

What's New

ProNest 2019 LT v13.1

Released April 2019

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ProNest 2019 LT v13.0

Released April 2018

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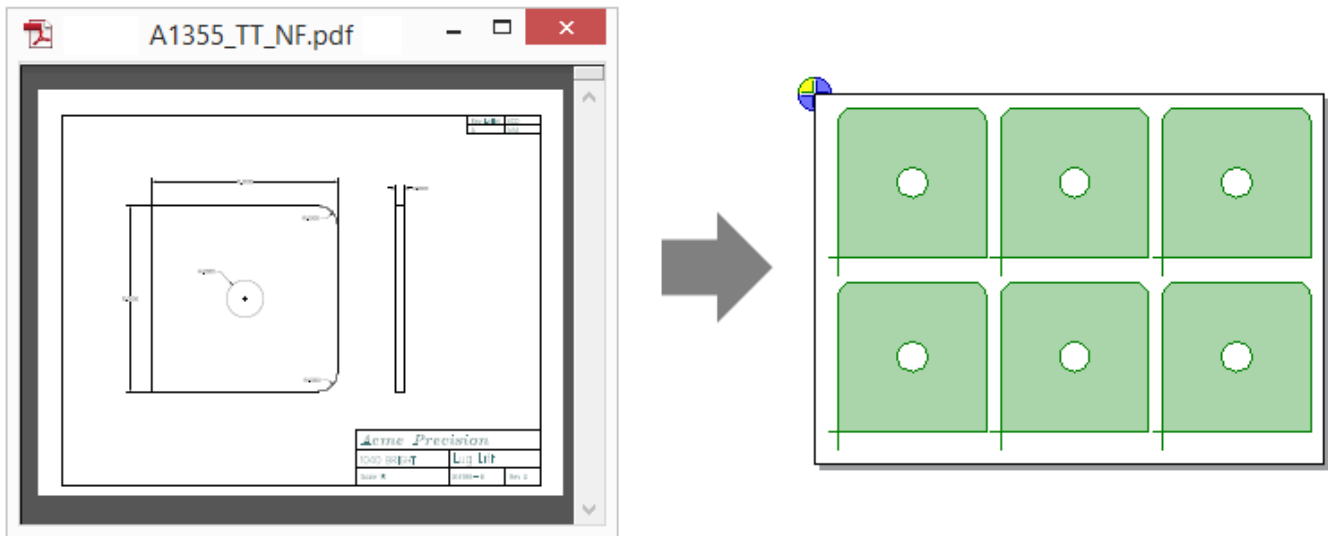
New Features and Enhancements

The following enhancements are available in the ProNest LT 13.1 release:

Importing Parts

PDF import

ProNest now supports importing parts from PDF files. Vector part geometry (scalable drawing information such as lines, arcs, and text) can be brought into the part list, ready for nesting. This is useful for quickly importing engineering drawings, spec sheets, artistic drawings, logos and graphics.



Benefits include:

- Easier file exchange. Quickly bring in parts from PDF files for quoting/estimating or cutting without the intermediate step of creating separate CAD files.
- Multiple parts on a single page can be imported together as a block or as separate parts in the part list.
- Prior to import, remove any objects you don't need from the PDF, such as title blocks, using CAD Cleanup (Simple or 2D CAD).
- Quickly adjust scale from the Edit Part List prior to import.
- Text can be brought in as either scribe/mark or cut geometry.

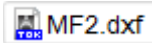
ProNest token files

ProNest LT now has the ability to permanently store processed parts that have been added to the part list, with lead-ins and lead-outs, in a separate file. In ProNest, this part information is stored in a "part token file." Saving part token files is useful if you will be cutting a part more than once. Benefits include:

- Token files are significantly faster to add to the part list, particularly for large or geometrically complex parts.
- No need to repeatedly make changes to a part each time it is imported, such as scaling, cleaning up stray profiles, smoothing, and so on. Once you get the desired result after importing a part the first time, you can quickly add that exact part again using its token file.
- Any files added from the Part Sources: CAD tab in the Edit Part List window can have a token file, including 2D and 3D part files, raster images, and PDF parts.
- Ability to save Advanced Edit token files lets you permanently store changes you've made in Advanced Edit.

