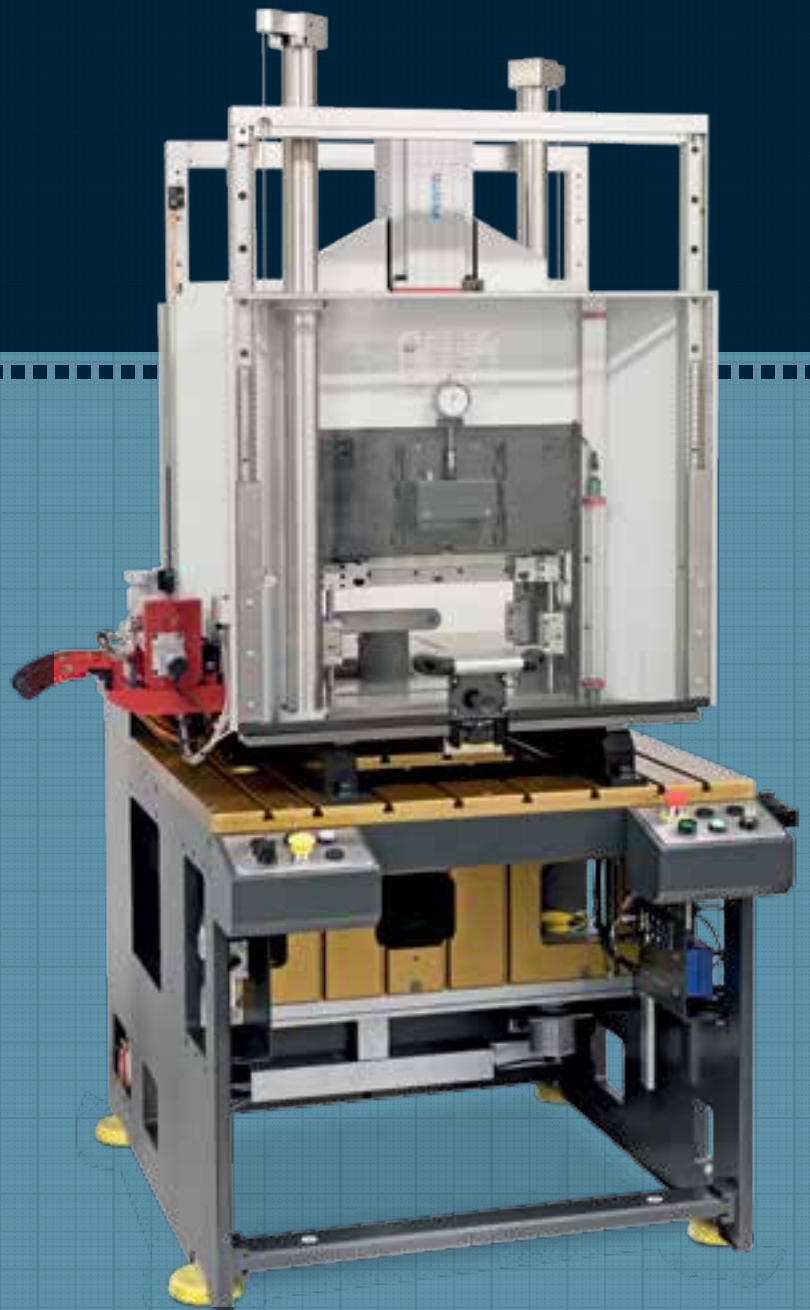


COMPACT PRECISION:

MODULAR SYSTEM SOLUTIONS FOR PRODUCTION AND AUTOMATION



PROVEN TECHNOLOGY FOR A VARIETY OF APPLICATIONS

For more than 25 years creative automation serves their customers as innovative, experienced solution provider for product and process development, automation and special equipment. Today, creative automation offers 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.

All system components are designed by strict guiding principles, which evolved from our practical experience. The modules are compact, highly precise, fast, reliable and intuitively operated. With the modular system our customers have seamless solutions at hands, which can be completed by components for individual demands if needed.

Our modules of standard products have proven mainly in the Electronics, Medical, Automotive and Fine-mechanical industries. For your production and automation needs, rely as well on the precision machinery of creative automation from Southern Bavaria, one of the centres of stamping technologies in Germany!



