Midco® INTERNATIONAL

Lanemark Midco HMA2A series air heating burners are designed to provide a high efficiency, high turndown, low emission solution for air replacement or “make-up” air heating applications.

Typical Applications

- **Paint spray booth air heating – spray and bake cycles**
- **Paint drying and curing ovens**
- **HVAC air replacement schemes for factories, warehouses, distribution centres…**
- **Crop dryers**
- **Print media dryers**

Lanemark Midco HMA2A series burners operate directly within the heated air flow and can be located either upstream or downstream of the main air supply fans.

Key Features

- **High heat output per unit length**
- **Low emissions – suitable for manned/unmanned operations**
- **Wide acceptable process air velocity range**
- **High turndown (up to 30:1)**
- **Short flame length**
- **Common burner head for natural gas and propane**

Lanemark’s DbCalc© software is available to determine burner ratings and to design suitable duct profile plate arrangements at firing rates of up to 220 kW per 305 mm (750,000 Btu/h per ft) burner length.

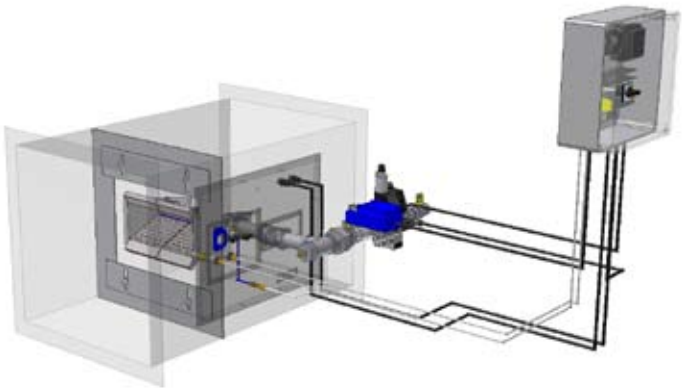
Burners can be configured either as straight sections or in various “shapes” such as “H” or “I” designs by the use of compact elbows and tees, to fit within required duct dimensions.

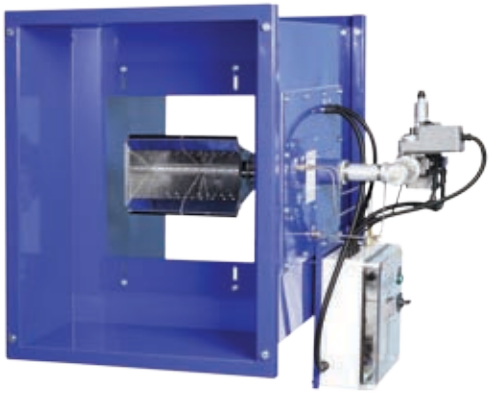
Gas manifolds are available in both cast iron and aluminium which significantly reduces the weights of larger burner assemblies.

Specifications

Heat Input	**220 kW max/305 mm section (max 750,000 Btu/h/ft)**
Air Velocity	**7.5 – 18 m/s (1500 – 3500 ft/min)**
Required Air Pressure	**0.5 – 3.0 mbar (50 – 300 Pa) (0.2 – 1.2 in w.g)**
Turndown	**30:1 max**
Typical flame length	**Natural Gas : 280 – 405 mm (11 – 16 in)** **Propane : 205 – 330 mm (8 – 13 in)**
Efficiency	**100% (LHV) or 92% (HHV)**
Burner Head Gas Pressure	**Natural Gas : 8.8 mb – 19.5 mb (3.5 – 7.8 in w.g)** **Propane : 3.3 mb – 7.5 mb (1.3 – 3.0 in w.g)**
Burner Head Orientation	**Parallel to process air flow**

DB AIR HEATING BURNER SYSTEMS





MODEL	Max Heat Input Range (kW)*	Max Heat Input Range (Btu/h)**	Gas Valve Train ***	Connection***
DB01	73 – 103 kW	250,000 – 350,000 Btu/h	VCD1	1"
DB02	146 – 205 kW	500,000 – 700,000 Btu/h	VCD1	1"
DB03	220 – 308 kW	750,000 – 1,050,000 Btu/h	VCD1	1"
DB04	293 – 410 kW	1,000,000 – 1,400,000 Btu/h	VCD2	1½"
DB05	366 – 513 kW	1,250,000 – 1,750,000 Btu/h	VCD2	1½"
DB06	440 – 615 kW	1,500,000 – 2,100,000 Btu/h	VCD2	1½"
DB07	513 – 718 kW	1,750,000 – 2,450,000 Btu/h	VCD3	2"
DB08	586 – 820 kW	2,000,000 – 2,800,000 Btu/h	VCD3	2"
DB09	659 – 923 kW	2,250,000 – 3,150,000 Btu/h	VCD3	2"
DB10	733 –1025 kW	2,500,000 – 3,500,000 Btu/h	VCD3	2"

Higher heat inputs are available on request

* *Heat Input Range @ 146 – 205 kW per 305 mm burner section length*

** *Heat Input Range @ 500,000 – 700,000 Btu/h per ft burner section length*

*** *Gas Connection based on 146 kW per 305 mm (500,000 Btu/h per ft) burner section length @ 20 mb gas supply pressure (Please refer to Lanemark for gas valve train connection sizes for firing rates > 146 kW per 305 mm (500,000 Btu/h per ft)*

Lanemark DB Duct Burner Systems comply with the relevant sections of European Standard : EN746 Part 2

Specifications

Lanemark DB Duct Burner Systems are supplied in a packaged or semi-packaged format.

The Lanemark Midco burner is supplied fitted to a mounting plate which is designed to be bolted to the side of the process air duct – normally supplied by others but available on request.

The DB Duct Burner includes a compact pre-piped modulating gas valve train and control box that can either be supplied attached to the mounting plate or as a separate assembly to be installed on site at a convenient location within 3 metres of the burner location.

The control box includes, as standard, a burner controller, ignition transformer, differential air pressure switch and two “3 – way” air valves which enable an air pressure switch safety check to be carried out at burner start up. Additional control components, including temperature controllers, can also be included when requested.

	Standard Equipment	Options
Fuels	✔ Natural Gas	• Propane
Control Voltage	✔ 230V	• 110V
Flame Sensing	✔ UV Scanner	• Flame Rod
Heat Output Control Options	✔ Modulating	• High/low/Off

All illustrations are for guidance only. For reasons of continuous development, Lanemark International Limited reserves the right to alter specifications without prior notice.

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