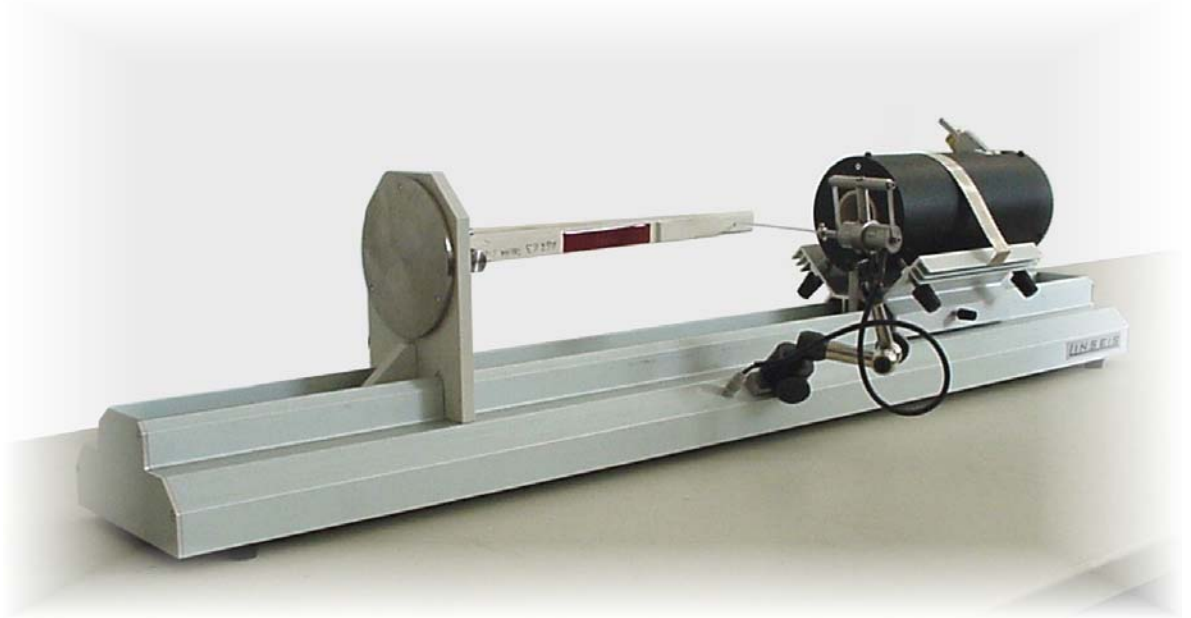


# Glaze Tension Dilatometer after Steeger

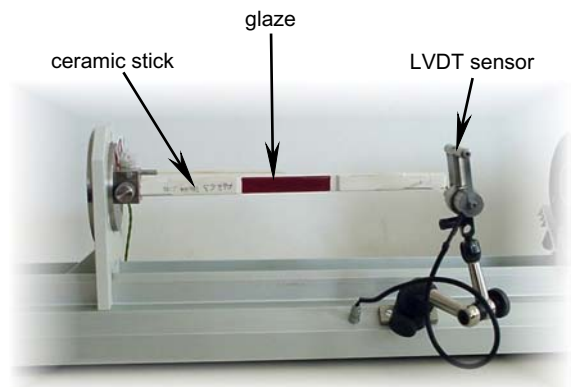


Picture: Complete measuring system

The glaze tension measuring system is a measuring technique which is especially interesting for companies producing ceramics, for example porcelain or tiles.

Whenever a glaze is used to cover the raw material, it is important to know how the different expansion coefficients of the glaze and of the base material do effect each other.

