



**ProNest<sup>®</sup> 2012**

Version 10.2

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## ***What's New***

Released August 2013

## New Features and Enhancements

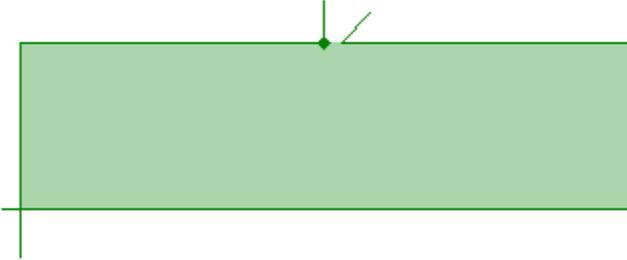
The following enhancements are available in the ProNest 10.2 release:

### ► Tab Improvements

Developed primarily for laser applications, several tab enhancements are available:

- **Lead-outs on tabs**

Tabs added through AutoTab or manually using Advanced Edit can now have lead-outs. A new column called "Apply Leadouts" in the AutoTab settings spreadsheet will place lead-outs on tabs added during AutoTab or manually. Tabs added manually in Advanced Edit now have lead-out properties that can be set profile by profile.



- **Set a maximum size for tabbed profiles**

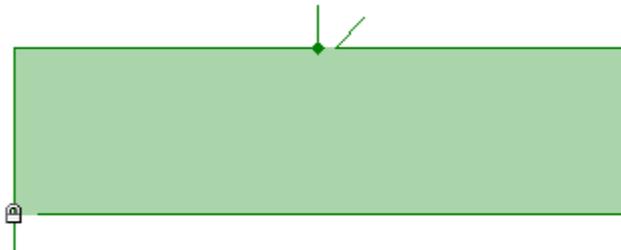
A new AutoTab spreadsheet column called "Profile Dimension" governs whether or not profiles will have tabs applied to them, based on their size (length or width). Profiles less than or equal to the maximum size will have tabs applied during AutoTab, while larger profiles will not be AutoTabbed.

This is useful if you want to tab smaller parts to prevent them from dropping through the slats of the table or from tipping up, while leaving larger parts un-tabbed.

- **Lock undertravel on start point "tab" leads**

In past versions of ProNest, when using "At Intervals" or "Number of Tabs" strategies, AutoTab could modify the existing leads on a profile by adding undertravel, creating a sort of tab at the start point. However, this "tab" at the start point could be lost when leads were moved during collision avoidance, automatic nesting, etc.

Now, during AutoTab the undertravel added on these types of leads is locked (🔒), ensuring that the tab-style lead is retained even if it is repositioned or altered on the part.



- **Leads specific to tabs only**

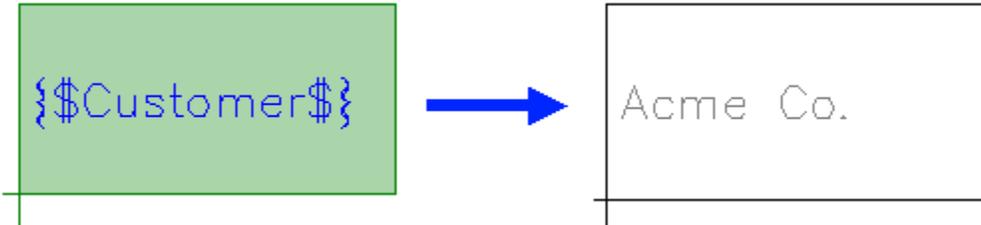
In the Leads settings spreadsheet (XLS), a new column called "Tab Lead" indicates whether or not a given record contains leads for tabs. This lets you use specific leads for tabs only, separate from other leads in ProNest. Tab leads will be used during Autotab or when manually adding tabs in Advanced Edit.

## ► Scribe Text Improvements

There are several improvements to scribe or mark text:

- **Variables in scribe text**

ProNest now supports the use of variables in scribe text, enabling a number of different properties (such as inventory ID number, heat number, customer, reference, etc.) to be easily added on the part for marking. Variables, which act as placeholders for actual values, can be added in Advanced Edit in ProNest or included as text in the CAD file.



*A ProNest part with a scribe text variable "Customer" added. When the part is cut, the actual customer name would be scribed.*

- **Font for scribe text added in Advanced Edit**

You can now select the font to use for scribe text added in Advanced Edit.

