

Hypertherm[®]

ProNest[®] 2021
Nesting software

What's New

Version 14.1

Released May 2021



New Features and Enhancements

The following enhancements are available in the ProNest 14.1 release:

Ease of Use

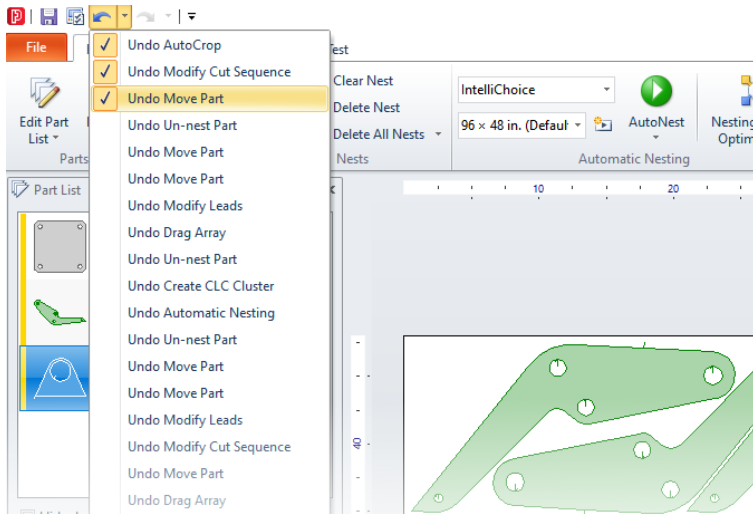
Undo and Redo for nesting-related actions

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 dropdown 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
- Applying collision avoidance

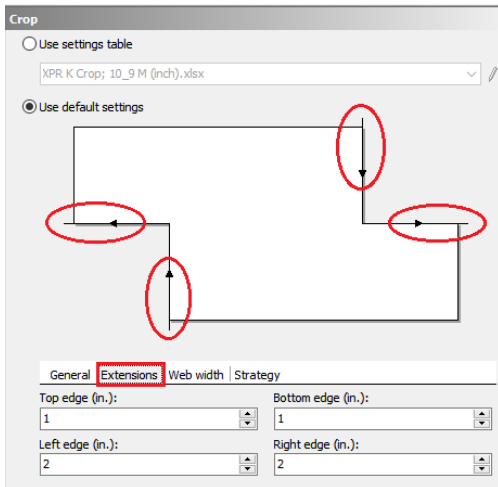
If you wish to limit the number of undo and redo actions that ProNest keeps track of, you can do so by setting a limit in Preferences > Miscellaneous > **Maximum number of undo steps**.



Machine

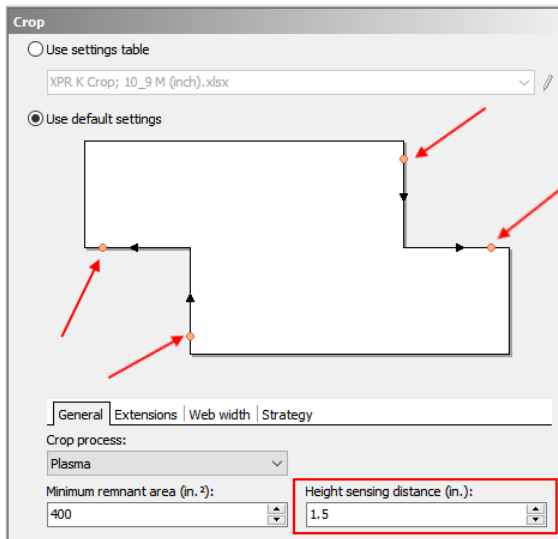
Top, Bottom, Left, and Right Crop Extension settings

New Crop settings allow you to specify extensions of a particular length for your crop cuts at top, bottom, left, and right plate edge locations. These crop extension settings allow the pierce points to move off the plate (a positive extension) or onto the plate (a negative extension).



Height Sensing for Skeleton Cut-Up and Crop

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 Crop and Skeleton line cuts. Contact Technical Support if you'd like to use this feature.

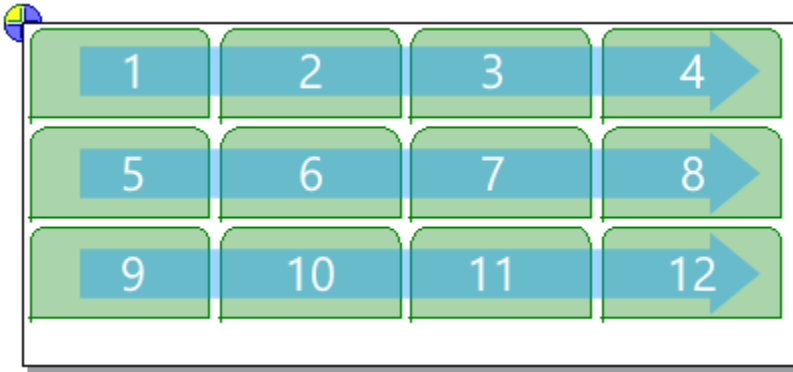


Integrated cut sequence with parts for all vertical skeleton lines

When the setting to **Integrate skeleton lines with parts** (Settings > Skeleton Cut-Up > Cut Sequence) 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.

