



OMNIWIN 2016

Advanced Designing and Nesting Software

OmniWin 2016 is the ideal software for thermal cutting for oxyfuel, plasma and laser cutting with CNC machines. It is first class software equipped for fast and effective cutting which reduces workload through the effortless export and import of drawings and plans. It offers a wide range of functions and nesting capabilities for special applications. OmniWin 2016 is effective and economical for small production runs as well as in just-in-time manufacturing with changing quantities at custom cutting operations.

PRODUCTION PLANNING

Thermal cutting workshops have numerous tasks for work preparation before production on the machine can start. Part geometries must be designed or imported from customer drawings then nested to maximize material usage. Using the CNC nesting plan can ensure fast processing and high quality while utilizing the full technological capabilities of the machine like True Hole® or Contour Cut.

SIMPLIFICATION OF WORK PROCESSES

OmniWin 2016 combines the highest technical flexibility with fast, efficient processing while reducing costs by maximize material usage. With integrated operations of CAD, and import nesting for vertical and beveled parts the process dramatically simplifies the work flow.

OMNIWIN 2016 IS OFFERED IN FOUR VERSIONS:

- Standard
- Enhanced
- Professional
- Enterprise

ALL EDITIONS OF OMNIWIN 2016 INCLUDE:

- Fully integrated CAD system.
- 3D part rendering.
- Raster to vector image importing.
- Short cut keys.
- Undo of all previous tasks.
- Familiar controls for zooming and panning.
- Text conversion for marking or cutting.
- Messer developed process database.
- Part, plate, plan, and customer database.
- Messer Hole Technology.
- Tool path simulation.
- Customized reports.
- Process optimization with collision avoidance.
- Dimensioning.
- NC import for reposting or troubleshooting.
- Part scaling, mirroring, rotating, and bumping.
- Construct custom plates.
- One click data processing.
- Heat dissipation techniques.
- Advanced time calculations.
- Cost estimation.