- If a CAD font folder is specified, you can select either CAD (.shx, .fnt) or system fonts
- Different fonts can be used on a single part
- This provides full Unicode support for text added in Advanced Edit

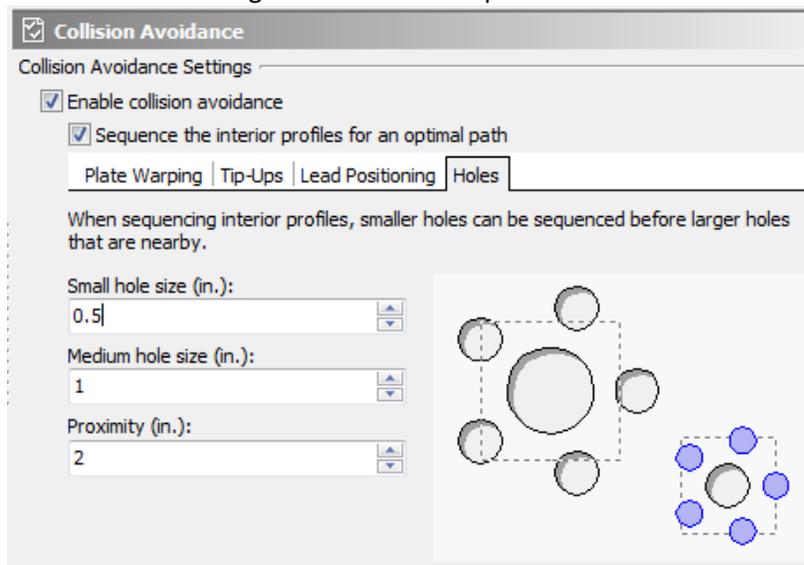
- **Scribe text fully editable in Advanced Edit**

You can now resize, reposition, change the font, or otherwise edit scribe text in Advanced Edit. This applies to text added in the CAD file or via Advanced Edit.

## ► Collision Avoidance: Cut Small Bolt Holes First

For certain parts, such as flanges, small bolt holes are situated near other larger interior features. These holes are sometimes sequenced so that tip-ups and torch crashes could occur.

New Collision Avoidance settings have been added which enable the cut sequence to be set based on hole size, reducing the chance of torch crashes. Based on user-defined hole size ranges, smaller holes can be cut before larger interiors on the part.



### ▶ True Hole® Technology: Interior Cut Sequence

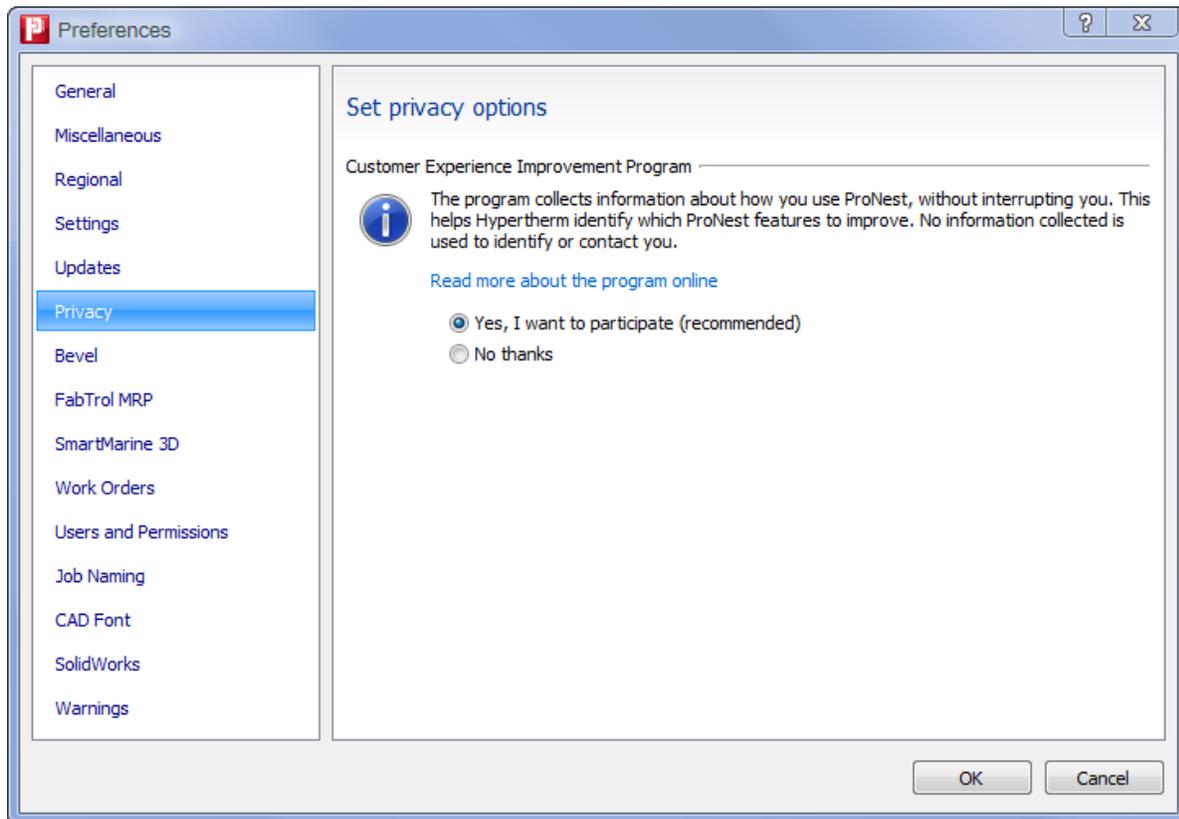
The interior cut sequence of a part can be set so that all True Hole® profiles are cut before any other interiors on the part. This reduces gas purge time when compared to alternating between cutting True Hole and non-True Hole features on a part.

