



# TurboNest® 2010

NESTING & PROCESS OPTIMIZATION SOFTWARE

## Power made simple

TurboNest nesting software, for conventional plasma and oxyfuel applications, delivers best-in-class performance and reliability yet is also incredibly easy to learn and use. With TurboNest you will experience flexible import of your 2D CAD files, material cost savings from efficient nesting, and repeatable results from parameter-based setups that provide consistent cut quality and productivity, along with reduced operating costs. TurboNest offers the solutions you need to process your jobs quickly, easily, and profitably.

**Power Made Simple!**

## Performance you can depend on

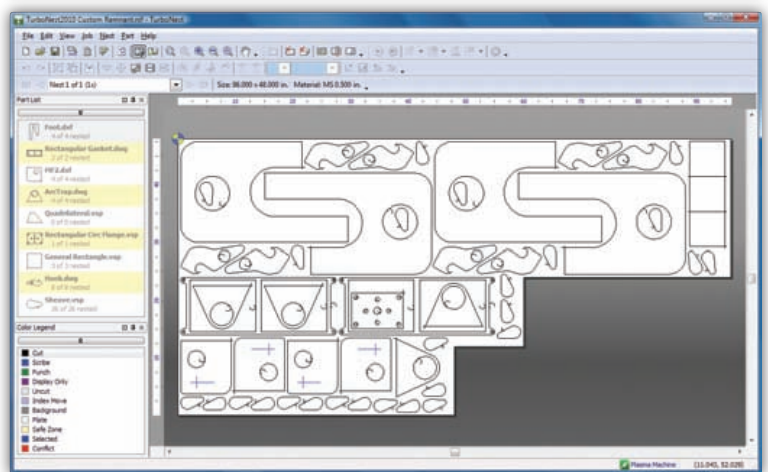
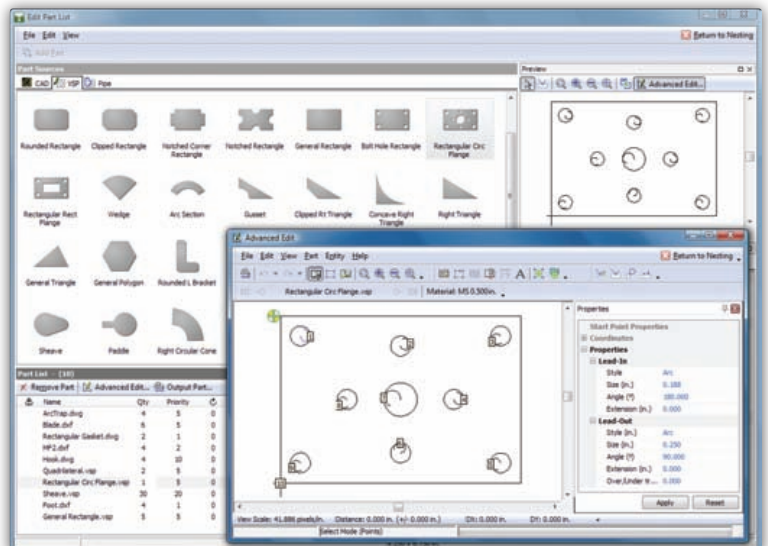
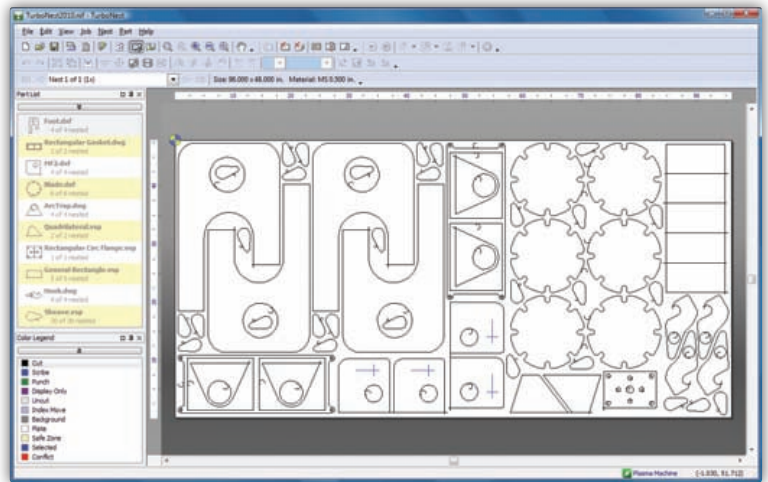
TurboNest's standard features provide users with the flexibility needed to efficiently program for multiple plasma and oxyfuel machines. For example, tool-pathing of CAD files (lead-in/out style and placement, cut direction and sequence, kerfing, etc.) occurs automatically upon import. Part requirements (quantity, grain restrictions, etc.) may also be assigned. Rotate, bump, cluster, copy, array, and other features allow parts to be manually nested with ease. Produce parts of consistent quality using TurboNest's built-in technologies (feedrate and kerf control) and conveniently share job information with management and machine operators provided in TurboNest's printed reports. Through automation of many stages of the nesting process, completing a job using TurboNest will take you less time and will give you better results.

