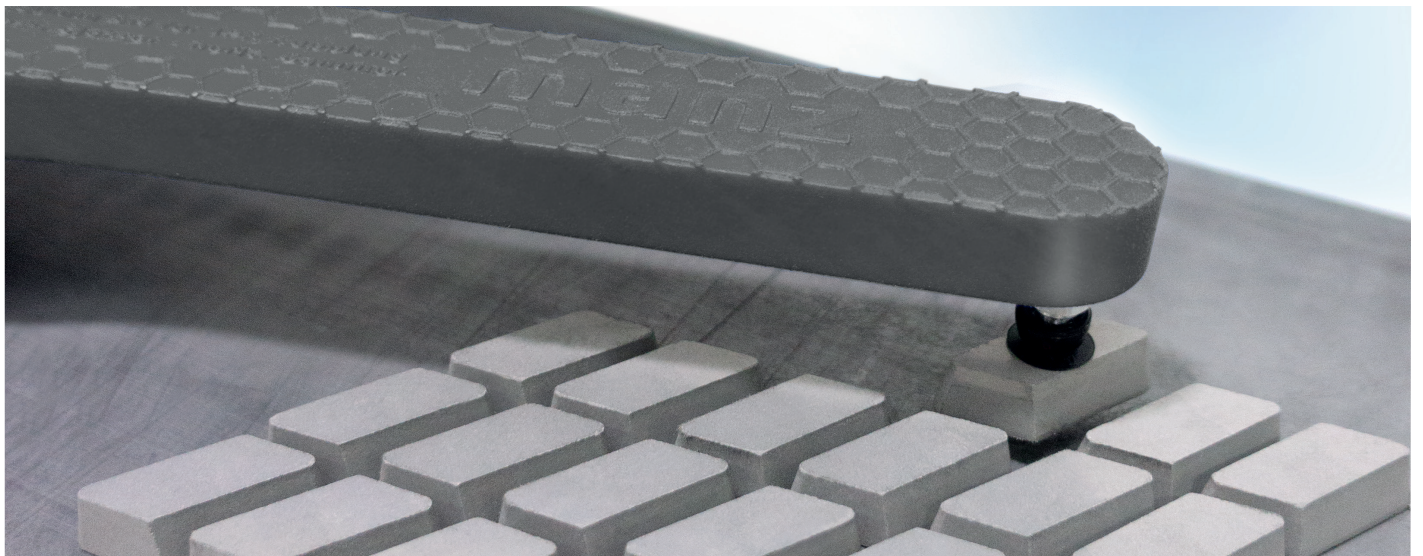
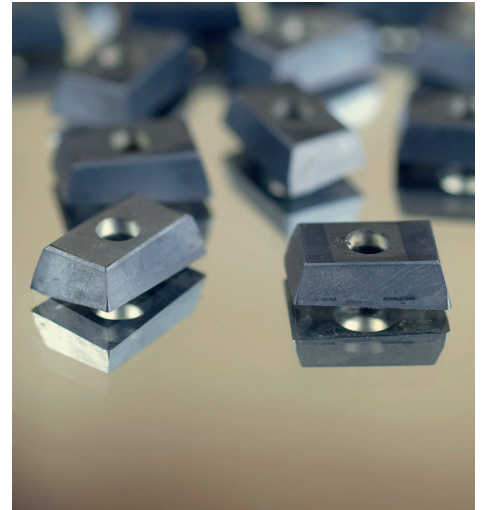




**CPA 800**



# CPA 800 – Carbide Press Automation

**For constant product quality at maximum uptime**





## Carbide Press Automation CPA 800 – MANUAL SETUP IS A THING OF THE PAST



### Manz AG

Established 1987  
Headquarters in Reutlingen, Germany.  
Other locations in Slovakia,  
Hungary, Italy, China, Taiwan, the USA  
and India.

