

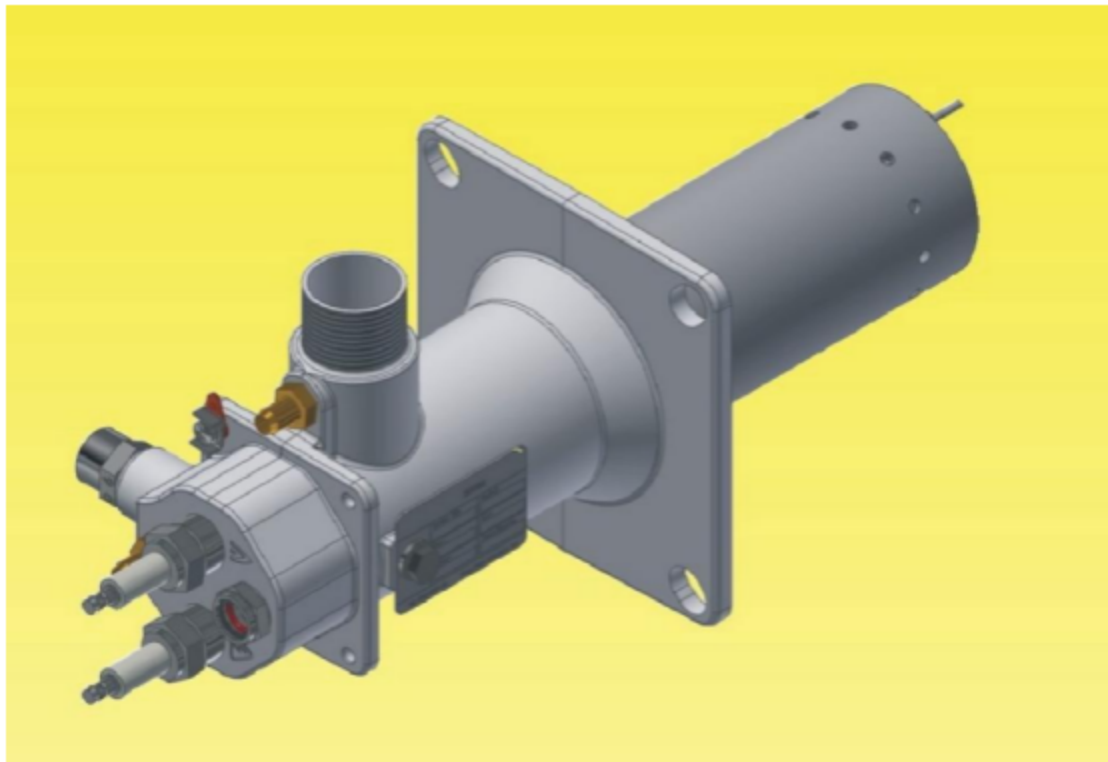
Astechnic



NUOE

AST

Integral Burner



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AST Integral Burner

Classical structure with high reliability and energy saving

Features

AST Integral Burner is assembled in one piece. It has high installation precision, adapts to different kiln working conditions, and has high combustion efficiency. In the case of low air excess coefficient, it can achieve complete combustion.

Its excellent structural design is shown not only in the practicability of function, but also in the reliability of products. As a classic structure, AST Integral Burner has become a very reliable burner after being honed by kiln ignition for many times. It is not affected by the environment and can burn normally under very bad working conditions.

In today's ceramic industry, energy saving has become synonymous with the industry. Whoever has mastered the core technology of energy saving will master the lifeblood of the ceramic industry. AST Integral Burner performs well not only in reliability, but also in energy saving.

AST Integral Burner flame has good performance, high speed and high rigidity. Silicon carbide and burner assembly together with more accurate alignment, can use preheated air (below 200 °C).

AST Integral Burner has good flame stability and regulation ratio, and its load regulation range is more than 1:10, which is suitable for a variety of control modes and heating process requirements.

Applications

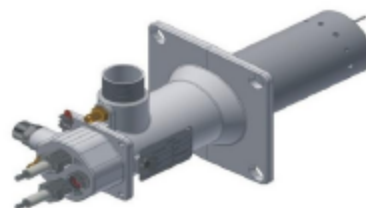
- Ceramic roller kiln;
- Tunnel kiln.

Product description

- | | |
|---------------------------------------|--------------------------------|
| ● Air housing: cast aluminum | ● Power: 5~60KW |
| ● Maximum furnace temperature: 1200°C | ● Air inlet pressure: 1-10mbar |
| ● Fire pipe material: SUS304 | ● Gas inlet pressure: 1-12mbar |
| ● Combustion head: SUS321 | ● Fuel: NG |
| ● Fixed flange: cast aluminum | ● Turndown ratio: 1:10 |
| ● Preheated air: 200°C | |

Ignition and Flame Monitoring

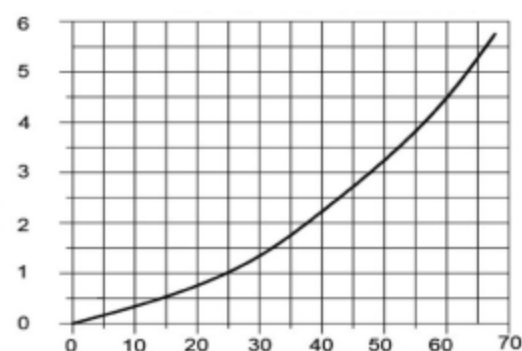
Burner ignition can be achieved by ignition electrodes, and flame detection can be achieved by ion detection.