You can increase productivity with TurboNest by utilizing one or more of its optional modules. Automate your nesting to save programming time and material by adding TurboNest's True Shape Nesting module. Take advantage of the available productivity tools (common line cutting, chain cutting, bridge cutting) to reduce operating costs. TurboNest's optional modules will help you improve profitability at your manufacturing operation. Create the package that's right for your budget and your business now, then add additional modules later, as you need them.

## Commitment to service

MTC Software products are backed by the industry's best technical support, provided via company and channel partner specialists who are available to assist you using telephone, fax, email, and online support sessions. Our dedicated support team will make sure that you are up and running quickly, achieving operational readiness in as little time as possible.

We offer a Software Subscription program which includes one-on-one internet training sessions, unlimited technical support, and access to periodic version and update releases. The subscription program provides a cost effective way to get the most out of your investment in MTC Software.



**MTC software®**  
POWER MADE SIMPLE®



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## Standard features

### CAD/CAM import, conversion, and part development

- Import and automatic conversion of \*.dxf and \*.dwg, \*.dgn, \*.nc, and \*.nc1 CAD file formats
- Import and automatic assignment of CAD layer(s) information for cutting, scribing, and punching processes
- Ability to import and separate multiple parts from a CAD drawing
- Clean-up of CAD file layers, profiles and entities
- Automatic entity reduction and smoothing of jagged line, polyline, and spline entities
- Problem CAD files are automatically corrected or flagged for a simple manual edit (delete entities and profiles, close open profiles, etc.)
- Variable shape parts library to create commonly used geometric parts within TurboNest
- Cut direction and sequencing are automatically assigned on import plus tool paths are generated on-the-fly
- Automatic assignment of material-based lead in/out style (arc, linear) and size on import
- Rotation restriction capability to manage part grain constraint during manual and automatic nesting
- Advanced edit tool, including corner loop, tab, and part-cut-up functionality

### Interactive manual nesting

- Customizable material thickness database and sheet X-Y dimension list
- Edit lead in/out position and style before and/or after parts are nested
- Independent and material-based part, plate, and pierce separation control
- Advanced drag-and-drop, copy, bump, mirror, rotate, cluster, and array functionality
- Part interference detection
- Interactive and automatic plate cropping
- Basic multi-head support with head selection and spacing
- Animated cutting sequence simulation
- Material-based process parameters with feedrate and kerf



### Output, reporting, and costing

- Production cost parameters including material database with unit price, scrap value, and density
- Automatic calculation of part area, weight, cutting time, cost, etc.
- Automatic calculation of nest and job properties, including utilization percentage, parts nested, production time, and cost, etc.
- Printable standard shop reports
- Automatic height control configuration
- Pre-piercing and pre-kerfing technology
- Flexible post-processor and machine X-Y axis configuration
- Automatic NC code generation, by part, nest, or job






## Optional modules

TurboNest is ideal for use with the following cutting processes.








Use the icons provided to identify the cutting process that will typically benefit from that module.

 Conventional Plasma       Oxyfuel

### Automatic nesting modules

|                       |   |   |
|-----------------------|---|---|
| Pattern Array Nesting |  |  |
| Rectangular Nesting   |  |  |
| True Shape Nesting    |  |  |

### Productivity modules

|                          |   |   |
|--------------------------|---|---|
| Common Line Cutting      |  |  |
| Chain Cutting            |  |  |
| Bridge Cutting           |  |  |
| PIPE Parametric Fittings |  |   |

### Material and inventory optimization module

|                 |   |   |
|-----------------|---|---|
| Custom Remnants |  |  |
|-----------------|---|---|



**MTC software<sup>®</sup>**

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DS-TN2010NA

### Americas

**United States – Central Operations** [mtc@mtc-software.com](mailto:mtc@mtc-software.com) | +1 (716) 434-3755

**Canada** [mtcCA@mtc-software.com](mailto:mtcCA@mtc-software.com) | **Mexico** [mtcMX@mtc-software.com](mailto:mtcMX@mtc-software.com)

**Brazil** [mtcBR@mtc-software.com](mailto:mtcBR@mtc-software.com)

### Asia Pacific

**Singapore** [mtcSG@mtc-software.com](mailto:mtcSG@mtc-software.com) | **China** [mtcCN@mtc-software.com](mailto:mtcCN@mtc-software.com)

**Japan** [mtcJP@mtc-software.com](mailto:mtcJP@mtc-software.com) | **Australia** [mtcAU@mtc-software.com](mailto:mtcAU@mtc-software.com)

### Europe, Middle East, and Africa

**United Kingdom** [mtcUK@mtc-software.com](mailto:mtcUK@mtc-software.com) | **Netherlands** [mtcNL@mtc-software.com](mailto:mtcNL@mtc-software.com)