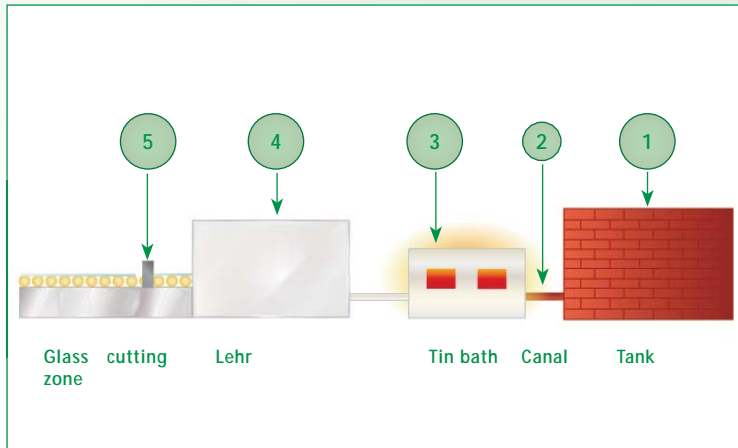


Industrial Float Glass Production

with digital DIAS Pyrometers
PYROSPOT

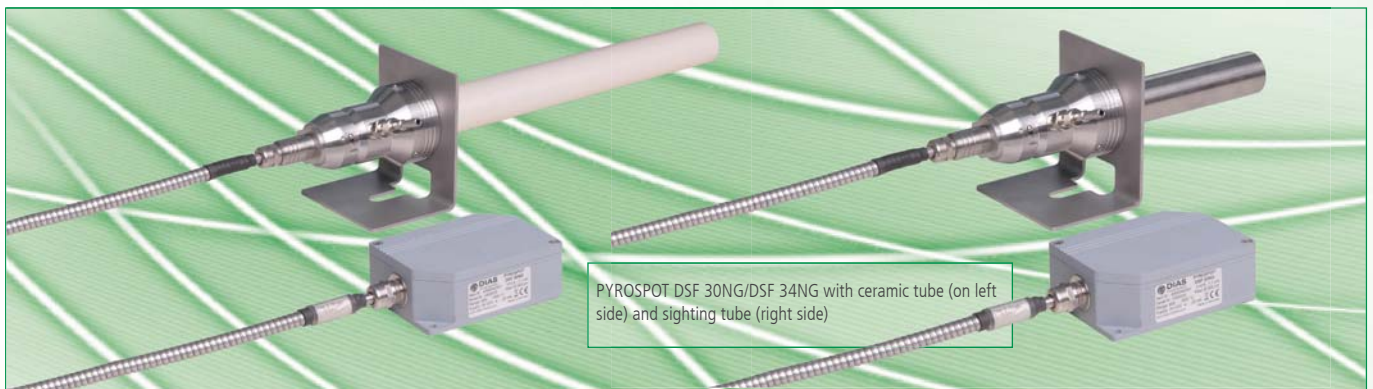


Pyrometers in Float Glass Industry



Different pyrometer models are used in the industrial floatglass production as the temperature of molten glass as well as solid glass have to be determined.

In the **zones 1 and 2** (tank and canal) special fibre optic pyrometers are used for the measurement of the molten glass as there are very high ambient temperatures up to 200 °C. Here the models **PYROSPOT DSF 30NG** or **DSF 34NG** are mounted in combination with a special quick release mounting angle equipped with an air purge and sighting tube. The fibre optic cable and optic head withstand ambient temperatures up to 250 °C without cooling



PYROSPOT DSF 30NG/DSF 34NG with ceramic tube (on left side) and sighting tube (right side)

In the **zones 3 and 4** (tin bath and lehr) the pyrometers have to measure solid glass. For this application pyrometers with a spectral range of 5 µm are necessary so that only the glass surface will be detected. At each **position 3** pyrometers are placed in a row, left and right edge of the glass plate and the middle. This gives a rough temperature profile of the glass plate. Here the pyrometer models **PYROSPOT DT 40G**, **DT 42G** or **DT 44G** are used. As these pyrometers have very long temperature ranges the same model can be used in the different temperature zones. Caused by the high ambient temperatures in these zones the pyrometers will be mounted with a water cooling jacket and an air purge unit. This guarantees a long maintenance free operation.

In **zone 5** (exit of lehr, cutting zone) the solid glass has to be measured at lower temperatures. For this reason the pyrometer models **PYROSPOT DT 40L**, **DT 42L** and **DT 44L** are used. As also the ambient temperature is lower only a solid adjustable mounting angle for easy alignment and strong mounting of the pyrometers and an air purge unit is required to keep the lens clean of contamination for a long term maintenance free operation.



PYROSPOT DT 40G/DT 42G/DT 44G

Cooling jacket with air purge unit

DT 40L/DT 42L/DT 44L with air purge unit and mounting angle

Picture credits: ICA Plants, Wikimedia Commons, licenced under CreativeCommons-Lizenz by-sa-2.0-de, URL: <http://creativecommons.org/licenses/by-sa/2.0/de/legalcode>

Technische Änderungen vorbehalten. Technical details are subject to change. 23.07.15



We are certified for many years according to ISO 9001

Phone: +49 351 896 74-0
 Fax: +49 351 896 74-99
 E-Mail: info@dias-infrared.de
 Web: www.dias-infrared.com

DIAS Infrared GmbH
 Pforzheimer Straße 21
 01189 Dresden
 Germany