

Flexible production cell for final machining



Supfina - Your Solution Provider

Partner for economical Fine Machining

As one of the world's leading solution providers for high-precision machining processes, Supfina accompanies you on your specialized path to an economically manufactured workpiece. With our decades of experience, we support you as early as the product development stage with regard to quality parameters, process technology, and prototyping. Thanks to innovative automation, our systems also allow for full flexibility when integrated into your existing production structure. Whether you require a single system or a fully automated machining cell with the integration of value-adding processes, the right solution can be implemented for every requirement.

Talk to us about your individual processes and benefit from innovative systems, clever automation options, or full integration into your machining process with our comprehensive range of services.



Robot processing automation and machining

Linked to success

Standalone Machine · Interlinking · Robot Cell

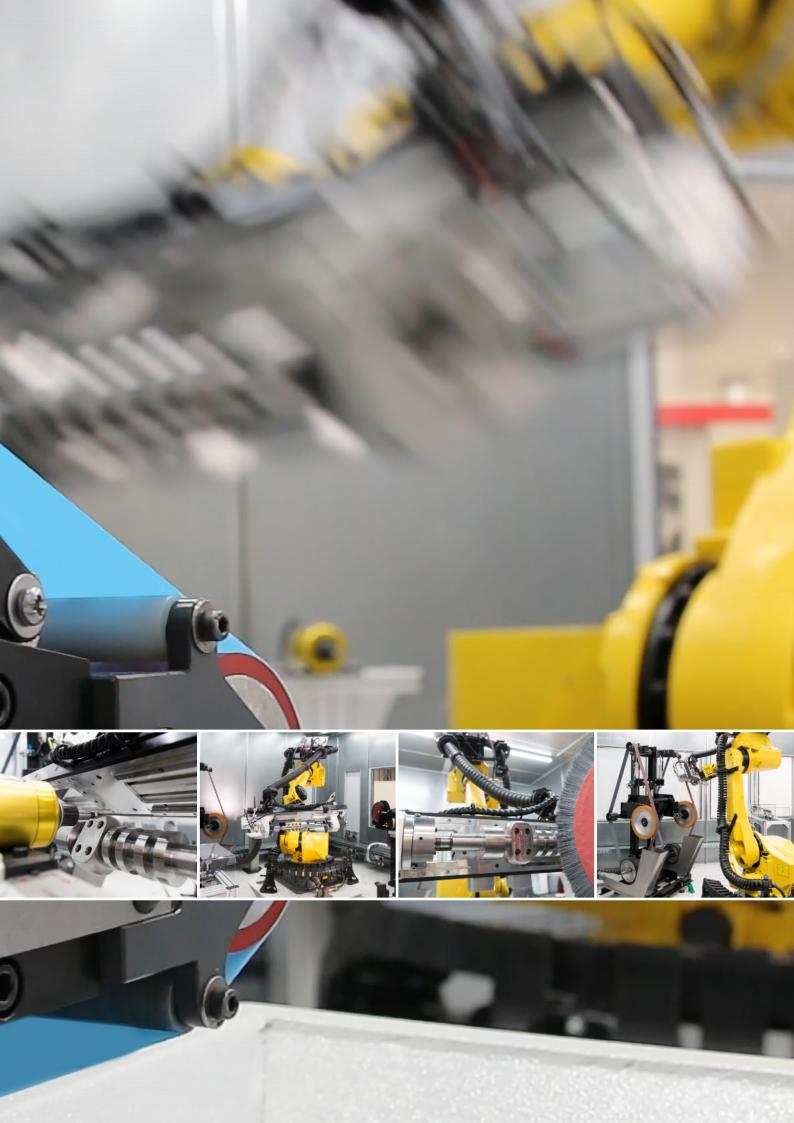
In addition to precision, economic efficiency is the focus of every production. Supfina has a decades-long history of providing individual solutions. Whether it's automated loading and unloading by gantry systems, interlinking of systems in existing production structures, or the use of innovative/robot-controlled process automation – suitable solutions for different production conditions are developed in close cooperation with our customers.

Supfina is also setting standards in terms of digitization. Thanks to smart networking and IoT connectivity, systems can be better coordinated to optimize maintenance and reduce wear. With Supfina's full integration of assets, intelligent automation, and digital connectivity, we can boost your production's profitability and overall equipment effectiveness (OEE).



