

LANEMARK

crop drying

Agricultural Drying gains from Lanemark Midco Control

The need to provide effective controllable heat across the wide range of crop drying processes is fundamental and calls for systems that are both efficient and adaptable – key characteristics of the Lanemark Midco range.

The agency agreement that Lanemark has with American manufacturer, Midco International Inc, has opened up a range of markets for the company's modular burner system design – and users involved with agricultural during processes have been amongst the first to benefit.

Across the Midco range, high turn-down and controllability are key features as are low emission levels and flame stability. When added to the modular concept that is centred on individual six-inch sections which can be connected to meet precise application needs – both in terms of dimensions and heat requirement – the burners' suitability in the crop drying environment becomes self-evident. This is further enhanced

with the ability to use either natural or propane gas on a standard burner head which is of particular significance in this sector.

The latest addition to the Lanemark range, Midco burners sit alongside the company's established TX and FD (tank heating and oven heating) burner ranges, and benefit from the same emphasis on controllability and energy efficiency. As the agricultural industry focuses more and more on cost control and effective production methods, the design characteristics and benefits associated with the

Lanemark Midco series has much to offer – almost irrespective of the specific crop drying need.



Examples (above and reverse) of Agricultural drying equipment manufactured by Octagon Products, which make the most of Midco gas burner systems now available from Lanemark International Ltd.

Lanemark Midco burners combine high turn-down, flame stability and excellent controllability with a highly versatile modular design.

Centred on a 6" section format, individual units can be simply connected together to enable virtually any shape, orientation or size of application to be accommodated The suitability of the design to operate with either a natural gas or

propane supply enhances this adaptability further still – bringing the benefits of the units to a wide range of

industries and application environments.





- In an industry where unplanned downtime is to be avoided, the support and structure of the Lanemark BurnerCare package is widely regarded as a key element of the Lanemark service.
- Lanemark BurnerCare is designed to ensure ongoing optimum performance and peace of mind for every customer in the crop drying industry.
- The service includes planned maintenance schedule options and comprehensive on-line support as well as system commissioning and the supply of spare parts.



The versatility and high levels of heating control that can be achieved with Lanemark Midco gas burner systems are clearly demonstrated in a highly specialised agricultural drying application. Octagon Products is making the most of the Midco design that is central to an extensive range of crop drying equipment.

Typical installations of the Octagon systems see Midco burners used as a heat source into the distribution system of a crop drying store. Air movement upwards through the crop containers then ensures that drying and storage requirements are fulfilled – factors that can vary widely

depending upon the produce. From its Daventry

base, the company supplies customers as far afield as the USA and Australia and draws attention to key characteristics of the burners that are the latest addition to the acclaimed Lanemark process air heating range.

"Because of the wide variety of crop types, it is vital that the drying process is highly accurate and controlled – and the Midco design allows us to deliver accuracy of 0.5°C," comments John Madigan, Director at Octagon Products.

"Achieving the optimum product condition and colour is often dependent upon both temperature and humidity and our systems need to be able to offer a range of heat outputs. This is typically from between 8°C and 35°C above ambient although, in the case of onion curing, for example, the lower figure may

only be 2°C," he says. "We have found the Midco burner systems to be very capable in these terms particularly as they can heat large volumes of air and the turn-down ratio is very large.

"Because they also offer a modular design, we are able to configure systems in terms of output and dimensions to meet precise application

and installation needs," he continues, pointing out that, to date, as many as 18 sections have been connected in a single system, delivering 4.5 million Btu/h – equivalent to 1320 kW.

John Madigan says that in many applications, the fan unit pushes warm air into the crop – the effectiveness of which is optimised by the ability of the Lanemark Midco units to fire up-stream of the fan position. "They provide a very short flame length, are extremely clean in operation and can be installed either horizontally or vertically," he continues, "and, importantly, do not require any additional air source. With turn-down capability of up to 30:1, the drying needs for a wide range of products can thus be readily fulfilled."

"Each Midco installation comprises a number of individual 6" or 12" sections which can be connected together to virtually any size to meet precise application requirements," comments Lanemark's Process Burner General Manager, Adrian Langford. "Importantly, this versatility is enhanced by their ability to use either natural or propane gas on a standard burner head. This is an important consideration for Octagon Products as the vast majority of agricultural applications operate with a propane gas supply."

Apart from crop drying, the Midco design is also central to Octagon's success in other sectors. John Madigan highlights their use for drying cricket bat willow and timber for pizza oven fuel as being prime examples.

"Every application with which we are involved has its own unique parameters so it is important that our supply of heating and control systems is as flexible as possible. The use of the Midco system – with the benefit of Lanemark's support and expertise in the field – is a vital ingredient and offers distinct advantages to everybody involved in this specialised sector," concludes John Madigan.