### Employees

approx. 1,400 employees worldwide,  
including around 500 engineers

### Core technologies

Automation  
Metrology  
Laser processing  
Wet chemistry

## CPA 800 – the next level in carbide automation

THE *CPA 800* FROM MANZ REDEFINES THE BOUNDARIES OF AUTOMATION IN CARBIDE MANUFACTURING. FOR PROFITABLE MANUFACTURING AND CONSTANTLY HIGH PRODUCT QUALITY – EVEN FOR SMALL BATCH SIZES.

Whether tools for cutting, roadbuilding and mining or wear and special-purpose parts: decreasing batch sizes while increasing product complexity call for new, innovative approaches in the manufacturing of powder press parts. The smaller the production quantity, the more often changeovers are required. Common methods, such as constantly decreasing cycle times, fall short. How much profit you make is determined by increasingly fast conversion processes. And this is where the *CPA 800* comes in.

The fully redeveloped CPA series is based on 30 years of cumulative experience held by Manz in the field of carbide automation combined with the core competencies in metrology and process technology. The result is a highly automated and simultaneously robust machine that is setting new standards with its intelligent features.

One highlight is the Gripper Management System, which is unique in the industry for its flexibility and precision. The practical User Experience Design makes the machine easy to operate. Data-driven setup processes and integrated metrology also ensure short throughput times and consistently high product quality, even with highly complex small batches. **The advantage for you: Approximately 50 percent less downtime resulting in significantly increased overall equipment efficiency (OEE).**

We assist you in setting up and optimizing your carbide automation and will help you getting ready for future-proof operations already today with the *CPA 800*.



### Smart automation for more profitability

The *CPA 800* combines high throughput and short setup times. This means that revenues remain high even with smaller batch sizes.

# CPA 800 – Six drivers for less downtime and more profit

WITH THE CPA 800 SERIES MANZ OFFERS A HIGHLY EFFICIENT SOLUTION FOR HANDLING POWDER PRESS PARTS. BENEFIT FROM GROUNDBREAKING TECHNOLOGIES AND WELL-KNOWN MANZ STRENGTHS SUCH AS OUR STRONG SERVICE ORIENTATION.

The CPA 800 series is designed to maximize system availability and minimize downtimes. It does this by using smart technologies and innovative concepts, such as in metrology, gripper management and operator guidance. Combined with our comprehensive services, we offer a solution that will allow you to efficiently master the increasing requirements for precision and project diversity.



### RELIABILITY

The well-engineered machine design and the use of proven standard components make for particularly stable and low-maintenance system operations. Unscheduled shutdowns are minimized and efficiency is maximized.



### SERVICE AVAILABILITY

24/7 availability, teleservice with technicians, needs-based service packages and support over the entire service life of the machine – from the feasibility study to production support – allow you to take full advantage of performance potential.



### FLEXIBILITY

About 40 product type-specific grippers and automated teaching allow for efficient handling of a full range of product geometries and the rapid implementation of customer requirements.



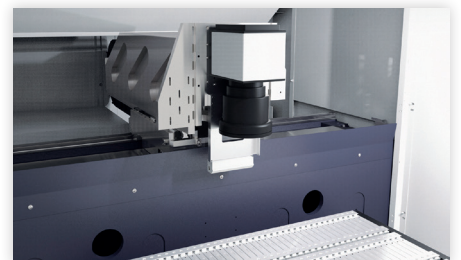
### THROUGHPUT

The automatic calculation of product-related parameters expedites setup and increases the throughput of the system. The aggregation of inter-related parameters enables further reduction of setup costs.



### QUALITY

The high-level automated machine setup and digital assistance systems reduce manual interventions and thus also the potential for errors. The result is maximum process reliability while also allowing for strict tolerance specifications to be met.