OMNIWIN 2016

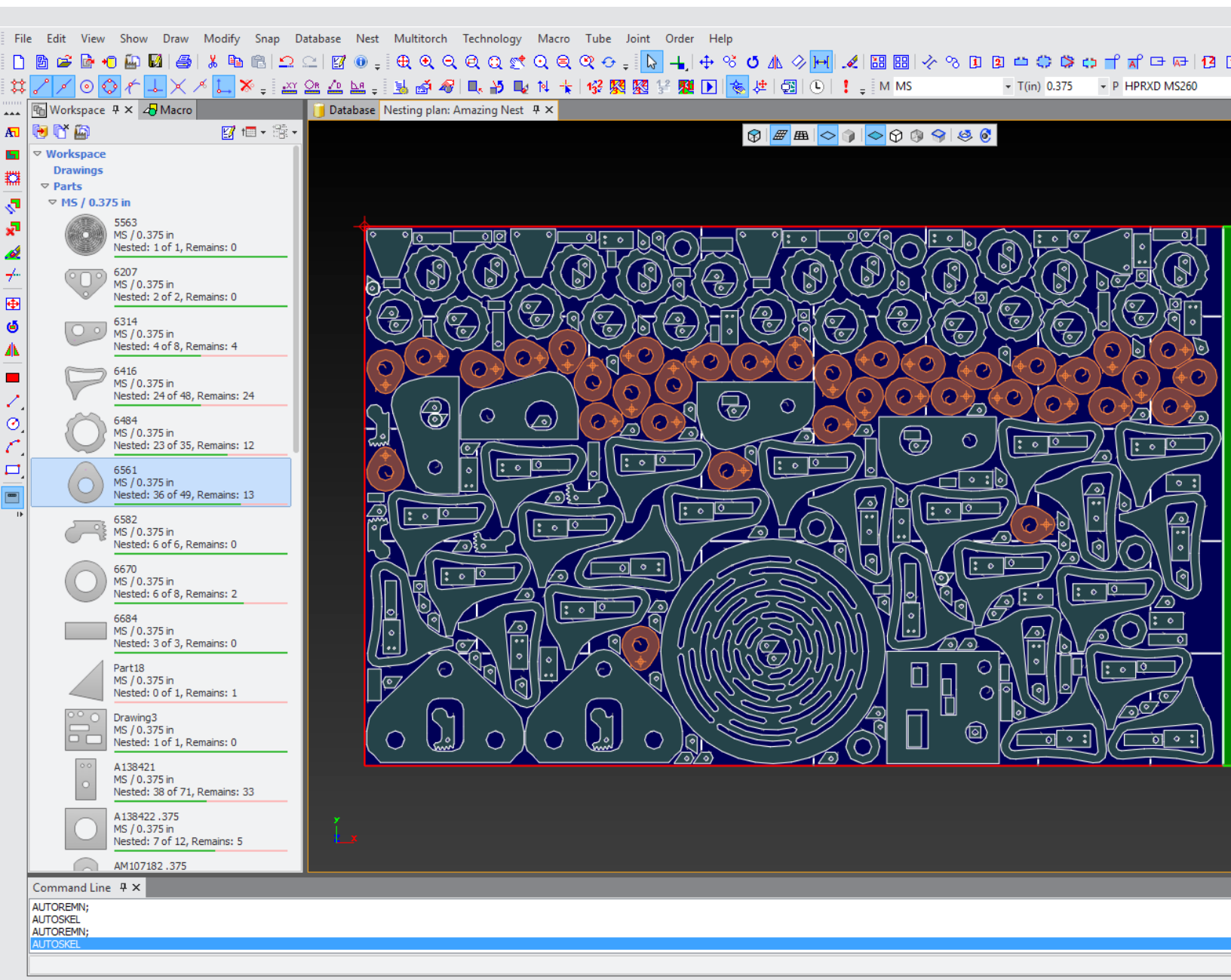
PROFESSIONAL DESIGNING AND NESTING

PROGRAMMER INTERFACE

OmniWin 2016 provides a CAD system offering an integrated work environment for drawing parts, importing existing drawings, creating nesting plans, and generating the CNC output within the same application. The operator programmer interface allows a clear overview and is available in numerous languages allowing functionality for intuitive daily applications.

FAST PART DESIGN

Parts are created simply and quickly in the integrated CAD system using various positioning, drawing, modification, grouping, and labeling functions like other professional CAD programs use. Standard parts can be created in seconds using macros with variable parameters like converting markings into closed contours or line contours. The 3D function for vertical and beveled parts gives a realistic view of the part geometry.

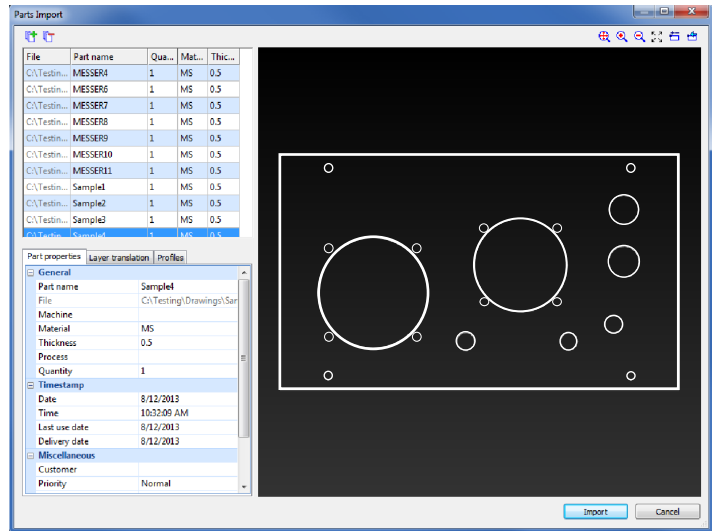


INCREASED PROGRAMMER PRODUCTIVITY

Bulk part importing allows the user to import multiple drawings at one time, preview drawings, assign layers, select materials, thickness, quantities, and machine profiles. The workspace will sort the parts by material and thickness for a more efficient workflow. 3D parts viewed in the Graphical User Interface (GUI) gives the user a realistic view of the part while the new manipulator tool helps the user copy, rotate, scale, mirror and move parts on a nest plan for efficiency. Generation of all production data is accomplished with one button click.