CONTENT

AX – Systems	4
TX – Automatic Cutting Press	6
ProX – Modular Processing Machine	8
EX – Feeders/Material Infeeders	10
SEM – Servo-mechanic Aggregate	12
Special Machinery	14
smart impuls®	16
Network	18



AX – SYSTEMS

The AX systems are designed as systems with process-optimised linear movement for comprehensive processes in stamping, forming, assembling, feeding and controlling. They are available in various performance classes and construction types.

APPLICATIONS:

- 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.
- Applicable as sliding aggregate for operating stamping/forming punches, assembly punches, welding guns etc.

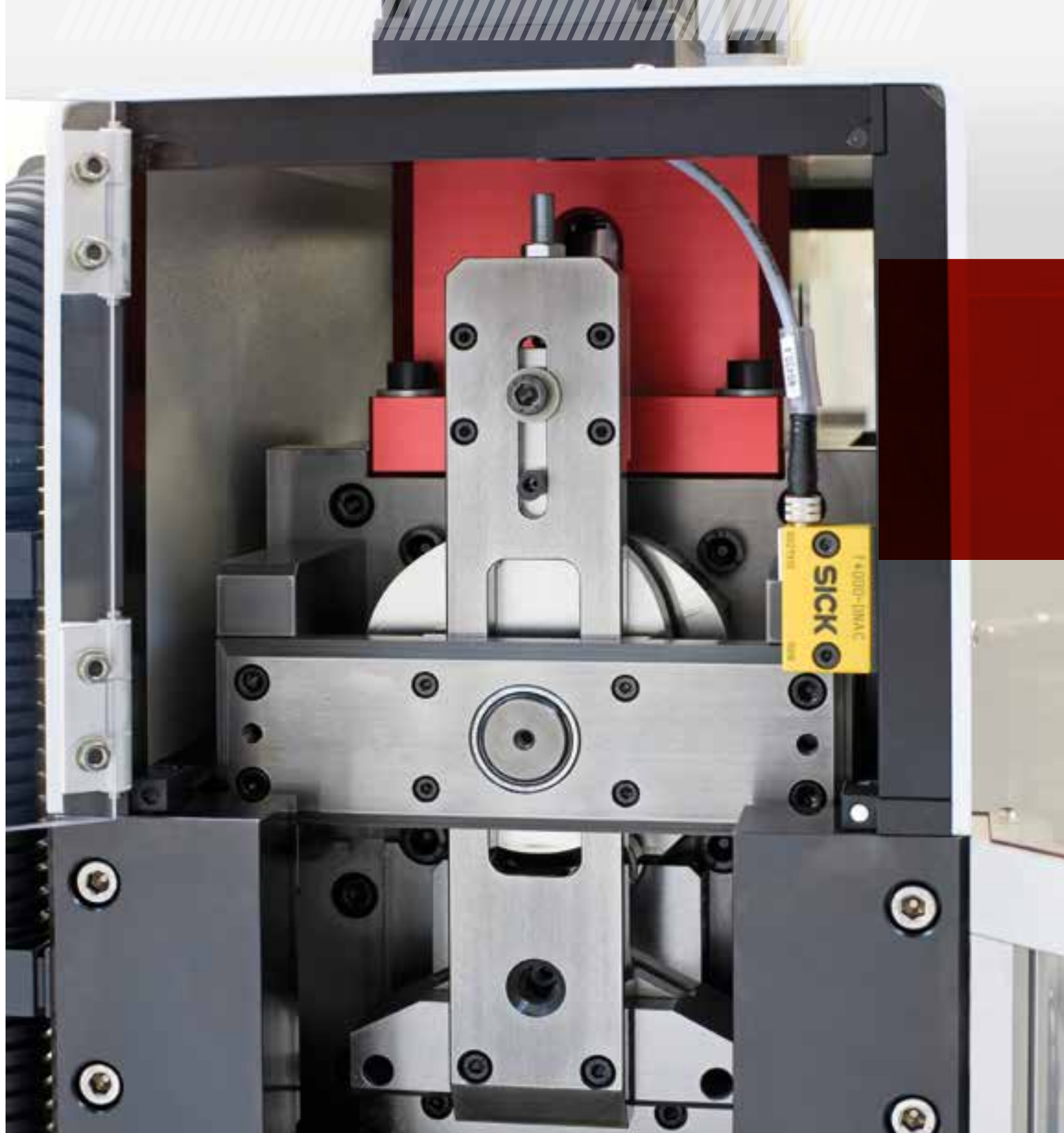
FEATURES/BENEFITS:

- Multi-functional linear module for the automation technique
- Process-optimised linear movement
- Flexible gear options (pneumatic, mechanic, servo-mechanic)
- Compact construction with comfortable connection options for active elements
- Optimal integration options for complex facilities

PERFORMANCE CLASSES:

- AX 10 with up to 10kN forming power, layout as C frame or sliding aggregate
- AX 20 with up to 20 kN forming power, layout as C frame or sliding aggregate
- AX 50 with up to 50 kN forming power, layout as C frame or sliding aggregate
- AX 100 with up to 100 kN forming power, layout as C frame or sliding aggregate
- AX 100V with up to 120 kN forming power, layout as C frame or sliding aggregate





TX – AUTOMATIC CUTTING PRESS

With process-optimised linear movement in 2 performance classes and various construction types. The automatic cutting presses of the TX series are constructed with uncompromised process capability.

APPLICATIONS:

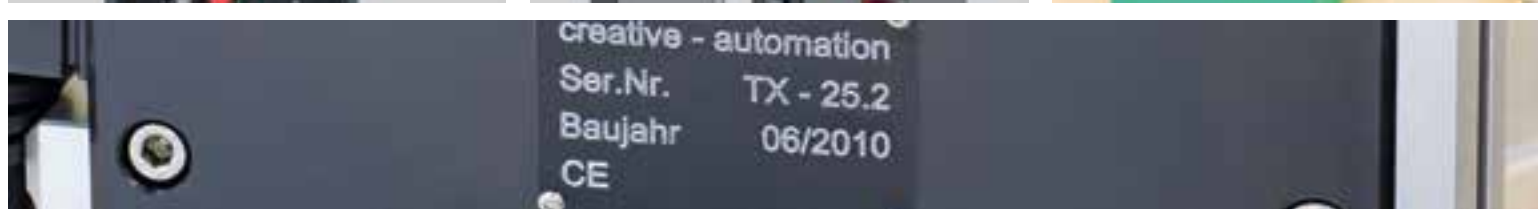
- A fine machine for stamping, forming and moulding of fine, demanding parts
- Operation as stand-alone system
- Operation as integrated system in complex production lines

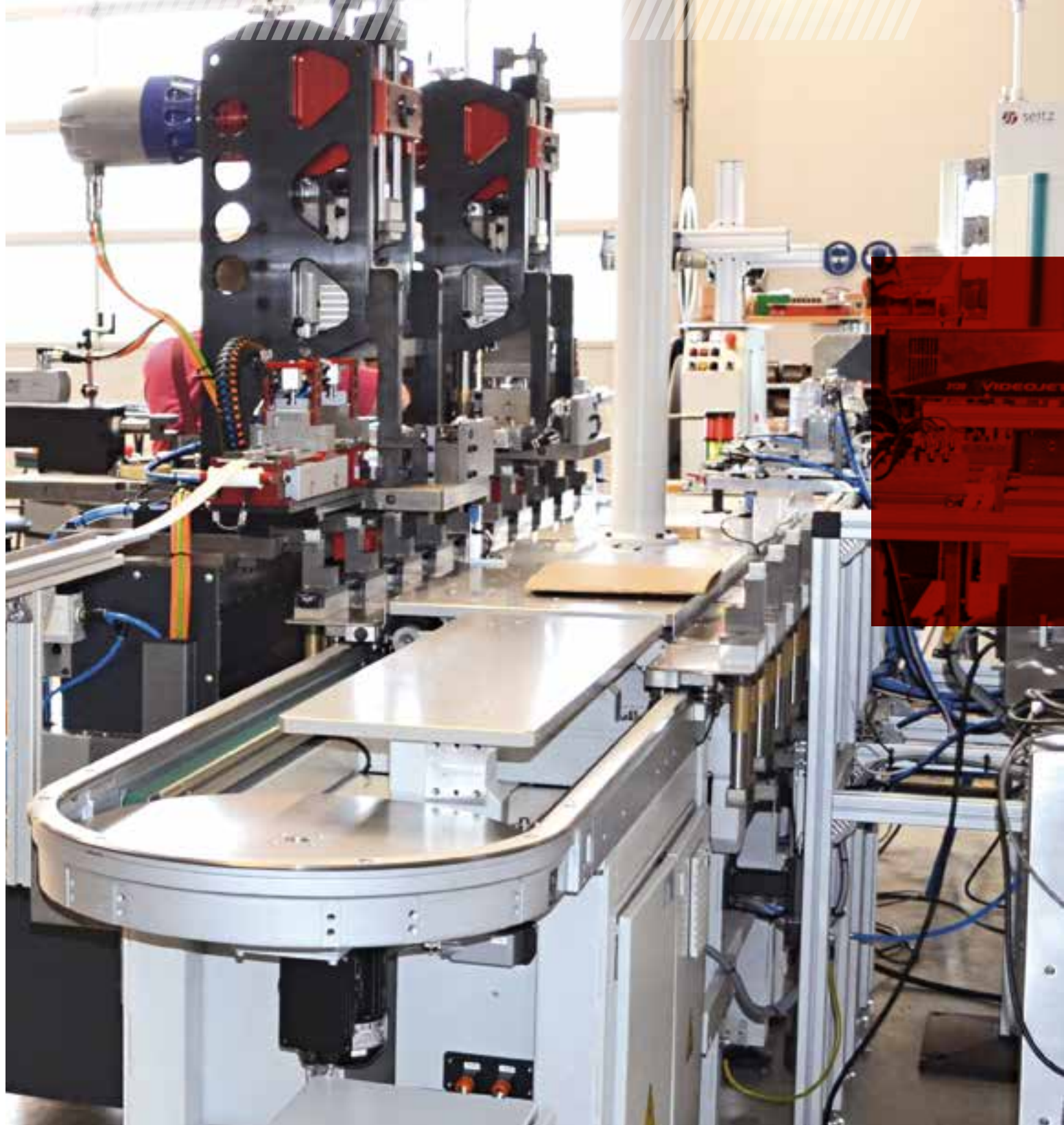
FEATURES/BENEFITS:

- Servo-mechanic gear according to actual safety regulations, performance level "d" for automatic cutting presses, performance level "e" for feeding presses
- Controlled momentum by slightly moved masses
- Optimal plunger direction by massive sliding channels in combination with vibration buffers on conveyer level
- High dynamics by servo gear, high precision by double symmetric, forced cam gear (2 patents)
- Ultra fast machine steering (CODESYS based), provides for free programmable recipes for pulsation technologies. Comes with integrated possibilities for process power control, tool control, double plate, finest lubrication etc.
- System machine frame with options for adding further axes for cross and/or bottom movements
- Optional servo roll feeder (with servo inter-ventilation) or collet feeder with linear axis and optional pneumatic or servo-operated clamping

PERFORMANCE CLASSES:

- TX 40S automatic cutting press with up to 40 kN forming power, optional with integrated forced cam ejector (from above)
- TX40E feeding press for operating with light curtain, with up to 40 kN forming power, optional with integrated forced cam ejector (from above)





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.

APPLICATIONS:

- Production machine for prototype development
- Modular machine for serial production
- Basic system for EX, AX and SEM systems

FEATURES/BENEFITS:

- 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 AX100 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.
- With a special part transfer even previously decollated parts can be handled by the machine.

ProX 100 is currently our most demanded machine.

PERFORMANCE CLASSES:

- ProX 100s, table width 1,000 mm
- ProX 100l, table width 2,000 mm





EX – FEEDERS/ MATERIAL INFEDERS

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

APPLICATIONS:

- Additional axis for cross or bottom movements for presses
- Additional axis for processing machines
- Component for modular system solutions

FEATURES/BENEFITS:

Fast roll feeder with additional axis for programmable inter-ventilation

PERFORMANCE CLASSES:

EX 10P – EX100P (band width 10 – 100 mm)

- Simple pneumatic collet feeders (cost-optimized for slow-running processes with fixed feed length, cycle time up to 30 1/min)

EX 63 (band width 5 – 63 mm)

- band width options 1 – 50, 1 – 100, 1 – 120, 1 – 350 [mm]
- Collet feeders on a linear axis (types up to 350 mm with mit freely adjustable feed length, clamping options pneumatic or with servo, cycle time up to 120 1/min)

EX 63T (band width 5 – 63 mm)

- Collet feeders in conjunction with collet infeeders (push and pull) as synchronised tandem feeder. This type has proved in long processing lines.
- It also offers the possibility to produce with little loss of material (inbound mode: pushing feeder, outbound mode: pulling infeeder)

EX 100 (band width up to 100 mm)

- Collet feeders with forced cam gear, optional with autonome servo gear or linked to a central gear (feeder length up to 50 mm, cycle time up to 400 1/min)

