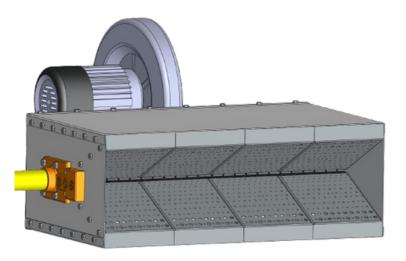


# FlexFire FBD Series Duct Burners

# **Technical Catalogue**

Edition- 1.01

## **Product Description**



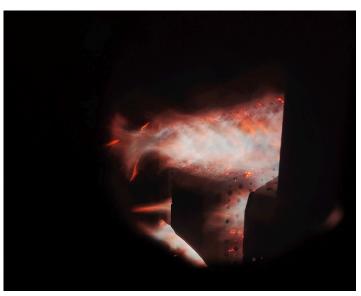
Helios Flexfire series FBD burners are linear burners specifically designed for hot air generation.

These burners are used in multiple applications including paint baking ovens, dryers, air handling units, incineration systems and other low temprature applications.

FlexFire Burners feature a modular construction, allowing rapid assembly from straight and T-sections, providing exceptional adaptability for customized setups.

The precise mixing of air and fuel within the burner enhances both emission control and efficiency. Additionally, a built-in combustion air blower can be effortlessly attached to the rear of the burner's stainless steel housing, ensuring consistent performance across a range of duct velocities without requiring a profile plate installation.

For burner mounting, both In-duct and wall mounted configurations can be provided. For In-duct configuration a modular slide in design is available, for wall mounted configuration flanges are provided for direct mounting of the burner.



Gas flow control components are fitted in offer versatility, with multiple options. To further customize, a gas control port valve is available with modulating motor and linkage options. Air and gas pressure switches are available for pressure monitoring.

For ignition, spark ignited pilot line is available. Ionization sensor and UV flame detectors are available for flame supervision.

## **Burner Specifications**

#### Fresh Process Air

Combustion Air: O2- 21%, Temp 20 deg. C Fuel: Natural Gas Process Air: fresh air 21% O2	
Max. Rated Capacity per 300mm section	280 KW
Max. Flame length	0.3 - 1m
Turndown	30:1
Natural Gas pressure	25-40 mbar
Combustion Air Pressure	20 mbar
Max air flow per 300mm section	450 m³/hr

#### • Recirculating Process Air

Burner Specifications Combustion Air: O2- 21%, Temp 20 deg. C Fuel: Natural Gas Process Air: Recirculating air (low O2)	
Max. Rated Capacity per 300mm section	250 KW
Max. Flame length	0.5-1.5m
Turndown	30:1
Natural Gas pressure	25-40 mbar
Combustion Air Pressure	20 mbar
Max air flow per 300mm section	450 m <sup>3</sup> /hr

<sup>\*</sup>Stated data is indicative, and can vary according to air temperature, air humidity, altitude, fuel type & quality.

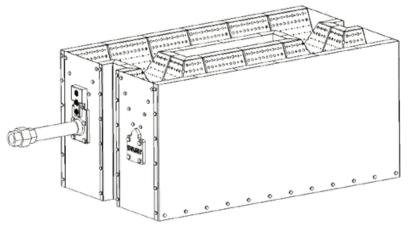
# **Applications**

HELIOS FlexFire burners can be used in a range of applications.

The FDB series burners are perfect for direct air heating applications. Hot air generation by the burner fufills the temperature requirement of the system and there is no variation in the the process air flow.

FDB Series burners are also used in variety of drying applications including but not limited to food, ceramics, textile, paper, pharamceutical's, in these applications both fresh and recirculating air is used.

FDB series burners are also available in wall mounted configuration for HVAC systems, Greenhouses to provide supplementary heating. It can also be used in low temprature ovens with air recirculation.



H-Type FBD Duct burner

# FBD Duct burner

#### Manufactured and Marketed by

Blaze Combustion Systems Plot-113, Patparganj Industrial Area Delhi-110092, India

#### **For More Information**

To Learn more about our products and offerings please visit blazecombustionsystems.com or contact us at sales@blazecombustionsystems.com



FBD Duct burner with integrated blower