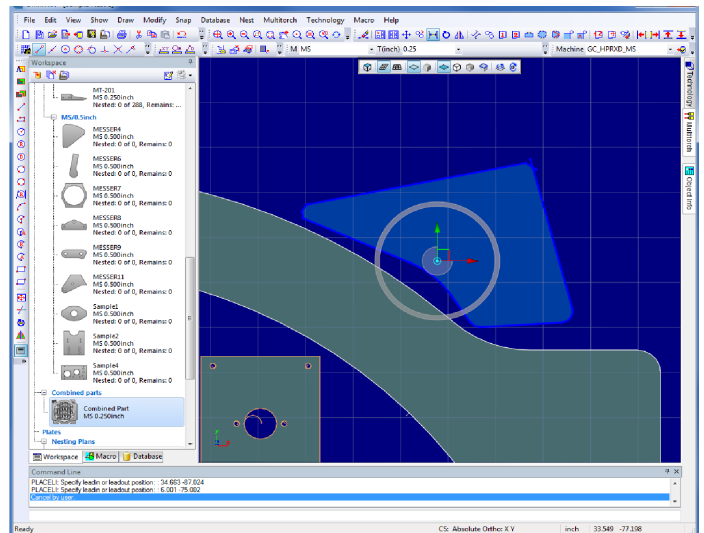
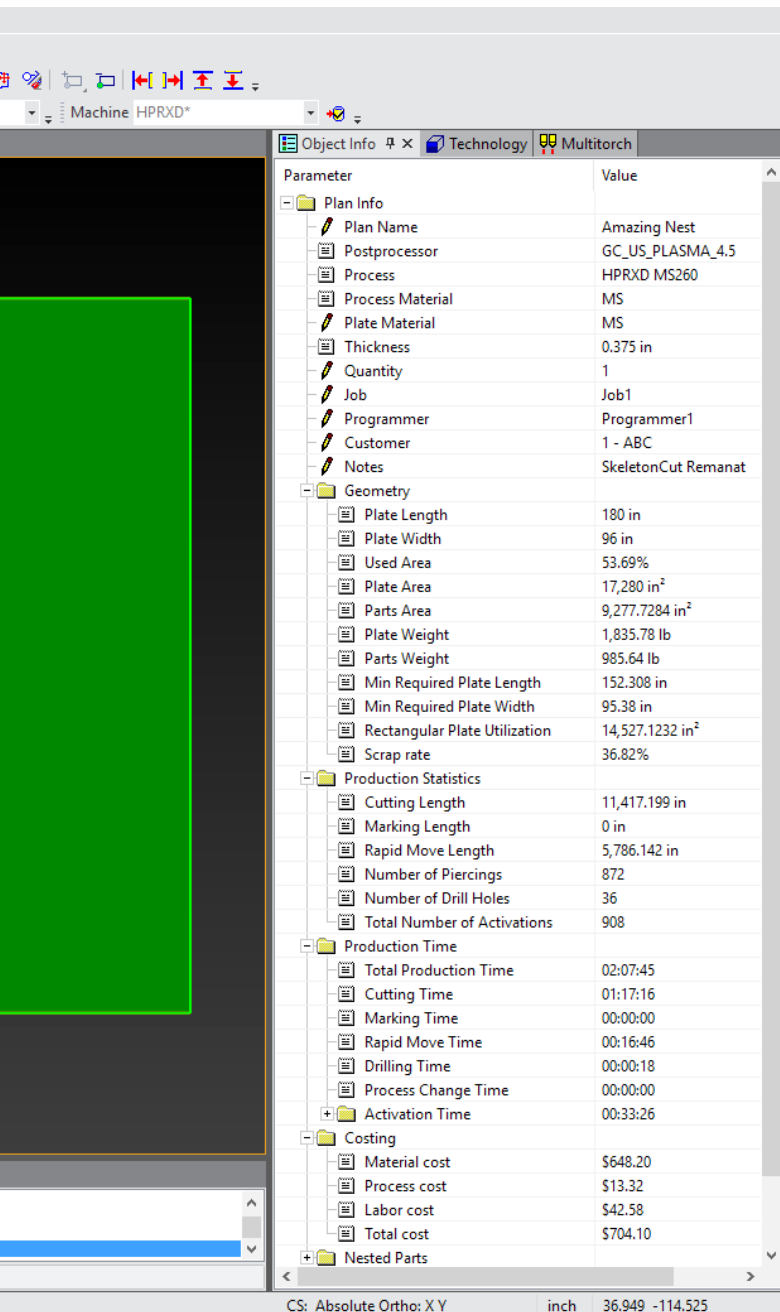
INCREASED MACHINE PRODUCTIVITY

