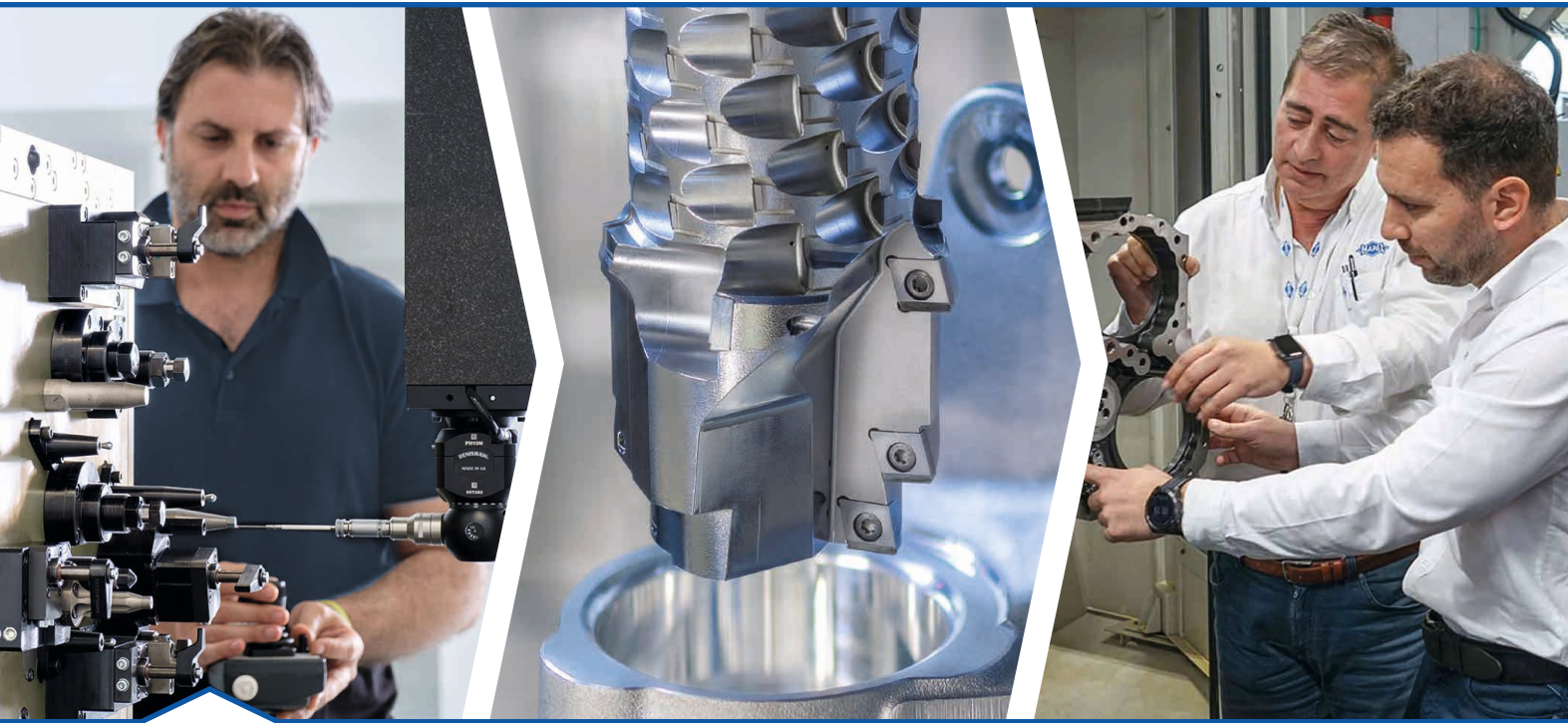




Your technology partner for cost-effective machining

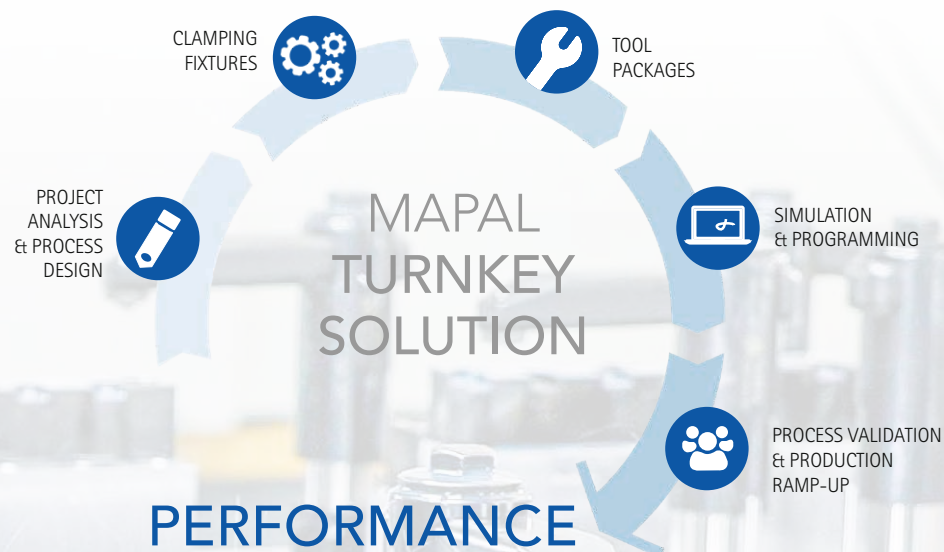
TURNKEY SOLUTIONS

Turnkey – Complete solutions for manufacturing

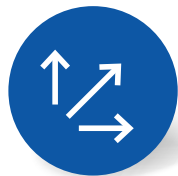
MAPAL now offers a comprehensive range of services for the holistic planning and implementation of manufacturing processes. From project analysis and the design of tools and fixtures to commissioning and start-up support – all components are optimally coordinated and come from a single source.

The close integration of engineering, tool technology and fixture solutions results in economical, reliable and high-precision manufacturing solutions. Customers benefit from maximum planning reliability, reduced interfaces and a central point of contact – for efficient and future-proof production.

From the initial idea to successful implementation, MAPAL supports its customers with technical expertise, clear processes and a strong network. The combination of machine, tools and fixture is individually tailored – for maximum efficiency and minimum interfaces.



WHY MAPAL?



Everything from a single source

At MAPAL, customers get everything from a single source and benefit from the tool and process expertise of a specialist.



Partnership

MAPAL's activities are based on close, transparent dialogue with all customers and, as a result, long-term partnerships on equal footing.



Quality and precision

MAPAL tools stand for the highest quality and cost-effectiveness. They are characterised by excellent dimensional accuracy and maximum precision.



New planned production

Based on raw and finished part drawings and machine data, the manufacturing task is analysed in close cooperation with the customer and effective machining strategies are developed for all steps.



Conversion to new components

Continuing to use existing machines saves time and money. MAPAL's expertise guarantees maximum process reliability. MAPAL provides individual support according to customer requirements and, on request, assumes complete responsibility for the conversion.

