



## PRODUCT AND PROCESS ENGINEERING, MACHINERY AND SPECIAL MACHINERY BY CREATIVE AUTOMATION

Efficient, reliable  
and of highest quality



# PROCESS OPTIMISATION THROUGH CREATIVITY!

Today efficiency, reliability and utmost quality of the part being produced is more important than ever when it comes to designing production processes. With more than 25 years of experience creative automation is specialised in developing innovative solutions mainly for the electronics, medical, automotive and fine-mechanical industries.

No matter how complex or delicate the components needed may be. As your partner in product and process engineering, machinery and special machinery we find the suitable solution. You will benefit from our modular-design based, high performance systems for stamping, forming, embossing, deep-drawing, transfer, assembly, inspection and packaging that are in use by many, well respected manufacturers.

For your specific requirements we adapt our modules utilizing our multifaceted experience, our creativity and our high-quality standards.

Benefit from our creativity for your production! We achieve the optimal result on your product by our experience, profound industry knowledge, strong commitment of our team and the open-mindedness to break new ground again and again.

**„We perceive ourselves as innovative partner of the industry. We are seeking the technical challenge. Aiming to make our customers benefit from enhanced technologies and systems, we are breaking new ground.“**



**General Management** (from left to right):  
Christian Kallenbach, Strategy | Willy Settele, Operations | Klaus Zettlmeier, Strategy



# OUR DESIGN PARAMETERS

In order to provide our customers with high-performance and lasting solutions, with our distinctive quality attributes, we adhere to the following seven design principles:



01

## COMPACT PRECISION

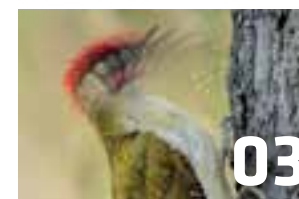
Design and build products with maximum process capability, precision and adaptability with minimum possible size and footprint. Our machines must be compact, high precision and efficient.



02

## FUNCTIONAL DESIGN

Use our well-defined aesthetic for shapes and colors. This is not self-serving, it provides our machines and installations with a carefully considered combination of design and aesthetics. The user acceptance, attention-span and intuitive understanding of our systems are improved.



03

## OPTIMISED FUNCTION AND METHOD

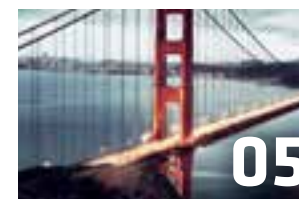
The function is the focus of our attention. Our linear transfers utilize cam-controls and dynamic servo drives, providing concurrent advantages of mechanical and electronic process control and optimization.



04

## CUSTOMER ORIENTATION

The customers wishes and actual requirement must be central for our design and development. We provide the most economic solution for the process.



05

## CONTINUOUS PRODUCT IMPROVEMENT

For the design and building of our systems the guiding principles are: simplicity, robustness and maximum quality. We continuously strive, with no compromise, to further improve our design and processes.



06

## SYSTEMATIC MODULARITY

Each component that we develop has to be able to serve as a standard module in existing equipment.



07

## SYNERGIES, COOPERATION AND PARTNERSHIPS

As a mid-size company with extensive connections and experience in our markets, over the years we have built an exceedingly competent network of symbiotic partnerships and cooperative relationships. This benefits our customers for we can marshal a specialist for each task at hand.



## PLENTY OF CHOICES ALREADY IN THE STANDARD

For many years creative automation supported their customers as supplier of special machinery and benefits from a comprehensive pool of experience. Today we perceive ourselves mainly as system supplier.

The essence of our experience has been applied in our system components: modular-designed, highly precise, fast, reliable and intuitively operated, these are some of the features of our standard precision machinery. A broad range of solutions can be designed by use of these standard systems – and upcoming demands can be anticipated. Just a few adaptations are needed to make our standard precision machinery fit for new jobs.

### AX – SYSTEMS

The AX systems with process-optimised linear movement come with various performance classes and construction types. They are applicable as C frame press for operating stamping/forming/moulding tools in bloc arrangement, as well as for assembling tasks or the operation of thermodes etc. In addition, they are applicable as sliding aggregate for operating stamping/forming punches, assembly punches, welding guns etc.

