

Showcasing advances in laser cutting systems

Amada, the largest machine tool manufacturer in the world, is showcasing the latest advances in laser cutting systems with the help of industrial gases and supply solutions provider, Air Products.

From its UK headquarters in Kidderminster, Worcestershire, Amada UK, operates the UK's largest dedicated Technical Showroom providing demonstrations of state-of-the-art laser cutting systems and other machinery to over 1200 visitors each year. In recent years, the company has noted that demand for laser cutting systems has increased.

David Goves, senior engineer at Amada UK, who is responsible for managing the technical demonstrations, says: "Laser cutting machinery has come a long way since its introduction in the 1980s. Recent technological advances mean modern laser cutters are capable of cutting thicker material, up to 20mm thick, to a higher quality and quicker than ever before. This makes them suitable for a wide range of applications, from high quality sheet metal parts to thick plate production and in terms of efficiency they compare favourably with more traditional solutions like plasma cutting.

"Recent developments in gas supply systems, which facilitate continuous usage, are also helping to make laser cutting systems more viable."

Earlier this year, Amada UK decided to upgrade the gas supply system in their Technical Showroom to help demonstrate the very latest laser cutting systems. Working in partnership with Air Products,



the company opted to introduce the CryoEase® microbulk gas supply system, which would allow them to demonstrate the benefits of continuous usage. Instead of using traditional cylinder packs, the new gas supply system has a storage tank, which can be located anywhere onsite and re-filled with liquid nitrogen using a special high pressure filling system, thus avoiding downtime caused by the need to vent down tanks.

Using liquid gas rather than gas cylinder packs also means that when demonstrating the latest laser cutting machines to their customers, Amada UK can be sure that there is no interruption caused by the need to change over cylinders, as Dave Goves explains:

"There is nothing more annoying than starting a demonstration on a brand new piece of equipment and being forced to stop to change over cylinders. The customer wants to see the machinery operating non-stop and the CryoEase® gas supply system enables us to do that reliably every time."

As demand for laser cutting machinery continues to grow, new laser users are emerging, including sheet metal producers, plate metal producers, laser cutting contractors and a variety of metal fabricators producing everything from aluminium food containers to steel office furniture and supplies. Increasingly, these operators are keen to ensure continuous usage of their laser cutting systems in order to maximise efficiency. Amada UK offers a full range of automation systems for its lasers and over recent years has seen automated





laser systems become more popular. With over 40% of laser users opting to automate their machinery, a continuous gas supply is vital in order to operate 'lights out' production.

Andrew Cornes, CryoEase® service manager at Air Products, says: "In addition to our ability to provide liquid gases like nitrogen and oxygen, argon and carbon dioxide at micobulk volumes, we can now refill tanks with liquid nitrogen at a pressure suitable for laser cutting applications – usually around 30 bar. This means more operators of laser cutting machines can benefit from continuous operation."

In addition to demonstrating the latest laser cutting systems, Amada UK also runs specialist training workshops for operators and advises industrial users about all aspects of installation. One of the main priorities for existing and new industrial users is improving efficiency and this can include considering when to switch to using liquid gas storage.

Andrew Cornes advises: "The storage capacity of our smallest CryoEase® system is 180 litres and in most cases we advise production managers that if they are using more than 10 cylinders of high-purity gases per

month it may be worth switching to liquid storage. This will improve efficiency and bring other benefits too. For example, liquid storage can also be safer because it eliminates the need for cylinder handling and compressed gases can also be stored at a lower pressure."

For more information about the CryoEase® service contact Air Products by phoning 0800 389 0202 or visit www.airproducts.com/cryoease.

About Amada UK

Amada UK is part of Amada Global – the largest machine tool manufacturer in the world, headquartered in Japan. From its UK headquarters in Kidderminster, Amada UK supplies a wide range of punching, bending and laser cutting machinery and automation. Its machine tool show plaza, with lecture theatre and presentation suites, hosts regular exhibitions and seminars and provides specialist technical support services to production managers and operators. For more information about Amada UK, visit www.amada.co.uk.

For more information

Air Products PLC
2 Millennium Gate
Westmere Drive
Crewe
CW1 6AP
0800 3890202

Air Products Ireland Ltd
Unit 950
Western Industrial Estate
Killeen Road
Dublin 12
Tel 01 463 4200

tell me more
www.airproducts.co.uk
www.airproducts.ie