



Case Study:

# McCONNEL



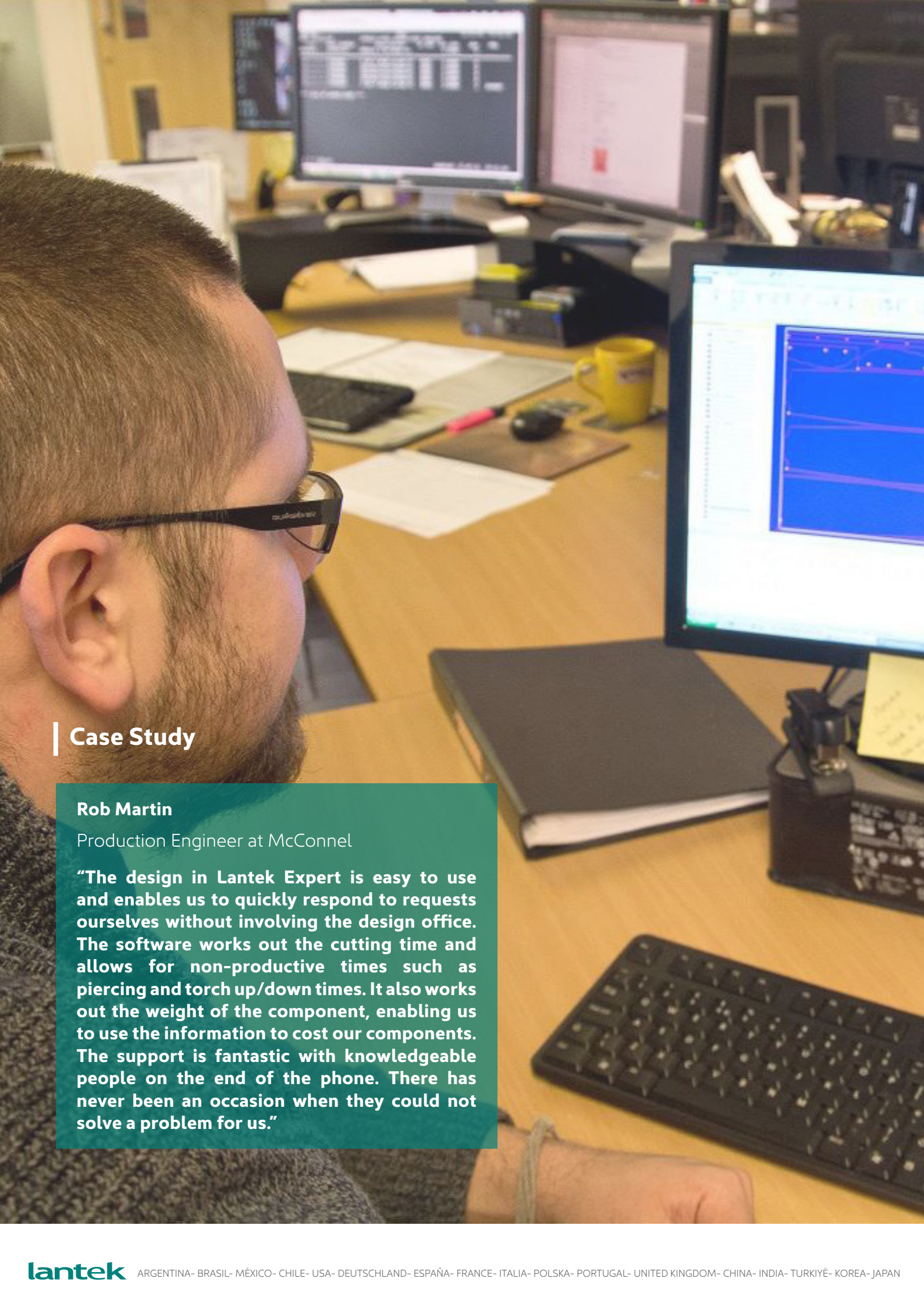
LANTEK HELPS  
McCONNEL CUT  
GRASS AND  
HEDGES DOWN  
TO SIZE

Since the 1930s, McConnell has been designing and manufacturing innovative agricultural machinery at its Ludlow factory.

Sold around the world, its machines range from power arm hedge trimmers which you see attached to tractors maintaining hedgerows across the country, to its amazing ROBOCUT remote control mowing machines designed for heavy duty mowing where access would be dangerous, laborious or too steep for other mowing methods.

lantek





## | Case Study

### Rob Martin

Production Engineer at McConnel

**“The design in Lantek Expert is easy to use and enables us to quickly respond to requests ourselves without involving the design office. The software works out the cutting time and allows for non-productive times such as piercing and torch up/down times. It also works out the weight of the component, enabling us to use the information to cost our components. The support is fantastic with knowledgeable people on the end of the phone. There has never been an occasion when they could not solve a problem for us.”**





The company has been using Lantek Expert for over six years, installing it alongside its first Kerf plasma cutting machine. Rob Martin, Production Engineer at McConnel says, "We make nearly every part of our products in-house, buying in very little. We have machine shops for milled and turned parts, plasma and oxy cutting machines in our sheet metal workshop, as well as assembly and testing facilities. Designs are created using SolidWorks in our design office and are passed into Lantek Expert using DXF ready for cutting."