### TX – AUTOMATIC CUTTING PRESS

The TX automatic cutting presses come with process-optimised linear movement in 2 performance classes and various construction types. They are constructed with uncompromised process capability. A fine machine for stamping, forming and moulding of fine, demanding parts.

### PROX – MODULAR PROCESSING MACHINE

Our ProX module is an extremely robust and vibration resistant basic system, optional in 2 sizes. Constructed as optimal basis, made of a compound of steel and polymer concrete, for building up AX 100, AX 20 and SEM components and an optional roll feeder or collet feeder of the EX series.

ProX 100s offers the possibility to place up to 2 AX 100 units in series. The AX 100 units can even be operated with shifted phases. Further systems (AX 20 or SEM) can be integrated to the AX 100 for bottom or cross movements.

ProX 100l offers the possibility to place up to 4 AX 100 units in series. The AX 100 units can even be operated with shifted phases. Further systems (AX 20 or SEM) can be integrated to the AX 100 for bottom or cross movements.

Both types can be extended by additional ProX 100 units. With an additional feeder an automatic cutting press (1 axis) or a linear processing centre (several axes) is generated.

### EX – FEEDERS/MATERIAL INFEDERS

An important component for every automated part production is the fitting material feeder. That's why we have developed a feeder with the respective capabilities for a variety of possible applications.

Recommended applications are: Additional axis for cross or bottom movements for presses, additional axis for processing machines, component for modular system solutions.

### SEM – SERVO-MECHANIC AGGREGATE

Our SEM system mainly consists of a combination of an AX 20 gear unit (forced cam gear with servo drive) with a highly precise slide bearing skid. Designed as precise, dynamic unit for fast (1 mm swing with 2,000 1/min) and sensitive processes up to 20 kN. The skid benefits from all needed options for the mounting of the active elements (punch holders etc.).

In addition the system has a swing level adjustment and the skid can not only be connected stiff to the gear but also with a spring accumulator. This gives the possibility to realise a tolerance compensation (forming power stays nearly constant) by means of an overswing of app. 0.1 – 0.5 mm. This can be a great advantage in sensitive processes.

In conjunction with our IPC control this system works very well with our pulsation technology (stamping, forming, moulding, drawing, smart impuls® s, b, p, z).





## INDIVIDUAL SOLUTIONS creative automation

Our main target is to offer our customers ideal systems for a variety of forming and automation processes. In addition we used our knowledge gathered from the intense work with demanding forming processes to develop 4 new forming technologies (smart impuls®). However, today creative automation is not only a system supplier of a modular range of precision machinery and system components. In addition we are at your service with advice concerning the application of our systems. If desired we can also design and produce a tailor-made, turn-key facility for you.

We really care about the specialties of your processes and create an optimal solution in close dialogue with you. When it comes to the realisation we apply techniques of the state-of-the-art tool design and construction such as micro-finishing, special surface coatings, dry stamping etc. Furthermore we create synergies within our extended network of specialised cooperation partners. Make use of our know-how for your application!

### CONSTRUCTION

Our draughtsmen are highly-qualified engineers and technicians with long-lasting experience. Right from the start of constructing and basic designing of the tool or the needed part we make use of these factors for your targets. We advise you in selecting the optimal materials, the measures and tolerances of the part, in outlining the functional specifications, in selecting the production process, the process FMEA etc.

If needed, we can analyse your part by means of a FEM system or conduct empiric pre-test series with creativity and phantasy. The entire construction is supported by modern 3D CAD systems. We use a high-performance composer for visualising and animating during the project.

We produce prototypes for you for which we make use of Rapid Product Development techniques. This is how we help speeding up the product development and developing even complex parts in a given frame of time and costs.

During the project nothing is left to chance. Our desire is right in the center. We edit the functional specifications, monitor the milestones and steer the project with review techniques and in close cooperation with the customer.

### SPECIAL MACHINERY

No matter what your requirements are: With the special machinery for automation solutions designed by ourselves and our partners we will find an answer. With the modular system design of our standard machines we have a broad variety of existing solutions at hands, which already cover parts of the desired machine.

