

## Technical information for the use of the variable atomizing burner type StiGmin02

### Application

Underport burner and holding device especially for regenerative fired glass furnaces

- Fuel: Heavy oil up to 1.8 % sulphur 75°C ... 130°C preheated, 6 bar
- In tempering time: All types of oil fuel possible
- Mixed fuel: With natural gas 10 up to 50 % caloric
- Atomizing air or natural gas: 0,05 ... 0,25 Nm<sup>3</sup>/kg 2,5/0,2 bar
- Cooling air: 2/0,15 bar, ≥ 6 Nm<sup>3</sup>/h, add. ventilator air ≥ 5 Nm<sup>3</sup>/h
- Energy output: 260 ... 3000 kW  
650 ... 5000 kW optional

### Basic concept

- Inside-atomizer: Oil- atomizing is located inside air-top. This is a new configuration as a freestream jet. It has a new additional device (a new outside air cleaning ring) so that the atomizer top will not become encrusted with carbonium.
- The target is to optimize oil drop-diameters and best cleaning conditions for all working time.
- Outside atomizer in well known design especially for NO<sub>x</sub> minimization with a new additional inside air cleaning ring against carbonium fastening.
- Wide range of positioning caused by exposition of burner head and prepositioning at holding device and burner.
- Cool positioned seals, so it is possible to use perfect solutions of sealing. No more problems with tightness of oil.

### Flexibility

Adjustable types of burners, in situ:

- Inside-atomizer
- Outside-atomizer
- Double (combination-) atomizer
- Infinitely variable „inside“ and double type, with the same handling device
- Angle of atomizing: 15° up to 40° it is function of type
- Modular design

### Handling

- Atomizing gas parts are still clean, free of contamination of oil
- Clean situation around the burner's working places
- Long working cycles of the burner without external cleaning
- Long survival time in case of missed cooling air
- The atomizer is tolerant toward missed oil preheating

### Special services for effective use

- Best know how about energy and quality effects for melting process
- Special measurements
- Special software for best use, able to conditioning for all types of glass furnaces

### Holding device

- High stability
- Lightweight design, high flexibility
- 5 parts of free movement, 4 parts of free one-handling device, without tools
- Quick, easy, exact and sure burner positioning: one-handed

### StiGmin02 Oilburner

