

What's New

Major new features and changes in ProNest 2021 LT. For a complete version history, please visit the online knowledge base.

ProNest 2021 LT v14.2

Intentional open profiles Edit Part List speed improvement Drag and drop to import parts DSTV powder marking Outline parts by profile type Quality enhancements

ProNest 2021 LT v14.1

Undo and Redo for nesting-related actions Height Sensing for Skeleton Cut-Up Integrated cut sequence with parts for all vertical skeleton lines Enable corner rounding Cutting Techniques for individual parts Drag Leads Lead conflict view Expanded options for reapplying leads when changing material Training videos in the Help

ProNest 2021 LT v14.0

LibreCAD for ProNest Export to ProNest Edit Part List and nested parts LibreCAD for ProNest Fonts Circle in Diameter Contour Selection Help system CAD Editor Preference Raster Image Improvements SVG File Import Part Report Interior Bridge Cutting Maximum Part Orientations to Try Disable Anchor Part to Cursor after Duplicate Allocated Costing

ProNest 2021 LT v14.2

v14.1.1-v14.2.0

CAD IMPORT

Intentional open profiles

When importing a part, you can use the "Cut as open profile" CAD layer mapping option to treat profiles on that layer as intentional open profiles in ProNest, which does the following:

- Does not apply kerf compensation
- Does not apply leads
- Does not display open profile warnings



Any layers mapped to Cut as open profile must also be mapped to a cut process.

Properties: CAD								
Nesting CAD Import Leads								
 CAD Layers 								
	Cut all layers with [Plas							
	Cut - [Plasma]	0;CUT;OPL						
	Scribe - [Plasma Mark]							
	Scribe - [Scribe Tool]							
	Punch - [Plasma Cente							
	Punch - [Plasma Quick							
	Tooling							
	Display Only							
	BOM							
	Cut as open profile	OPL						
	Map to CAD color num							
v	Cut Sequence							
	Strategy	Find Best						

Note that profiles can be mapped to Cut as open profile, even if they are actually closed profiles. This feature is designed for interior profiles.

Edit Part List speed improvement

Navigating to CAD files and folders in the Edit Part List Part Sources area is significantly faster, particularly when navigating through network folders.

Drag and drop to import parts

You can drag and drop parts from your desktop or Windows file explorer directly into the Part List area of the Edit Part List window. This quick and convenient way to import parts is a helpful way to save time navigating through folders in the Part Sources area. Drag and drop import is recommended only for parts that have already been processed (such as token files) and for parts with import properties that don't need to be adjusted.



DSTV powder marking

For powder marking, the PU bloc can now be mapped to the Scribe or Mark process of a ProNest machine.

DISPLAY

Outline parts by profile type

Profile type is an outline option in the Color Legend. Using the Profile type outline option, part profiles are identified as Exterior, Interior, Open, Special Open, Scribe, Punch, or Drill. Profiles mapped both to the Cut as open profile layer mapping option and a cut process are identified as Special Open.





Quality enhancements

- Outline parts by quality to easily identify quality colors.
- Apply quality to CAD files during import. A default quality value may be specified in Settings > Importing Parts.
- Quality defined in OMAX files (.omx and .ord) are applied to the part during import. In ProNest LT, the default quality color number scheme matches the default found in the OMAX LAYOUT software.

Please contact Hypertherm for an updated post processor if you'd like to use this feature.

ProNest 2021 LT v14.1

v14.0.1-v14.1.0

EASE OF USE

Undo and Redo for nesting-related actions

Many actions performed on a nest can be undone or redone using Ctrl+Z for undo or Ctrl+Y for redo. As you complete actions on the nest that can be undone or redone, you can also use the undo and redo drop-down menus, located in the quick access toolbar in the top left corner of the ProNest window, to skip back or ahead to a particular step.

Using undo and redo can be useful if you moved a part on the nest and want to move it back to its exact previous position, for example.

Actions that can be undone or redone include:

- Manual and automatic nesting
- Dragging, rotating, and arraying parts
- Removing parts from the nest
- Bridging, chaining, and common line cutting parts
- Modifying the cut sequence

If you wish to limit the number of undo and redo actions that ProNest keeps track of, you can do so by setting a limit in Preferences > Miscellaneous > Maximum number of undo steps.



