

Flame Treatment with Silicoating



Application:

The flame treatment with silicate coating is mainly used for the pre-treatment of metal and glass surfaces. Glass bottles, dishes, tubes and sheeting can be pre-treated. The silica coating can be applied to both coated and uncoated glass, in addition to metal foils and moulded parts.

With this form of flame treatment, the combustion gas/air mixture has an easy vaporable organic silicium compound (hydrosilicon) added to it. The hydrosilicon compounds combust to form silicate SiO_x ($x \approx 2$) which is deposited on the surfaces as an invisible silicate layer which is only a few nanometres thick with a finite coarseness.

The hydrosilicon dose can be regulated and also activated and deactivated as required.

Design:

A type FTS/EFT flame treatment units is combined with a type SFT silicate coating module for this purpose. Special arcogas® burner types are available for the silicate coating.

Both the installation in printing presses and the use as a stand alone solution are possible.

Technical Data:

Supply voltage:	230/400V, 50-60 Hz
Connected elect. load:	0.4-3.5kVA
Air consumption:	50-3000l/min.
Gas consumption:	0.4-22.5m ³ /h natural gas
Compressed air connection:	6-8 bar
Unit output:	6-225kW
Treatment width:	according to customer specifications
Hydrosilicon consumption:	0.13ml per 100 l/min. combustion air