Lanemark DB Duct Burners are designed to provide a clean, high efficiency, gas fired heating source for air replacement/make-up air applications. They provide excellent temperature control by virtue of their capability to operate over wide turn-down ratios under modulating gas control.

Lanemark DB Duct Burners operate with very shortflame lengths and are particularly suited to applications where personnel will be working in the heated air stream - for example, paint spray booths.

Lanemark DB Duct Burners are simple to select using Lanemark's DbCalc® design software.



Model Maxin kW			um Rating Btu/h		nimum Suggested Duct Size for \( \Delta t \) 30°C			
		N**	Bluffi	H	- 24	w		
	DB01	75	250,00	0 650	х	460		
	DB02	145	500,00	0 650	х	610		
	DB03	220	750,00	0 730	х	760		
	DB04	295	1,000,00	0 790	х	910		
	DB05	365	1,250,00	0 830	х	1070		
	DB06	440	1,500,00	0 860	х	1220		
	DB07	510	1,750,00	0 880	х	1370		
	DB08	585	2,000,00	0 900	×	1520		
	DB09	660	2,250,00	0 910	х	1670		
	DB10	730	2,500,00	0 920	х	1830		
	Higher heat inputs are available on request.							

## Typical Applications

- Air replacement (make-up air) heating systems
- Paint spray booths
- Hot air curtains
- Textile & fabric dryers
- Print media dryers
- Powder & grain dryers
- Paint drying/curing ovens

Lanemark DB Duct Burners comply with European Standards EN676 & EN746 (where applicable)

### Specifications

Lanemark DB Duct Burners are supplied in a packaged format.

Each burner is supplied as duct burner sections fitted to a mounting plate which is designed to be bolted to the side of an air supply duct that is to be provided by others. Each Lanemark DB Duct Burner includes a compact pre-piped gas train fitted to the burner mounting plate.

A separate control box is also provided which should be installed within 3 metres of the burner location.

The control box incorporates a burner controller, ignition transformer, differential air pressure switch & two 3-way air valves.

The 3-way air valves permit a safety check to be made on the operation of the differential air pressure switch at each burner start up.

	✓ Standard Equipment	<ul><li>Options</li></ul>
Fuels	✓ Natural Gas	<ul> <li>Propane</li> </ul>
Control voltage	✓ 230V	• 110V
Flame sensing	✓ Flame rod	<ul> <li>UV scanner</li> </ul>
Heat output control options	✓ Modulating	<ul> <li>High/low/off</li> </ul>



# DIMENSIONS & PERFORMANCE

# **DB DUCT BURNER**

Heat input : Nominally 73 kW per 150 mm burner section

(500,000 Btu/h per 12" burner section)

Air flow velocity : 12.7-16.3 m/s (2500-3200 fpm)

Air pressure∆P : Typical : 1.4 mbar at 14.5 m/s duct air velocity

(0.55"w.g at 2850 fpm)

(based on discharge temperature of 21°C (70°F)

Turndown : up to 30:1

Efficiency: 100% based on LHV (92% based on gross CV)

Flame lengths : Typical : 175-450 mm (7-18")

depending on heat input/duct air velocity

Burner head : Natural Gas: 11 mbar (4.5" w.g) at full output
gas pressure Propane : 20 mbar (8.0" w.g) at full output

Burner head : Parallel to duct air flow orientation

Burner configuration : Standard : horizontal straight sections.

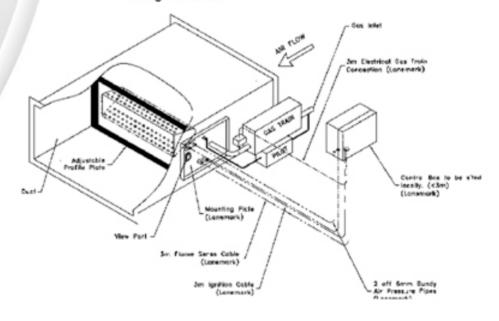
Alternative "H" shaped sections or other configurations are

available on request

Burner/Duct Sizing : Burner rating, minimum duct size, profile area & profile plate

dimensions are all easily determined using Lanemark's DbCalc®

design software



# LANEMARK

All Duct Burners benefit from Lanemark's BurnerCare customer support. BurnerCare services include burner system commissioning/start-up, supply of spare parts and system training. BurnerCare will provide a contract service plan and a rapid response facility, designed to ensure the continued and reliable operation of Lanemark equipment worldwide

# **Additional Burner Products**

(See individual Data Sheets for full details)

The Duct Burner range is just one of the series of process burners available from Lanemark International Ltd.

Also available from Lanemark is the TX and TRX range of modular tank heaters and the FD range of high turn-down process air heating oven and dryer burner products.

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





