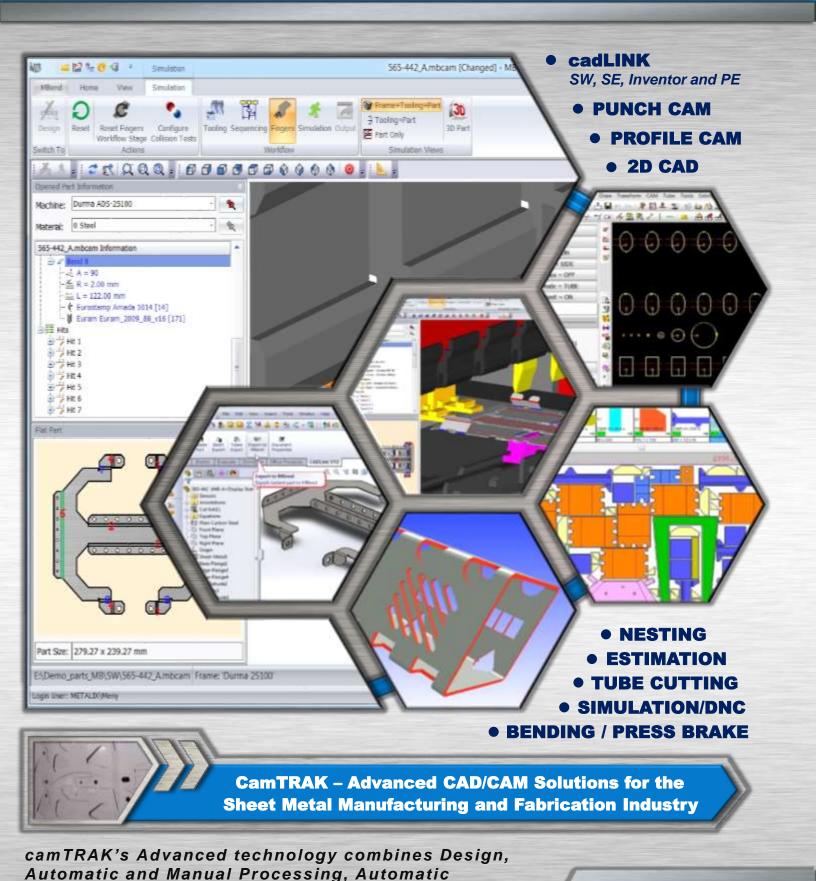
# **Proven Innovative Solutions**



www.cam-trak.com

Office: 830-837-5595

Nesting, effective NC Generation, Graphic Simulation and DNC Machine Communication.

CAD/CAM Solutions

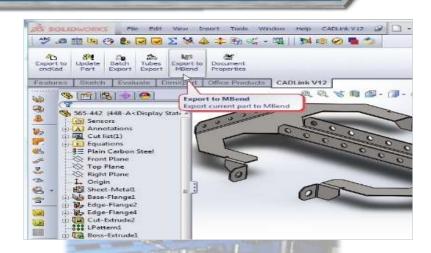
Email: info@cam-trak.com



## 2D CAD / Part Generation / cadLINK

**CamTRAK's cadLINK** module enables one-click real-time transfer of parts from 3D Modeling packages into the CAM processing system.

Parts can be transferred from SolidWorks, SolidEdge, Autodesk® Inventor®, Pro/ENGINEER using an on-line associative link, bypassing the need for intermediate geometry files such as DXF's and DWG's.

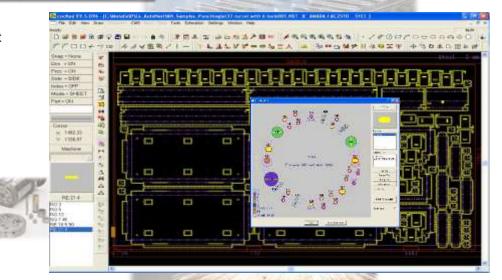




## **Punch Features**

camTRAK features these advanced technologies, which are fully automatic, yet can be easily controlled manually:

- Automatic Punching with Pre-Defined Shapes
- Wire and Micro Joint positioning
- Clamp Avoidance
- Easy to use Common Cuts
- Single Clamp Movement
- Full support for Wheel tools
- Tool Path Optimization
- Efficient strategies for tool usage

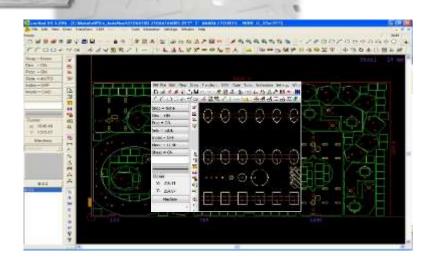




### **Profile Features**

**camTRAK** enables the full usage of your machine's capabilities:

- Automatic Cutting with Corner Treatment
- Rapid Tool-Path Crash Avoidance
- Tool-Path Optimization with Auto Entry Point
- Material-based Cutting Tables
- Vaporization and Marking Before Cutting options
- True-Type Font cutting and engraving
- Common Line cutting
- Cutting Direction (CW/CCW)





## **Automated True Shape Nesting**

camTRAK offers optimal material utilization via AutoNest's automatic nesting module.

