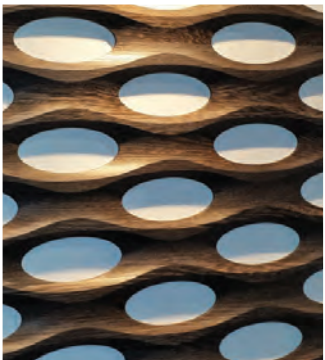# CNC SOFTWARE FOR
# PRODUCTIVITY & PROFITS

EnRoute®

thinksai.com

# WHY YOU NEED ENROUTE SOFTWARE
# IF YOU HAVE A CNC MACHINE

Tailor made for CNC production, EnRoute Software simplifies your workflow and increases your productivity with tools that save design time and cut time.

A blend of artistic and precision drawing tools coupled with an extraordinary toolpath engine make EnRoute the ideal CAD/CAM software for 2D and 3D design and cut applications.

EnRoute Software is offered as a traditional license product with several product levels to fit your application needs. EnRoute Complete, which includes our full set of design and production tools, is offered as an affordable monthly subscription plan. Choose the product that is right for your business.

## ENROUTE PRODUCT LEVELS

### ENROUTE DESIGNER

Intuitive and flexible, our design tools allow for the easy creation and editing of text, shapes, contours, and textures for all types of applications. Import artwork and use our powerful vectorization engine to create clean, cut-ready lines and contours with precision and speed.

#### STANDARD DESIGN TOOL SET
All the features needed to:
• *Draw freehand using a stylus or mouse.*
• *Create lines, Bezier curves, circles, rectangles, squares, and arcs.*
• *Edit shapes using the jigsaw and welding tools.*
• *Text -add, copy and paste.*
• *Contour editing*

#### CREATIVE DESIGN TOOL SET
3D and texture design tools including:
• *3D Design - Revolve, Spin, Extrude, Sweep Two Rails, Chamfer, Primitive Objects*
• *3D Reliefs – Creation and Editing*
• *Textures – Bitmap, Parametric, Symmetric, Rapid*
• *3D Mesh Creation*
• *3D Object Creation*
• *Relief Slicing*

### ENROUTE BASIC

This level provides all the necessary tools you need for 2D applications. The Standard Design Tool Set is coupled with a Toolpath Engine that enables:
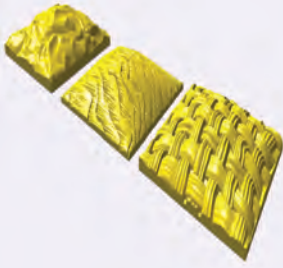
• *Routing and Open Contour Offset*
• *Engraving and Scribing*
• *Hatch, Island and Spiral Fills*
• *Toolpath plans and strategies*
• *Supports multiple tools per toolpath*
• *Drill bank support*

EnRoute's toolpaths are associated with the base geometry, which automatically recalculates when changes are made.

The BASIC edition includes Dynamic "Quick Fit" Manual Nesting so you can easily position parts to save on material. Verify output before cutting with 2D and Ortho simulation.

***Example Applications: Channel letters, 2D Dimensional Signage, Inlays and Push Through, Any Parts Cut Using a Standard Bit.***

## ENROUTE PLUS

In addition to all of the features of the BASIC level, PLUS gives you the ability to design and toolpath 2.5D engravings, prismatic lettering, parametric and rapid textures. EnRoute software is known for its unique texturing capabilities. Choose from realistic parametric textures, such as bamboo, pebbles, wood, weaves, flagstone, or create your own design from an image. Or use EnRoute's exclusive Rapid Texture tool to create one-of-a-kind designs. Rapid Texture utilizes the size and shape of the bit to cut 3D textures in substantially less time.

Sharp, clean corners are a snap with EnRoute's Corner Fine feature. Simply specify a small-radius bit as your "fine tool" and the software takes care of the rest, identifying each corner and removing any excess material left in the corner radius.

The PLUS version provides expanded Nesting capabilities including True Shape and Block Nesting. In addition, you can create and save Remnant sheets, which you can then nest into on your next job. The Nesting and Remnant features save you money by reducing material waste.

*Example Applications: Pyramid letters, V-groove Signs, Awards & Plaques, Textured Signs, Textured Wall Panels, Rapid Pictures.*

## ENROUTE PRO

In addition to all the features of the PLUS level, PRO includes the Creative Design Tool Set for making and editing 3D reliefs. Unleash your creativity with the power and flexibility of EnRoute PRO. Additional features in the level include:

- *Extrusion Tool -- easily turns 2D shapes into 3D contours.*
- *Object Distortion – time saving tool provides elastic handles for pushing and pulling objects to define new shapes.*
- *Symmetric Parametric Texture Tool—helps you align and match textured patterns across multiple panels.*
- *Advanced Nesting Suite – saves materials with Nest-Around-Obstructions and Common-Line cutting capabilities.*

The PRO version comes equipped with all the tools you need for efficient Nested-Based Manufacturing. EnRoute's AutoToolpath (ATP) function allows you to process layered DXF files using saved strategies to nest, order and output with just a few clicks of a button.

With PRO, you can create templates to store and reuse information that is commonly input for the material, toolpaths as well as design features that require input. This time-saving feature will simplify your workflow.

*Example Applications: 3D Artistic Signs, Architectural Signs, Curved Mouldings, 3D Millwork, Cabinets, Nested-Based Manufacturing, Mold Making, Furniture.*

## ENROUTE COMPLETE

This version contains the same feature set as PRO but is offered as an affordable monthly subscription product. The big advantage with a subscription is free product upgrades. Subscription customers always have the latest product version as part of their plan. Choose from 3 different payment options:

- *Month-to-month with no obligation, you can cancel at any time*
- *Discounted month-to-month with a 12-month commitment*
- *Annual pre-paid*

Free technical support via phone, email or chat is also included with every subscription plan. Start your subscription with a free 7-day trial.