This is activated using the Save Part File Tokens setting (on the Importing Parts settings page).

- Prior to adding the part, a small "TOK" icon on the part source file indicates whether or not it is a token file.



The preview in the Edit Part List also shows this information.

- You can choose to import either the original CAD file or the associated token file when adding a part to the part list.

Process Expertise

Cutting Techniques

Machines can have difficulty cutting certain sections of a part, such as sharp corners and small radii. These sections often do not cut well at the speed and parameter levels that are used in the rest of the profile. With cutting techniques, ProNest will take into account part geometry and apply ramping techniques or make adjustments to other cutting parameters based on the situation. Cutting techniques can give you much control over how parts are cut and can increase cut quality while minimizing damage to parts and to the cutting head.

Benefits include:

- Fine grain control of deceleration and acceleration (feedrate ramping) around corners, lead-ins, lead-outs, and arc-shaped segments of a part.
- Disable height control for the cutting head at virtually any point along a profile.
- Automatically round off sharp corners on parts, using a corner radius cutting technique.
- Full spreadsheet support allows cutting techniques to be applied based on material, profile type, profile area, and class.
- Customizable commands allow for application of advanced, user-defined cutting techniques.

Automatic Height Control settings

In ProNest LT, a new settings page lets you choose when to disable automatic height control for the following cutting operations:

- Interior profiles, based on profile size
- Crop cuts
- Skeleton cut lines
- Lead-outs

Ease of Use

Part dimensions

The dimensions (length x width) of a selected part are now shown in the Preview pane in the Edit Part List.

User Experience

Suggest a Feature

A link to the Suggest a Feature page in the knowledge base has been added on the File tab > Help page.

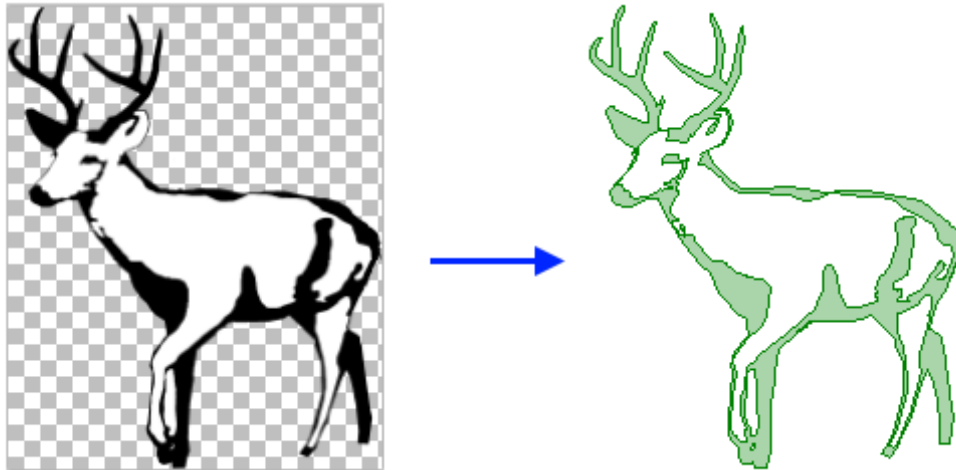
New Features and Enhancements

The following enhancements are available in the ProNest LT 13.0 release:

CAD Import

Importing raster images

ProNest can import raster image files and convert them to vector parts that can be cut on your machine.