One-Way Horizontal Cut Sequencing

The One-Way Horizontal cut sequencing (Settings > Cut Sequence > Type) option sequences parts in horizontal bands in one direction.



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. This property can be set during or after part import in Part Properties. When the property is selected, the part will use the corner rounding values specified in the column headers Corner Radius and Corner Radius Threshold Angle in your Cutting Techniques spreadsheet.

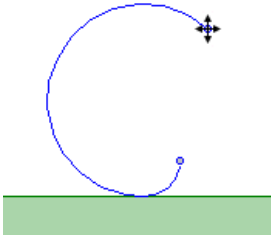
Advanced Edit

Advanced Edit speed improvement

Using a bevel setup and going into Advanced Edit the first time is faster by 45% and subsequent opens are 85% faster.

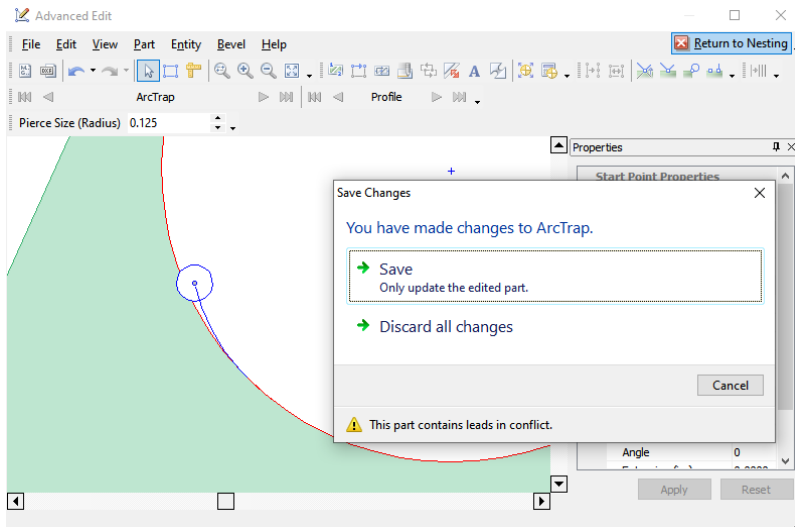
Drag Leads

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.



Bevel Machine Interface

Bevel support for Class by Process

Class by Process-capable machine setups now support bevel class by process. On the Bevel Settings page, you can specify an additional bevel settings table that is used to apply bevel parameters for the multiple cut processes you have specified.

Miscellaneous

User initials in naming variables

The initials of the current ProNest user can now be used in naming conventions for jobs, quotes, and other areas. For instance, the job naming convention %JobID%_%UserInitials% for the user Bob Tiedt might yield a job file called 215778_BT.nif.

Installation

Plate Handler and Microjoint settings folders are now created during installation.

Quoting

CSV quotes

CSV file is now an available format for quotes, in addition to print, PDF, and email. CSV quotes can be configured using custom reports.

Jobs

All Recent jobs

On the File > Recent tab of ProNest, a new All Recents tab appears beside My Recents. All Recents shows the latest 25 jobs that were saved in ProNest, which can be useful for shared database configurations.

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.

Note that changing material for individual parts in the part list has not changed. If at least one copy of a part is nested, material for that individual part cannot be changed.

Search for Jobs

On the File > Recent tab in ProNest, you can now search for jobs that have been previously saved. All jobs in the database can be searched, including jobs created by other users in a shared database environment. You can search by a number of different fields to find the jobs you need, such as job name, part name, nest material, plate name, work order number, and so on.

Process

True Hole support for 220 Amp

True Hole support for the 220 Amp plasma process is available. Please contact Technical Support if you'd like to use this feature.

Database

Soft delete support

ProNest now has improved data integrity when you delete material, part library, assembly, plate inventory, and work orders records from the database that may be referenced by other database records.

Soft deletion allows records to be marked as deleted without actually removing them from the database. Soft-deleted records cannot be selected, but all old records can still refer to them. If the "deleted" record was not referenced by any old records, then it will be permanently removed from the database.

Restore Tool for ProNest 2021 databases

A new database restore utility is installed with ProNest Server. This tool allows you to move a ProNest 2021 database to another PC with ProNest 2021, without having to use SQL Server Management Studio or other tool.

