



Case Study:

Pegasus Profiles



Laser, waterjet,
plasma and flame cut
programmed in Lantek
Expert delivers flexibility
and efficiency

Pegasus Profiles has three sites. The main site is in Thetford and the other two are in Andover and near Daventry. The company has been operating over 40 years and the Lantek software has enabled the company to consolidate its waterjet, laser cutting, plasma cutting and flame cutting CNC programming into one system.

lantek



Case Study

Nigel Clark,
Managing Director at Pegasus Profiles

"Lantek Expert is simple to use. It has enabled our staff to be more flexible as they can use one system instead of multiple systems and, the nesting saves significantly on material costs. The superior shop floor documentation generated by Lantek Expert is also a big improvement for us. We are confident that Lantek Expert will programme any machines we install in the future"

Nigel Clark, Managing Director of Pegasus Profiles says, "We cut material up to 500mm thick as well as thin material, extremely hard wear plate material such as Hardox, high strength steels such as Strenx and non-metallic materials including MDF, carbon fibre and foam. This requires us to have a wide range of cutting machinery to suit the different applications. In addition, we also have plough grinding capability with Lumsden grinders which offer a cost effective method of machining the surface area of plate to give a clean bright finish and a tolerance of $\pm 0.25\text{mm}$." Pegasus is also able to supply refurbished spare parts and consumables for Lumsden grinders.

Originally, the two different waterjet machines by Calypso and WJS had their own dedicated software as did the Esprit plasma and Technicut flame cutting machines, resulting in the programmers needing to learn, understand and use multiple software packages to generate the unique CNC code for each machine. When Pegasus Profiles installed a Trumpf 3050 laser from MSS Lasers, Nigel Clark realised that he could replace all these diverse software packages with the Lantek Expert system and dedicated postprocessors to suit each machine, which was particularly attractive to the company. "The Lantek graphics is the same for each machine, so we only have to learn one system. The old systems were machine specific. We have three CNC programmers and each of them had a specialist area. With Lantek, we can make much better use of our programming resources. There is a significant amount of programming to be done as every job is bespoke and consist of a lot of one off parts. For example, a structural steelwork project may have up to 160 different parts, all of them unique."

The company has around 500 tonnes of steel in stock and processes about 2,500 tonnes every year. Flame cutting applications include special purpose machines and wind turbine parts, while waterjet is ideal for parts which are non-metallic or which cannot be cut by laser, plasma or flame cut and materials such as titanium where the product would be damaged by a heat affected zone. To make the best use of material, the nesting within Lantek Expert is very important. "We nest together parts from multiple projects according to cutting process, material specification and thickness. The ability to mix these parts on one sheet of material enables us to maximise material utilisation. The nesting software is powerful and easy to control, enabling us to get up to 80% utilisation and also, with its library of offcut shapes, reuse remnant material, particularly important for some of the costly materials we process."

Data on new products comes in a range of formats from a sketch to DXF and DWG files which can go straight into Lantek Expert for programming. The lead time achieved by Pegasus Profiles from order to delivery is 3 days for most products and the flexibility and ease of use of Lantek Expert contributes to this. Nigel Clark says, "Lantek Expert is simple to use. It has enabled our staff to be more flexible as they can use one system instead of multiple systems and, the nesting saves significantly on material costs. The superior shop floor documentation generated by Lantek Expert is also a big improvement for us. We are confident that Lantek Expert will programme any machines we install in the future."





FACT SHEET

COMPANY NAME	Pegasus Profiles Ltd.
ACTIVITY / INDUSTRIAL SECTOR	Cutting and processing sheet and plate materials
LANTEK SOLUTION	CAM 2D
LICENSES	4 Lantek Expert
MACHINES	Calypso Waterjet Trumpf 3050 Laser Waterjet Sweden Esprit Plasma Technicut