

CAD/CAM nesting software



ProNest CAD/CAM part nesting software for advanced mechanized cutting is designed to supercharge your cutting operation, helping you achieve greater automation, efficiency, and profitability. Brought to you by the cutting experts at Hypertherm Associates, ProNest can optimize performance for plasma, laser, waterjet, and oxyfuel cutting machines.

More than just a nesting software, ProNest includes powerful features to help manage your entire cutting operation. You'll be able to quote jobs, manage work orders, and monitor machine status, all in one place.

Benefits



Material cost savings

Powerful, high yield nesting reduces your material costs and increases profitability.



Ease of use

Incredibly easy to learn and use, with intuitive screens, and a wide variety of helpful features.



Breakthrough technologies

ProNest is the only software that provides full support for our SureCut™ technologies including True Hole®, Rapid Part™, and PlateSaver™ which are delivered automatically without operator intervention, and True Bevel™ which greatly reduces bevel set up time.



Increased productivity

Modules like Common Line Cutting and Chain and Bridge Cutting can increase efficiency, and reduce cutting time and consumable wear.



Unlimited technical support

Unlimited access to technical support, training, and software updates is included with your purchase.



Connected systems

Allows integration to your existing business systems to deliver and access manufacturing data in real-time.



Standard feature highlights

Machine support

- All major brands/manufacturers/models

Part design and development

- Integrated 2D CAD program to create and edit CAD files
- Variable Shape Parts feature to develop common parts from templates

CAD/CAM import and conversion

- Import CAD files (industry-standard file formats)
- Import PDF
- Import OMX or ORD
- Raster to vector converts static images to CAD
- Import Bill of Materials properties from CAD files
- Automatic CAD file correction and error notification
- Automatic spline/ellipse smoothing and reduction
- Separate multiple parts from a single CAD file
- Automatic mapping of CAD layers to processes (cut, mark)
- Automatic update of nest for part revisions
- Automatic part corner radiusing for optimized laser cycle time and part quality

Job set-up

- Material database (with grade and gauge)
- Customer database
- Custom remnant creation (define irregular shapes for nesting)
- Visualize slats on the nest
- Plate list
- Part library
- Assembly database
- Grain constraint
- Safe zones for plate clamping applications
- Multi-head cutting

SureCut™ technology

- True Hole® technology capable*
- Rapid Part™ technology capable*
- True Bevel™ technology capable*
- PlateSaver™ technology capable*

Built-in process expertise

- Advanced process support and job set up on the CNC*
- Material type, thickness, grade and class-based process parameters:
 - Separations for part, plate, and pierce spacing
 - Kerf compensation and feedrate
 - Quality and dynamic feedrate calculator for waterjet
 - Lead-in/out style optimized for part geometry and quality
 - Cutting techniques

*Certain hardware and software requirements may apply.

continued

- Pre-pierce and edge pierce
- Moving pierce techniques for waterjet
- Disable automatic height control based on part geometry
- Pre-heat timing for oxyfuel
- Cut sequencing – automatic or manual
- Vaporize protective film layer prior to laser cutting
- Automatic tabbing/micro-joints
- Fly cutting

Interactive manual nesting

- Jobs can contain sheets for different material types, thicknesses, and classes
- Color parts according to part property
- Group parts into clusters for nesting
- Drag, drop, bump, and auto-bump parts on the nest
- Move, mirror, and drag to rotate parts
- Prohibit/permit nesting inside of a part
- Part interference detection
- Edit lead-in/out position and properties within the nest
- Animated cutting sequence simulation
- Control cut direction and cut sequencing on part-by-part basis
- Plate cropping
- Nest around material defects for waterjet
- Waterjet quality

Reporting

- Management and shop reports
- Export reports directly to PDF, Excel Spreadsheet, CSV, or webpage

Costing and quoting

- User-defined machine and labor production costing
- Automatic calculation of part production costs and part/nest utilization
- Quoting tool including itemized part costs, secondary processes, markups, and discounts

Output

- OneClick™ feature runs all of your most common job tasks automatically
- Post-processor with NC output
- DXF output
- OMX or ORD output

Modules

The following modules can add powerful capabilities to your software.

Productivity modules

- Automatic Nesting
- Nesting System Optimization
- Common Line Cutting
- Collision Avoidance
- Chain and Bridge Cutting
- Skeleton Cut-up

Enterprise modules

- Data Sync
- Tekla® PowerFab® Connector
- STRUMIS™ Connector
- Work Order Processing
- Plate Inventory
- Production Manager

3D process modules

- Pipe and Fittings
- SOLIDWORKS® software interface
- Inventor® software interface
- Creo™ Parametric software interface

Machine interface modules

- Reposition machine interface
- Bevel machine interface
- Drill machine interface
- Plate machine interface

Beyond nesting



SHAPING POSSIBILITY®

PLASMA | LASER | WATERJET | AUTOMATION | SOFTWARE | CONSUMABLES

Request a free trial at: www.hypertherm.com/CAM

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© 4/2024 Hypertherm, Inc. Revision 13
89491D



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