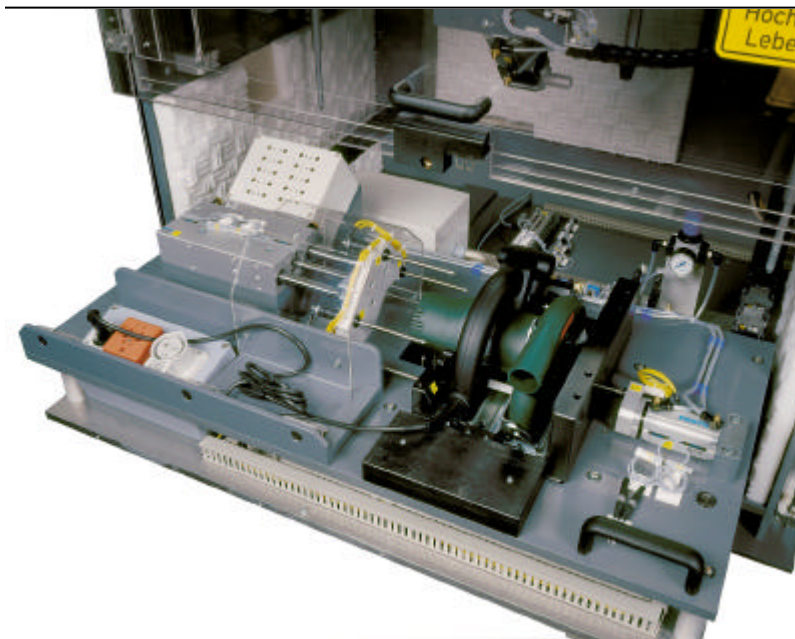




System Example for Electric Tools



- PC remote controlled test system
- high voltage test
 - safety insulation
 - operating insulation
- function voltage
- blocking current test
- braking/retardation time measurement



System Example Electric Tools

This test system has been designed to perform the end test for electric hand circular saws. The DUTs have double insulation and belong to safety class II. So that there is no need for the earth bond test but the high voltage flash test is all the more important.

The housing screws are pneumatically contacted with Kelvin pins and the high voltage applied from L+N to external exposed metal. A withstanding voltage tester with back measuring (4-wire technique) guarantees together with the Kelvin pins that all points are contacted and that the power supply plug of the DUT has been connected. This way there is no danger of a faulty measurement caused by not making contact.

In addition there is a function test evaluating the current consumption of the DUT. Then a pneumatic cylinder blocks the saw blade and the full load current is tested by the test system.

After a further current test a flutter test of the saw blade is performed. Which means that the saw blade is being tested in the longitudinal direction for mechanical deviations (beat or balancing of the blade).

Finally the braking/retardation time between switching off the DUT and the standstill of the saw blade is tested.

The above test system is just one of the examples possible for test systems made to specification.

Technique:

- PC remote controlled test system with WINDOWS software
- withstanding voltage test in 4-wire technique (back measuring)
- test cage with automatic interlock
- DUT adapter with independent, pneumatic contacting of Kelvin pins
- function tests allow an exact evaluation of the DUT

