



Smart Surfaces

General description

With our technologies, we combine virtually all types of surfaces with numerous functionalities that can be adapted quickly and flexibly to the user's needs through intuitive interaction. On demand they provide information, react to touch and proximity, illuminate the interior or ensure a comfortable indoor climate. By combining our innovative technologies and integrating them into plastic, leather, wood or even metal decoration, we are able to close the gap between function and design.



Translucency

- › Display and control elements change to visible (and back) if required
- › New possibilities for diffuse status and warning information as well as ambient lighting



Sensing

- › Touch and proximity recognition makes every surface an input device
- › Safe operability due to holistic haptic feedback



Morphing

- › Protrusion or retraction of single control elements on demand
- › Enabling the balancing between homogeneous surface and perceptible, haptic finger guidance - as with conventional mechanical buttons



Heating

- › Providing heat directly below the surface for immediate reaction
- › Transparent and mechanically flexible technologies cover a wide range of applications

What are the benefits of Smart Surfaces?

The surfaces surrounding the user should be minimalistic and seamless, and at the same time functional and intuitive to be less distracting. Making the surfaces smart opens several possibilities:

- › Safely and intuitively operable, adaptive HMI - ready for autonomous driving
- › Seamless and integrative design
- › Fewer stand-alone solutions
- › Energy-efficient heating - especially for electric vehicles

What are possible areas of application for Smart Surfaces?

Smart surfaces can be used in a wide range of areas because they have various functions. They form the basis for advanced, innovative HMI and comfort solutions for example in the following industries:

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| › Automotive | › Bus | › Manufacture |
| › Truck | › Train | › Aviation |