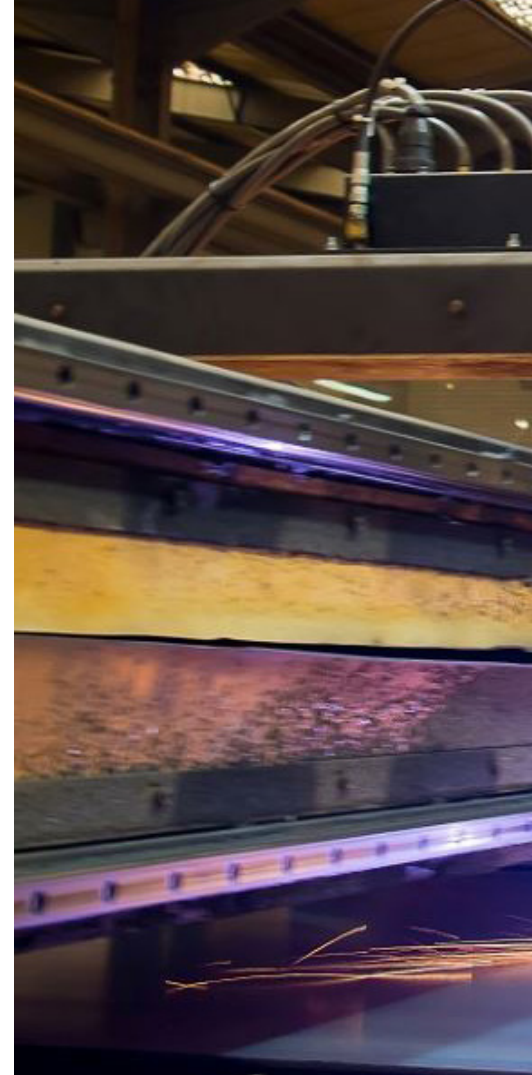
Because of the range of machines supplied by McConnel, there are tens of thousands of parts held within the Lantek Expert database, with more being added as new designs are developed. "We take the DXF into Lantek Expert and record information such as material type and thickness. For managing demand in the workshop, our IBM system collates orders for machines and breaks these down into their component part numbers and quantities. A spreadsheet of this information, which can typically contain 4-5000 parts each week, is passed into Lantek Expert."

All the geometric and material information is already in Lantek Expert, so the engineers operating the software simply use some drop down menus to sort the part requirements into thickness and material type. Mostly they use the automatic nesting, which can be adjusted for optimum nesting quality and nesting time, to fill the sheets. Rob Martin says, "Mainly we are cutting mild steel, but we also cut Domex and Hardox which are extremely tough and durable materials for high wear situations on or in the ground. Material thicknesses go from 1.6mm up to 85mm. Parts up to 20mm thick are cut on the plasma, while thicker or high volume parts are cut by our CNC oxy cutting machine which has four linked torches. For nesting we rely on Lantek Expert automatic nesting, just checking the last sheet in case there is an odd part on it which we can squeeze onto one of the previous sheets with one of the software's manual nesting tools."

Lantek has helped McConnell to optimise the set up all the machine parameters such as lead in type, cutting and rapid speed and gap between parts and, it will be helping the company to implement its second Kerf plasma, which is about to be delivered. Both the existing and new Kerf plasma are to have Kerf UltraSharp technology. Rob Martin adds, "Ultrasharp will enable us to cut exact size holes in relation to material thickness. For example, we will be able to cut an exact size 8mm hole in an 8mm thick plate which we previously would have had to drill. Lantek worked closely with Kerf to develop this technology and will be helping us to implement it."

As well as production parts, the engineers at McConnell use the 2D drawing capability in Lantek Expert to design and manufacture jigs for use in other areas of manufacture and assembly. The company also relies on the time and weight calculations in Lantek Expert.

When a new release of Lantek Expert is introduced, Lantek engineers visit to carry out additional training if necessary, ensuring that McConnell is getting the best productivity from its investment.











## FACT SHEET

COMPANY NAME	McCONNEL
ACTIVITY/INDUSTRIAL SECTOR	Manufacturer of hedge and verge mowing power arm technology
LANTEK SOLUTION	CAD/CAM 2D
LICENSES	1 Lantek Expert 5 Lantek Expert CAD
MACHINES	KERF Shapecut