

FERROBOTICS GmbH

Automated Surface Treatments

Abstract

Automated surface treatments have so far only been reserved for very large batch sizes and thus mainly for large companies. However, small and medium-sized companies also have a variety of tasks that could benefit from customized automation solutions. With the new ACF kit from FerRobotics, especially surface treatment for small and very small batches of small robots can now be carried out and thus automated simply and economically.



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Co-funded by the
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of the European Union

Introduction

For more than a decade, FerRobotics has dedicated itself to the idea of creating exactly what was long considered unthinkable: equipping robots with a sense of contact. Above all, however, this makes it capable of carrying out work that previously could only be carried out by human hands due to workpiece characteristics or small batch sizes. With the unique Active Compliant Technology, FerRobotics has succeeded in equipping robots with precisely the tactile sensitivity and exact contact force required for guaranteed process reliability.



Challenges

Above all, the Linz-based high-tech company has specialized in activities such as grinding, polishing and deburring and has established a high standard of automation with its sophisticated system packages for this problematic manual work. While it is not reasonable for the employee to work on a workpiece with constant force over a long period of time, the robot now does this effortlessly.



Robots that automatically adapt to a surface at the moment of contact work more precisely, safely and economically.

The versatile product range of end-of-arm systems keeps the presettable contact force constant and adapts even to complex surfaces. All device components are finely tuned to each other, right down to the extraction system, and are optimized for the respective processing, thus ensuring optimum process quality.

How will solve the problem?

With the new ACF-Kit FerRobotics has developed a tool for Cobots, which offers small and medium-sized companies the possibility to use the advantages of automation in a meaningful way. The latest member of the extensive product range, which has been specially optimised for the needs of flexible production, i.e. for small batch sizes, includes a wide range of end devices for surface processing and is ideally suited for almost all shapes and materials. Thanks to their modular design, the versatile and user-friendly plug & play tools can be changed over in a matter of seconds and can thus be used for a wide variety of applications within a very short time. Grinding, polishing, brushing, deburring - the applications are manifold and can now be covered with robotic support.

Ingeniously simple

But it is not only the sophisticated and simple exchange system, which meets the highest technical standards, that makes the ACF kit interesting for SMEs. Rather, the simple handling, i.e. easy assembly and simple set-up as well as quick job modulation, is decisive for uncomplicated and profitable use. After all, neither commissioning nor operation requires engineering know-how and thus expensive technician hours.

Conclusion

High-quality grinding, polishing and deburring requires experience and is also physically extremely demanding. As a result, it is becoming increasingly difficult to find experts in this field. Thus, in a world that is becoming more and more digital, the automation of processes is also essential for small and medium-sized companies. Not only to work economically and efficiently, but also to compensate for the lack of manpower and to guarantee a consistently high level of quality. With its new versatile ACF kit, FerRobotics now enables SMEs to have surface processing carried out by Cobots, even for small batches and with little implementation effort. The ACF-Kit is available immediately.



About FerRobotics

FerRobotics Compliant Robot Technology GmbH is a global leader in the development and sale of flexible and intelligent robot elements. As a technology leader, the company offers its customers and market partners top-class expert knowledge and sound experience in flexible automation. With its patented Active Contact Technology, FerRobotics delivers versatile solutions that help robots develop a sense of perfection - for every conceivable surface processing and contact-sensitive handling task.

References

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