



The spark test apparatus serves for testing intrinsically safe circuits. The test is based on whether the tested equipment is capable of producing sparks, arcs in normal operation, capable of igniting the gas mixture specified by the standard, in the given chamber, under given conditions.

In practice it is very difficult and complicated to work with the spark test apparatus as theoretically described in the standard. One measurement requires a lot of additional devices making the whole operation complicated and lengthy. It is essential to know the accuracy of the gas concentration used for the test and calibration, which can be achieved solely if the gas mixer is appropriately accurate and stable.

Due to the above, Ex Testing Station has developed the apparatus described in the standard.

The apparatus includes a built-in gas mixer producing the gas mixture for testing and calibration with a high accuracy. The actual measuring process is completed with the purging of the chamber before the measuring process, aiming at the removal of the needless combustions products.

All the elements required for the operation of the apparatus are assembled in only one compact unit. As soon as the gas mixture required for the test is in- and outlet and the electrical connection is made, the apparatus is ready for operation.

The spark test apparatus is completed with a test gas mixture producing unit, which can be placed in and removed from the apparatus like a module.

The measuring process starts with the pressing of one button only; the apparatus runs down the test in automatic operation mode then evaluates the obtained results and proceeds accordingly, e.g. performs calibration check.

The whole process is controlled by a computer, to provide for man-machine contact.

The installation and usage of the spark test apparatus of compact construction, due to its design and the userfriendly software, is very simple and can be learned during a short period of time.

The operator's errors can be almost totally eliminated. Thus time and money will be saved during operation.