Messer Process Optimization minimizes the distance between rapid moves within inner contours of parts and from part-to-part. Two separate modes are available for minimizing lifter up and down time between pierces and starting points are moved to avoid tip-up collisions.



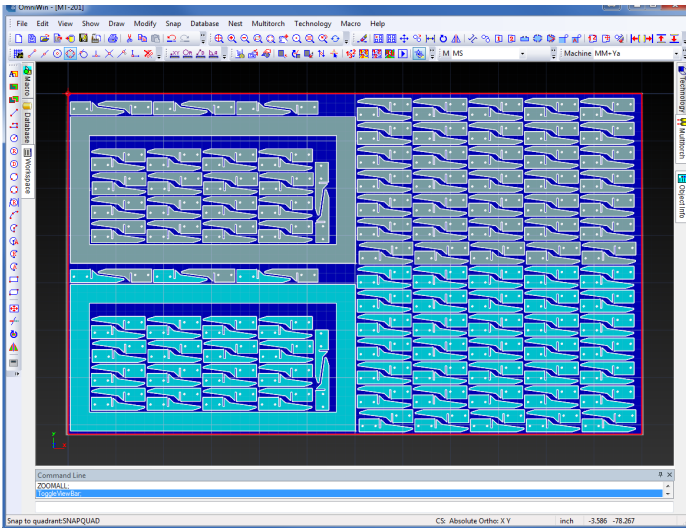
SIMPLE AND RELIABLE PART IMPORT

Part drawings in the form of DXF, DWG, DWF, DSTV, or IGES files are easily imported into the system with the integrated import function. The parts are converted to the necessary format with automatic layer interpretation and allocated to the desired processes. Import support is available using various automatic error corrections as well as the ability to import bill of material properties on CAD files.

