BLM GROUP presents ArGo, the new programming solution for 3D laser cutting systems

BLM GROUP's Software Division introduces ArGo, a new CAM programming software dedicated to 3D laser cutting systems. ArGo enables the complete management of tubes and three-dimensional metal profiles such as deep-drawn, stamped, die-cast, and hydroformed parts, ensuring consistency and integration with other BLMelements applications.

With its simple, intuitive, and modern interface, ArGo allows seamless coordination between the offline "virtual" world — the software — and the online "real" world — the machine.

Comprehensive tube management

ArGo is the result of BLM GROUP's 20 years of expertise in trailblazing tube processing solutions. It allows automatic recognition of cut and bent parts, including all aspects related to machining, cutting rules, sections, axes, and bends. This solution represents a significant step forward in *All-In-One* functionality, integrating tube benders and Lasertube systems, calculating material elongation, and correcting the position of cutting geometries to ensure first-part accuracy. With ArGo, users can now decide whether to cut the tube either before or after bending, even in curved tube sections.

Reverse engineering

ArGo introduces reverse engineering capabilities, allowing users to read existing part programs. This enables them to rebuild a complete project starting from an already machined part or transpose the offsets applied on the machine back to the model in the office.

Easy to use

One of ArGo's key features is its ease of use, made possible by an advanced human-machine interface that supports programming for the entire cell, including both the cutting machine and the anthropomorphic positioning robot. Flexibility is ArGo's true strength: it allows operators to switch cells to process the same part or multiple parts within a single cell. Customers who already own BLM GROUP machines will appreciate the seamless integration with other BLMelements applications, particularly ArTube, BLM GROUP's CAD/CAM software, which is ideal for designing, manipulating, and drawing tubular parts.

Dynamic

The new software enables offline programming and rapid synchronization with the machine, boosting operational efficiency. ArGo can optimally calculate collision-free trajectories and automatically generate part support templates. For curved tubes, handling becomes more automated thanks to automatic recognition of sections and the bending axis, facilitating the

interactive definition of the gripping position along the curved axis. ArGo also allows for machining on stationary or moving workpieces, held in place by the robot.

Synergetic

With ArGo, it is now possible to manage the entire production process in a complete and integrated way. Even offline programming is managed with a proprietary solution, offering all the benefits of perfect synergy between machines and software.

Connected

A *digital twin* of the physical machine configuration can be created in a virtual environment. Each machine will have a configuration file that accurately reflects the actual location of various devices within the workspace, enabling a precise digital representation of the physical system.

Cost effective

ArGo offers a scalable, customizable solution designed to meet specific needs, with benefits including upgrade management. Additionally, maintenance and upgrade contracts can be managed through BLMportal, ensuring continuous and optimized service.

Etymology of the name ArGo

ArGo fits into the classical-mythological tradition, following the path set by "Prometheus," the production management, planning, and monitoring MES used in all BLM GROUP's plants across different technologies.

The name "ArGo" recalls Argo, Ulysses' dog, a symbol of unwavering loyalty, suggesting a trusted companion. Argo is also the name of the legendary ship that carried Jason and the Argonauts on their quest for the Golden Fleece, evoking the idea of ArGo as a tool that guides users swiftly toward their goals. Additionally, the suffix "go" conveys dynamism, action, and movement, highlighting ArGo's efficiency and its ability to accompany users throughout their operational journey.