Machining Systems interlinking







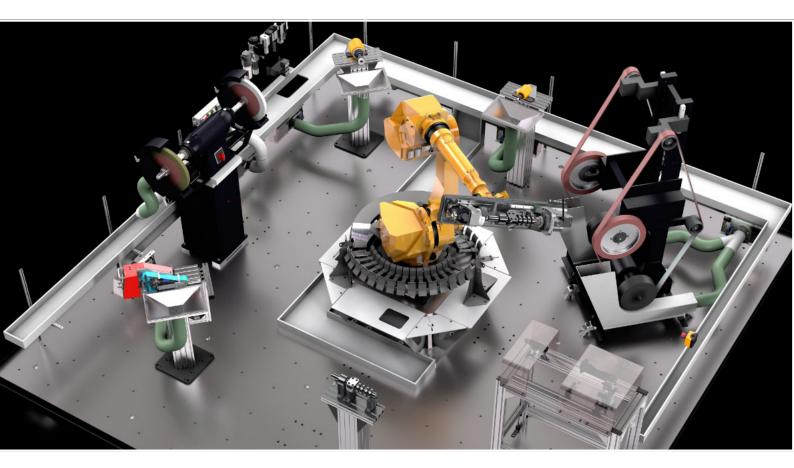
Production fully automatic

With the R-Cell®, Supfina provides an innovative production cell that easily meets all of these requirements. In our modular robot cell, a large number of processing stations can be arranged according to individual requirements and, thanks to its flexible design, can be expanded or adapted at any time.

This not only ensures increased flexibility and faster reaction times, but also the potential for great savings thanks to an efficient production in a small space.

From consulting, planning, implementation and programming, to commissioning and service – Supfina accompanies you as an integrated solution provider on your way to the future of production.



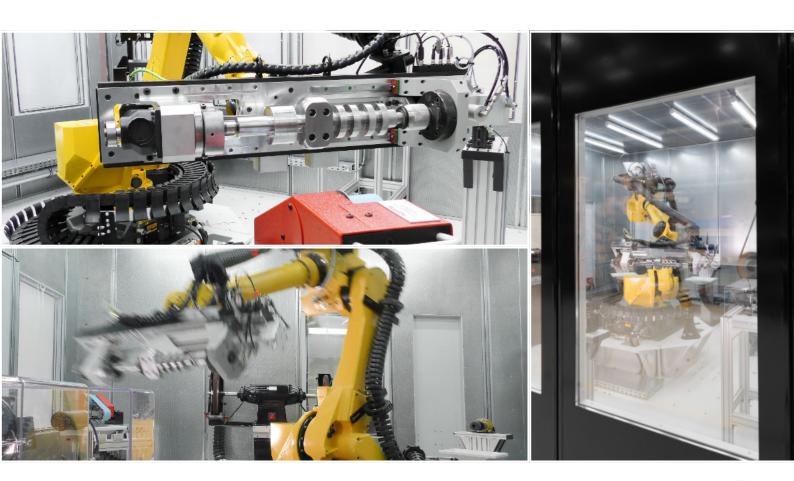


Everything from one source

Turnkey solutions created by Supfina

The integration of value-increasing processes as well as upstream and downstream manufacturing steps is all part of Supfina's core competencies. Our customers benefit from decades of experience when it comes to designing economical and lean production processes.

A comprehensive approach is just as important to us as a distinct customer orientation. From consulting to final acceptance and reliable service, it's possible for our customers to receive everything from a single source.











Flexibility as customer advantage

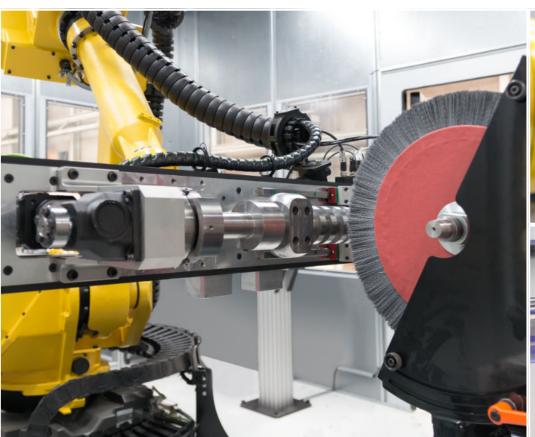
For a future proof investment

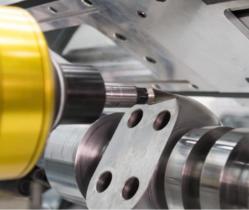
With the Supfina R-Cell® you will benefit from the following features:

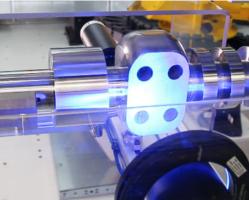
- Processing stations that are easily flexible and interchangeable
- Selecting and deselecting individual processing stations for different workpiece programs
- Free definition of the processing sequence
- Recipe management per workpiece in the machine control

Supfina supports the integration of new workpieces on your system:

- Path and processing planning by means of CAD
- Planning software for various robot systems
- Cycle time simulation
- Basics on digital twins



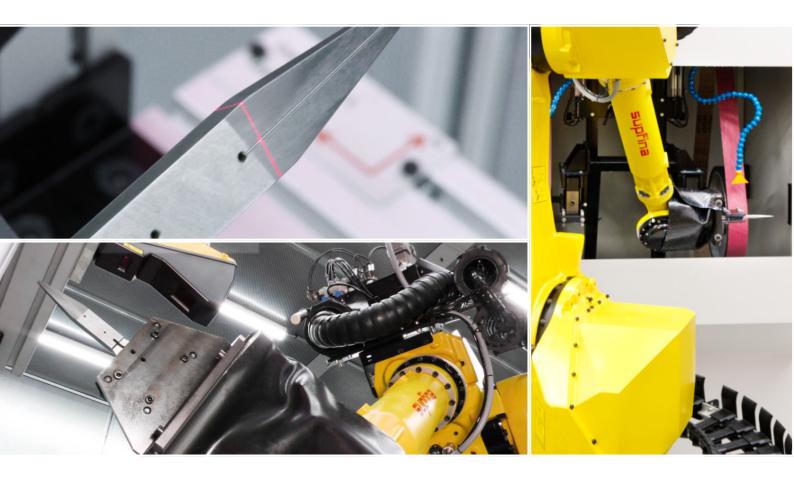




Convincing advantages

The modular Supfina R-Cell® can be customized in a variety of different sizes with any of the following machining processes:

- Superfinishing
- Deburring
- Grinding
- Milling
- Polishing
- Monitoring
- Laser Marking/Engraving
- Cleaning
- Vision System
- Measuring and Error Proofing
- Precision Loading Trays

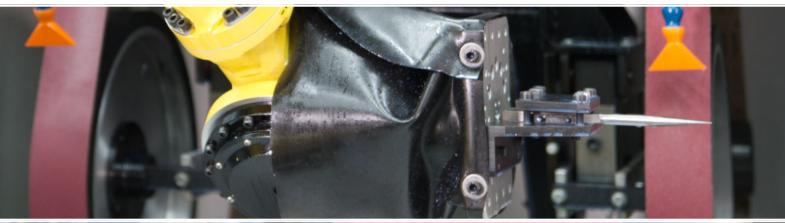


Unlimited possibilities

The right configuration – no matter the machining process

The processing of hand tools is an example of one of the versatile applications of the R-Cell®. For the economic production of pliers, wrenches, socket wrench inserts and many other tools, an automated grinding process for machining of high-quality forging blanks is indispensable. The process-safe alignment and recognition of the workpieces is the basis for perfect functional surfaces in terms of shape, surface and symmetry.

The measuring of the blank geometry with regard to allowance and hardening distortion of each individual workpiece before grinding coupled with a grinding process with target/actual value comparison ensure consistently high final quality even with varying input qualities. The rejection of faulty blanks (crack formation, undersize, offset) is fully automatic.





Convincing advantages

- Flexible and modular building block system offers sustainability for product changes
- Multi-step machining for different component requirements
- Intelligent module arrangement for shortest cycle times and stable process conditions
- Project-integrated solutions/interfaces for quick and easy loading and unloading
- Digitization package with freely selectable IoT options to increase machine availability
- Targeted process control/optimization through optional SPC rejection
- Optional: Cleaning process and NIO rejection



Solutions · Services · High Precision Abrasive Machining

Supfina offers its clients customized, state-of-the-art machines and equipment for superfinishing, double-disk grinding, fine grinding, flat finishing, and automation — each backed by innovative solutions and comprehensive services.

As a modern company, Supfina offers customers integrated and innovative solutions including comprehensive services.

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