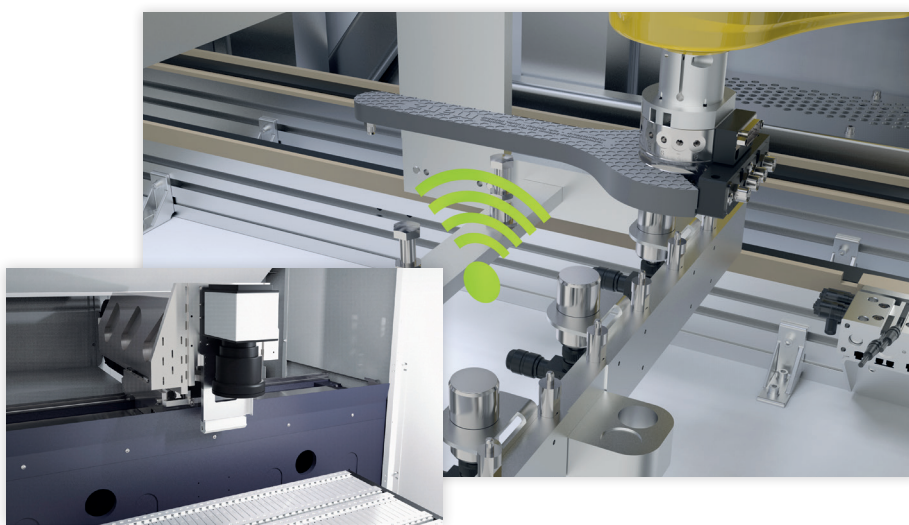


### PRECISION

The Vision System for camera-based positioning of powder press parts ensures precision when placing the sintered plate. With the Part Placer, you can specify on the HMI how the parts should be set down. The use of form sintering plates (e. g. with pins or webs) is possible without additional effort.

# CPA 800 – Simpler setup. Faster conversion.

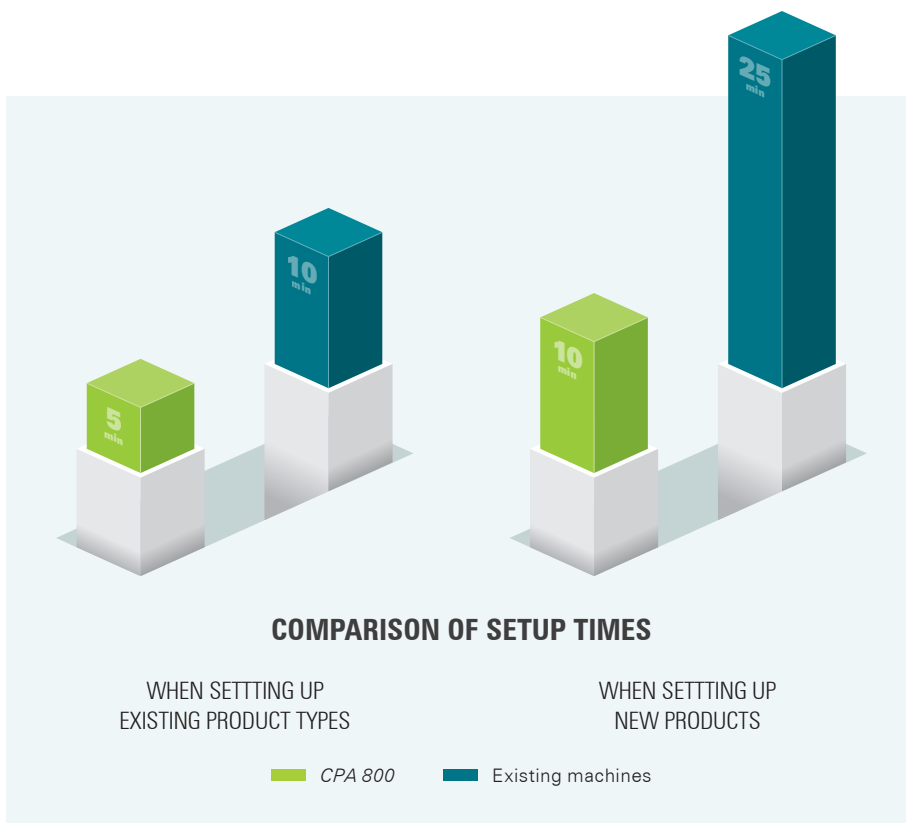
THE CPA 800 SERIES MAKES COMPLEX THINGS SIMPLE. ALLOWING YOU TO COMPLETE THE MOST CHALLENGING JOBS QUICKLY AND RELIABLY WITH MAXIMUM QUALITY.



