



NEXT.assembly

x-DASalign

Test stand for driver assistance systems

Precisely adjusted driver assistance sensor technology in the vehicle provides more safety in road traffic. The number and the complexity of the systems in the vehicle increase and require efficient calibration and setting processes which have to be carried out under consideration of dynamic chassis parameters. The multitude of sensors built into vehicles requires separate setting stations for the optimized and quick testing and calibrating process.

The manufacturers of components and vehicles develop and use a multitude of sensors and calibration concepts which differ in function and use and which can be flexibly calibrated and tested by this type of test stand. By means of stereometry measuring heads chassis height, symmetry of chassis as well as chassis parameters are measured and taken into consideration during the calibrating process of the sensors.

CUSTOMER BENEFITS



Highest process and production reliability

Simple, easy-to-maintain structure

Low space requirement

Calibration of the installed assistance systems and documentation of the calibration values

Flexible visual presentation of calibration patterns or video sequences possible through the use of displays

Flexibility by modular structure

Technical data

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Layout example x-DASalign

COMPONENTS x-DASalign

- Front / rear radar calibration
- Front / rear camera calibration
- Front / rear corner radar calibration
- Lidar system calibration
- HUD calibration
- Calibration targets for surround view systems
- Measurement system for acquisition and calculation of vehicle position
- Calibration systems for lane departure sensors

TEST STAND CALIBRATION

The different target and calibrating systems of the driver assistance test stand can be checked fast and efficiently by means of setting gauges especially produced for the test stand. The calibration processes of driver assistance systems are documented and in fully automated test stands can be carried out automatically and independent of the operator by the test stand itself

After inserting a setting gauge, the individual calibration targets can be checked and set up with the aid of point lasers and distance laser measuring devices.

AUTOMATION

For the flexible control of the test stand components Dürr supplies its own automation software x-line as well as products for the ECU communication.

The use of calibration displays enables an even more flexible design of the complete test area as well as an adaptation to a wide range of vehicle types. It is possible to depict a wide variety of calibration patterns on the displays. The number of patterns to be displayed can vary as desired. It is also possible to adjust the pattern ideally to different vehicle types by using different scaling factors, without having to perform mechanical movements.

If requested, video sequences can also be illustrated to stimulate the vehicle camera systems.