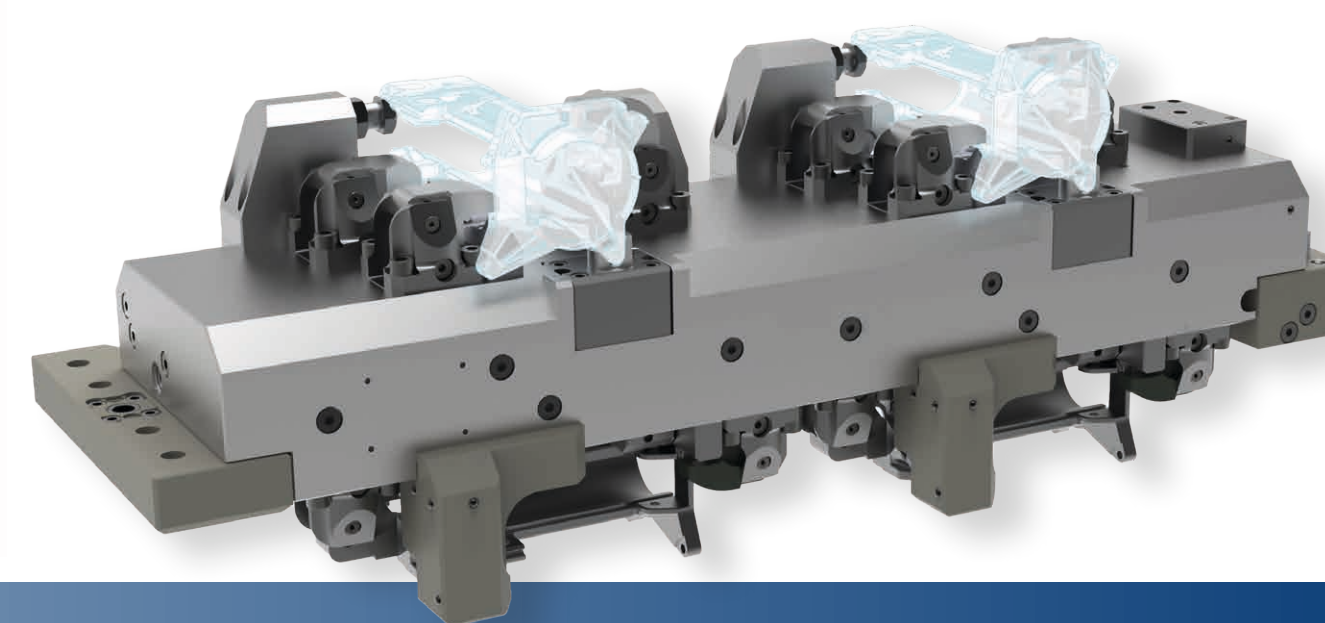


Efficient machining processes

Introducing modern machining strategies and innovative tool solutions into ongoing production processes? MAPAL takes on this task for its customers. The result: longer tool life, improved component quality and increased productivity.

INITIAL SITUATION

MAPAL Turnkey solutions – efficiency through process responsibility



MAPAL assumes complete responsibility for the manufacturing process – from planning to series production. Through the precise coordination of tools, fixtures and machine parameters, MAPAL achieves stable processes, high cutting data and minimal cost per part.

Close cooperation with machine tool builders and in-depth application expertise ensure maximum productivity and a fast return on invest (ROI). As a technology partner, MAPAL stands for technical competence and sustainable manufacturing reliability – and is the perfect partner for demanding turnkey projects.

PROJECT ANALYSIS & PROCESS DESIGN

- Project analysis
- Feasibility study
- Cycle time analysis
- Development of machining process
- Definition of clamping fixture



CLAMPING FIXTURE

- 3D and 2D design
- Production and assembly
- Dimension and function testing
- Collision analysis
- Technical documentation



TOOL PACKAGE

- Selection of the appropriate tool technology
- 3D and 2D design
- Production, assembly including presetting
- Tool documentation
- Delivery of the assembled tool set



SIMULATION & PROGRAMMING

- Cycle time study
- NC programme creation
- Simulation & collision check
- Parameter optimisation
- Implementation of a customer-specific programme structure



PROCESS VALIDATION & PRODUCTION RAMP-UP

- Verification of process capability (CPK analysis)
- Documented customer acceptance & series release
- Support during production ramp-up
- Training of operating personnel
- Maintenance & support



Complete process solutions – all advantages at a glance



PERFORMANCE

Cycle time optimisation and 99 % collisions reduction between fixture and tools



RESULT GUARANTEE – CPK

Analysis stability on production process



INVESTMENT OPTIMISATION

Focus on the best integrated fixture/tools solution: 15-20 % production cost reduction



ONE PARTNER

Integrated design for tools, fixture and cnc-programme development



Discover tool and service solutions now that will put you ahead:

BORE MACHINING

REAMING | FINE BORING

DRILLING FROM SOLID | BORING | COUNTERSINKING

MILLING

CLAMPING

TURNING

ACTUATING

SETTING | MEASURING | DISPENSING

SERVICES

FOLLOW US