Air Pressure -- Flow Characteristics: Gas Pressure, One Flow Characteristic

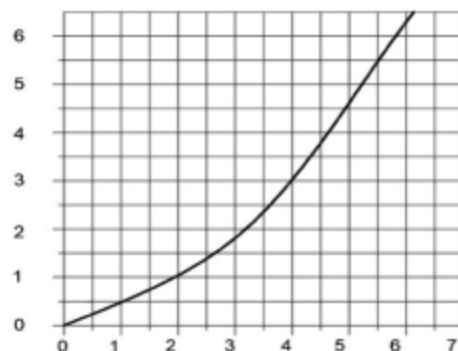
A-ST air pressure-flow curve



Gas pressure (mbar)

Flow rate (m³/h)

A-SD gas pressure-flow curve



Gas pressure (mbar)

Flow rate (m³/h)

A-ST burner test data (wind sheet: type B wind film, test conditions: air excess coefficient 1.0, air temperature: normal temperature)

Installation

The AST Integral Burner is recommended for horizontal installation, if vertical mounting is required, it is important to be aware that it may cause condensation and ignition problems on the electrodes.

AST Integral Burner can be used in furnaces with refractory linings, refractory bricks or refractory castable masonry.

Specific installation requirements:

Use bolts to fix the burner horizontally on the furnace wall, and heat insulation cotton needs to be installed between the burner and the furnace wall;

The air and gas inlet can be adjusted at an appropriate angle according to the connection direction of the site conditions;

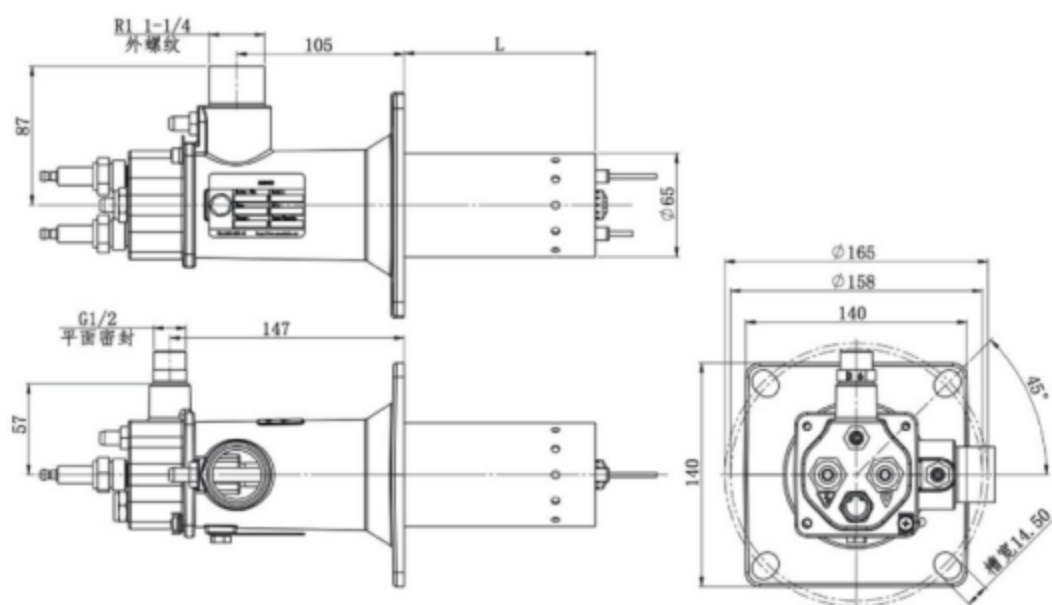
AST Integral Burner is often used with silicon carbide due to its high thermal conductivity, low coefficient of thermal expansion, light weight, high strength and energy saving effect.



Burner Specifications

Code	Model	Power	Fire pipe diameter	Fire tube length/L	Wind film type	Fuel	Location
101902650001	AST-70-B-70	5-60KW	70	70	Type-B	NG	Preheating section
101902650002	AST-70-B-100	5-60KW	70	100	Type-B	NG	Preheating section
101902650003	AST-70-B-110	5-60KW	70	110	Type-B	NG	Preheating section
101902650004	AST-70-B-120	5-60KW	70	120	Type-B	NG	Preheating section
101902650005	AST-70-B-150	5-60KW	70	150	Type-B	NG	Preheating section
101902650006	AST-70-B-180	5-60KW	70	180	Type-B	NG	Preheating section
101902650007	AST-70-B-200	5-60KW	70	200	Type-B	NG	Preheating section
101902650008	AST-65-C-70	5-30KW	65	70	Type-C	NG	High temperature section
101902650009	AST-65-C-100	5-30KW	65	100	Type-C	NG	High temperature section
101902650010	AST-65-C-110	5-30KW	65	110	Type-C	NG	High temperature section
101902650011	AST-65-C-120	5-30KW	65	120	Type-C	NG	High temperature section
101902650012	AST-65-C-150	5-30KW	65	150	Type-C	NG	High temperature section
101902650013	AST-65-C-180	5-30KW	65	180	Type-C	NG	High temperature section
101902650014	AST-65-C-200	5-30KW	65	200	Type-C	NG	High temperature section

The specific installation dimensions are shown in the following table:



External thread, plane seal; slot width 14.50