

Industrial Manufacturing of Glass Ampoules

with digital DIAS Pyrometers
PYROSPOT



Pyrometer in the manufacturing process of glass ampoules



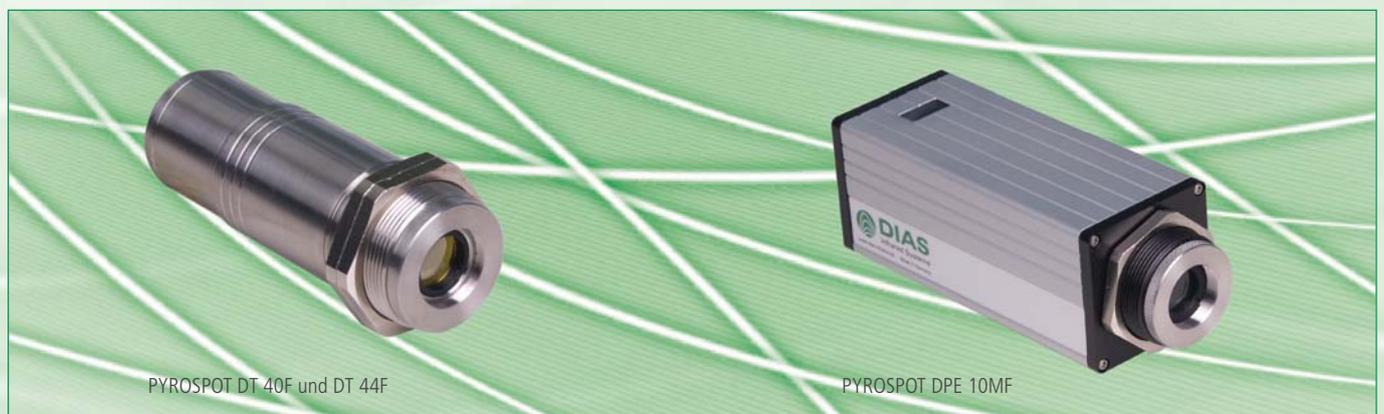
Glass ampoules in medical and cosmetic industries serve mainly as containers for the respective products. They are also used as thermal release elements in fire detection systems in sprinkler systems and other temperature-controlled release mechanisms. In the manufacturing of these glass ampoules a finished glass raw body is heated and then reshaped to the respective form. These usually fully automated processes are proceeding in a horizontal rotating table with several gas burners. The ampoules are heated by the burner to a certain temperature that is crucial for the further processing.

An important part in the process control is to capture the temperatures exactly and quickly. Temperature measurement devices used for this purpose need to be quick, exact and especially unaffected when they are measuring through the gas burner.

The particular DIAS pyrometer PYROSPOT DT 40F and DT 44F offer exactly these features. With measurement ranges between 300 °C and 2500 °C, mutable optical proportions and fast acquisition times from 10 ms, the pyrometers measure through the burner flame to the glass surface.

For extremely small ampoules or very fast production processes the high-end pyrometer PYROSPOT DPE 10 MF can be used. This pyrometer measures in ranges between 50 °C and 2500 °C with an acquisition time of only 1.5 ms and can realize measuring fields smaller than 1 mm. The burner flame has no influence on the measurement.

All pyrometers have a standard analogue output available or a digital interface for integration in the process control.



PYROSPOT DT 40F und DT 44F

PYROSPOT DPE 10MF

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