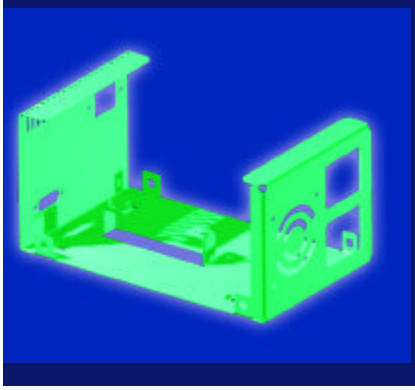
SPI - Sheetmetal

for Mechanical Desktop 5.0

World's best feature-based, parametric design and unfolding of sheet metal parts and assemblies



SPI - Sheetmetal Desktop 5.0 is the leading MAI-application for feature-based, parametric design and unfolding of complex sheet metal parts and assemblies with Autodesk Mechanical Desktop 5.0. It allows you to model more-complex designs faster than ever. SPI - Sheetmetal Desktop is 100% integrated with Mechanical Desktop 5.0. Thus modifications of parameters are considered, no matter if you built the model with Mechanical Desktop or SPI - Sheetmetal Desktop functions.

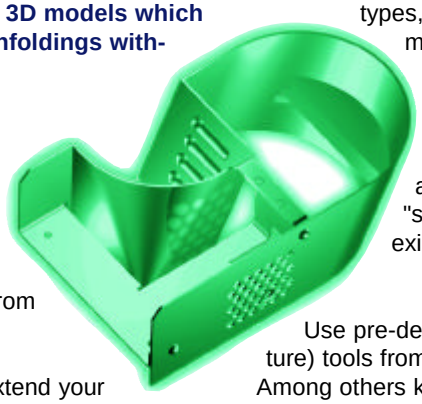
System Capabilities

- **Assembly Modeling**
- **Sharp Cornered Design**
- **Auto Analysis**
- **Unfolding of Freeform Surfaces**
- **Sheet metal Specific Lofting & Shelling**
- **Real-time Previews**
- **User-defined parametric Tools**

With SPI - Sheetmetal Desktop 5.0 you can create precise complex 3D models which can be transferred to unfoldings without problems.

Be more efficient now. Create parametric sheet metal bodies from any profile! Lead off parts or whole assemblies from existing 2D drawings or design your parts in 3D from the beginning.

Start with a profile and extend your design by adding flanges, that can be positioned under arbitrary angles. Use the new "box" command or use predefined flange-types, also create complex sheet metal parts with the "shelling" command and use the "split attributes", which can be used for corner splits and faces (flat planes), also create new sheetmetal parts using "sheet metal lofting" between existing profiles.



Use pre-defined or self-defined (new feature) tools from SPI's editable tool library. Among others knockout, oblong, rectangle, square, countersink and stiffening are available as parametric tools.

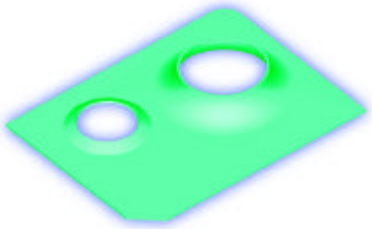
What's new in Version 5.0?

- User defined parametric tools
- New standard stamp tools
- Parametric bend feature
- Video based online help system
- Filleting and chamfering of sheet metal corners
- Virtual corner splitting for curved edges
- New measurements method for angle between faces
- SPI material and unfolding data added to the BOM part data
- Tooltable shows coordinates and angle
- Interface to SPI - VBend (Bending Simulation)

SPI - Sheetmetal Desktop 5.0

New tools and User-defined parametric punch and stamp tools

The user can now define a parametric punch and stamp tool library. These tools can be placed on the parametric part with the same command as the standard SPI tools. Two new standard stamp tools are introduced: Outlet-Round and Outlet-Sharp



Parametric bend feature

SPI - Sheetmetal Desktop 5.0 introduces a full parametric bend command. This command is similar to the corresponding bend command in the non parametric SPI - Sheetmetal / AutoCAD.

This command can bend up a flat geometry of a parametric Sheet metal part by specifying a bending line.

The command considers the bend allowance. The bends are corrected according to the shortening calculation method when modifying either the bending angle, the type of material or the part's thickness.

There are several options to specify the bending line: clicking two co-ordinates, picking a bending line of an unfold shape, using an open profile.

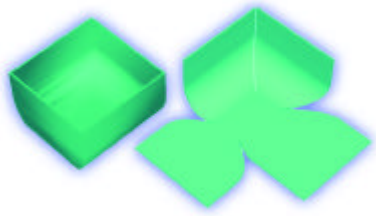
Filleting and Chamfering of sheet metal corners

A very frequent task is to fillet or chamfer sheet metal corners to avoid sharp areas. Using default Mechanical Desktop commands for that is often difficult, because the to select edges are very small and difficult to pick.

The SPI command makes the selection of the required edges much more easy. With SPI just pick an edge near to the edge you like to modify. An obvious mark for all selected edges is shown.

Virtual corner splitting for curved edges

Enhancing the *corner split* command with version 5 it is possible to define a global spacing for non straight corner situations.



New measurement method for angle between faces

Version 5 allows to measure the inclusive angle between two planar faces. This also applies to the measure capability of angles in some SPI - Sheetmetal and SPI-Sheetmetal Desktop commands, like flange creation etc.

Video-based help system

For most SPI - Sheetmetal Desktop commands a video is provided displaying the command in real life.

SPI material and unfolding data added to the BOM part data

The SPI material data appear in the bill of material if there are appropriate columns defined. After each unfold process the dimension of the unfolded geometry (width x heights) is assigned to the part data.

Tool table shows tool coordinates and angles

The tool table shows the tool position coordinates x and y and the reference angle for each tool. To do so, the user must choose a reference point for the generation of the x and y values.

Interface to SPI - VBend (Bending Simulation)

SPI - Sheetmetal Desktop 5.0 Pro support interaction with SPI - VBEND, which delivers a complete bending simulation for sheet metal parts. It is possible to determine feasible bending sequences and it also supports tools selection and interference detection. A complete virtual dynamic simulation of the whole bending process is possible.

ACT TODAY
SPI - Sheetmetal Solutions software is sold through a worldwide network of Value Added Resellers.
To locate the reseller nearest you, or to order free demo material, please contact:

United States and North America
DeLisa Leighton
SPI Office USA
Larkspur, CA 94939-1754
Tel. +1 415 507 91 88
Fax +1 415 507 91 89
e-mail infoSPI@aol.com

All other countries
Volker Reimers
SPI Headquarters Germany
D-22926 Ahrensburg
Tel. + 49 4102 42051
Fax + 49 4102 44411
e-mail vr@spi.de

http://www.spi.de

Additional Highlights

Fast creation of a parametric box

Real-time previews

Enhanced split attributes with selection of the corner type

Sheetmetal face split

Intelligent split path finder

Unfolding of freeform surfaces once created with lofting or filleting

Unfolding of plate-, cylindrical-, conical- or other faces, that are not part of the sheet metal design

Direct positioning and rotating of the unfolding

Create unfolding optional in "model" or "paper space"

Enhanced handling of the punch tools

Enhanced corner stamps

Bending table with total length of bend line