



simply genius

ZK COMPANY



Company

- Medium-sized Company
- Managing Directors: Armand Bayer, Holger Friedrich
- Development, production and sales of EDM machines, handling systems and software solutions
- Manufacturing site: Brensbach im the Odenwald / Germany
- Sales network: Europe, India, East Asia and Central and South America

OUR VISION



ZK SOFTWARE

ZK EDM

ZK AUTOMATION

Vision

“As a pioneer in cavity sinking and the automation of cavity sinking EDM machines, we are consistently pursuing our vision of developing cross-technology automation solutions and selling them globally..”

OUR MISSION



ZK SOFTWARE

ZK EDM

ZK AUTOMATION

Mission

Our focus is always on the needs of our customers and the benefits for them.
We listen and we ask questions.

We understand the challenges and requirements of our customers and remain in constant dialogue with them. As consultants to our customers, we see ourselves as partners at the same level.

ZK INGENUITY & COURAGE



"How can we achieve a reliable result in the shortest amount of time with minimum effort?"

We have been asked this question almost every day for the last 30 years.

UNSERE CORE COMPETENCIES



We continue to provide the answer with solutions for eroding, handling and software-controlled process optimization in tool and mould making. To achieve this, we combine innovative technologies with a wealth of experience, bringing hardware and software into an unrivalled, efficient interplay. Through precision, quality and process transparency, we support you on the path to modern production.

ZK EDM – genius SERIES



- High-quality EDM machines
- genius machine control - user-orientated and fast programming
- State-of-the-art generator technology with low-wear gauge-block tuning for graphite
- C-axis as standard, simultaneous 8-axis operation
- Steplessly movable dielectric tank (without emptying) on all machines

ZK NOVA – THE NEW DIMENSION



New machine base for the highest demands on speed, precision, stability and flexibility

Next dimension in machine control – geniusNOVA

Latest platform of the IMtec erosion generator

ZK NOVA – MACHINE BASE



Thermosymmetric mineral casting construction

Acceleration up to 1G 10 m/sec²

Rapid traverse speed of 20 m / min in X/Y/Z

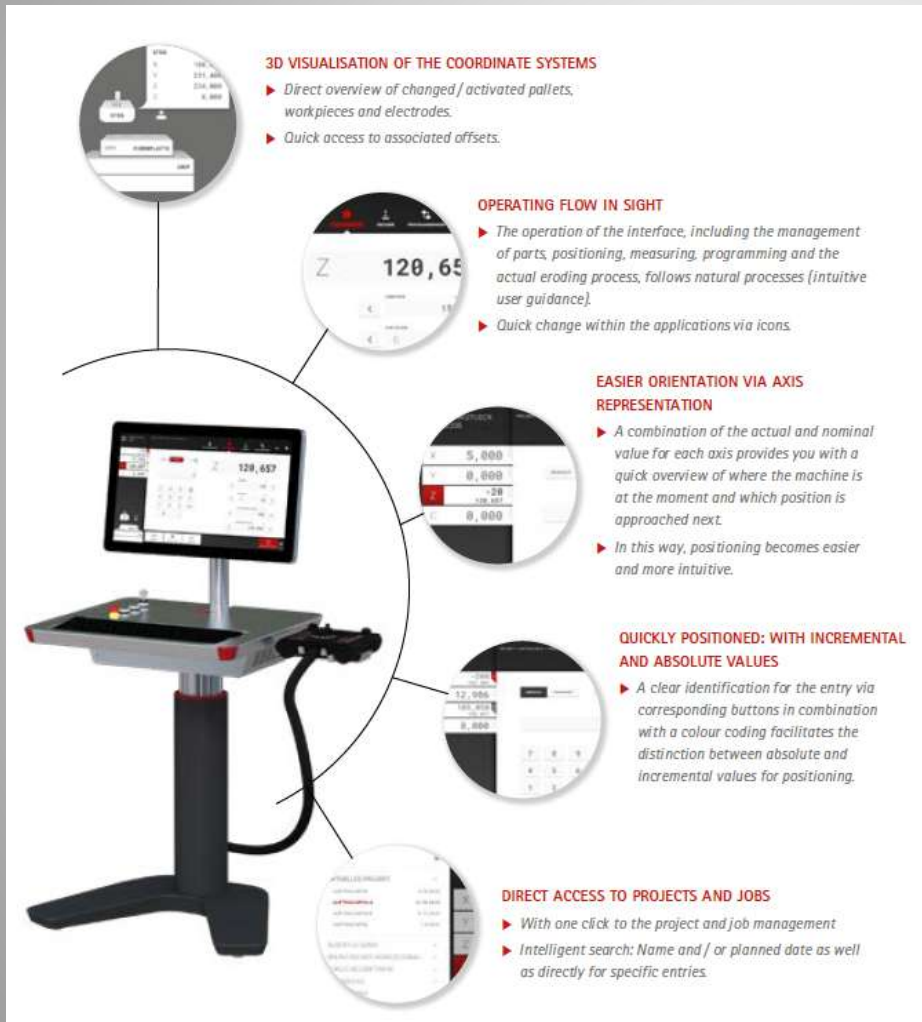
Fully encapsulated and integrated measuring systems

Integrated switch cabinet cooling (standard)

Tempered machine frame (option)

Manual or automatic centralised lubrication by SKF (option)

ZK NOVA – MACHINE CONTROL



3D VISUALISATION OF THE COORDINATE SYSTEMS

- ▶ Direct overview of changed / activated pallets, workpieces and electrodes.
- ▶ Quick access to associated offsets.

