

Industrial Application of the Pyrosil® - Technique with ST-Systems

PYROSIL®



Function principle

The ST-System is a pre-treatment unit for the process controlled feeding of a well defined amount of an organosilicon compound (Precursor) to a carrier gas stream. The carrier gas / precursor mixture is then admixed with air of the burner and subsequently completely incinerated. Thereby, a strongly adhering silicate layer is formed on the surface of the flame treated substrate. The dosing unit should always be used in combination with a gas control. In order to achieve optimal results (e. g., adhesion), the parameters (dosing amount, treatment time, etc. ..) will be adjusted for the targeted application. The system is adapted towards the special application by adjusting the process parameters (such as burner width, power and the number of burners).

During the development great importance has been attached to the variability, reliability, process stability and simple handling of the system. The low costs for the consumables is an other great advantage of our systems.

Applications

The ST-System is used in automated systems in the industrial field. Large surfaces of various materials (e. g., polymers, metals, glass, ceramics, etc. ...) can be treated. The unit can be integrated into respective safety concepts of plants by provided interfaces.

Configuration principle