The following image file formats can be imported:

- PNG
- JPG, JPEG
- BMP
- GIF

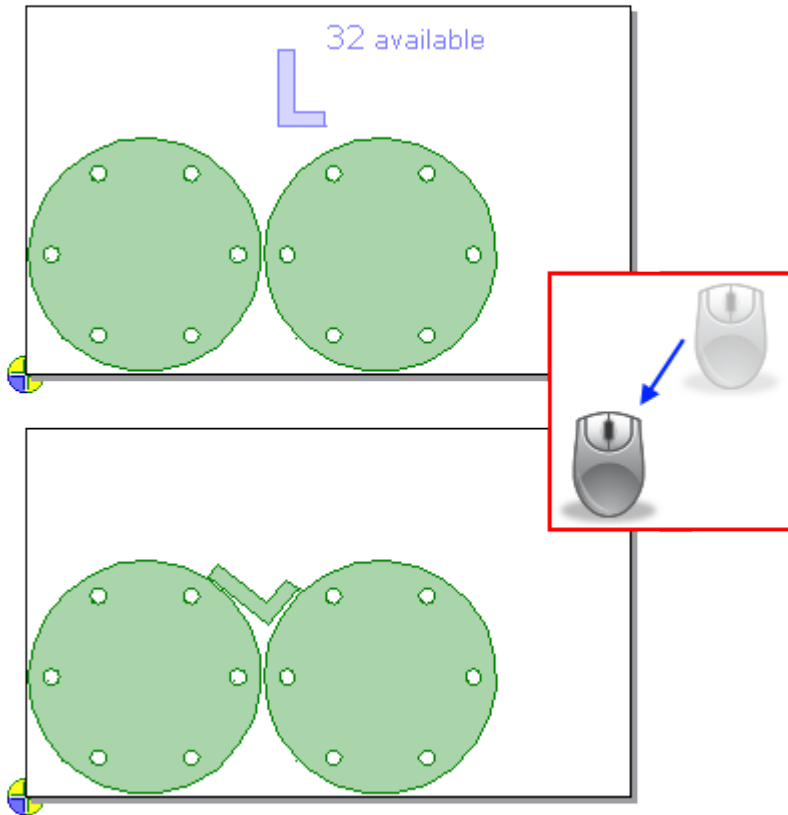
New settings enable you to fine-tune the image prior to import, to get the best result. Once the image has been converted to a part, it can be nested and output.

For images that will be cut more than once, you can easily save a vector version of the part (DXF or DWG) using 2D CAD.

Nesting and Utilization

Manual Nesting: Smart Drag

Manual nesting is now much more fluid and intuitive. With existing parts on the nest, fitting in parts along the contours of other nested parts and the plate edges is much easier.



When dragging a part on the nest, the part will bump up against existing parts or plate edges and then rotate to fit. You can glide the part along edges of neighboring parts to get the best result. This makes it easy to fit parts into empty spaces on the nest, without the need to manually rotate the part to just to right angle.

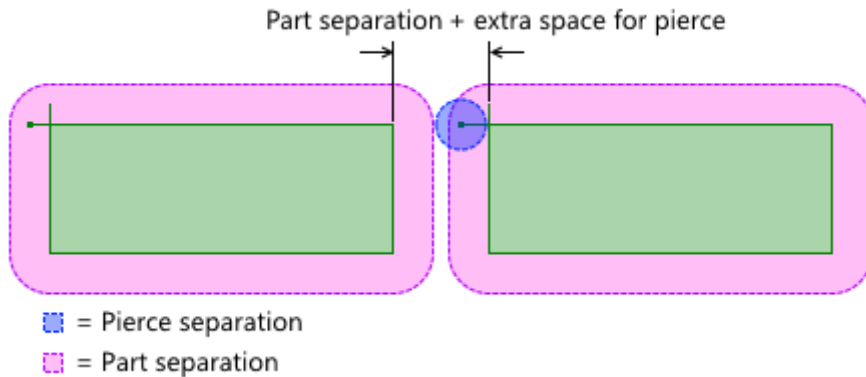
Benefits include:

- Faster and easier to create tighter nests during manual nesting
- Achieve better plate utilization, especially when nesting around the contours of larger parts