## GRIPPER MANAGEMENT SYSTEM

The Gripper Management System with automated teaching and a wide range of gripper types ensures speed during retooling as well as reliable results.

When changing products, the system uses newly calculated or previously saved parameters to suggest the right gripper for precise handling. All the user has to do is confirm the gripper selection. This not only saves time but also ensures consistent quality – regardless of who is operating the machine.



Production start (in minutes)  
CPA 800 vs. existing machines

## USER EXPERIENCE DESIGN

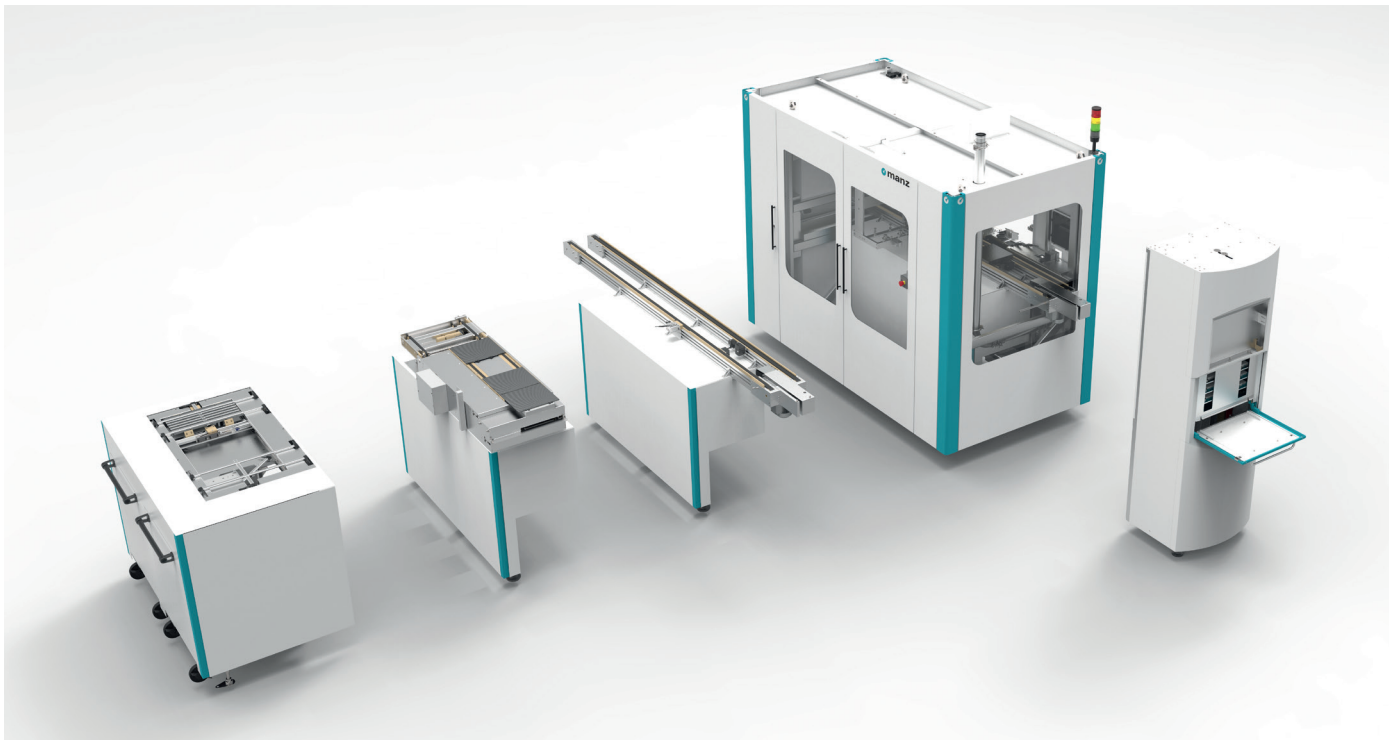
The intuitive user concept facilitates quick and error-free setup of the machine. A user assistant makes input suggestions and guides the user along the shortest path through the setup steps. This avoids costly user errors and reduces training costs.

