STIRRING SYSTEMS

FOR FOREHEARTH & FLOAT FURNACES

innovation
ENGINEERED IN GERMANY

HORN
GLASS INDUSTRIES
The HORN stirrer systems enable mechanical treatment of the glass at the downstream part of the melting and conditioning process, the equalising zones. For example, zirconia contaminated glass, which mainly collects at the bottom area is mixed, thereby avoiding cat scratches.

Furthermore, the thermal homogeneity index (THI) in front of the spout is improved by approximately 1 to 1.5%.

The application of stirrers works perfectly in combination with the HORN drain system VARI-DRAIN©.

The stirring system consists of:
• a solid machine frame with a swing out mechanism to simplify maintenance work
• a height adjustable stirrer drive frame
• air cooled slide bearings and motor
• a motor with frequent converter
• with the rotation speed adjustable from PCs or switch cabinet

The stirrer appliance includes a winch for inserting, lifting or lowering the stirrers into the glass melt. The shafts are equipped with a quick-coupling system for fast stirrer exchange. The number of stirrers depends on the width of the forehearth and normally paddle type stirrers will be used. Customer-specific stirrer types can also be used. The rotation direction of each stirrer has to be engineered according to the overall design of the forehearth.

The horizontal stirring appliance (HST) is used in float glass furnaces solely for conditioning of the molten glass at the neck to the melting area. Glass layers with different temperatures are mixed to a smooth and homogenous temperature profile by the circulating movements of the stirring system. Different types are available on request.

The stirrers are mounted on a moveable wagon which is stabilised by four side fixings.

The reversal of the stirrer direction is carried out by an electric motor with a frequency converter. The rotation speed can be adjusted continuously.

The stirrers are mounted on a moveable wagon which is stabilised by four side fixings.