This is controlled by a new "Sequence all True Hole cuts first" setting on the Cut Sequence: Interior Profile settings page, which appears only when a True Hole-capable machine is loaded.

### ▶ Customer Experience Improvement Program

The program collects information about how you use ProNest. This helps Hypertherm identify which ProNest features to improve. No information collected is used to identify or contact you. The CEIP program runs in the background as you use ProNest, without interrupting you.

You can opt in to the improvement program using a new Privacy preferences page.



### ▶ Multiple Classes on a Nest

Previously, ProNest allowed only one single class per nest. This was due to class being used primarily as a means of specifying amperage or assist gas, where only one class per nest was appropriate.

Certain features available in Phoenix (the embedded software installed on Hypertherm CNCs) are specified in ProNest using Class as an item in parentheses [e.g. "100Amp (Fine Feature)"]. Now parts with classes that have different information *in parentheses* can be nested together, so long as the rest of the class information is identical. This enables different Hypertherm features to be used on a single nest.

For example, you can now place parts with "130Amp O2/Air (Fine Feature)" and "130Amp O2/Air (True Hole)" on the same nest. However, a part with "130Amp O2/Air (True Bevel)" could not be nested together with a "200Amp O2/Air (True Bevel)" part.

► **Ignore Row in Settings Spreadsheets**

A new column called "Ignore" can now be used in settings spreadsheets. When any non-blank value is entered, ProNest will ignore that row. The major benefit of this is to hide materials that aren't used from view, making material lists throughout ProNest simpler to use.

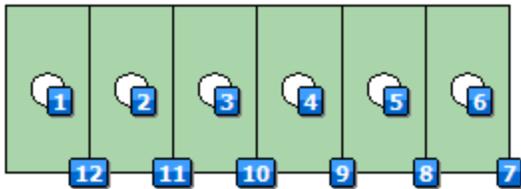
► **AutoNest: Fill Interiors First**

During automatic nesting, ProNest will attempt to nest smaller parts inside the interior profiles of larger nested parts before filling other areas of the nest. This can be useful if your parts contain large cut-outs that can be nested on.

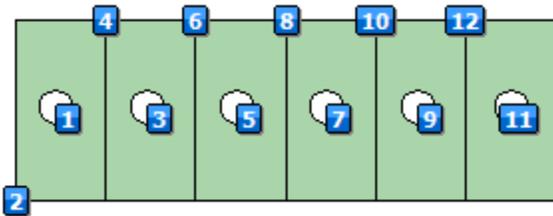
► **Common Line Cutting: Non-Crossing Sequencing By Part**

With the non-crossing style (used for applications where the torch shouldn't cross a previously-cut path, due to the potential for torch diving), parts that are CLC arrayed or grouped in an advanced multi-part CLC are now cut part by part. This was implemented to fix issues with part movement during cutting.

Previously, with non-crossing in use, a CLC array or multi-part CLC may have been sequenced so that the interiors on all parts in the CLC are cut first, followed by exterior profiles:



Now by default, CLC arrays and multi-part CLC groups are cut part-by-part:



Note that this doesn't affect the crossing style or any CLCs made using Pair or Quad CLC.

► **Mirroring Error Message Preference**

Using a new preference, you can elect to show or hide the "Part violates its mirror property" error message that is displayed when a part is nested in violation of its Mirror value (Never or Always).