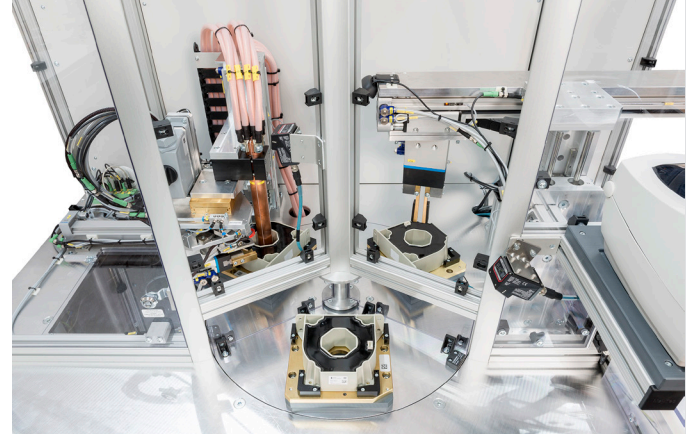


CUSTOMIZED

Industry: Electrical Industry

Test system for current sensors



Task

In order to achieve the shortest possible cycle times of less than 30 seconds, the current sensors should be contacted fully automatically after placement by hand. If a faulty DUT is detected, it should be ejected automatically. Since different versions of the current sensors are tested on one system, the test adapter must be exchangeable in less than 5 minutes. After the exchange, it must be checked whether the suitable adapter has been installed for the respective DUT.

Solution

By using a rotary indexing table with three test stations, it was not only possible to build an extremely space-saving system, the test time was also minimized to a maximum of 30 seconds per DUT. The user is protected from the movement of the turntable by a protective housing in combination with two-hand operation. This avoids unintentional intervention and the risk of crushing.

Station 1

Manual insertion of the DUT and correct positioning via a centering bolt. By actuating the two-hand control, the DUT proceeds to the next station.

Station 2

The DUT is contacted fully automatically with current loops and a function as well as a hipot test is carried out. By actuating the two-hand control again, the DUT proceeds to the next station.

Station 3

If a DUT is detected as faulty, it is automatically sorted out in station 3 via a gripper. The "Passed"-DUT proceed to the first station where they can be removed and labelled by the user.

Advantages

- + Space-saving design by using a rotary indexing table
- + Short testing times
- + Fully automatic sequence after manual loading
- + Low personnel expenditure
- + Simple, intuitive operation

Specifications

- Function test up to 3,200 A DC
- Hipot test up to 5,500 V AC / 100 mA
- Recording of the primary current via current transformer and multimeter
- Recording of the secondary current via multimeter
- Testing can take place with different polarity