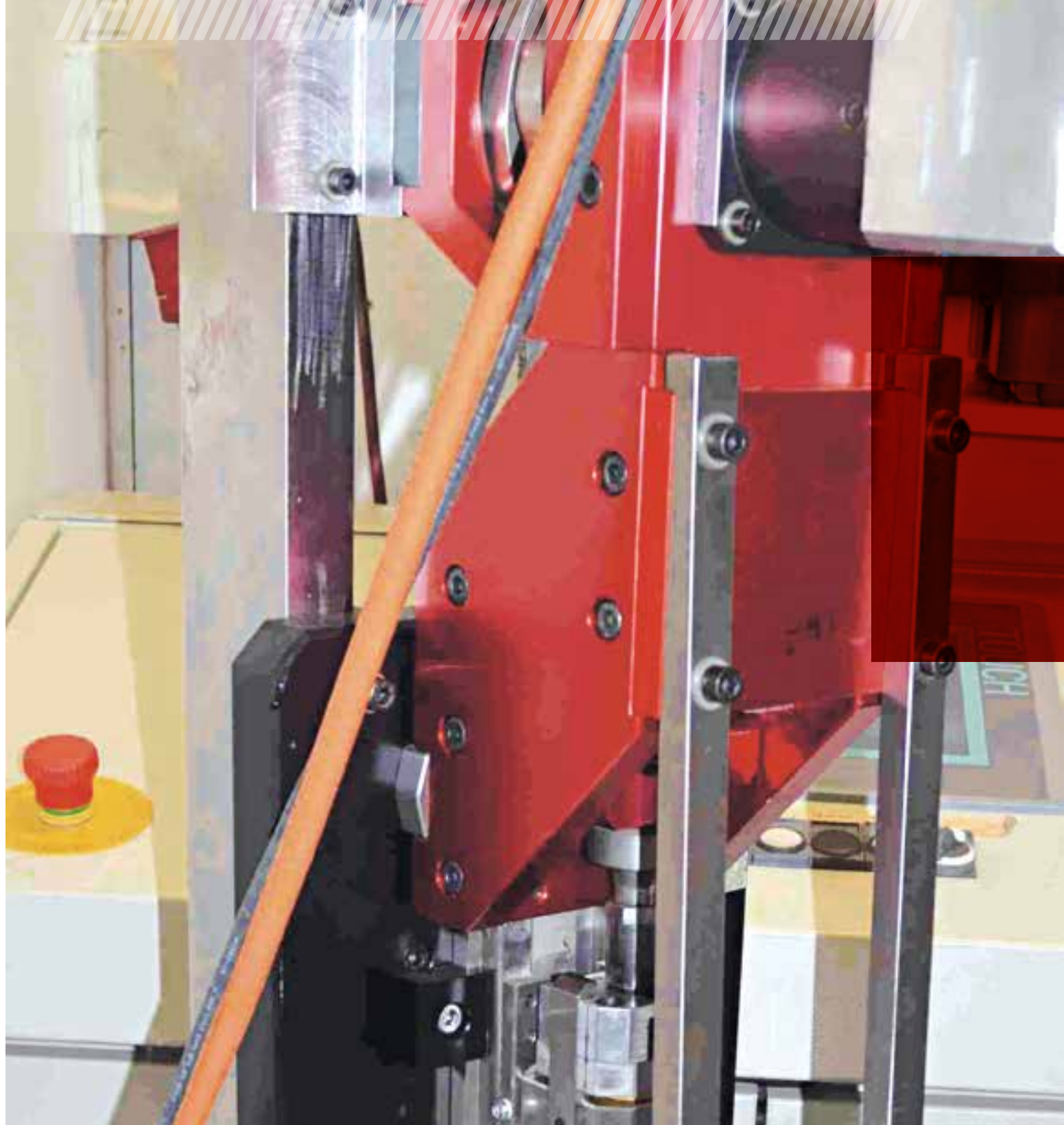
EX 50 (band width up to 50 mm)

- Roll feeder with a servo gear each, programmable inter-ventilation (feeder length freely adjustable, cycle time depending on the feeder length up to 750 1/min)

EX 40 (wire radius from 0.5 up to 3 mm)

- Wire roll feeder with servo axis, freely programmable feeder length





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 cannot only be connected fixed 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.