**AutoNest** is a powerful True Shape nesting tool offering versatile methods for automatic and manual nesting to provide the best possible nesting solutions.

### AutoNest includes:

- Fully Automated Nesting-select the parts and AutoNest does the rest.
- Hole Filling Interior holes in parts are identified and filled with compatible parts, creating efficient solutions
- Multiply Material Nest parts from different materials
- True Shape or Rectangular Nesting
- Grouping automatic and manual



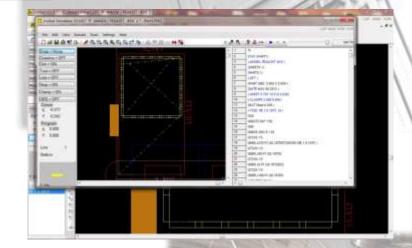


### **Simulation / DNC**

The **Simulation** program is a completely individual module of **camTRAK** and runs in a separate window from the main program, allowing **camTRAK** to remain open in the original window.

#### camTRAK Simulation:

- Supports graphic simulation of any CNC program
- Allows loading legacy programs previously written on the machine
- Converts legacy programs into graphics with the NC to DFT option
- Enables easy editing of NC programs while viewing the processed sheet
- Permits changing tools in your Machine's Turret, according to your NC settings
- Automatically checks NC code for errors like missing parameters, clamp errors, over-travel errors, etc.

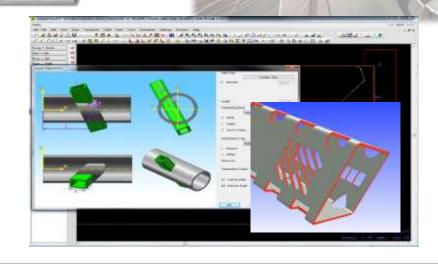




### **Tube and Pipe Cutting**

camTRAK supports Laser/Plasma/Flame machines equipped with a CNC Rotary Axis head, enabling cutting parametrically defined intersections between tubes, and between a tube and a plane. It also supports single-sided or double-sided lapped intersections using a simple graphic interface.

Precise design and 3D tube layout for cutting tube assemblies can be quickly reached with this simple **camTRAK** software module.





# Complete Design – To – Production Cycle

# camTRAK is an integrated system covering the complete cycle required for the Sheet Metal Manufacturing Industry.

### **Drafting**

camTRAK has a very powerful easy to use 2D drafting module. In addition to a full set of drafting tools, camTRAK supports special sheet metal drafting aids and Geometry Validation to automatically detect and correct unclosed contours.

### **Punch Technology**

The Punching module supports:

- Auto-Punch
- · Special Tools
- · Auto-Indexing
- · Automatic reposition
- Common Cuts

### **Tube Cutting**

**camTRAK** supports Laser/Plasma/Flame machines equipped with a CNC Rotary Axis for tube processing, using a single graphic interface.

Set layout and design for cutting tube assemblies quickly and accurately , then view the cuts in 3D.

### **Simulation of CNC Programs**

**camTRAK** supports graphic simulation of any CNC program, including legacy programs previously written on the machine.

The simulation enables easy editing of CNC programs, while graphically viewing the results on the processed sheet.

NC to Draft: Legacy NC files can be converted into drawings.

### **Import**

**camTRAK** has an efficient import feature for DXF, DWG, IGES, CADL and other standard file formats. Includes supports for mm/inch-based files and Layering.

### **Cutting Technology**

The Cutting module supports:

- Auto-Cut
- Contour Check and Correction
- Beam Width definition and Auto Compensation
- · Corner Loops and Corner Slow Down
- Z axis control
- Open Contour Cutting

### **Post Processing: NC Files**

Advanced post-processors generate efficient programs, including Sub-routines (macros), Optimized Tool Path and Minimal Turret Rotation, with support for machine operations such as oiling, vacuum and

### DNC

Easy communication with your machine allowing for uploading and downloading of NC files, with support for batch loading and for extracting NC files from the machine controller.

### **Data Report Generation**

Detailed production reports for individual parts, Nesting Solutions and Costing Estimation, using fully customizable templates.



CAD/CAM Solutions

Powered by: Metalix

www.cam-trak.com

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