Part Library

Part Library and Customers

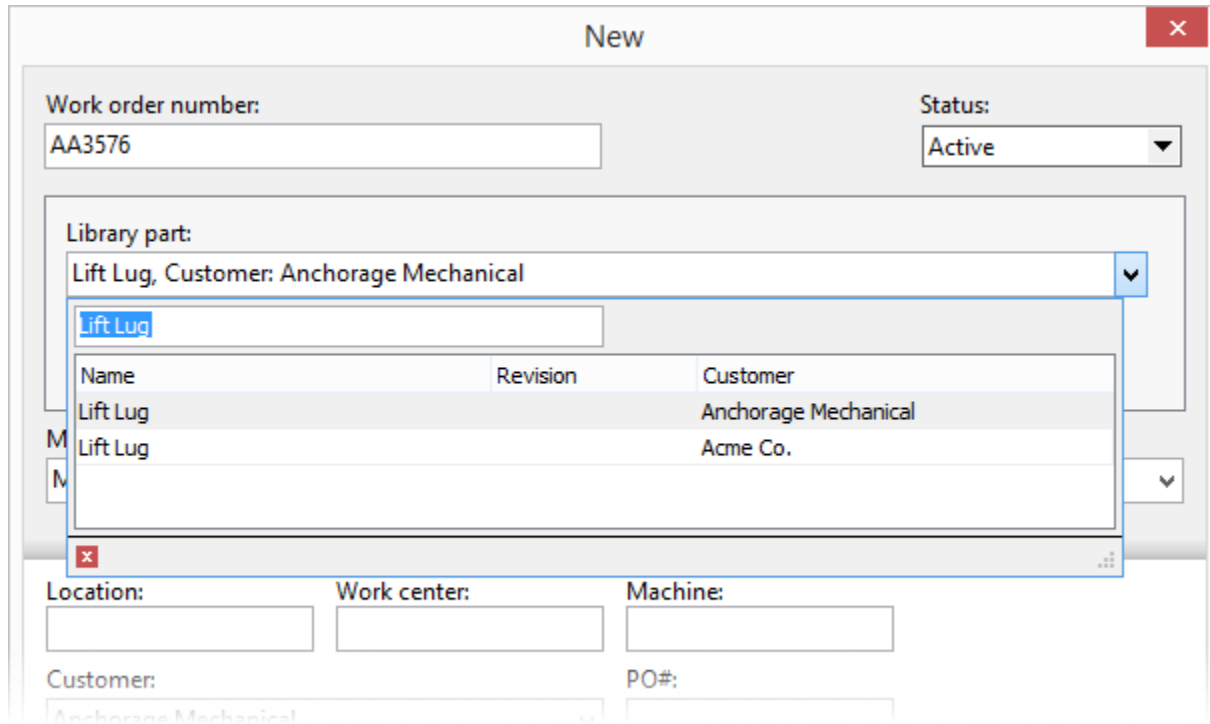
Library parts can now be differentiated by Customer. It is now possible to have multiple library parts with the same Part Name and Revision, but different Customers assigned. This is useful if you have a library part and want to store separate versions of it for different customers.

Work Orders

Easier selection of library parts for work orders

In the Work Orders editor, selecting a library part is now easier when adding or editing a work order. This is useful when you are linking work orders to library parts.

The new Library part selection list shows library parts with Name, Revision, and Customer.



Work Orders and Customers

When matching work orders to library parts, ProNest can now take customer into account when making a match. If multiple library parts have the same Part Name and Revision, but differ by Customer, ProNest will always try to match the work order to the library part that has the same customer.

This enables you to specify the customer for a work order in a Data Sync import task and match the correct customer-specific library part during a sync.

Plate Inventory

Plate display format

You can customize how inventory plates are displayed in ProNest. Plates can be formatted to use any arrangement of plate name, heat number, ERP plate number, and ID.

3D CAD

SOLIDWORKS® multi-body sheet metal support

All sheet metal bodies from a SOLIDWORKS multi-body SLDPRT file can be imported into ProNest. In the Edit Part List, simply select the .sldprt file you wish to import, and select **Contains multiple parts** and **Explode multiple parts** in the CAD Import Properties.

Plate Machine Interface

Plate Machine Interface (Peddinghaus)

For plates small enough that they wouldn't span two clamps, the second clamp can now be engaged or disengaged based on plate size. A new CFF is required to use this feature.

File import

OMAX files

Support for OMAX .omx and .ord files is available, with an OMAX files filter option in the Part Sources area of the Edit Part List. OMAX files are imported as CNC files and must use inch file units. Support for non-OMAX .ord files is not available.