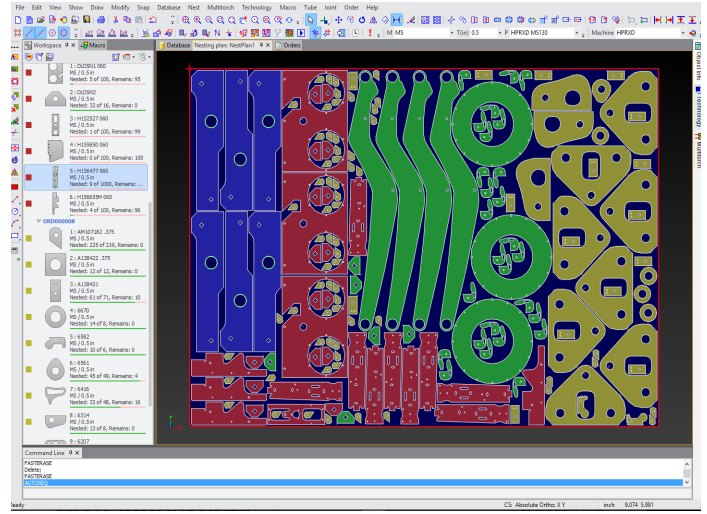


INTUITIVE NEST PLAN CREATION

Nest parts are created out of an ergonomically designed optical list with drag and drop and automatic collision control. The configurable technology database determines the parameters of part-part and part-plate distances, as well as the added lead-ins and lead-outs, shape and length. Manipulation of parts such as copy, rotate, and move with collision control is performed by one tool while sequence of parts and contours can be defined manually, automatically or rule based. The system also allows individual modifications to the technology of single nested parts which can be applied to other identical parts. Messer Hole Technology can also be applied for plasma cutting of circular inner contours to optimize the quality of cut depending upon the unit used.



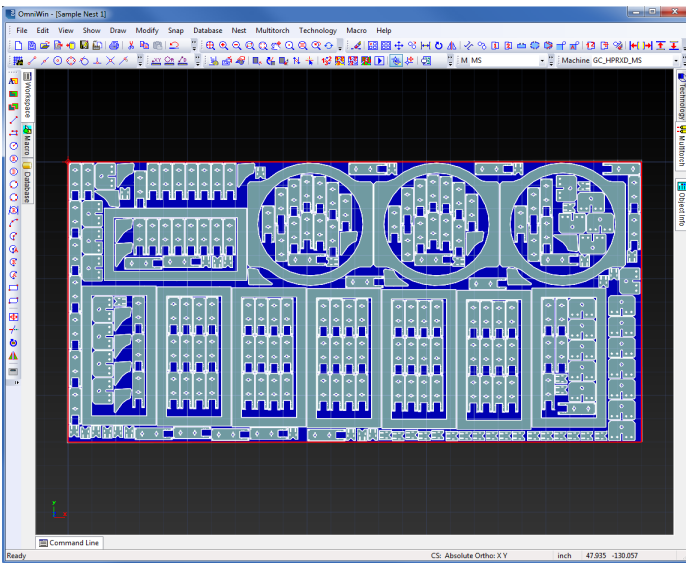
MULTI TORCH NESTING (Enhanced, Professional, Enterprise)



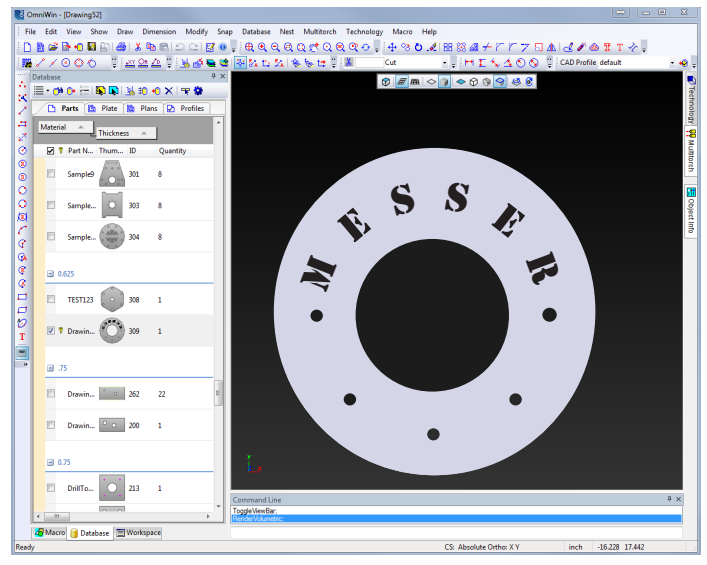
PART, PLATE, PLAN AND CUSTOMER DATABASE

(Standard, Enhanced, Professional, Enterprise)

