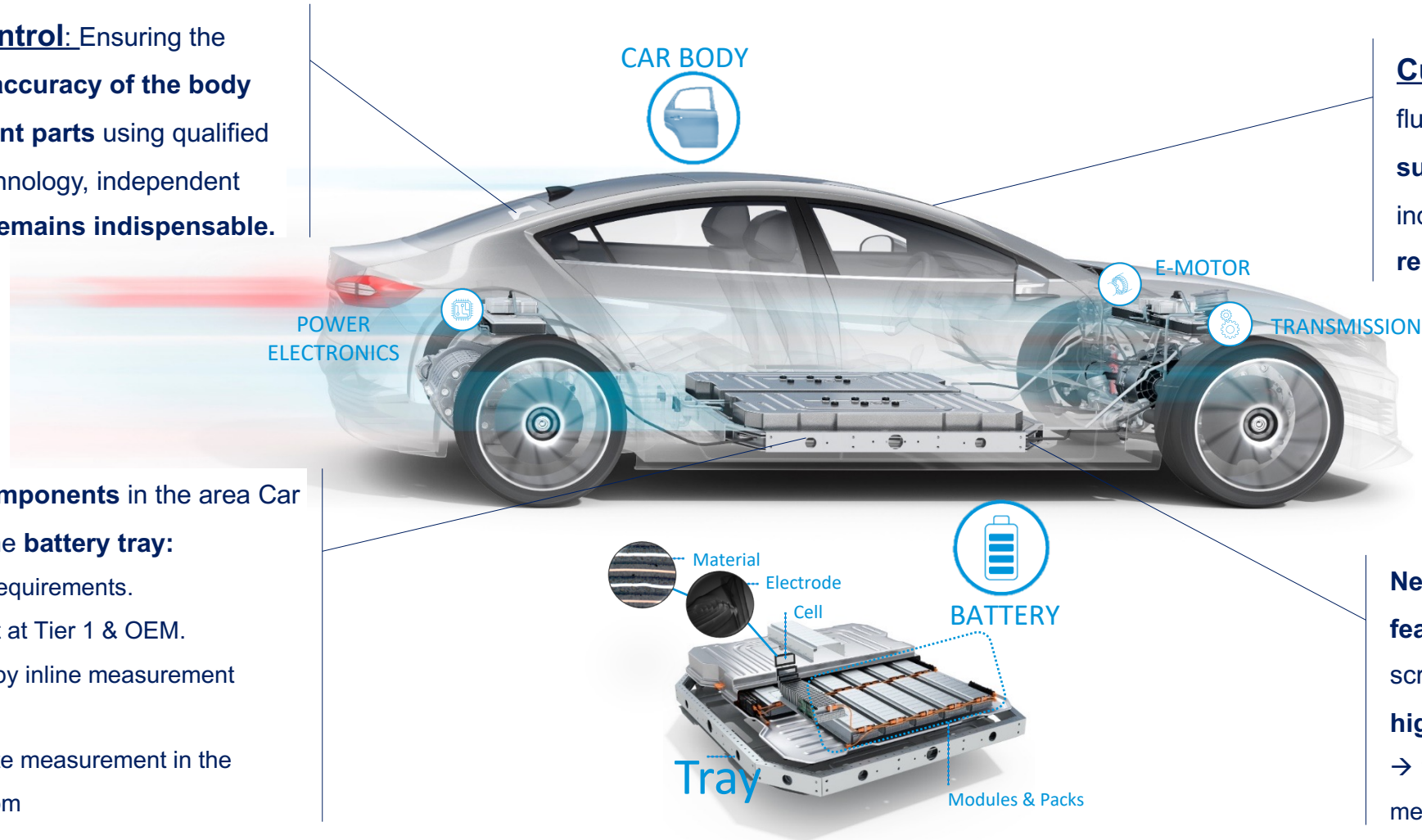
# Metrological transformation ICE to NEV in the field of car body.

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**Process Control:** Ensuring the **dimensional accuracy of the body and component parts** using qualified measuring technology, independent type of drive, **remains indispensable.**

**Customer perception:** Gap and flush along the process chain using **suitable measurement technology**, independent of the type of drive, is **very relevant** in automotive engineering.



**Use of new components** in the area Car body such as the **battery tray**:

- High quality requirements.
- Measurement at Tier 1 & OEM.
- 100% testing by inline measurement technology.
- Highly accurate measurement in the measuring room

**New product and process-relevant features on the body**, such as the screwing points of the battery tray, are **highly relevant**:

- 100% measurement by inline measurement technology