OPERATING FLOW IN SIGHT

- ▶ The operation of the interface, including the management of parts, positioning, measuring, programming and the actual eroding process, follows natural processes (intuitive user guidance).
- ▶ Quick change within the applications via icons.

EASIER ORIENTATION VIA AXIS REPRESENTATION

- ▶ A combination of the actual and nominal value for each axis provides you with a quick overview of where the machine is at the moment and which position is approached next.
- ▶ In this way, positioning becomes easier and more intuitive.

QUICKLY POSITIONED: WITH INCREMENTAL AND ABSOLUTE VALUES

- ▶ A clear identification for the entry via corresponding buttons in combination with a colour coding facilitates the distinction between absolute and incremental values for positioning.

DIRECT ACCESS TO PROJECTS AND JOBS

- ▶ With one click to the project and job management
- ▶ Intelligent search: Name and / or planned date as well as directly for specific entries.

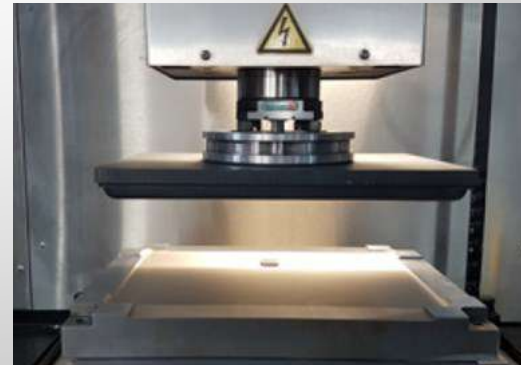
- New user interface in an innovative design
- Control panel electrically height-adjustable, Windows industrial PC and 22-inch touchscreen
- Digital handwheel for manual target positioning, ergonomically shaped, fully integrated 4-axis joystick control and integrated LCD display (availability of all important setup functions)

ZK EDM – PRIORITY SURFACE



... large-format homogeneous surface
Samsung cover

Workpiece	200 x 300 mm
Workpiece material	steel 2073
Electrode material	graphite SGL R 8710
No. of electrodes	2
Surface	VDI 22 / Ra 1.2 μm



ZK EDM – SIMULTANEOUS 8-AXIS OPERATION



The intelligent control system enables you to control **8 axes synchronously as eroding axes**. A real plus for you if you have to process complex geometries or free-form shapes. This allows you to control the optimisation of processes with large quantities easily and efficiently.