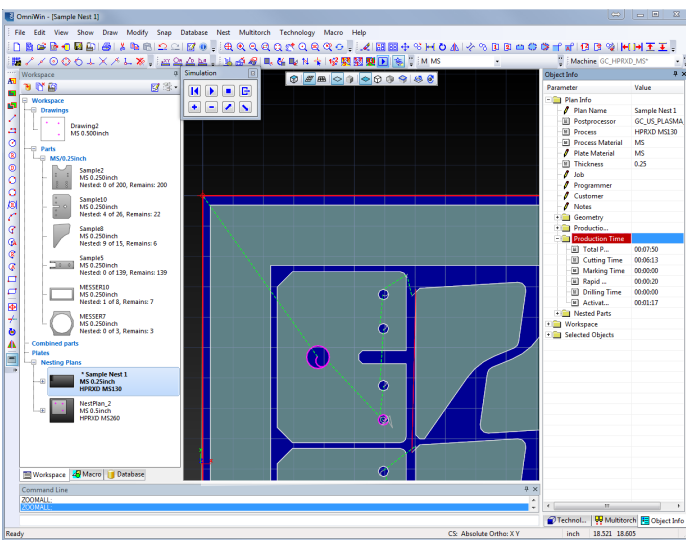
WORK ORDER PROCESSING (Enterprise) Shown



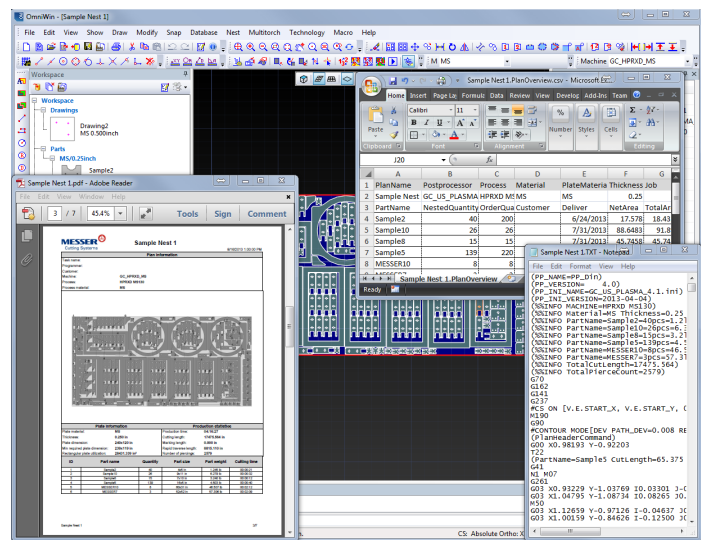
AUTO NESTING (Enhanced, Professional, Enterprise)



