

STIRRING SYSTEMS

FOR FOREHEARHS & FLOAT GLASS FURNACES

HORN
GLASS INDUSTRIES

innovation
ENGINEERED IN GERMANY

STIRRING SYSTEMS FOR FOREHEARTHS

The HORN® stirrer system enables mechanical treatment of the glass at the downstream part of the melting and conditioning at the equalising zone. This is typically installed to avoid cat cratches and can also be used to improve the thermal homogeneity index (THI %). The HORN® stirrer system in combination with the HORN® drainage system VARI-DRAIN® works perfectly to avoid cat scratches and other cord defects.

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 gear motor drive with frequency converter
- 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. Several stirrer types are available. The rotation speed of the stirring system is adjustable from a PC or a switch cabinet. HORN® forehearth stirrer systems are also used in colouring forehearth systems. According to the overall design of the forehearth, the rotation direction of each stirrer is engineered individually.

SYSTEM FEATURES

- Continuously adjustable rotation speed
- Easy replacement of the stirrers through quick couplings
- Maintenance free bearings and drive elements



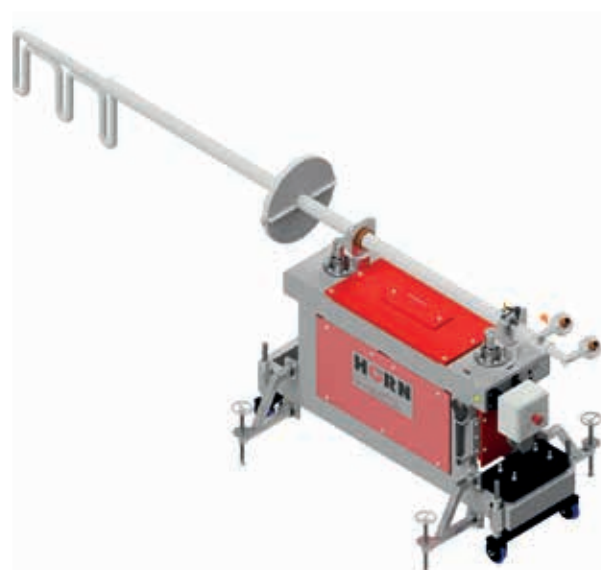
A swing-out mechanism is available in order to simplify maintenance work.

STIRRING SYSTEMS FOR FLOAT GLASS FURNACES

The horizontal stirring appliance (HST) is used in float glass furnaces solely for the conditioning of the molten glass at the neck to the melting area. Glass layers with different temperatures are mixed to a smooth and homogeneous 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.

APPLIANCE FEATURES

- Sensitive components are located at the cold side
- Good accessibility
- Homogenising of the entire traverse section of the channel
- Continuous adjustable rotation speed and direction
- Continuous adjustable immersion depth



The whole device is inserted into or pulled out of the neck of the furnace by means of a rail system.