

Technical article

100 YEARS OF TRADITION AS AN AUTOMOTIVE SUPPLIER - FOCUS ON AUTOMOTIVE HMI

Preh GmbH's portfolio increasingly includes applications for electromobility, but also plays a special role in the automotive supplier market in the area of automotive and commercial vehicle Human Machine Interfaces (HMI).

In recent decades, numerous Preh innovations have found their way into producing series for well-known automobile manufacturers. Conventional rotary knobs and buttons are not completely replaced, but rather integrated into an overall concept. The latest generation of rotary knobs can be attached anywhere on the touchscreen, which enables maximum variability in interior design. Preh has even gone one step further and offers rotary knobs that can be individually designed and additionally moved on the display or even removed entirely.

While these innovations will increasingly find their way into vehicles, fully autonomous driving (level 5) is still a long way off. On the way to full driving autonomy, Preh presented an interior concept for semi-autonomous driving at Auto Shanghai 2019. This was developed in close cooperation with the sister companies Joyson Safety Systems (JSS) and JoysonQuin. The interior concept offers so-called Smart Decor Surfaces, i.e. decor surfaces that switch to a display mode when approached. If the driver wants to drive autonomously, the steering wheel can be folded in and the display can be extended to double its size. This can then be used by the vehicle occupants for information and entertainment. In addition to interior concepts and measures for semi-autonomous driving, the topic of electromobility is also a big one at Preh. Preh offers battery management control units, e.g. in the BMW i3 and i8 as well as battery management systems (BMS) for 48V, which are currently in use in all four- and six-cylinder Mercedes-Benz models. In addition to the battery management systems, Preh offers a high-voltage booster for a purely electric sports car, which enables the 800V battery to be charged quickly and converts the voltage to 12V, 48V and 400V using a DC/DC converter.

As an innovative company, Preh has reinvented itself again and again in its 100 year history. This is the right way to keep pace with the rapidly increasing dynamics in electromobility development as well as interior concepts and semi-autonomous driving, but always to be one step ahead.