MACHINE

Height Sensing for Skeleton Cut-Up

In settings, you can enter a value for Height sensing distance, which can direct your cutting head to sense the correct height at a specified distance from the plate edge for Skeleton line cuts. Contact Technical Support if you'd like to use this feature.

Integrated cut sequence with parts for all vertical skeleton lines

When the setting to **Integrate skeleton lines with parts** is selected, an additional option to **Include all vertical skeleton lines** may now be selected. When enabled, all vertical skeleton lines will be included in the integrated cut sequence, even when the skeleton lines don't intersect nested parts.

Enable corner rounding Cutting Techniques for individual parts

When a Cutting Techniques spreadsheet is in use, Allow Corner Rounding is an available part property that allows you turn on or off corner rounding on individual parts in the part list.

ADVANCED EDIT

Drag Leads

In Advanced Edit, you can click and drag a lead-in or lead-out to quickly change the size or angle of the lead. This efficient and visual method of adjusting your leads is designed particularly for artwork pieces that may not need leads in precise locations.



Lead conflict view

When enabled in preferences, leads that cause a profile to be in conflict will be outlined in the Conflict color in Advanced Edit, and a "Leads in conflict" warning icon will appear for the part in the Part List. Pierce size can also be considered when determining conflict.

🔀 Advanced Edit	- 0	\times
Elle Edit View Part Entity Help	Eeturn to	Nesting _
🗈 📾 🖍 • ~ • 🕞 🗆 🚏 🍳 🍳 Q 🗔 . 🖾	□四中落A囝尾鳥.減当₽蚪.Ⅲ.	
101 ≪ ArcTrap 101 101 ≪	Profile Doll .	
Pierce Size (Radius) 0.125		
S	Properties Start Point Properties Start Point Properties Save	a× ×
	Only update the edited part. Discard all changes Cance	
	This part contains leads in conflict. Angle Acply Acply	Reset
	Þ	6

JOBS

Expanded options for reapplying leads when changing material

When the preference **Always reapply leads when changing materials** (File > Preferences > General) is selected and material is changed at the job level, leads will be reapplied for all parts–now including nested parts.

When this preference is cleared and material is changed at the job level, you can choose whether to reapply leads for only nested parts, only non-nested parts, all parts, or no parts.

TRAINING

Training videos in the Help

To help you get up to speed on ProNest LT, the introductory training video series is now available directly in the ProNest LT Help. Introductory LibreCAD training videos are also available in the LibreCAD Help. An Internet connection is required in order to watch videos.

ProNest 2021 LT v14.0

CAD

LibreCAD for ProNest

A new Hypertherm-exclusive CAD program, LibreCAD for ProNest, is installed with ProNest. This dynamic CAD program allows you to easily create drawings and edit drawings before and after they are imported into ProNest for a streamlined workflow. LibreCAD for ProNest may used as a standalone CAD program or it can be used for CAD cleanup in ProNest.

Once imported into ProNest, you can edit and dimension any file type in LibreCAD for ProNest. As a standalone CAD editor, you can open DWG and DXF file types in LibreCAD for ProNest, but files must be saved as DXF.

Key features in LibreCAD for ProNest include:

Export to ProNest

Import a drawing from LibreCAD directly into the Part List in ProNest without having to use the Edit Part List window.



Edit Part List and nested parts

Edit an imported part from the ProNest Part List, the Edit Part List window, or the nest, even if the part is already nested.



Multi-Select editing

For an efficient workflow, multi-select nested parts and right-click to Edit in LibreCAD so that you can edit or dimension multiple parts in LibreCAD before returning to ProNest LT.

Automatic Layer Mapping

The LibreCAD for ProNest Layer List is automatically populated from your Importing Parts Settings in ProNest.

			Layer List						Ð	>
			۲		6	#		0		
CAD Layers					~	++		ROM		
Cut - [Plasma]	0;CUT;PLASMA		-	-	•	-		DOM		
Cut - [Waterjet]	WATERJET		۲		•	#		CENTERMAR	ĸ	
Punch - [Plasma Center Mark]	CENTERMARK		۲		ė	#		CUT		
Tooling	TURRET	-	۲		Δ.	#		DISPLAY		
Display Only	DISPLAY			-	-		_			
BOM	BOM		۹		•	Ħ		PLASMA		
			۲		õ	#		TURRET		
			۲		6	#		WATERJET		

Trim Excess

Quickly trim away unwanted entities by selecting them in this mode.