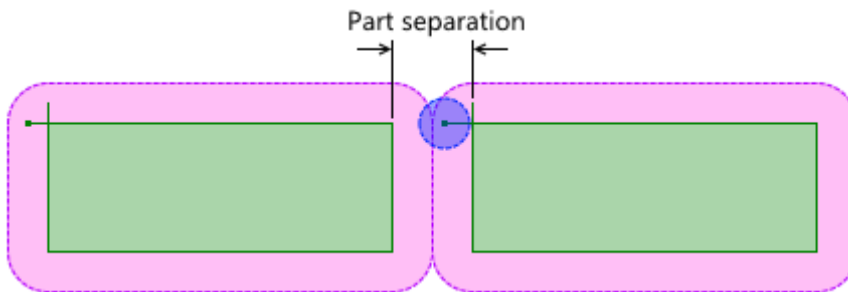
This feature can be quickly turned on or off in the main window.

Ignore leads during nesting

In previous versions of ProNest, during manual and automatic nesting, you could either take all part leads into account or ignore leads altogether, regardless of lead size or the plate material. Taking all leads into account during nesting sometimes results in extra, unneeded space between parts.



Now, you can ignore only certain leads during nesting, based on whether they're smaller than a user-defined percentage of the part separation.



This is useful in cases where some leads/pierces are insignificant and should not affect the spacing between parts, but others are larger and should not be ignored, in case they cause real conflicts with neighboring parts.

Benefits include:

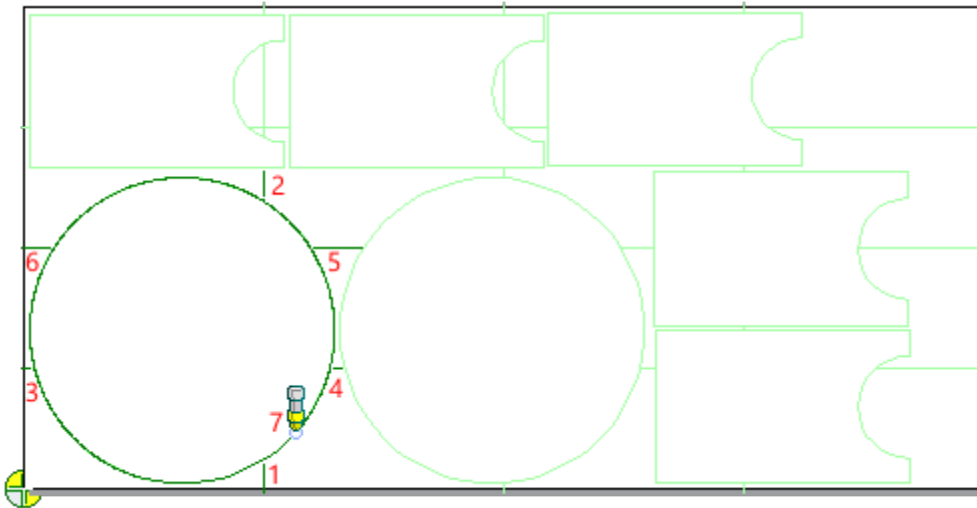
- Better material utilization by nesting parts closer together. In some scenarios, this may be the difference between a part set requiring two plates and fitting everything on a single plate.
- Reduce instances where there are conflicts shown on the nest, but there wouldn't actually be a problem during cutting.
- No need to enter Settings and turn the **Ignore part leads** setting on or off prior to nesting, based on material or lead length.
- Useful for both laser and plasma cutting.

Lead styles

Any lead style is available and can be selected in all areas of ProNest, including the Edit Part List, the main window, and the Leads settings spreadsheet. Previously, custom lead styles had to be applied manually in Advanced Edit.

Skeleton Cut-Up: Integrate sequence with parts

A new setting allows skeleton lines and exterior part profiles to be cut together in groups. All skeleton lines intersecting the exterior profile will be cut first, followed by the exterior profile. The sequence will then move on to the next group of skeleton lines and parts.