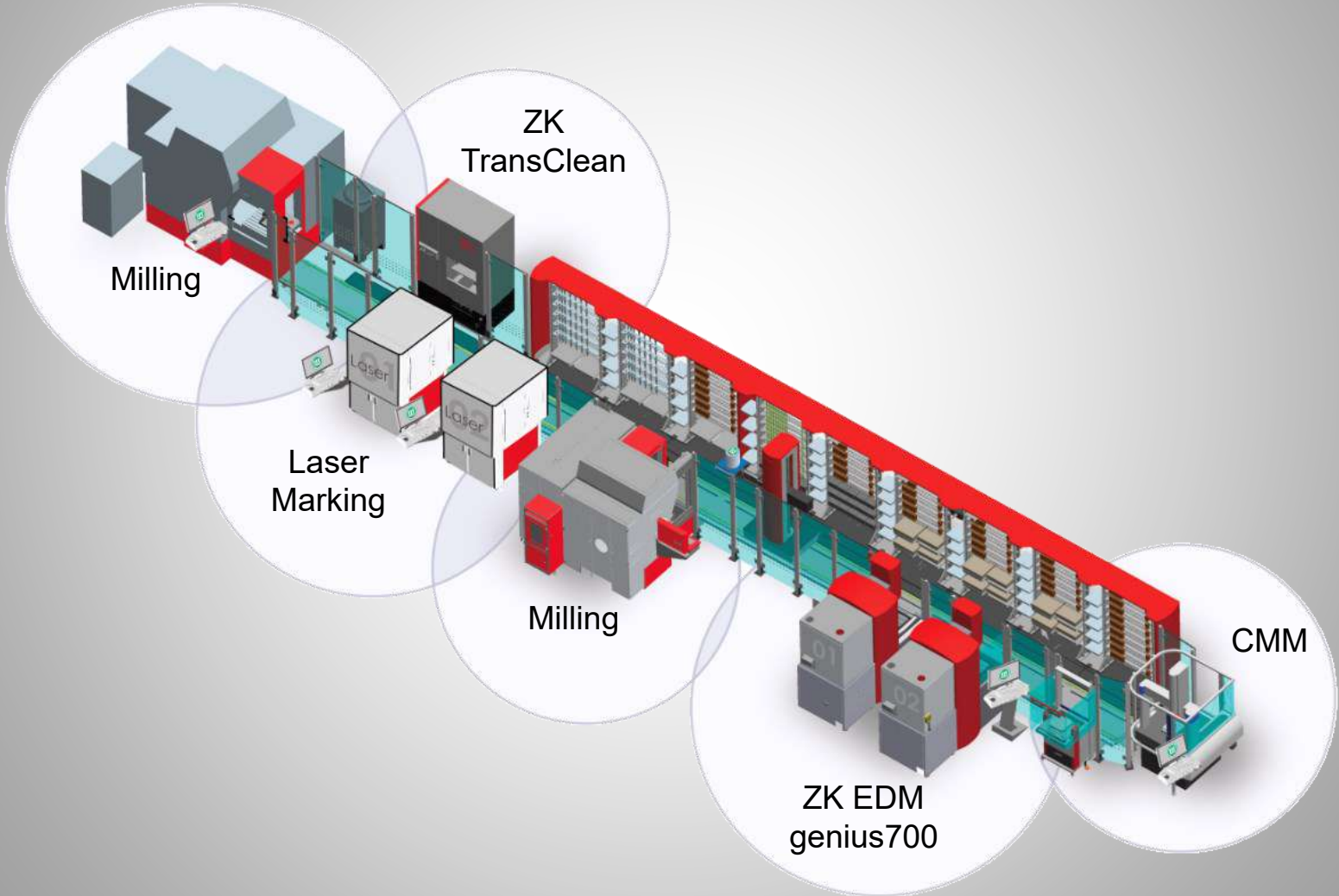
ZK AUTOMATION



ZK AUTOMATION

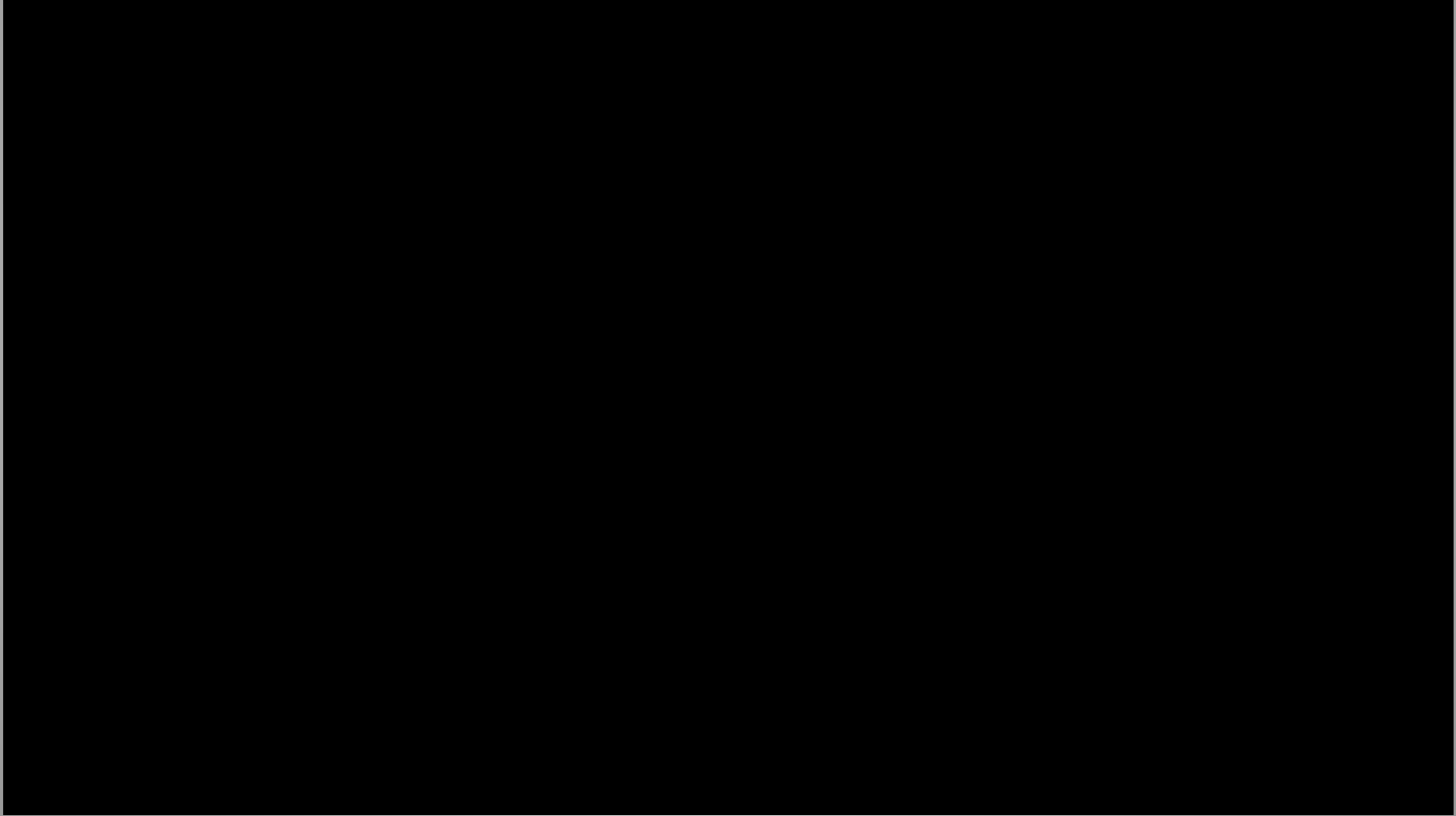
- Chameleon family - Linear or compact systems for single or multi-machine automation
- Modular and flexible - individually configurable for your requirements
- Transfer weight up to 250 kg / reach up to 2,700 mm
- Maximum efficiency with flexible production cells, fully automatic across multiple processes with minimum space requirements

