

Case Study

Industry

Crop Drying Company Octagon Products Lanemark Midco burner

Lanemark optimises crop drying by delivering Midco versatility and control

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. **Daventry-based Octagon Products, which supplies** customers as far afield as the USA and Australia, 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. John Madigan, Director at Octagon Products draws attention to key characteristics of the burner design -

"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," he says.

"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 adds. "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 also points out that in many applications the fan unit pushes warm air into the crop – the effectiveness



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.

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."

The recent appointment of Lanemark by American manufacturer Midco to distribute its range of products both in the UK and a number of overseas markets, has enhanced the ability of the company to meet a long list of application needs. The Midco units sit alongside the

Industry Company **Product**

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well-established Lanemark TX tank heating and FD air heating product ranges and, with the benefit of the modular design, the Midco series has much to offer as Lanemark Process Burner General Manager, Adrian Langford explains -

"Each Midco installation comprises a number of individual six inch or twelve inch sections which can be connected together to virtually any size to meet precise application requirements. Importantly," he continues, "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 now - 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.



Midco gas heating systems the key facts



Midco burners are the latest addition to the range of Lanemark burner products and offer a list of key features to all users – not least those in the agricultural crop drying sector -

- High turn down, flame stability and excellent control contribute directly to efficient operation.
- Low emission levels help to maximise energy efficiency whilst minimising environmental impact.
- Design is based on six and twelve inch modular sections which can be connected together to match almost any shape, orientation or size of application both in terms of dimensions and heat requirement.
- Midco units operate via either natural or propane gas - opening up opportunities where no mains supply exists.
- All installations fully supported by the Lanemark BurnerCare service which includes commissioning, maintenance and supply of spares to ensure continued, successful operation.