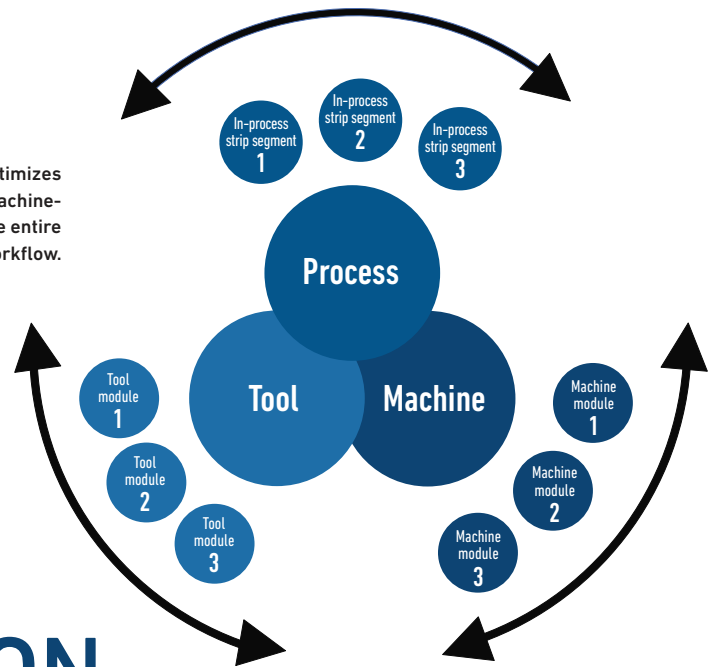


The system configurator optimizes the process-, tool-, and machine-related aspects of the entire manufacturing workflow.



NEW: DIGITAL TRANSFORMATION CREATES PRECIOUS ADDED VALUE

The new system configurator can be used to configure all tool and machine modules for the Bihler systems GRM-NC, LM 2000-KT, LM 2000-NC and BIMERIC Modular. It is an innovative, fully-featured solution which allows all users to arrive at the design they need quickly, easily and reliably.

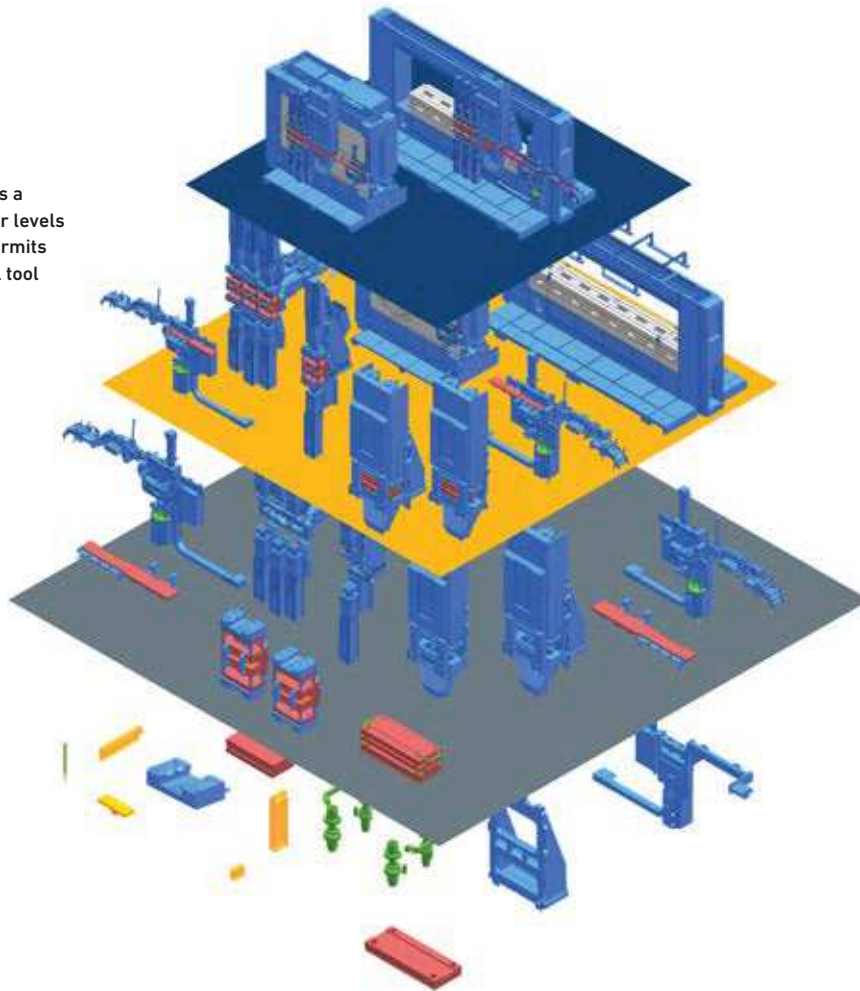
With its modular series, Otto Bihler Maschinenfabrik is giving all users access to completely new dimensions in manufacturing and enabling them to get to grips with all production requirements extremely efficiently and completely flexibly. With the GRM-NC servo stamping and bending machine, the two linear machines – LM 2000-KT and -NC – and the BIMERIC Modular servo production and assembly system, the modular series currently comprises four of the latest generation of highly-standardized, high-performance Bihler systems. They all possess uniform interfaces for forming operations and are fully compatible with one another in terms of the employed stamping and bending tools. This means that the corresponding forming tools can be moved between systems and used independently of the machine.

