



## SNIF™ HD-2000

### PYROTEK METAL CLEANING AND MIXER SYSTEM FOR FURNACES



The SNIF HD-2000 provides automated metal processing in furnaces and a safe, efficient alternative to the manual use of flux wands.

Featuring an integrated degassing impeller, the SNIF HD-2000 offers the flexibility to simultaneously circulate and treat the melt. The SNIF HD-2000 injects treatment gas or solid refining agent below the metal surface to effectively reduce alkali metal content and improve inclusion removal efficiency.

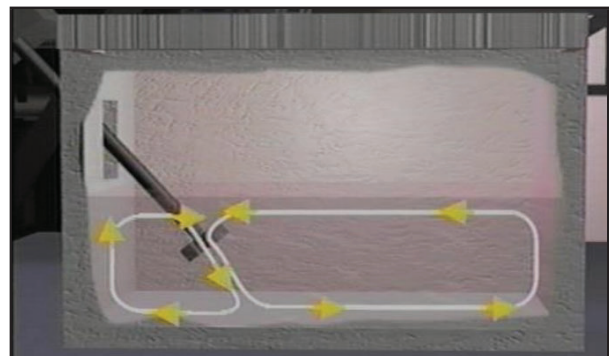
The SNIF HD-2000 can be either floor mounted beside the furnace or mounted on the side wall of the furnace. In the standby position, the mixing shaft and impeller are completely removed from the furnace. For operation, the mixing shaft and impeller pivot into position. The impeller is completely submerged in the molten aluminium, maximizing the mixing action, while providing efficient degassing for metal cleaning.

#### APPLICATIONS

Automated mixing and refining in all aluminium casthouse processing furnaces.

#### BENEFITS

- Automated process minimizes hazards associated with manual fluxing practices
- Offers more efficient metal cleaning compared to flux wands
- Uses gas efficiently to help reduce emissions
- Metal treatment with either gas or solid refining agent injection



*Image: The spinning action of the nozzle pumps the metal, helping to break up the injected gas into small bubbles, and distributing the bubbles throughout the molten aluminium. The result is a well-mixed molten metal bath.*



## SPECIFICATIONS

### Mechanical

The SNIF HD-2000 is mounted at the side of the furnace. The shaft and impeller are designed to fit through an opening in the furnace wall ~51 centimeters wide by 71 centimeters high, based on furnace design.

A clearance of ~2 meters from the mounted unit must be allowed to accommodate the pivot motion of the unit from its vertical storage position to its operational position.

### Control Panel

Electric and gas panels allow for either fully automatic or manual system control.

Electrical Panel (H x W x D)	183 x 81 x 61 cm
Gas Panel (H x W x D)	183 x 102 x 31 cm

### Treatment Gas

Argon or Nitrogen	5.6–25 Nm <sup>3</sup> /h, 94–425 L/min at 6.0 bar
Chlorine	up to 15% of inert flow at 2.5 bar

### Refining Agent Addition

Refining agent addition in place of chlorine is available as an option.

### Utilities

All electric drive and control

20 hp drive motor

380–440 VAC 3-phase is required

Compressed air (vortex cooling) —17 Nm<sup>3</sup>/h at 6.3 bar

