

Automation and digitalisation

Solutions for the future are already available at WFL

Without any doubt, the pace in optimizing manufacturing through digital support and automation has significantly increased and developments towards that will accelerate in the future. Within manufacturing there are several key targets to meet in order to stay competitive and generate profitable business results in a challenging environment.



1. Reducing lead-time and avoiding errors in the production planning process
2. Virtual simulation of processes and validation before starting the metal cutting process
3. Monitoring the process during machining to collect clear and visualized data in order to identify errors and opportunities for further improvement
4. Making use of intelligent tooling that is able to communicate with the machine control and thereby optimize the process, based on know-how captured in algorithms rather than on individual experience and practical knowledge
5. Validating the manufacturing results in the machine to make sure that the machined part is correct before it is taken out of the machine
6. Monitoring the state of the equipment continuously with the purpose to proactively service the machine before failure
7. Using automation to get as many productive hours out of the machine investment as possible and to run with less per-

sonnel. This is both based on the fact that there is a big lack of skilled workforce in most parts of the world. In a more and more complex environment, it is important to reduce the risk of errors caused by manual intervention.

For many companies the development trends are very challenging or sometimes even threatening. So how to deal with all the changes and continue to operate business at the same time?

At WFL we have the ambition to take away as much complexity as possible and to guide our customers in a step-by-step approach. In our daily business we get to solve some of the most challenging manufacturing tasks and the projects very often involve a number of digital solutions as well as automation. WFL's offer is highly flexible and based on very comprehensive internal solutions. However, solutions from our partners can be provided too in order to meet our customer's requirements and preferences.

The WFL digital offer



The WFL digital offer – Additionally, WFL is providing solutions together with Siemens, Sandvik Coromant and other partners.

United Technologies von WFL und FRAI



Advantage through Automation

The acquisition of FRAI Robotic Solutions in 2018 has opened up new opportunities in providing leading automation solutions, which are tailored to the specific needs of our customers. The interest in the combination of automation and WFL Millturn machines has increased tremendously since FRAI has joined the group. For further information take a look at this website: www.frai.at.

Smart novelties in 2019

Full control over your MILLTURN

We are proud to announce that we dispose of a completely new process monitoring system with intelligent adaptive control functions. With WFL iControl you can further enhance the efficiency of your MILLTURN. WFL iControl protects your machine even during unmanned production, as it is working with a multilevel monitoring logic and reacts when:

- Exceeding a collision limit
- Exceeding a process near limit, which is subsequently being learned
- Significant fast force changes occur (dynamic breaking control)



One application – all data

In 2018, the process monitoring solution WFL DATA ANALYZER was presented at AMB in Stuttgart for the first time. Many customers have decided to install this product and we are proud to announce that two additional functions are ready now:

- Tool Monitoring for monitoring of individual tools with information on wear, period of application and longevity.
- Service Monitoring for a perfect preparation of possible service intervals for all machines and therefore prevents standstills.



Intelligent tools – the future of manufacturing

With a world record of internal machining with 18xD, long, damped boring bars have already been offered for the most challenging internal machining operations for several years.

Recent developments of Sandvik Coromant include digital supported boring bars with embedded sensors and smart software that has been integrated in the control of the machine tool. This solution not only allows for even higher productivity and quality, but also leads to an increase in process safety. WFL and Sandvik Coromant worked closely together to provide a continuous power supply for digital tooling, which until now has been solved with a battery. The new power solution enables a trouble-free manufacturing process.

