Complete forming lines
From A(utomation) to Z(ig-zag feeder)

ANDRITZ Kaiser has been producing punching and stamping presses covering a wide range of applications for 70 years. Only the correct interaction of all subsystems such as coil handling lines, feed system, oiling units, tool and press leads to the desired performance of your forming system.

Each installation is unique; each customer has its specific needs and wishes. We offer technological masterpieces in order to rise to all these challenges, be it for our press feeders, transfers, die change systems, die cushions or complete line integration according to EC regulations. For economic solutions we use own Peripheral equipment and/or components from our partner companies. We are focused on customized project solutions. However, our competence goes beyond pure technology. Holistic, competent expertise, clear and efficient project management, and a reliable after sales support create a valuable customer liaison and support in all of your installation’s life phases – from the very first conceptual phase to its end of life.
From the coil to the crate
Solutions for the material flow

As suppliers of complete production lines, we take great care to consider the production process in its entirety. Material supply, scrap disposal, parts handling and safety procedures are taken into account very early in the project.

The material goes through a certain number of steps before ending up as a finished part. All those steps must be carefully planned in order to optimize productivity. Thanks to our decades of experience of cooperating with peripherals suppliers, we are able to officiate as general project managers for ready-to-use production lines. Our work begins with the material supply: single or double uncoilers, motorized or not, with or without coil changing assistance, and all options and variant expected from a state-of-the-art product.

The following straightener is chosen according to your precision and maintenance specifications. Next comes your favorite supplier’s press feeder. For example the highly dynamic KWV roll feeder by ANDRITZ Kaiser, which you will discover on the following page. Do you rather work from a blanks stapler? We provide fully automatic feeding systems according to your specifications. See also our transfer systems on page 5.

The scrap disposal systems are placed under the press: conveyor belts, vibrating unit, exhaust, all linking seamlessly to your existing installation. Parts handling opens to a broad scope of technical solutions, from the simple conveyor belt up to fully automatic sorting and stapling systems with connection to the next processing equipment. Last but not least, safety installations true to EC regulations using material or immaterial barriers protect your coworkers. We offer the complete service solutions round the life time of your press including after sales service.
KWV roll feeder
Dynamics and precision

Technical characteristics

• Highly dynamic servo or torque drives
• Toothed belt or gear box units
• Upper roll lifting via dynamic programmable cams with automatic adjustment to the press speed
• Chromed rolls
• Adjustable mounting rack
• Setup mode with patented safety circuit

Options

• Motorized height adjustment of mounting rack
• Roughened or grooved rolls
• Perforation control unit
• Zig-zag-mode
• And more!

<table>
<thead>
<tr>
<th>Type</th>
<th>Strip width max. mm</th>
<th>Strip thickness max. mm</th>
<th>Cross section mm²</th>
<th>Precision mm</th>
<th>N° of strokes* 1/min</th>
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<tr>
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* depending on feed angle and strip feed length
Electronic 2D/3D transfer systems KET/KETS
Innovative technology for peak performance

Technical characteristics

- Available moving mode 2D and 3D
- All axes freely programmable
- X-movement with high performance, low maintenance linear drives
- Y- (and optionally Z-) movement with standard NC-drives and optionally also with high performance, low maintenance linear drives
- Light, low vibration transfer beams from profiled aluminum
- Intuitive controls with integrated optimization tool for the ideal synchronization of the transfer with you ANDRITZ Kaiser press
- Space saving design between the uprights of the press

Options

- Automatic beam coupling systems
- Active, passive and/or swiveling grippers
- Additional pre-liners
- Unloading grippers
- Beam deposits

<table>
<thead>
<tr>
<th>Type</th>
<th>Advance mm</th>
<th>Close mm</th>
<th>Lift mm</th>
<th>Carried weight kg</th>
<th>N° of strokes max.</th>
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Special solutions on demand
All about tools
Tools and die changing systems

The core component of the stamping and forming process is a topic for experts. The dimensioning and design of the tool are just as relevant for the productivity of the entire line as the tool allowances. We provide you the best-possible solutions for that.

Tools
The tool is the core component in stamping and shaping technology. The tool concept impacts the design of the entire system. That is why we take the topic of tools into account right from the start and accompany you in the definition and design of your tool. Starting with the part drawing, together with you we define the rough concept, accompany you during your discussions with various tool manufacturers and take the interface plus the rest of the complete system into consideration to ensure the optimal integration of the tool.

- Compound tool-sets
- Transfer tools
- Multi-stage tools
- Precision blanking

Semi-automatic tool change systems
It is often not possible to place tools starting from a weight of 6 tons into the press using conventional conveying equipment without expending a great effort. For this purpose we develop and manufacture various concepts for simple, semi-automatic tool change:

- Manual brackets
- Brackets with integrated linear-motion actuators and chain belt drives
- Movable table plate (with and without exchangeable plate)
- Chain conveyor
- Fork lift truck with change system set-ups

We have the right solution for every requirement. At the same time, the tools can be changed on both the long and the short side of the press. In addition, various manual or hydraulic tool clamping systems are available.

Fully automatic tool change systems
Whenever every minute counts, an automatic placement and alignment of the tools in the press is quite often the most cost effective solution. With our fully automatic tool change systems, fast, precise and reliable changing and positioning of the tools are guaranteed. What is more, we develop solutions that are most appropriate for your material flow and factory planning concept:

- Tool change shuttles (tandem or single)
- Moving bolsters (T-track or Front-to-Back)
- Connection to a hall-side tool storage system

During this, naturally we also take auxiliary plants such as a transfer into account, which ensures that the transfer rails can also be automatically changed. That quickly makes your system ready for production again.
From BLANK to form
Deep drawing, blank holding, part ejecting

Tools for manufacturing parts with great drawing depths often require drawing cushions. From the simple pneumatic spring mechanism to multi-action, controllable units in press tables and press rams, ANDRITZ Kaiser provides the perfect solution for your deep drawing process.

Pneumatic drawing cushion
The pneumatic units form a separate circuit and are used as passive springs or ejectors, each in a table or ram. At the same time, both the controlled and the uncontrolled elements are used. The system is matched to the machines to guarantee the highest possible yield, impeccable parts quality and cost-effective durability.

Hydraulic drawing cushion
Compact hydraulic or electro-hydraulic units in press tables and/or rams take care of various jobs, from pure blank holders up to multiply active shaping elements. The versatile, controllable systems come exclusively from renowned manufacturers. As a consequence, we provide reliable quality and long-term availability.

Ejector systems
For various applications, the component has to be ejected from the top tool. ANDRITZ Kaiser integrates hydraulic or pneumatic ejection systems into the ram or press. Triggering can be either uncontrolled (spring function) or controlled through the cam controller.