In addition, Manz has significantly reduced the number of parameters required for precise machine configuration. Fewer inputs provide the user with a clear overview and speed up conversion.



## CPA 800 – Flexible configuration for precision-tailored automation

THE CPA 800 SERIES ADAPTS FLEXIBLY TO MEET VIRTUALLY ANY REQUIREMENTS. YOU DETERMINE WHAT YOU NEED. WE PROVIDE CARBIDE AUTOMATION THAT IS PRECISELY TAILORED TO YOUR NEEDS.



Based on standard modules, the CPA 800 offers a diverse range of different configuration options. Only the housing, signal lamp, control panel and electronics are pre-defined. All of the other components can be selected using the modular principle – for your specific desired model.

### FEED-IN SYSTEMS

for uninterrupted loading and unloading of the press and the independent running of the carbide automation.

- Single conveyor belt (optionally with integrated sinter plate magazine)
- Double conveyor belt (input and output on two levels)
- Trolley for plate stacks

### ROBOTS & GRIPPERS

for efficient handling.

- From six-axis Scara robots to linear kinematics
- Around 40 different grippers
- Customer-specific grippers upon request

### METROLOGY AND VISION SYSTEMS

for quality assurance during the manufacturing process.

- Integrated Vision System for sintered plate and part measurement
- Camera-based part positioning

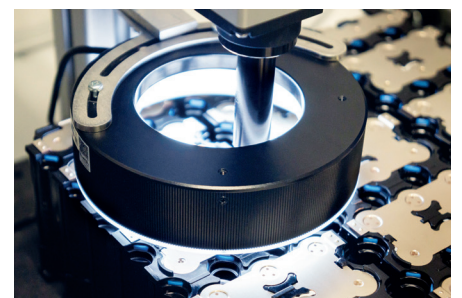
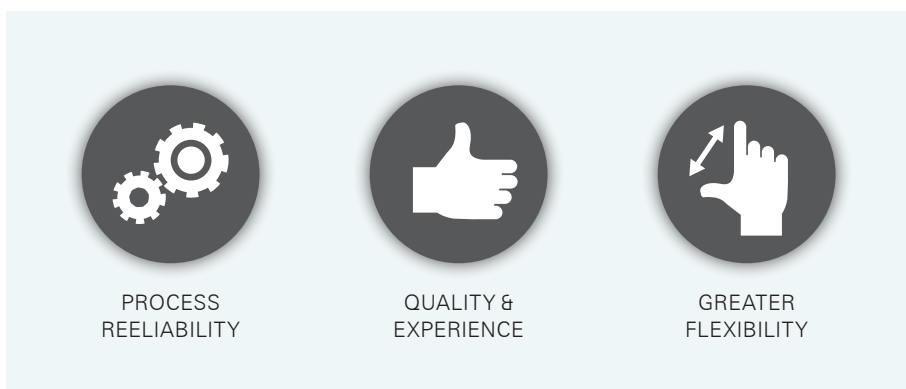
### PERIPHERAL DEVICES

for a perfect end product.

- Deburring station (mechanical, pneumatic)
- Weighing station for precisely measuring part weights

## Your advantages at a glance

THE CPA 800 SERIES COMBINES KEY ADVANTAGES TO PROVIDE CONTINUOUSLY HIGH QUALITY AND MAXIMUM AVAILABILITY.



The integrated metrology ensures maximum precision in handling powder press parts.

CPA 800 SERIES – CARBIDE AUTOMATION FROM THE TECHNOLOGY LEADER TO SUSTAINABLY INCREASE COMPETITIVENESS

### SERVICE EXCELLENCE

24/7/365 availability and on-site service, teleservice with technicians, needs-based service packages and support over the entire service life of the machine – from the feasibility study to production support – allow you to take full advantage of the performance potential.

