

DRAINAGE

THE SYSTEM TO REMOVE FREQUENTLY ARISING ZIRCON CORDS

HORN
GLASS INDUSTRIES

innovation
ENGINEERED IN GERMANY

HORN® VARI-DRAIN®

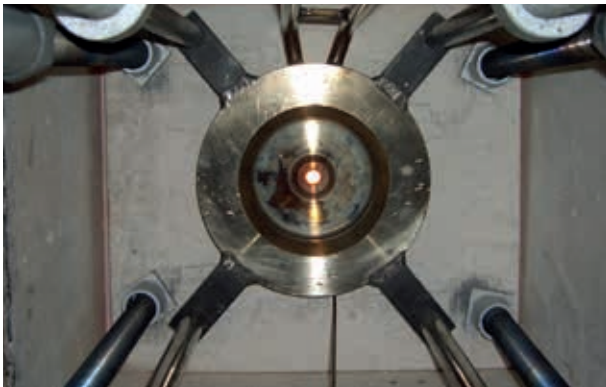
VARI-DRAIN® is your solution to resolve the problem of contaminations, such as cat scratches or zircon cords.

HORN® has developed a drainage system, which enables the draining of small glass quantities from the forehearth. This leads to minimised contaminants as zircon cords.

The system consists of a specially shaped channel block with a deepened part, centred drilling and a high temperature resistant metal orifice plate which is braced underneath the forehearth. An electrical heating element is positioned below the orifice and leads, when heated, to glass flow.

The approximate quantity of glass flow is defined by the size of the drilling in the orifice plate and can be adapted to specific technical requirements. The drainable glass quantity ranges between 0.4 - 2.0 t/d, depending on glass viscosity and colour. The precise and constant amount of glass flow during operation is controlled through the temperature at the draining point by a PID control loop.

After heating up the system, it takes about two hours until the first glass drops start to fall. The duration of the startup procedure depends to a great extent on the glass colour and chemistry.



Additional cooling air distribution completes the system for halting the glass flow if necessary.

The HORN® VARI-DRAIN® works without a counter electrode in the glass and is suitable for container, tableware, cosmetic, and lighting glass in the standard colours.

The HORN® VARI-DRAIN® system significantly improves the glass quality and therefore the profitability of a production plant.

ADVANTAGES

- No counter electrode required in the glass bath
- Free adjustable quantity

