

## BOOSTING

### HORN-Systems for supporting the glass melting process

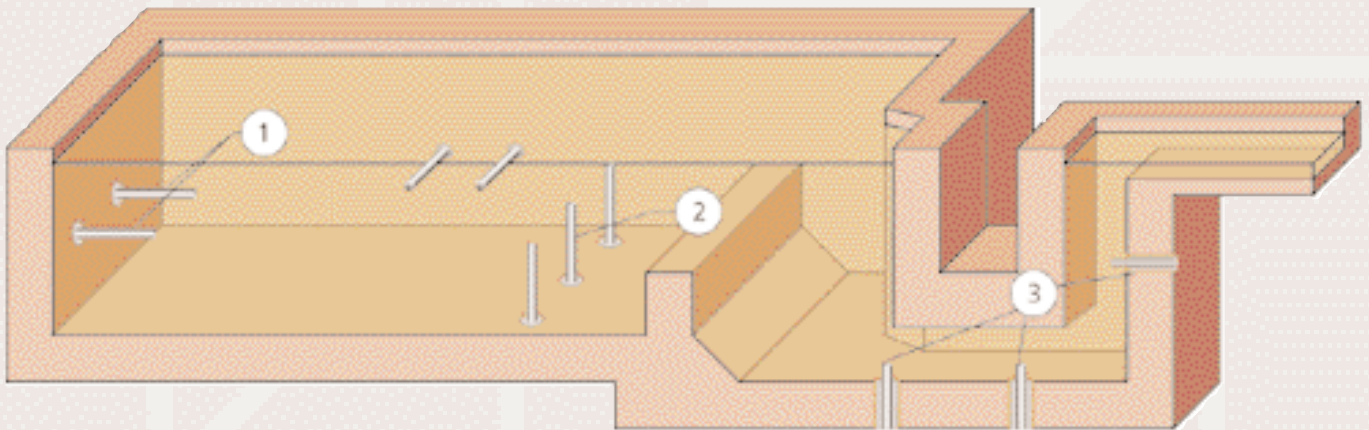
The addition of an electric heating system can greatly support the glass melting technique. Beside concentrated regulation of the glass flow the melting output is increased due to the Joule effect within the glass.

Depending on the existing situation or the customer's request the boosting system can be manufactured for melting boosting with lateral and bottom electrodes, as barrier boosting or as throat boosting. A combination of these systems is also possible.

The boosting systems can be equipped as one-phase or multiple-phase systems. Depending on the situation continuous thyristor-controlled systems or a continuously working transformer may be used.

When designing such systems HORN take into account both optimum operational function and optimum integration in the existing electric network.

All boosting systems supplied by HORN are fully installed and commissioned.



#### KEY:

1. Boosting / Sidewall electrodes
2. Barrier boosting / Bottom electrodes
3. Throat boosting

When designing the boosting system HORN applies the latest technical aids as well as its vast experience of boosting system installations.

Melting boosting and barrier boosting mainly increase melting pull and quality by concentrated regulation of the convectional flow.

The purpose of throat boosting is concentrated heat input in the throat in order to prevent "freezing" of the glass in this zone, mainly during the starting stage with darker glass colours.

#### Advantages and features

- Increased melting output and stabilization of glass flow
- Reduced emissions
- Retroactive installation in melting ends already operating
- Prevention of critical situations in case of pull change
- Constant furnace temperatures
- Increased remelting process
- Manufacture of main components in HORN owns workshops, guaranteeing highest quality standards
- Experience over many years and from numerous installations
- Modelling – establishing optimum dimensions and positioning of the boosting system

