

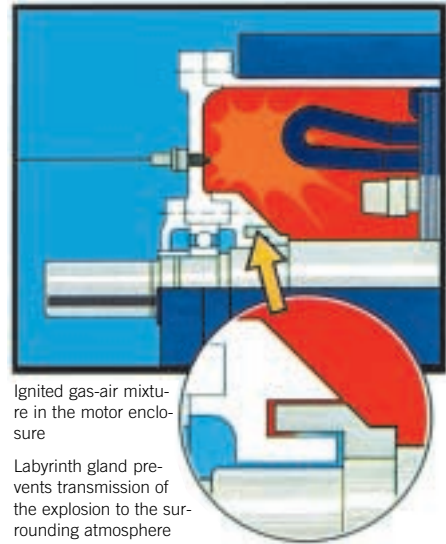
## Modern test facilities

European standards contain detailed test procedures for the verification of type of protection 'Flameproof Enclosure'. These tests serve to prove that the motor can withstand an internal explosion and that the transmission of an explosion to the surrounding atmosphere is prevented by means of adequate gaps at the shaft and the centring spigots of the motor endshields.

For these tests, the motor is filled with a gas-air mixture, prescribed for the respective explosion group. This mixture is ignited by an electric spark. Explosion pressures are measured, recorded and evaluated by a piezo quartz, an amplifier and a digital scope. The gas-air mixture to be used in the test is prepared in a pumpless plant. The mixing ratio is regulated and monitored by an oxygen analyser.

**We are the only European motor manufacturer with such modern testing equipment.**

Tests are witnessed by a representative of an official testing body. Test procedure and test results are recorded in a Test Report.



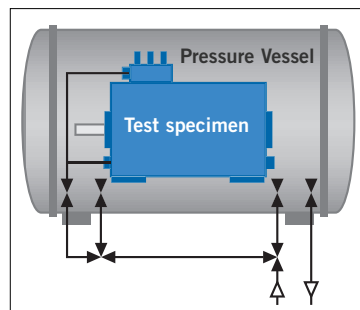
Ignited gas-air mixture in the motor enclosure

Labyrinth gland prevents transmission of the explosion to the surrounding atmosphere



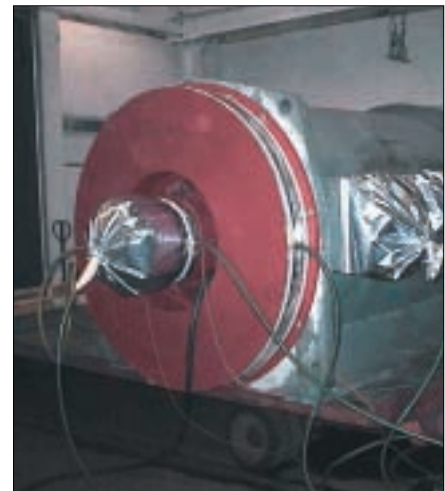
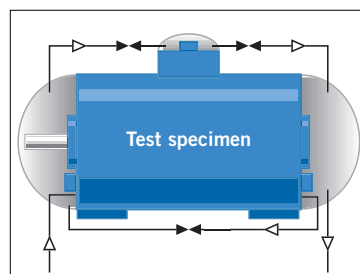
Explosion test laboratory

Explosion test in a pressure vessel for test specimens up to 1.6 m diameter ( $\leq$  Type 60..)



Equipment for mixing and monitoring the gas-air mixture

Explosion test in a polythene shroud for test specimens of more than 1.6 m diameter ( $>$ Type 60..)



Evaluation of transient explosion pressures