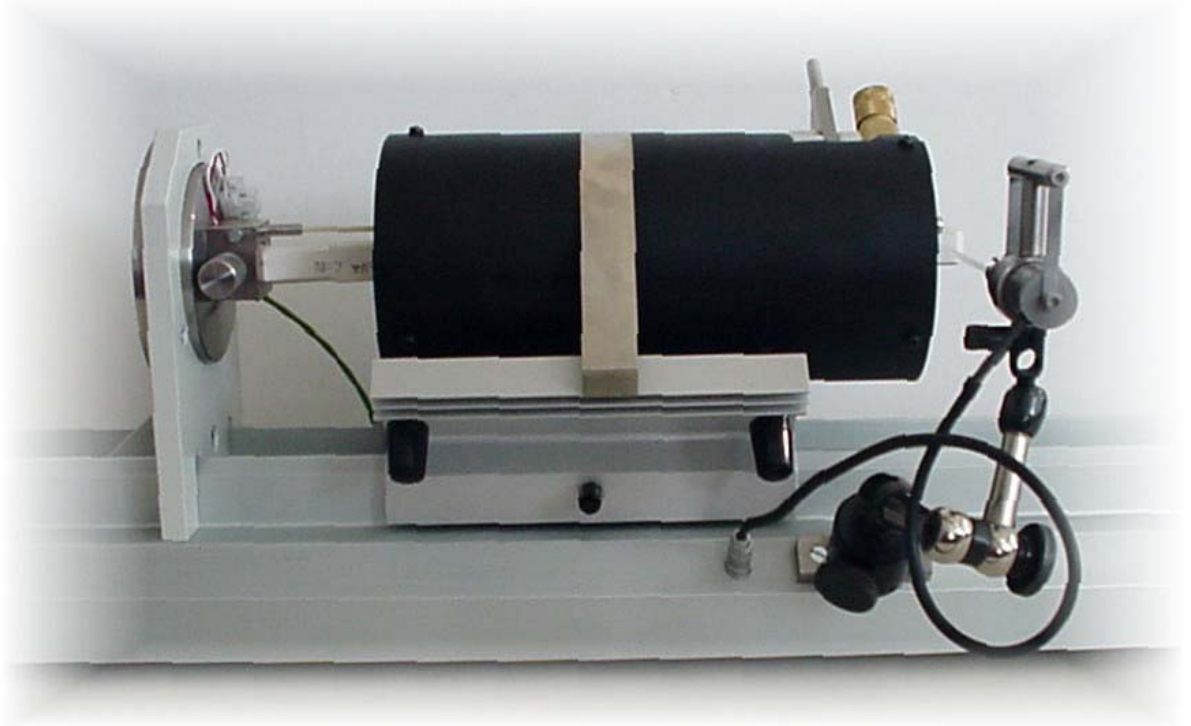
The result of the different expansion coefficients leads to a sideward elongation of a test stick, which is prepared with the sample base material and different glazes. This movement is visible when the test stick is heated up to the temperature where the glaze gets soft.



Picture: Ceramic stick with applied glaze

The amount of the movement is measured with a high precision LVDT sensor. This sensor has a resolution of 10 Nanometer.

## Glaze Tension Dilatometer after Steeger

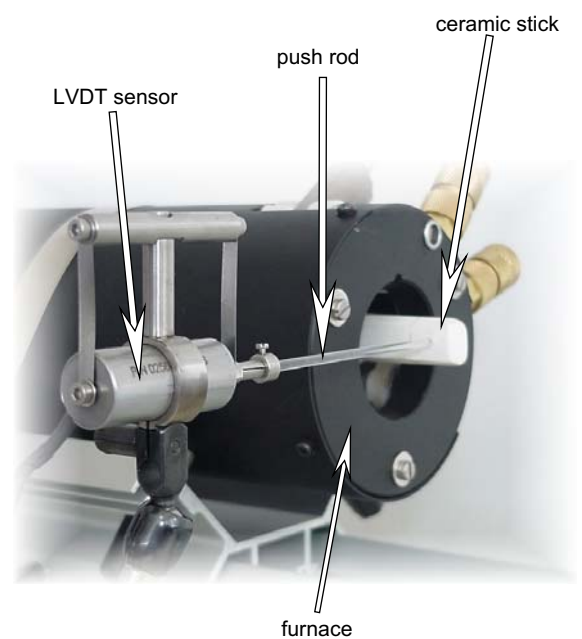


Picture: ceramic stick with furnace

Depending, if the expansion of the glaze is smaller or larger than the expansion of the base material, a movement will be recorded to the left or to the right side.

The used ceramic stick has a well defined shape, where the glaze is applied to the middle of the stick. The stick is fixed at one side in a precision metallic fixture.

A furnace is pushed over the stick so that the end is hanging out of the furnace. This end of the stick is then contacted from the side with the LVDT sensor.



# Glaze Tension Dilatometer after Steeger

## dimensions measuring stick