Shape Text

Shape text around an entity to create signs and artwork.



Explode Text into Letters

Explode text strings into individual letters for fine-grain control when shaping text.



Font Support

Use standard ProNest, Microsoft, and AutoCAD fonts in your drawings.



LibreCAD for ProNest Fonts

Use default LibreCAD for ProNest fonts or create your own LibreCAD font file (LFF).



Circle in Diameter

Draw a circle by entering a diameter value.

Contour Selection

Select an entity and hold the Shift key while hovering the mouse over other intersecting entities to highlight and select a contour path.



Help system

Hover over buttons or use a tool and press F1 to get context-sensitive help.

Learn more about using LibreCAD for ProNest through training videos in the Knowledge Base.

CAD Editor Preference

A new CAD Editor page is available in ProNest Preferences. On this page, you can specify a CAD program to use when you need to modify drawings. LibreCAD for ProNest is the default CAD editor, but you can modify this preference to use AutoCAD or any other CAD program installed on your PC.

Once a default CAD editor is set, you can edit a part in that program after it is imported into ProNest. This can be done by right-click on the part and selecting Edit in... from the Edit Part List window, the Part List, and the nest, even after a part is nested.

Raster Image Improvements

The raster image import feature now creates smoother curves and provides better results overall. You can adjust the Color Threshold (helps create geometry based on differences in colors in the image) and Despeckle (removes noise or speckles in the image) options during part import.

SVG File Import

You can now import SVG (scalable vector graphics) files into ProNest. Find these files more quickly using the SVG option in the Files of type filter in the Edit Part List window.

REPORTS

Part Report

A new Part Report is available, allowing you to print information about a part or multiple parts by right-clicking on the selected part(s) on a nest or in the part list, and selecting Part Report. The Part Report provides information about an individual part, including an image of the part with display information such as dimensions, size, material, class, process, costing information, and so forth. Ensure your Display Only information is viewable in Report Options.

ADVANCED EDIT

Interior Bridge Cutting

In Advanced Edit, you can create interior bridge cuts with this new feature. Designed with sign-makers and artistic crafters in mind, this feature allows you to create bridges to help minimize interior cutouts on parts for aesthetic purposes and to reduce tip-ups.



MANUAL NESTING

Maximum Part Orientations to Try

This new setting allows you to try orientations of 90°, 45°, 30°, 15°, 5°, and 1° when manually nesting a part by pressing Enter or double-clicking in the part list. The Automatic Nesting module is required to use this feature.

Disable Anchor Part to Cursor after Duplicate

A new preference is available to disable anchoring parts to the cursor after selecting Duplicate. This new preference can be found here:

• File tab > Preferences > General tab > When duplicating parts, do not anchor to cursor.

When enabled, selecting Duplicate will place a copy of the selected part(s) slightly offset from the original on the nest.

COSTING

Allocated Costing

In the Allocated Part Detail report, the Material Cost is now more accurate for parts that are nested inside the rectangular region of a larger part, but outside its exterior profile.

For the purposes of allocated costing, a part within the rectangular region of a larger part but outside its exterior is no longer considered to be contained by the larger part.

OPERATING SYSTEM

Native 64-bit support

ProNest LT is now available as a 64-bit application. The 64-bit version of ProNest LT software can be run on a 64-bit CPU/Operating System and take advantage of the extra accessible memory.

Note that ProNest LT can only run on 64-bit operating systems, 32-bit operating systems are no longer supported.

What's New in ProNest LT

 $\ensuremath{\mathbb{C}}$ 5/2023 Hypertherm, Inc. All rights reserved.

Hypertherm, ProNest, True Hole, SureCut, PlateSaver, XPR, and X-Definition are trademarks of Hypertherm, Inc. and may be registered in the United States and/or other countries. All other trademarks are the property of their respective owners.

Information in this document is subject to change without notice.

The software described in this document is furnished under a license agreement or nondisclosure agreement. The software may be used or copied only in accordance with the terms of those agreements. No part of this document may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language or any form by any means without the written permission of Hypertherm, Inc.



www.hypertherm.com