*Example Applications: 3D Artistic Signs, Architectural Signs, Curved Mouldings, 3D Millwork, Cabinets, Nested-Based Manufacturing, Mold Making, Furniture.*

## ENROUTE FABRICATION

Design and output 2D files for CNC Plasma, Waterjet or Laser with ease. CAD drawing tools let you design both visually or parametrically. The intuitive user interface is logically organized.

Clean-up and editing tools make it fast and easy to reduce points and remove unnecessary contours and intersections.

EnRoute's vectorization engine converts bitmap images into clean lines ready for resizing or cutting in just one click of your mouse.

EnRoute FABRICATION includes several advanced toolpathing features designed to optimize efficiency and provide high quality finished parts. Algorithms include:
- *Common-Line*
- *Looped Corners*
- *Smart Entry-Exit Positioning*

Kerf Compensation, controlled through a simple dialog box, allows you to easily determine the parameters you want to use when cutting and stores the information for easy recall.

Four nesting algorithms simplify the output process, automatically positioning parts for optimal material savings. With the Nesting Organizer feature you can specify the number and priority of parts to be cut prior to nesting.

*Example Applications: Manufactured parts, decorative metal art*

# TOP REASONS FOR CHOOSING ENROUTE

- **EASY TO USE, EASY TO LEARN**
- **BEST VECTORIZATION ENGINE**
- **UNIQUE TEXTURING CAPABILITIES**
- **FAST, ACCURATE RENDERING**
- **TIME SAVING TEMPLATES & LIBRARIES**
- **MATERIAL SAVING NESTING ALGORITHMS**
- **ATP CAPABILITY TO WORK WITH LAYERED DXF FILES**
- **FREE TECHNICAL SUPPORT**

# SAi EnRoute Feature Comparison

| | Complete (subscription) | Pro | Plus | Basic | Fabrication (subscription) |
|---|:---:|:---:|:---:|:---:|:---:|
| **DESIGN** | | | | | |
| Complete set of 2D CAD and Editing Tools | ✓ | ✓ | ✓ | ✓ | ✓ |
| Graphic Design Tools (Vectorize, Point Cleanup, Distort) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Advanced Text Tools (including support for Single Stroke Fonts) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Current 2D Import Filters (DXF, DWG, AI, EPS, SVG, PNG) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Shape Wizards (including Boxter) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Interlocking Component Creator | ✓ | ✓ | ✓ | | |
| Rapid Texture and Rapid Picture | ✓ | ✓ | ✓ | | |
| **TOOLPATHING** | | | | | |
| Advanced 2D Toolpathing and Drilling | ✓ | ✓ | ✓ | ✓ | ✓ |
| Profile & Kerf Tools | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3D Engrave Carving, Pyramid Tool, 3D Clean Pass, Corner Fine | ✓ | ✓ | ✓ | | |
| Start Point Control, Bridge Editing, Toolpath Distort | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3D Relief Surface Cutting, Carve into Surface | ✓ | ✓ | | | |
| 2D, Ortho and 3D Simulation with Realistic Material | ✓ | ✓ | ✓ | ✓ | ✓ |
| No-lift Toolpathing | ✓ | ✓ | ✓ | ✓ | |
| **3D SURFACING** | | | | | |
| 3D Relief Creation and Editing | ✓ | ✓ | | | |
| Textures (Parametric and Bitmap) | ✓ | ✓ | | | |
| Symmetric Parametric Texture Panels | ✓ | ✓ | | | |
| Vertical Relief Slicing | ✓ | ✓ | | | |
| Relief Slicing with Auto Toolpath Mask | ✓ | ✓ | | | |
| Mesh Unwrapping for Rotary Cutting | ✓ | ✓ | | | |
| 2D Mesh Model Stacker | ✓ | ✓ | | | |
| **NESTING** | | | | | |
| True Shape Nesting (3 Nesting Engines) | ✓ | ✓ | ✓ | opt | ✓ |
| Block Nesting with Common Line | ✓ | ✓ | ✓ | opt | ✓ |
| Nest Around Obstructions | ✓ | ✓ | ✓ | opt | ✓ |
| Create Remnants | ✓ | ✓ | ✓ | opt | ✓ |
| Multi-Layer Nesting | ✓ | ✓ | ✓ | opt | ✓ |
| Dynamic "Quick Fit" (Manual Nesting) | ✓ | ✓ | ✓ | opt | ✓ |
| Auto Toolpath for DXF Files, Cabinet Programs with Part Prioritization | ✓ | ✓ | opt | opt | |
| Auto Toolpath Lite for Active EnRoute Files | ✓ | ✓ | ✓ | opt | |
| **PRODUCTION** | | | | | |
| Save and Reuse Toolpaths for Faster Workflow | ✓ | ✓ | ✓ | ✓ | ✓ |
| Backplot Plugin for Output Verification | ✓ | ✓ | ✓ | ✓ | ✓ |
| Hundreds of Machine Drivers (Posts) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Setup Manager | ✓ | ✓ | ✓ | ✓ | ✓ |
| **SERVICE & SUPPORT** | | | | | |
| On-Demand Right-Click Training Movies | ✓ | ✓ | ✓ | ✓ | ✓ |
| Phone and Email Support | ✓ | ◆ | ◆ | ◆ | ✓ |
| EnRoute Knowledge Base | ✓ | ✓ | ✓ | ✓ | ✓ |

◆ Users on the current version of the software receive phone and email support

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