The new generation of software for Bend Simulation, *AutoPOL G²*, has launched, and the future in Press Brake control is now here!

The Swedish company, FCC Software AB, is celebrating its 25th anniversary this year and is using this opportunity to launch a new generation of software for Bend Simulation, *AutoPOL G²*. The company’s background has been with CAD/CAM technology, but since 2005 it has completely focused all of it’s development efforts on software for the control of Press Brakes. Functionality and working methods in the software have been developed in close collaboration with a number of independent manufacturers and their customers. Through this approach, the software has received worldwide acclaim and full recognition.

**Large customer base and strong domestic market.**
The customer base has expanded significantly in recent years, with a strong domestic market and a good distribution network in Europe and the USA. The complete AutoPOL program (as well as its separate modules), are currently supplied to many leading OEMs. Bystronic, SAFAN BV, FinnPower Oy, PrimaPower Inc, Weinbrenner GmbH, Cincinnati Inc, Ursvenk Technology Corporation and Amada Sweden are among these valued partners.

**3D technology is today’s industry standard.**
During the first decade of the 2000s, it has often been put to question to what degree 3D technology has been accepted in the sheet metal working industry. Over the past 10 years, FCC Software AB has based all development efforts on 3D technology. With the 3D model as a starting point, the company has built its software for Bend Simulation and sheet metal unfolding. Today, in 2012, one can clearly see that 3D data is the industry standard for computer-based process simulation, in conjunction with modern fabrication. Managing the sheet metal part, as it continuously changes its geometric shape through the different manufacturing stages, has required this approach. The simulation process can be easily explained as the method of finding an optimal bending sequence without collisions, whether for the sheet itself, or the tool and machine. For this, it is necessary to implement at all times an accurate 3D description of the model, tools and machinery. Off-line software is a matter of course to achieve high productivity at the Press Brake. Short production runs mean constantly new tool set-ups, and the need for quick program changes. A complete product database with geometry data, tool information, and current control program for the Press Brake is the basis for profitable production, also in conjunction with short additional deliveries.

**Technology in the front line.**
AutoPOL Bend Simulation has a broad customer base and has, with its proven technology, met with great success. "Our lead over competitors is increasing constantly and is marked with this new launch. Sometimes you hear the expression "state-of-the-art", but that's really what it comes down to with our new *AutoPOL G²*, says Alf-Åke Hall, CEO and founder of the company FCC Software AB. He continues, "On the independent software market for Press Brake control, we are at the forefront with our technology. We have the latest tools, ranging from the 3D Engine from Spatial Tech, to a 64-bit version supporting the latest hardware platforms. We not only build up more
technology and functionality, we are also working to simplify the use, and thereby facilitate and shorten the learning curve. With our new software in the basic version, the customer becomes productive from the very first day with the program.

The program is also available in a full version that provides tools for custom design of sheet metal parts. It is a little more training-intensive, but nevertheless a good and cost effective solution for companies that need this extra functionality. Some controller systems also offer built-in AutoPOL 3D graphics in the press brake control itself, to achieve optimum workflow from Off-Line program to the Press Brake.

What is it that characterizes AutoPOL G²?
Fredrik Holmvik, Application Engineer and Trainer, points out the new simplified user interface with Ribbon Menus. He has played a strong hand in the game in terms of change. His feedback from customers and dealers has been connected to the development team, and the programmers have done a fantastic job. The new transparent and clean menu makes it much easier to learn and find commands. Learning time is markedly diminished, and the cost is reduced. "We have also built a so-called Wizard or Guide - so that it actually only takes four clicks to get a complete control code for the Press Brake. Documentation, compensated flat pattern and NC code are automatically saved in default folders", says Fredrik. He continues, "As a user, simply click through and verify each step. If you want to interactively make a change at any stage, the user has full control. Flat pattern, optimization of the bending sequence, and tool set-up, are done with full automation."

Of course, the simplified, guided approach requires that the 3D model is correct and does not contain any critical errors, and having the right equipment and correct materials chosen. If problems arise, users can intervene and affect the process with full control. This approach means that users need not be "expert". The process will begin with full productivity, and the "expert" user will emerge gradually.

Expanded opportunities for the import of 3D data.
Many customers require the import of 3D models from different CAD systems. The standard file formats SAT, STEP and IGES have been included from AutoPOL program’s first launch. The software now offers multiple opportunities in different packages, so that the customer can import the original native formats from other design platforms, like Catia, SolidWorks and ProEngineer. This option increases the flexibility of many companies that are suppliers to several different customers. Larger companies typically want to work only with their legacy file format for CAD data, and do not like to deal with any neutral file format in parallel. The possibility to include the legacy file formats ensures that production data is easily handled through revisions or changes.

Quicker return on investment made.
The introduction of modern computer-based 3D technology at the Press Brake does not mean only investment in software. There is an entire package that includes installation, training and start-up. What many forget is that the machinery will run at reduced capacity until full production is reached. With smarter and more intuitive user interfaces, training and start-up can be managed in half the time without reducing any safety for the user. The total cost of the investment made is reduced.

For further information, please visit www.autopol.com