Focus on the process window Otto Bihler Maschinenfabrik has now developed the brand-new system config-

urator for the above-mentioned machines. It represents these machines in the CAD design and permits the individual configuration of all tool and machine modules for linear stamped and bended parts, always in a way that is perfectly adapted for the underlying manufacturing process. At the heart of this approach lies the process window as a geometrically defined working area which is absolutely identical at all machines in the modular series. Using the configurator, the stamping-and-bending process is, so to speak, developed for integration into this working area, i.e. all the required tool and machine modules are geometrically designed to dovetail precisely with the standardized process window, thus ensuring that they can be used on any of these systems. No additional configuration work is required at these systems and customers can immediately start to develop the required tools, which they can then simply use themselves or make available to their partners and suppliers for use on their own systems without any adaptations.

Complete information from a single supplier The system configurator has a simple, logical structure in the form of a toolkit. In this, all the necessary modules and information, consisting of the CAD model, process window, possible extensions and limit values, are made available to the design engineer on four levels. The configurator makes sure that the corresponding components are compatible with one another on all four levels (e.g. tool module with machine module and machine module with machine) and automat-

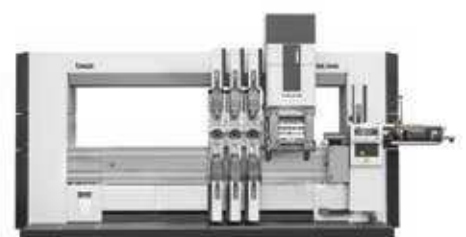
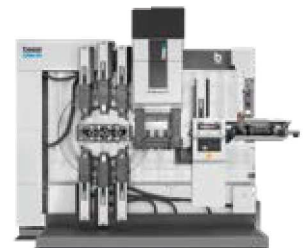
The system configurator provides a detailed representation of all four levels of the production solution and permits the individual configuration of all tool and machine modules for linear stamped and bended parts.



ically combines all the elements to form the subsequent production solution.

“The system configurator is an innovative, fully-featured solution that considers the process window as a whole and itself provides all the necessary information regarding the tool and machine technology,” explains Marc Walter, Departmental Manager for Design & Development at Bihler.

Clear value added in practice Overall, the new system configurator makes it considerably easier to develop tool and machine modules than in the past. Ultimately, it is no longer necessary to start by assembling the machine and then developing the corresponding manufacturing process in iterative loops involving an enormous variety of tools. Instead, thanks to the standardized process window, it is possible to develop the stamped strip in advance without having to worry about going beyond the geometrical limits of the machine or tool module. In practice, this would result in reworking operations that it is impossible to plan for. This is possible because all the functions of the modules, as well as the production sequence, can be standardized in advance. This also saves a lot of time and considerably reduces costs. The greatest practical advantage lies in the fact that all modules configured in this way are compatible with the entire modular series, can be ported to these machines without difficulty and function securely and reliably on them. The system configurator will be presented by Bihler for the first time at EuroBLECH 2022 and will become available after this. ●



Whether a Bihler GRM-NC servo stamping and bending machine, LM 2000-KT or -NC linear machine or BIMERIC Modular servo production and assembly system: The system configurator can be used for all the systems in the Bihler L250 product line.