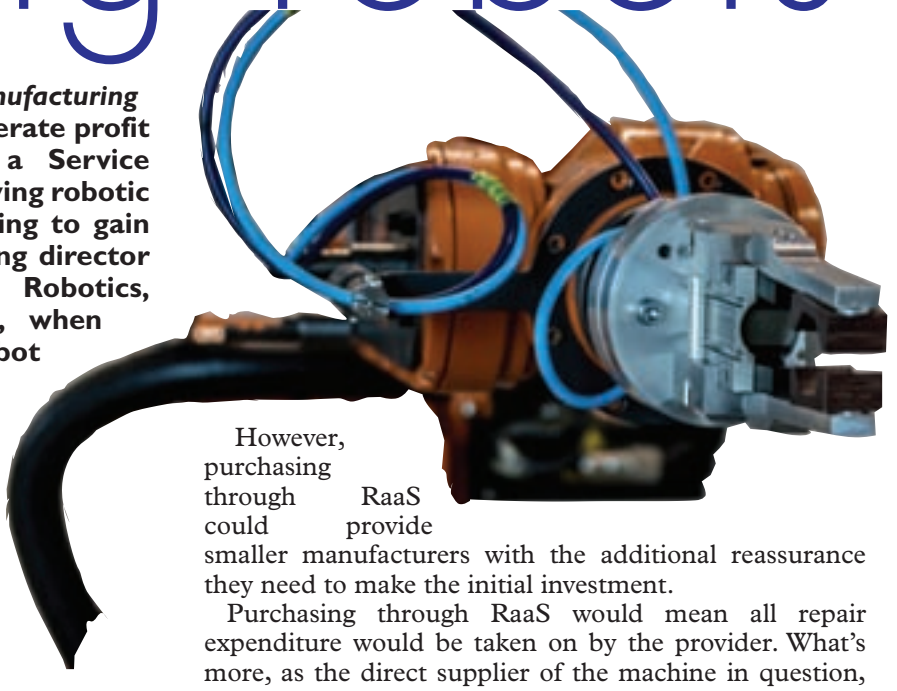
Renting robots

According to the *Future of Manufacturing* report, a third of manufacturers generate profit through servitisation. Robots as a Service (RaaS), the business model for deploying robotic automation on lease, is also beginning to gain traction. Here, Nigel Smith, managing director at Toshiba Machine partner TM Robotics, examines the potential of RaaS, when compared to traditional robot purchasing



RaaS describes the purchase of industrial robots by leasing robotic devices as needed, as opposed to the traditional method of buying a robot outright. Like many other servitisation models, the concept boasts reduced upfront costs and the advantage of ongoing maintenance. But, why fix a model that isn't broken?

Robots have long reigned supreme in some areas of manufacturing, such as automotive production and heavy industry. As the first adopters of six-axis robots, some as early as the 1960s, these large-scale industries understand the potential of robotics and importantly, have the financial resource to deploy this technology.

Small to medium-sized manufacturers, on the other hand, haven't been as quick to adopt robotic automation. High upfront costs make acquiring, integrating and maintaining an industrial robot unfeasible for many smaller businesses. However, RaaS could soon change this.

Weighing the benefits

One of the benefits of RaaS is the potential to lower the barrier of entry for smaller manufacturers. Leasing robots on a monthly, quarterly or yearly fee reduces the upfront cost dramatically, allowing manufacturers to invest in otherwise overtly expensive automation, without breaking the bank.

Eliminating upfront costs isn't the only relief for smaller manufacturers. A large part of the saving from RaaS would be a reduction in unexpected maintenance costs. Like many other servitisation models, as the robot is leased, the onus and cost of repairing the robot would fall on the robot provider.

Consider this as an example. A medium sized manufacturer has bought an industrial robot to help with production, but after a few months the machine has broken down. On top of initial cost of purchasing the robot outright, the manufacturer would have to expend resources on hiring specialist repair technicians, purchasing replacement parts and getting the robot back in working order.

Of course, some industrial robot suppliers do provide warranty and after sales support for their machines, regardless of the method used to purchase the robot. However, purchasing through RaaS could provide smaller manufacturers with the additional reassurance they need to make the initial investment.

Purchasing through RaaS would mean all repair expenditure would be taken on by the provider. What's more, as the direct supplier of the machine in question, the service provider should be able to fix the machine quickly as they are familiar with the technology, reducing the amount of downtime experienced by the manufacturer.

Minimising the expense of unplanned maintenance would allow for even the smallest of manufacturers to concentrate funds on other parts of the business, including the potential for more automation.

Keeping it traditional

Servitisation boasts reduced maintenance and reduced upfront costs. However, purchasing industrial robots outright doesn't necessarily carry financial risks. RaaS may not suit the requirements for every manufacturer. However, there are ways to reap the benefits of this business model, while ensuring they have complete ownership of the machines operating in their facilities.

One way of reducing the likelihood of unplanned maintenance is to select the highest quality of robots before making an investment. Toshiba Machine's range of SCARA robots, for instance, have recently undergone a part rationalisation process that has streamlined the design of the machines. This simplified design ensures maintenance requirements are reduced, as there are fewer internal components which are likely to break down or fail.

By ordering an industrial robot from a reputable supplier that has been in business for 70 years, smaller manufacturers will be certain to receive a reliable high-quality product. They will also have access to a strong distribution network that will support their needs every step of the way being able to rapidly supply spare parts. Overall, even without RaaS, small manufacturers are in a strong position to start automating. ❐

If you are interested in automating your production line with a Toshiba Machine robot, cartesian, SCARA or any other from our wide range of industrial robots call us on 01707 290370 or email us at sales@tmrobotics.co.uk