Selecting this setting can reduce part defects due to plate movement and lessen the chance of collisions with tipped-up parts.

Job setup

Safe zones

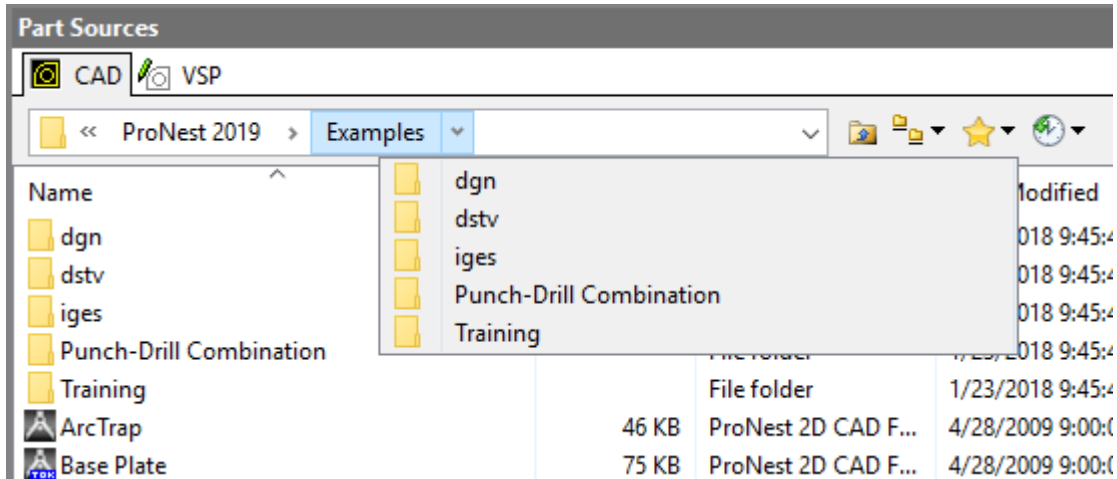
A default safe zone scheme can now be applied for an entire machine. The default safe zones are applied to all plates, prior to nesting. For machines that have stops or clamps to hold the plate in place, you no longer have to apply a safe zone scheme each time a new nest is created or a plate is added to the plate list.

- You can specify a maximum material thickness to use default safe zones, which is useful for thicker plate that may not require clamps.

Ease of Use

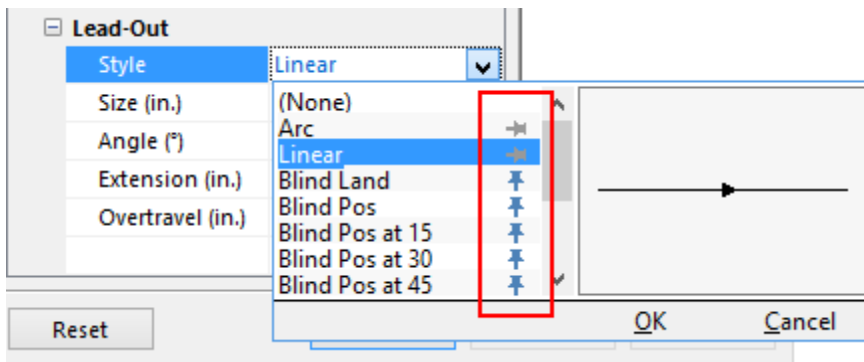
Breadcrumbs style folder navigation

Several areas in ProNest now use a more modern breadcrumb style folder explorer, making it faster and easier to browse for folders and files.



Pin lead styles

When selecting leads, commonly used lead styles can now be pinned to the top of the list, for quick access.



Pinned lead styles are saved with the ProNest machine, so that machine-specific lead styles will always be readily available.

Design2Fab

Design2Fab Integration

Roundtrip Design2Fab integration has been added to ProNest, enabling you to leave a ProNest job, add fittings in Design2Fab and return to the ProNest job with the patterns added to the part list, ready for nesting and NC output. (Introduced in ProNest 2017 version 12.1.3.)