- User training (including on-site instruction)
- Service & maintenance (individual components)
- Replacement and wear parts (shortest delivery times)
- Full-service and operator model (transfer of maintenance or operating responsibility for the system)

### INVESTMENT SECURITY

The machine can be individually adapted and easily upgraded. It is fully equipped for smart production and Manz is consistently working on advancing automation to achieve fully autonomous job processing.

### SMART PRODUCTION

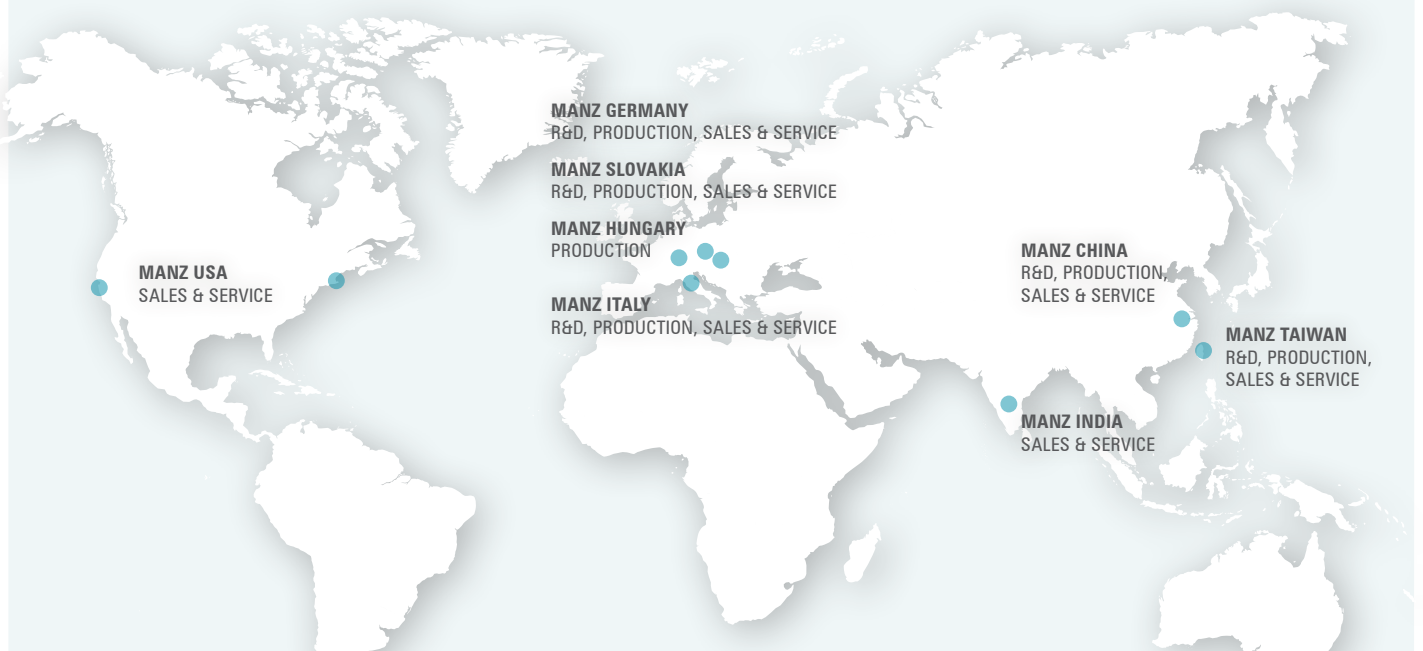
The Manz Smart Production Kit enables smart data use to systematically increase machine utilization and product quality. By gathering and analyzing machine and operating data (e. g. on status and output), processes can be monitored in real time and optimization potential can be identified. Features include:

- Supply and analysis of performance data – from individual machines to the complete production line
- Dashboards – important KPIs (e. g. availability, output, good parts) graphically presented as a summary
- Forecast function for improved production planning



The user monitor always shows the operator which gripper is being used and where.

## Our Locations



**Manz AG**  
Steigaeckerstrasse 5  
72768 Reutlingen

**Tel.:** +49 7121 9000 0  
**Fax:** +49 7121 9000 99

**www.manz.com**  
**info@manz.com**