



REVOLUTIONIZING THE WORLD OF BENDING

# *The new VGPNext software*

VGPNext is the intuitive CAD/CAM programming software for BLM GROUP tube and wire bending machines. The application features a completely revolutionized graphical interface and is full of functionalities at the click of a button. BLM GROUP machines are constantly evolving to keep up with our customers' needs. The software development team also continues wondering: is it possible to simplify programming? Is it possible to streamline the use of tube benders and wire benders? Is it possible to improve the synergy between machine and software? VGP3D already responded very well to some of these needs, but we saw the possibility of integrating new operations and simplifying certain functions, to make the programming phase more intuitive. This is the genesis of VGPNext, with a completely revamped interface and new functions that simplify the operator's work, making system programming more practical and easier.

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*A completely redesigned interface and new features simplifies the operator's job, making system programming easier and more convenient.*  
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### **More methods for programming the part**

VGPNext allows for choosing programs from a library where images and technical data are stored. The library contains all the programs on the server, making them available through preview images and different search filters, which make searching very easy. Customized tags can be assigned to the various piece programs and searches can be filtered by these tags, but also by section, material, date, machine and much more.

### **Importing a part program**

Using B\_Import, it is possible to call up a part or assembly in STEP or IGES formats in VGPNext, to automatically obtain theoretical coordinates. This saves a lot of time and allows even less experienced operators to gain familiarity with the program.

### **Modelling from scratch**

Programming from scratch may create some difficulties for those who are interfacing with software for the first time. There are so many variables to consider: theoretical coordinates, springback, material elongation, feasibility of bending, choice of tooling, etc. For this reason, BLM GROUP's software development team strived to create the entire process to be as intuitive as possible, dividing it into sequential steps and simplifying the programming flow with a ribbon bar that assists the operator by indicating missing steps, incorrectly filled data, default data and user-modified data. In this way, VGPNext shows where to intervene and allows the operator to confidently move from one step to the next, without losing valuable data. Having programmed the part and corrected the geometric deformations, all that remains is to simulate the feasibility with the 3D simulator incorporated into VGPNext.

### **3D simulation and time estimation**

VGPNext is equipped with a realistic simulator that anticipates possible collisions between the workpiece and the machine, in order to avoid contact during manufacturing and ensuring safe production. Each machine is identified by a serial number, allowing the software to recognize the exact configuration of the machine and its mounted accessories. This permits VGPNext to distinguish between two machines of the same

family with different configurations allowing the simulations to reflect the exact condition of the machine and therefore provide even more accurate cycle time data!

### **Defect corrections**

Bended parts are known to have bumps, wrinkles or other types of defects. Correcting them by reprogramming everything from the beginning would take up too much valuable time and targeting the correction to be made requires an experienced operator. This is why VGPNext is equipped with a defect correction catalogue, where the operator can conveniently choose the most suitable correction without having to re-program the entire part program. The machine will automatically suggest which correction to make and set the parameters for the correction. If an experienced operator wishes to enter his own customized correction, he can do so by adding a new 'custom defect' with the corresponding correction parameters to the list.

### **Monitoring**

This function allows the daily production of your plant to be monitored by checking - among others product variables - the workpiece cycle time, jobs completed, and the total number of rejects. It also provides a more complete overview of each machine's efficiency throughout the day.

### **Plug-in**

The plug-in screen manages additional functionality and allows for simulated changes in machine productivity with and without a certain function, in order to evaluate future purchases. With VGPNext, programming your bending plant will be even easier.