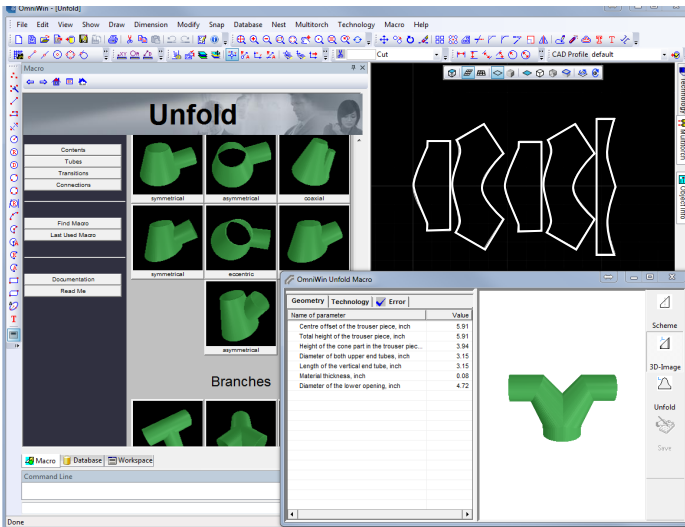
TEXT CONVERSION



MESSER PROCESS OPTIMIZATION, COLLISION AVOIDANCE, AND MESSER HOLE



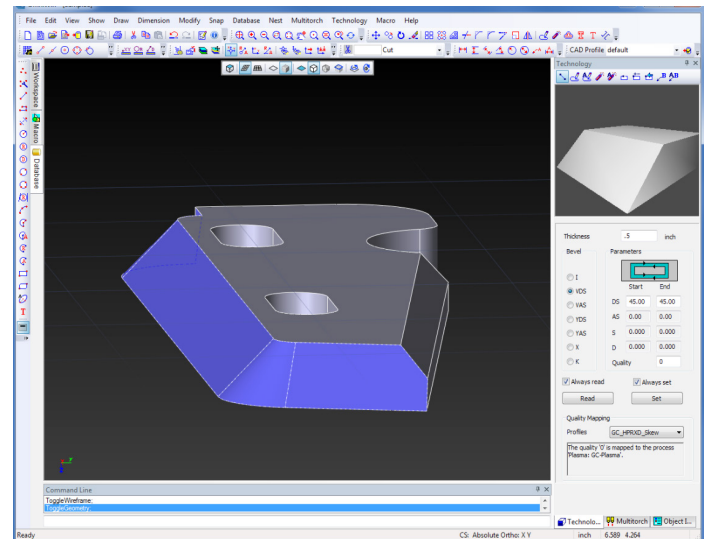
ONE CLICK PRODUCTION DATA AUTOMATION



UNFOLD - 3D INDUSTRIAL FITTINGS (Optional)

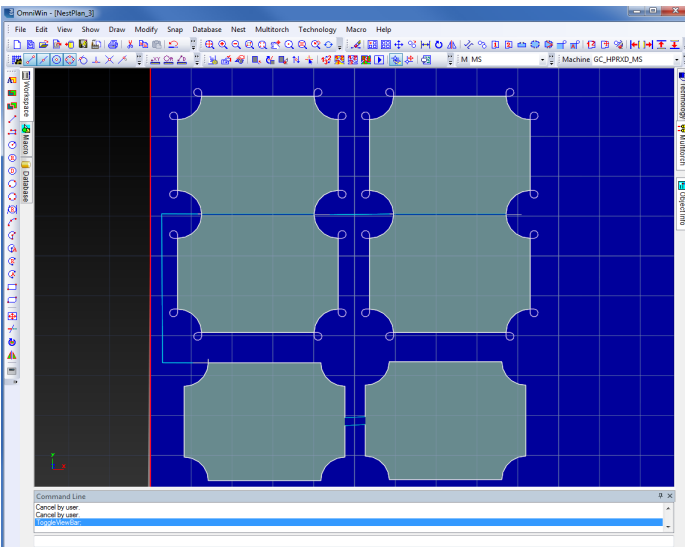
The unfold option offers a broad integrated palette of 3D geometries that are defined by parameters and can be unfolded for 2D cutting. Multiple technological functions are available to adjust the output for further manipulation for bending or rolling machines.

- » Fully integrated unfolding and optimization of 3D shapes for 2D cutting.
- » Extensive library of common shapes for container and ducting industries.
- » Sorting of geometric forms by category and subcategory.



BEVEL PART CREATION (Optional)

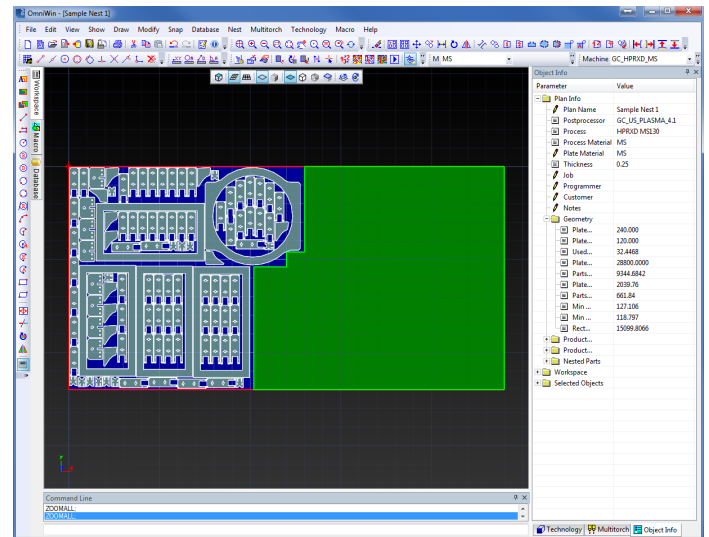
The Bevel Part Creation option integrates nesting of bevel parts using the standard OmniBevel database with proven compensations for hundreds of different bevels of various material types and thickness. The bevel creation is the fastest route to production with the most flexibility on any beveling application. It is simple to copy and modify a single bevel part and apply the modification to all the identical parts within the nest for faster production.