ZK AUTOMATION - FMC





ZK AUTOMATION



ZK 24/7 – SMART SOLUTIONS

CAD/CAM

Software

Handling

Automatisch
Fräsen

Automatisch
Messen

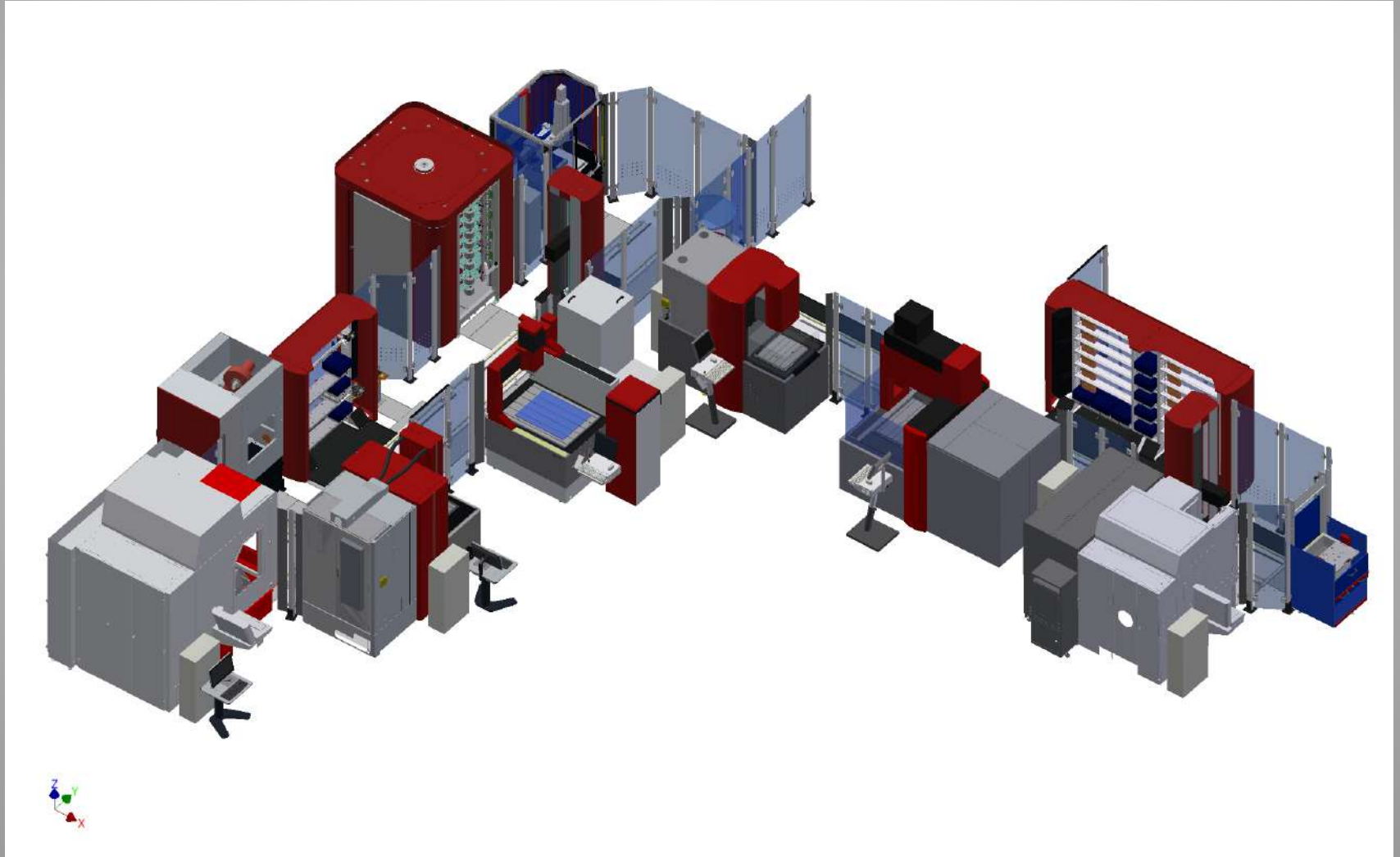
Automatisch
Erodieren

Automatisch
Reinigen

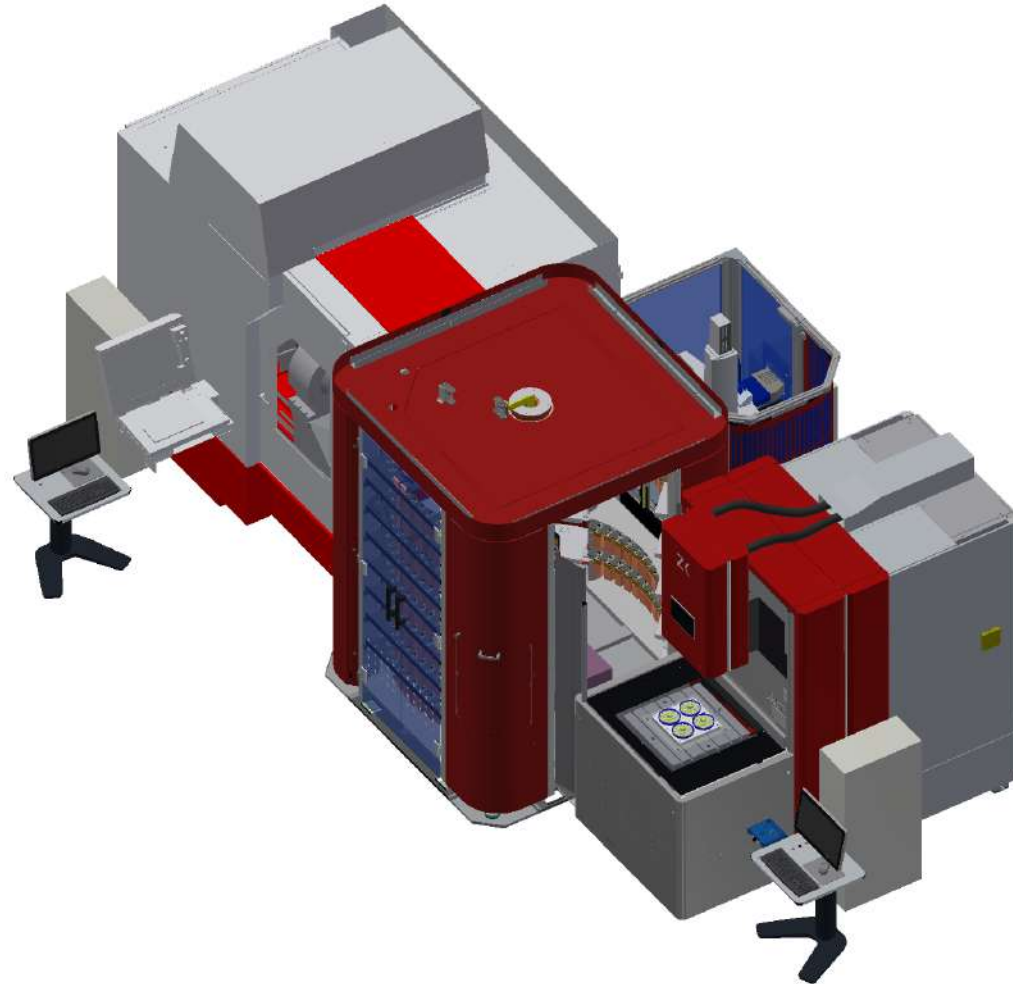
Automatisch
Messen



ZK AUTOMATION - LINEAR



ZK AUTOMATION - QUAD



ZK AUTOMATION – ROTATING MAGAZINE



Technical Data

Overall size (W x D x H)

Weight