APPLICATIONS:

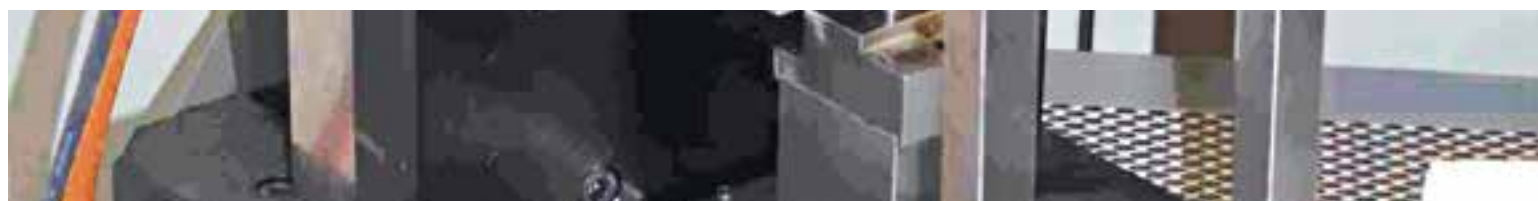
- Integration in fast-running presses as low or vertical movement
- In conjunction with our IPC control this system works very well with our pulsation technology (stamping, forming, moulding, drawing, smart impuls® s, b, p, z).

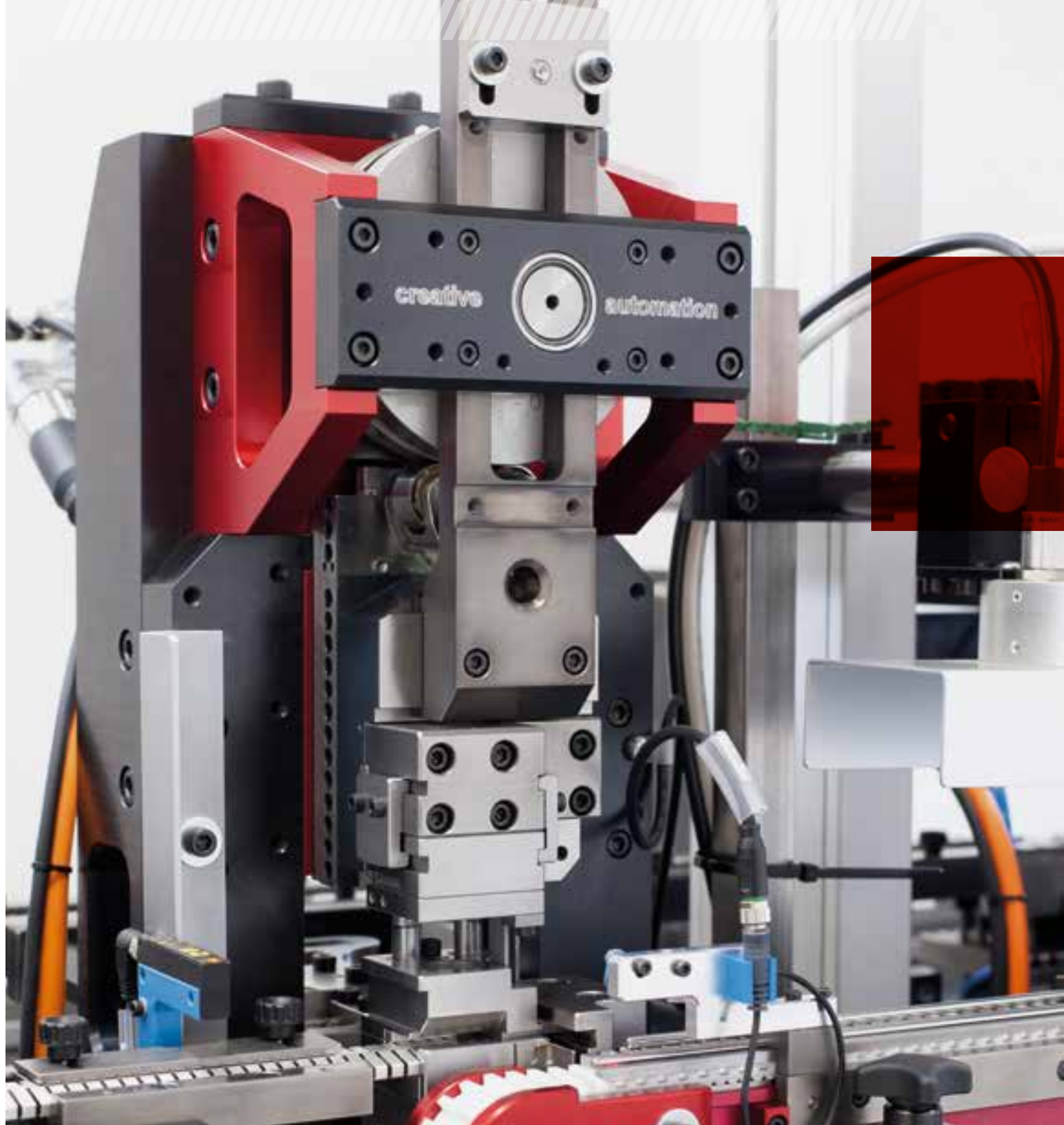
FEATURES/BENEFITS:

- Process-optimised high performance module with servo-mechanic gear
- 20 kN forming power
- Speed up to 1.800 min⁻¹
- Hydro-dynamic slide bearing skid
- Skid fixed or with spring accumulator
- Servo gear, planetary angular gear and forced cam mechanism
- Optional integration of f/s-control or position sensor for skid movement
- Optional IPC control

PERFORMANCE CLASSES:

- SEM mit 20 kN





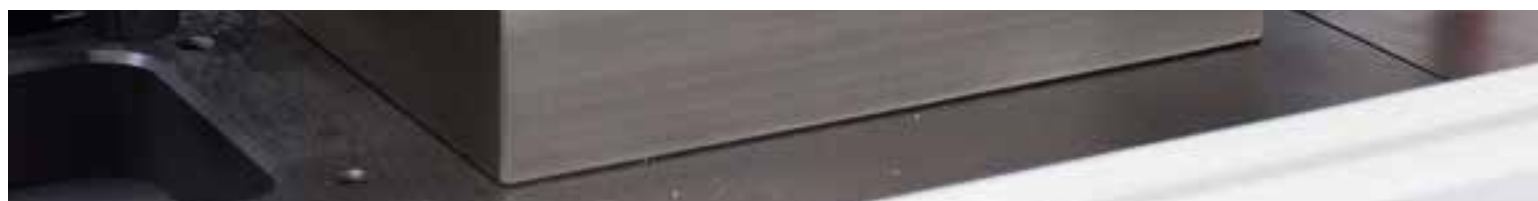
SPECIAL MACHINERY

creative automation is not only a system supplier of a modular-designed portfolio of precision machinery and system components. We are also at your service with advice in using our systems and if needed with the construction of a tailor-made, turn-key facility.

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. Make use of our know-how for your application!

KEY FUNCTIONS:

- Feeding
- Assembling
- Controlling
- Packaging
- Inpressing, inserting
- Stamping, bending
- Laser welding





FORMING TECHNIQUES smart impuls®

We have used our experience in complex forming techniques creatively to develop 4 new forming processes (smart impuls®).

smart impuls® is a technique which exceeds the possibilities of variable forming speeds and offers new procedures for stamping and forming of difficult materials and forming grades and even strengthens the process capability.

APPLICATIONS:

- Stamping, bending, punching or drawing of parts up to 1.5 mm material size

FEATURES/BENEFITS:

IN STAMPING WITH SMART IMPULS S®:

- Improved flush-cut share
- Improved straightness of the cutting surface
- Improved flatness of the stamping part
- Reduced stamping burr

IN BENDING WITH SMART IMPULS B®:

- Reduced fissuring in small radiusses and hard, rough materials
- Improved process capabilities of bending angles
- Program-controlled changing of bending angles

IN PUNCHING WITH SMART IMPULS P®:

- Reduced forming power, higher forming degree
- Reduced tensions in the punching area
- Reduced roughness in the forming area

IN DRAWING WITH SMART IMPULS Z®:

- Process validation currently in progress



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. Therefore we more than ever believe:

The future lies within the net!

Some of our preferred partners:



htw saar



DISTRIBUTION PARTNERS

- BRUDERER AG distributes the TX stamping machines and ProX 100 machines in Switzerland and Vorarlberg, Austria
- Fahrer Schallschutztechnik AG distributes our AX, EX und SEM systems in Switzerland and Vorarlberg, Austria
- Leicht Stanzautomation GmbH distributes our TX, AX, EX und SEM systems in Germany
- Giemann Electronics distributes our insert machines for IDC technique.

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