

## Kemcontrol system

High demands are placed on reliability in chemical plants. The gasket materials and the flanges are subject to a wide variety of pressures, temperatures and media.

In order to achieve the required sealing effect in the flange connection, a defined surface pressure in the sealing surface must be ensured at installation. At present this is calculated for every flange connection used in terms of the bolt load required, and applied to the flange connection through the bolt torque.

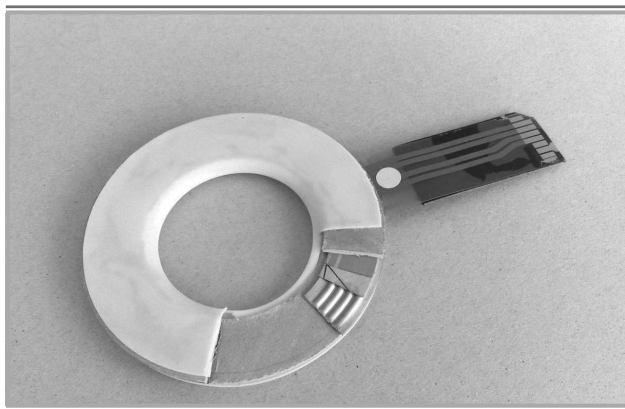
Conclusive evidence of the actual available surface pressure in the gasket is not possible due to the number of influences being exerted on the flange connection.

In addition, the gaskets must fulfil the requirements for environmentally-sound plants (such as the TA Luft certificate).

It is within this context that the Kemcontrol system was developed.

The Kemcontrol system consists of a gasket with a KCS Handheld attached. The KCS handheld can be used for all gaskets and will record the measurement values.

The Kemcontrol system is currently used in conjunction with all PTFE-enveloped gaskets. This includes in particular the profile ranges PW4i, PW5i and PW21i, as well as PF2i and PF3i.



Gasket profile PW4i

The Kemcontrol system contains a measuring film which is integrated into the gasket system and divided into several segments.

- The KCS handheld can be easily attached by means of an adapter via a lug on the gasket.
- During and at any time after the installation of the gasket, the effective surface pressure in the available segments can be read.
- The fitter is therefore in a position to directly control whether the specified surface pressure values have been applied and ensure that the flange connection is evenly tensioned.
- Regular monitoring can counteract a drop in pressure below the minimum, with the resulting risk of a blow-out.



KCS handheld, surface pressure in 4 partitions. Gasket profile PW 21i; flange DN 40 PN 40