No. of storage spaces for electrodes

Max. electrode weight

No. of storage locations for pallets

Max. transfer weight for pallets

Max pallet size

2026 x 2026 x 2575 mm

Ca. 2000 kg (Basic)

64Stk./Ebene EROWA ITS50, max. 512 pc.

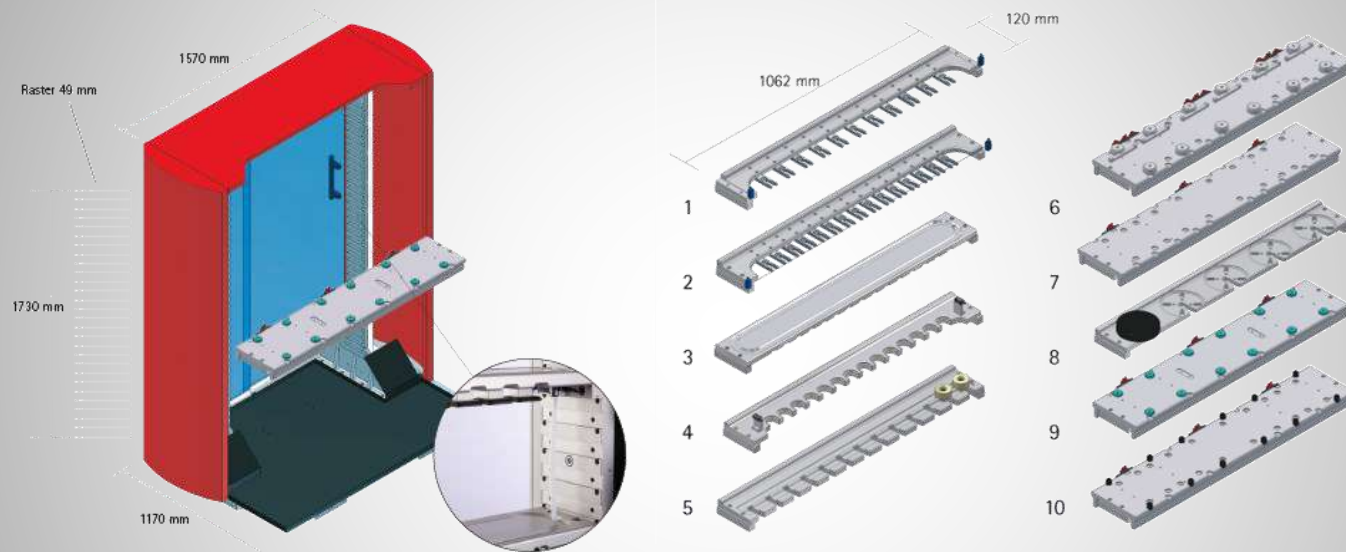
8kg

8 Stk. EROWA UPC 320

120 kg

320 x 320 mm

ZK AUTOMATION – FLEXIBLE SHELF SYSTEM



The Chameleon Handling System works with the standard clamping systems:

- System 3R Dynafix/ Macro
- EROWA ITS / PowerChuck / UPC / PalletSet W
- PARTOOL PowerGrip
- Hirschmann H 8 11.32

ZK STANDARD INTERFACES



GF Machining Solutions

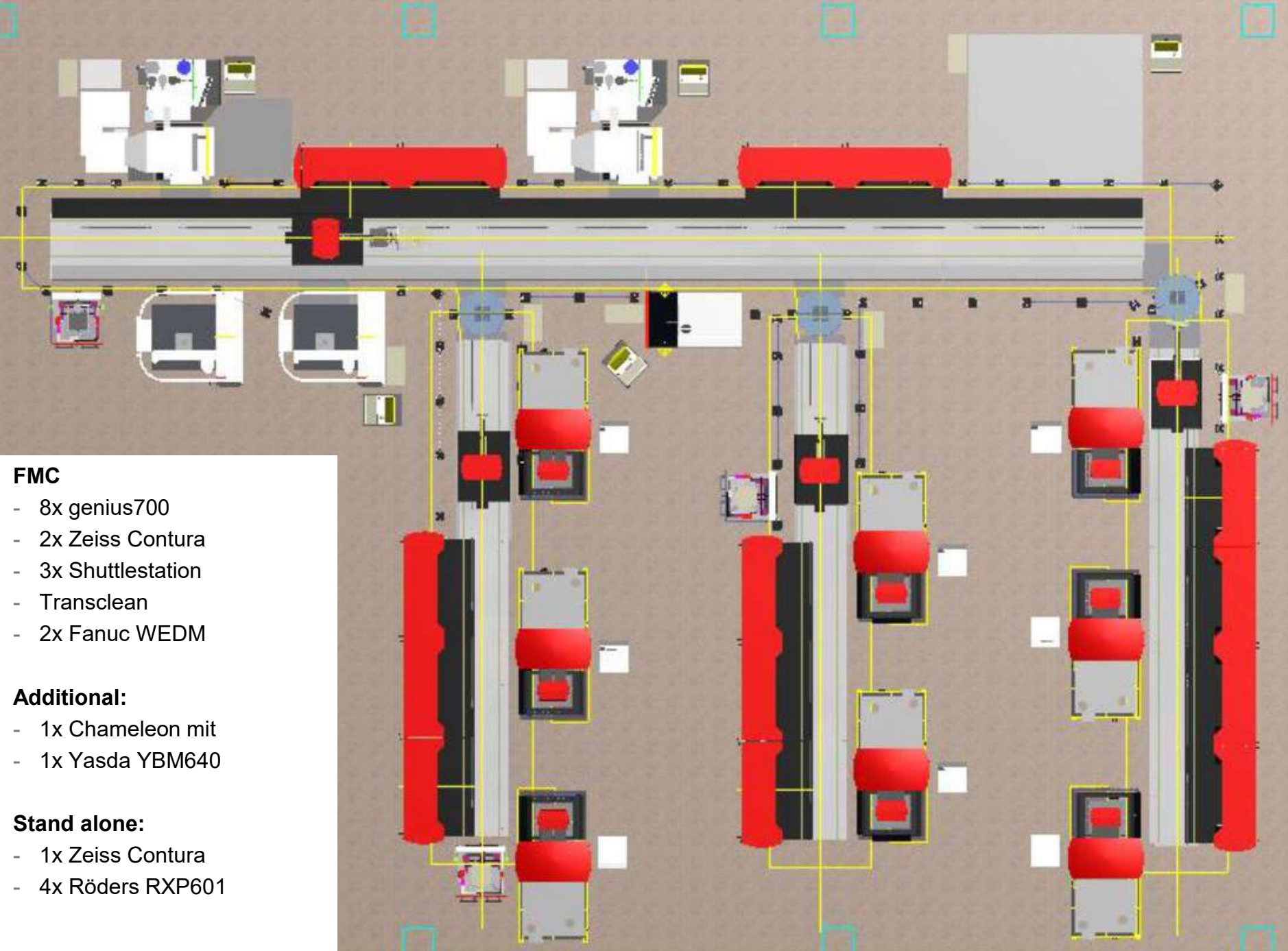


FANUC

DMG MORI



YASDA



FMC

- 8x genius700
- 2x Zeiss Contura
- 3x Shuttlestation
- Transclean
- 2x Fanuc WEDM

Additional:

- 1x Chameleon mit
- 1x Yasda YBM640

Stand alone:

- 1x Zeiss Contura
- 4x Rödgers RXP601

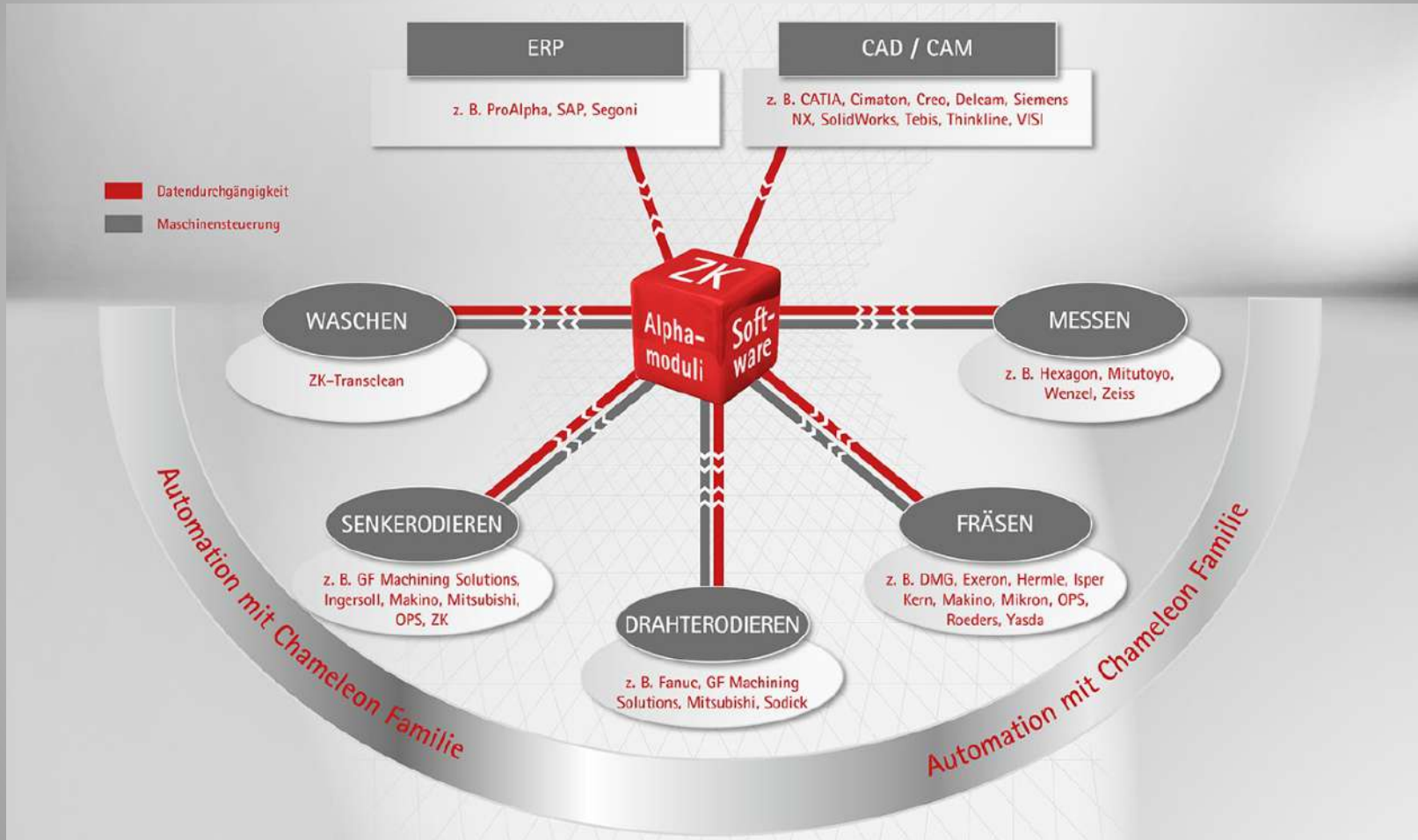
ZK SOFTWARE



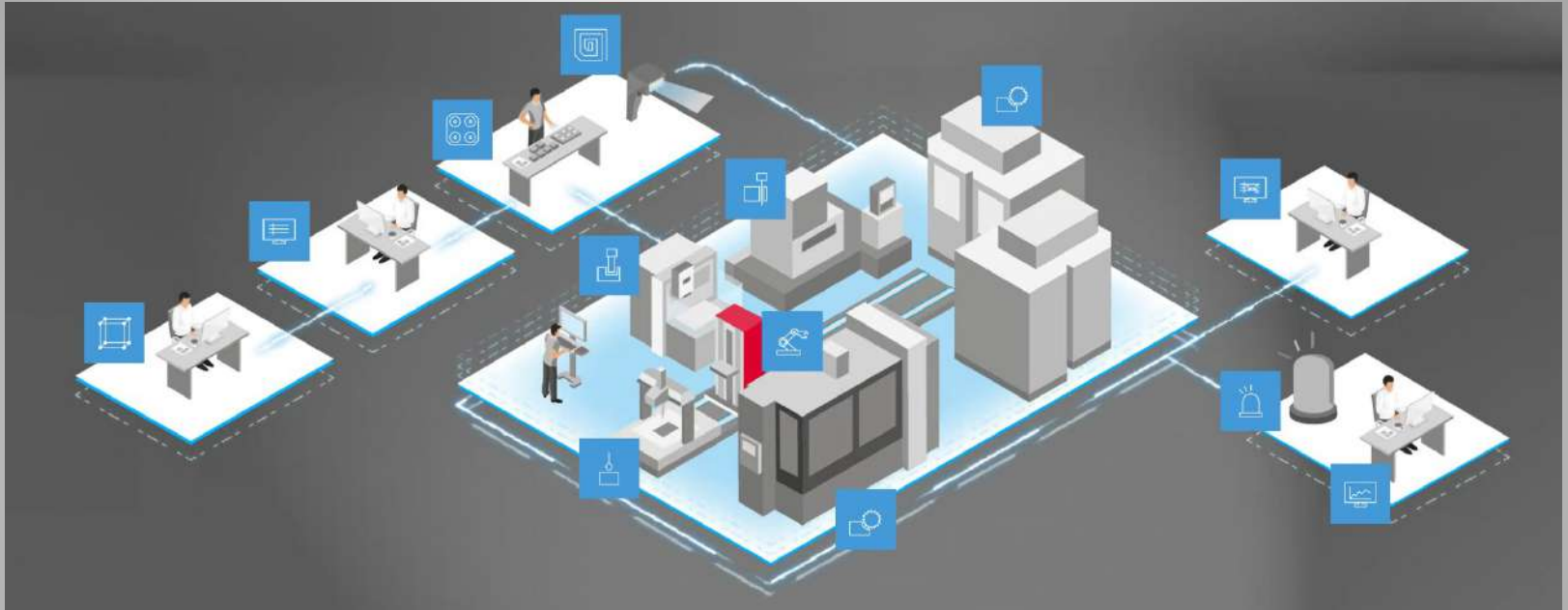
ZK SOFTWARE

- Modular solutions for production
- User-orientated and intuitive handling
- Suitable for any size of company
- Connection of almost all known manufacturers and production technologies
- Access to the ZK Academy, the training programmes and the technology centre enables the exchange of knowledge between experts

ZK ALPHAMODULI SOFTWARE



ZK ALPHAMODULI SOFTWARE

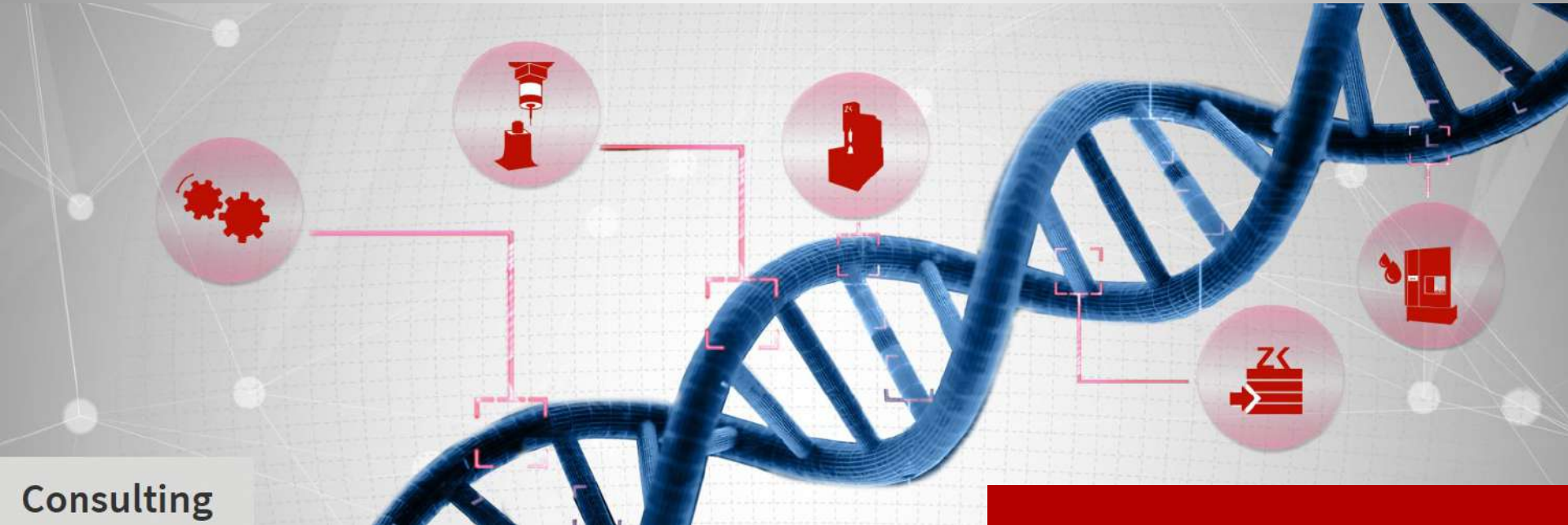


Alphamoduli at a glance:

The ZK Alphamoduli software is a flexible system for production control and process management for tool and mould makers and small series production from batch size 1. Alphamoduli allows you to control and automate your production shop and systems simply and intuitively. You remain flexible because the software adapts to any company size and any process sequence. And it is open to all manufacturers and technologies.

Alphamoduli: the software for greater transparency, efficiency and performance in your business. Simple, fast and flexible..

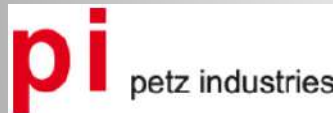
ZK WHAT YOU CAN EXPECT



Consulting

- Process analysis
- Project planning
- Installation and customizing
- ZK Academy - The Expert Centre
- Start-up support
- Technology training
- Service

ZK REFERENCE CLIENTS





simply genius

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www.zk-system.com