SigmaBEND®
Automated bending software

SigmaBEND utilizes full 3D simulation to maximize the speed, quality, and flexibility of bending processes. Operating from a user's perspective, SigmaBEND brings sheet metal cutting efficiencies to press brake operations. While each sheet metal product may vary, press brake tooling configuration remains fixed. This ability to interactively change programming parameters provides ultimate control. Programming and verifying bending operations offline frees up valuable machine time, improves first-off reliability, and reduces manufacturing costs.

Ultimate control + reduced manufacturing costs

Features

► Recognition of bend information in a 2D CAD file

► 3D CAD interfaces with SOLIDWORKS®, Inventor, and industry-standard formats such as IGES, SAT, and STEP

► Automatic bend sequences, tool selection and finger stop placement

► Real-time simulation with collision detection

► Easy-to-use user interface for interactive editing of all bend parameters

► NC programing in native controller code

► Automatic generation of full shop floor documentation with graphical illustrated set-up and bend sequence information

► 3D graphical interface for simulation on the machine controller

► Bending processes for air and die bending

► Support for angle measurement systems and lifting aids

► Customizable tool library

► Easy import of custom tooling

► Precision flat pattern generation

Advantages

► Complex bend sequences are calculated automatically

► Improve profitability by reducing waste costs

► Better planning results in on-time orders

► Data available when and where you need it

► Frees up machine for bending not programming

SigmaBEND/AP

# SigmaBEND Automated bending software

Benefits

Speed

► Faster, more reliable programming away from machine tool

► Shorter programming time with CAD integration and automatic features

► Shorter set-up time with quick access to manufacturing information

► Better re-use of NC programs

Flexibility

► Runs on current Windows Operating Systems

► Import standard Neutral File Formats (IGES, STEP, Parasolid)

► User can configure ESSI, G, and M Codes for multiple machines

► Generates standard and customizable reports

Quality

► Fewer design errors

► Centralized database

► Integrated with CAD/CAM system

► Check the process via realistic bending simulation

► Eliminate costly programming errors with collision check
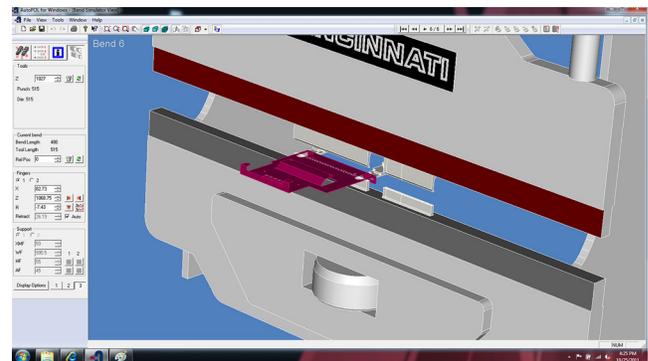
Compatible with these other SigmaTEK Products

SigmaNEST® AutoNEST™

Easy-to-use, powerful rectangular and manual nesting NC programming solution

SigmaNEST® TrueShape™

Builds from the AutoNEST core functionality and adds more dynamic, part-in-part nesting for reducing or eliminating scrap

SigmaNEST® Techno™

Optimizes machine through-put with advanced nesting and NC programming, including common-line, bridge, and chain cutting

SigmaNEST® Maximizer™

Combines the power of TrueShape nesting with the operational efficiencies of job tracking and inventory control solutions

SigmaNEST® PowerPack™

Combines advanced nesting and NC programming with greater operational efficiencies of job tracking and inventory control

SigmaNEST® Punch Basic™

Entry-level sheet metal software for single part nesting with punch machines

SigmaNEST® Punch Techno™

Maximizes material efficiency and machine through-put using advanced nesting functionality

SigmaNEST® Punch PowerPack™

Comprehensive sheet metal software for automatic nesting for punch machines.

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