OPTIMIZED TECHNOLOGY (Professional, Enterprise)

Numerous technology functions include:

- » Bridges with crossing and rounding.
- » Chain cutting.
- » Common line cutting.
- » Pre-piercing with several options.
- » Single and multiple tabs with variable widths.
- » Skeleton cut-up.
- » Disabling portion of a contour.
- » Automatic loop creation.



AUTO-REMNANT CREATION (Professional, Enterprise)

Plates which are not fully nested can be selected between diverse algorithms to define remnant plates. OmniWin 2016 saves the remnant plate geometry in the database to use it again as a template for nesting. Additionally, remnant plate cuts can be created and transferred to the CNC code in the machine when it is stored.

OMNIWIN 2016 Features		OW16 Standard	OW16 Enhanced	OW16 Professional	OW16 Enterprise
CAD	CAD Part Editing and Creation	X	X	X	X
	3D Visual Part Rendering	X	X	X	X
	DXF/DWG/DSTV/IGES Import	X	X	X	X
	Multi-Part Import	X	X	X	X
	Import images bmp, jpg, png, tif file formats	X	X	X	X
	Import or Draw Custom Plates	X	X	X	X
	Reverse Import CNC files to DXF	X	X	X	X
	Standard Shapes (Macros)	X	X	X	X
	Text Conversion for Cutouts or Marking	X	X	X	X
CAD and NESTING	Wrap Text Around Circles	X	X	X	X
	Shortcut Keys	X	X	X	X
	Undo All Tasks	X	X	X	X
	Dimensioning	X	X	X	X
	Snap Modes	X	X	X	X
	Manipulator Tool for rotation, copy, move	X	X	X	X
	Process Database	X	X	X	X
	Messer Hole supports True Hole®	X	X	X	X
	Reports with Fast Reports® Creator	X	X	X	X
NESTING	Production Time Estimation	X	X	X	X
	Cut Plan Simulator	X	X	X	X
	Disable Cut/Marking Contours	X	X	X	X
	Multi-torch Support (Interactive Nesting)	X	X	X	X
	Interactive Nesting (Row and Column / Pattern Matrix)	X	X	X	X
	Collision Avoidance	X	X	X	X
	Process Optimization	X	X	X	X
	Automatic Lead-in/out with Customization	X	X	X	X
	Transfer Part Modifications to all Identical Parts	X	X	X	X
	Spot Drilling/Center Punch	X	X	X	X
	NC, DXF, DWG, CSV, XML Export	X	X	X	X
	Part/Plate Library	X	X	X	X
	Modify Part Sequence	X	X	X	X
	Modify Interior Profile Sequence	X	X	X	X
	Modify Marking Sequence	X	X	X	X
	Create Mini-Nest Patterns (Clusters)	X	X	X	X
	Display Part Names	X	X	X	X
	Heat Dissipation	X	X	X	X
	One Click Production Data Automation	X	X	X	X
	Automatic Nesting		X	X	X
	Multi-Torch Automatic Nesting		X	X	X
	Common Cut, Chain Cut, Stitch, Bridge, Loops			X	X
	Drill with Tool Changer			X	X
	Automatic Remnant Creation			X	X
	Pre-Piercing			X	X
	Disable Contours			X	X
	Skeleton Cut Up			X	X
	Work Order Processing				X
	Bevel Part Creation (Optional)	X	X	X	X
	Unfold 3D Industrial Fittings (Optional)	X	X	X	X



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