Each new solution being added is designed with regard to its system capabilities. That's why the pool of modular systems is growing continuously. Our customers benefit from that: the design and construction time as well as the test phase need less time, the risk of poor process capability decreases.

### FORMING TECHNIQUES

Stamping, bending, punching or drawing of parts up to 1.5 mm material size is our core competence. For these applications our systems are predestined. With our support in these cases you can push the limits of what has been feasible so far. The impuls technology leads to improved features and thus better results in the production process.

### CONTROL ENGINEERING

In cooperation with partners in Germany (Festo, Seitz) and Switzerland (Siegfried) creative automation has developed an own press control system on IPC basis for our standard systems in a project lasting several years. As a result of its speed (CODESYS) our patented systems are able to operate our pulsation technologies with comfortable recipe set-up and outstanding dynamics. This control device also comes with a high-quality integrated process monitoring (double plate, power control, toll control, oil system dosage).





# FROM INDIVIDUAL SOLUTIONS TO SYSTEM SUPPLIER

We started as “Wilhelm Settele Design-office” in 1987, in Fuessen, in the picturesque Allgeau region of Bavaria. Our initial focus was product and process development for medical instruments. Through our sophisticated designs in this field, we gained a reputation as provider of clever, high precision solutions for sensitive applications.

For example, we developed the complete plug-in connector system for the smallest (at that time), mobile blood -pressure measuring unit and for Boehringer, a pain free lancet for drawing blood for glucose test by diabetics.

From the resourceful, “creative” design office, with limited financial means, grew creative automation, gradually, and from 2010 on with the support of ZETKA Stanz- und Biegetechnik GmbH & Co. KG, to today’s expanding success. The synergies in the field of engineering, development, controlling and marketing, deriving from this new constellation led to additional success and a growing market share. Due to the expanding demand from various industries we have become a valued service and product provider for the automotive, appliance, electronic, instrument and horology industries.

## OUTSTANDING MILESTONES:

creative automation is a system supplier for machinery and units for the processing of insulation displacement terminations all over Germany. Our systems for final processing of galvanized punching scraps in connection with plastic coating machines for the fabrication of hybrid components are favoured by industry leaders. With our ProX 100 we have developed a modular processing unit for the engineering of prototypes and production. Our customers benefit from the speed and low costs when producing new components and parts. The distribution partnership with BRUDERER gives us access to customers in the area of micro-stamping and the fine-mechanic markets in Switzerland and Vorarlberg, Austria.

## NETWORK

From the start our strategy as active, mid-sized company was to link to like-minded partners who are able to provide benefits to our customers and their solutions on their special field. Today entire industry sectors go that way. The future lies in networking!

## OUR VISION

creative automation is a growth model with very good development forecast. Guided by our vision we work hard make this a reality. We perceive ourselves as an innovative partner of the industry. We are searching the challenge in engineering and constantly advance enabling us to offer new technologies and new systems to our customers. We get there by our own ideas and new applications, by our cooperations and partnerships with like-minded companies, by synergies deriving from the conjunction with ZETKA, supplier of precise stamping and moulding parts as well as high-class hybrid components, and by the dialogue with our customers.

In our future development we are focussing on the further upgrading of our pulsation technologies. By cooperating with the HTW University, Saarbruecken, the basics of this technology are constantly researched. At the same time we are working on newly developed modules, enabling a pulsation frequency of >300Hz.

In addition we are working on an extension of the TX product series. The TX 100S, an automatic cutting press with up to 100kN moulding power, will be optional available with cam weight adjustment and integrated forced ejector.

**Innovation – Precision – Experience:** We will meet these challenges to the benefit of our customers both as system supplier and solution provider in the future as well.



**Some of our preferred partners:**

BRUDERER

Fahrer Schallschutztechnik

HAYEG Processcontrol

Leicht Stanzautomation

seitz Elektroanlagen

tba Technisches Bureau Allgeau

ZEILER

Bremer Werk für Montagesysteme

FESTO

htw saar

MK Zerspantechnik

Siegfried

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