

Rise of the robots

Edgetech head of sales Tony Palmer explains how refurbished automation technology can help IGU manufacturers revolutionise how they operate for less

In ours and many other industries, it is very clear that the future is automation.

The UK faces a severe skills shortage, and has done for years. The workforce is ageing, with more than 30% over 50, and more than 10% over 60.

Despite repeated warnings of a looming skills crisis, recruitment has been sluggish and government support has been patchy and ineffective.

All of which meant that, when Brexit was thrown into the mix, the impacts were severe.

By now, we're all very familiar with the statistics – millions of EU workers, who had formed a crucial part of Britain's construction and manufacturing workforce for over a decade, have left the country.

That this came during the greatest public health crisis in a generation, bringing a huge range of other disruptions, has hardly been ideal.

The result has been difficulty hiring workers, difficulty keeping them, and increasing wage inflation.

Robots on the rise

In one sense, the solution to all of this is simple – automation.

Businesses and industries around the world are increasingly embracing it. According to the World Economic Forum, in 2020 67% of work was done by humans, 33% by machines.

By 2025, they expect this to have shifted – with 53% done by humans, and 47% done by machines.

The global market for automation technology is expected to grow by billions of dollars over the course of the decade.

That is no surprise, because the benefits of automation are substantial. Automated tech allows manufacturers to operate more quickly and efficiently, without the need for breaks, and to a consistently higher standard.

IGU manufacturers are no exception. For decades, most applied spacers manually. But, when fully automated lines able to apply continuously with flexible spacer became available, these gave early adopters a massive leap forward both in terms of quality and productivity.

For example, switching to a fully automated Super Spacer application line can yield savings of tens of thousands of pounds each year, and increase a manufacturer's output by 18%, while requiring less than half the number of operators.

Over the last couple of years, we've seen more companies than ever switch to automation, and expect to see this increase further throughout the 2020s.

However, there's one thing that may be holding some companies back from making the decision to embrace it – the cost.



Tony Palmer

Improving performance for less

There's no question that acquiring a fully automated spacer application line is a serious investment.

We estimate that a new fully automated Super Spacer application line becomes cost-effective when manufacturers are making over 2,500-3,000 frames per week.

But there are many companies making fewer frames who could nevertheless benefit hugely from automation.

So what's the solution? Refurbished equipment.

When companies who've already invested in automation decide to upgrade their equipment, their existing machinery can be refurbished, tested to ensure it continues to operate to an excellent standard, then sold on to companies – at a significantly lower cost.

For manufacturers making over 2,000 frames a week, taking the refurbished route is an extremely viable way of supercharging their production capacity, and making units more quickly and efficiently than ever before. □

www.edgetechig.co.uk

Going up a notch

Jade Engineering has developed and launched a new V-Notch saw. The company says that a revision of this factory essential was well overdue and this is the first update on the UK market for some years.

The Jade VNS V-Notch saw has been designed and manufactured to comply with the latest manufacturing performance requirements and crucially to include a number of safety features that allow compliance with the latest European and UK safety legislation.

Specifically, says Jade, the VNS has been designed and manufactured in accordance with the EU machinery directive 2006/42/EC. It is also future proofed by complying with the UKCA directive, which becomes mandatory at the end of 2022.

Jade claims that a number of safety features distinguish the VNS from other machines in the market. One is the machine guard which closes automatically as the profile is clamped into place, the only V-notch saw to offer this according to Jade. Another is the carefully designed waste disposal chute situated on the side of the machine, that allows excess material to exit the machine without the operator being able to put their hands near the blades. The saw is also safely operated by using a two-handed start sequence.

Operation is simple and effective, with horizontal pneumatic clamp cylinders that are easily adjustable for any profiles. The two blades of the Jade VNS are set at 45° to one another to form a 90° angle, with the cutting depth easily set by using a simple hand wheel adjuster, measured using a digital position indicator.

The Jade VNS is the latest machine to be developed by Jade Engineering in direct response to discussions with its fabricator customers. “A number of frame manufacturers have approached us for replacements for their ageing V-notch saws. After examining our own products and carrying out some research it became clear that the world has moved on,” says Jade

Engineering’s Sean Mackey. “We have totally re-engineered this machine to offer excellent cutting performance, great durability but also including the latest safety features.” □



www.jade-eng.co.uk



Visitors to FIT will be able to see some of Emmegi (UK)’s most popular machines in action. Stand Q41 will feature both a Comet X4 4-axis machining centre and a Precision TS2 twin-head saw.

This is one of the classic machine combinations that Emmegi supplies to aluminium fabricators in the UK. Both use the same software and operator interface, and both can cope with similar volumes. The Comet X4 has a 7kW electrospindle which continuously rotates from 0° to 180° to machine on three sides of the profile, and the 3-axis Precision TS2 can cut from 45° inwards to 15° outwards and to 280 positions per degree.

Emmegi (UK)’s managing director says: “It has been three years since fabricators have been able to see machines in action at a trade show, so we’ve deliberately chosen the models which we know have the widest appeal.”

As well as seeing the machines, visitors to the Emmegi (UK) stand will also be able to get expert advice from the team on everything from operator training to machine maintenance – all while enjoying some classic Italian style hospitality. □

www.emmegi.com