What's New in SigmaNEST X1

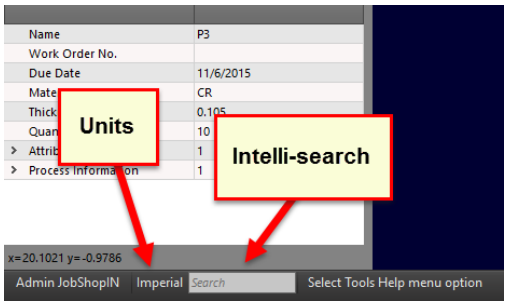
The following are new or updated features in SigmaNEST X1.

SOLIDWORKS Import Update

The SigmaNEST SOLIDWORKS Import Module now supports SOLIDWORKS 2016.

Updates to the Status Bar

The **Units** setting (Imperial or Metric) for the current configuration is now displayed on the status bar.

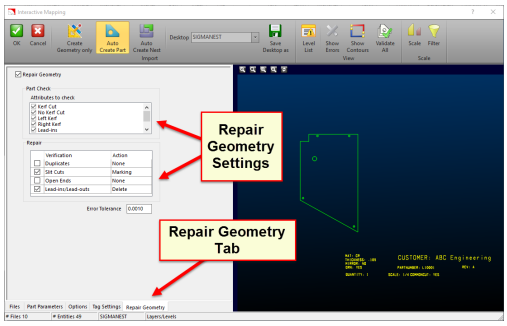


We have moved the **Intelli-search** function from the **Quick Access Toolbar** to the **Status Bar**. You can now click the text box labeled **Search** and type a keyword to generate a list of related actions.

For example, typing **Save** brings up options such as **Save Current Part**, **Save Work-space**, or **Save as**. Double-click the desired action to launch it. Alternatively, you can access **Intelli-search** by using the shortcut **Ctrl+F**.

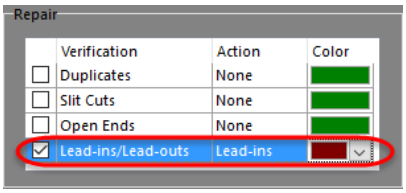
Repair Geometry Settings Added to Interactive Mapping

We have expanded the **Verify Geometry** check-box in **Interactive Mapping** into the **Repair Geometry** tab. Here, you can easily access all **Repair Geometry** settings without having to pre-set them in the **Geometry Edit** dialog. You can also save these settings to a **Desktop** for future use.



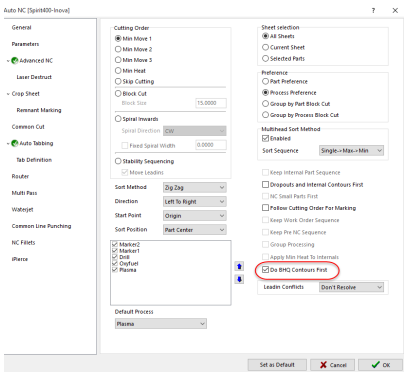
Lead-in/Lead-out Detection Added to Repair Geometry Function

You can now repair **Lead-ins** and **Lead-outs** by selecting the corresponding check-box in the **Repair Geometry** function. Note that this is available from both the **Geometry Edit** dialog as well as the new **Repair Geometry** tab in **Interactive Mapping**.



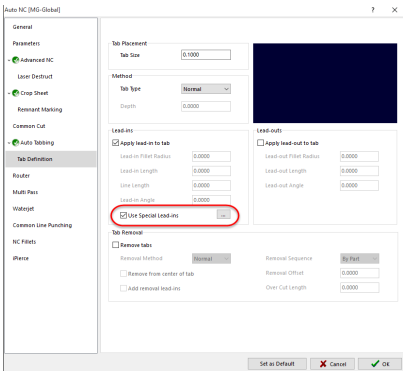
Apply NC to BHQ Contours First Option

You can now apply NC path to BHQ contours first by clicking the **Do BHQ Contours First** check-box in the **General** tab of the **Auto NC** dialog.



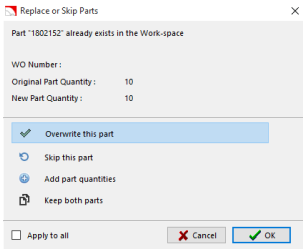
Special Lead-ins Available for Auto Tabbing

You can now apply **Special Lead-ins** when **Auto Tabbing**. This function is available in the **Tab Definition** settings of the **Auto NC** dialog. Check the **Apply lead-in to tab** box, followed by the **Use Special Lead-ins** box. Click the ellipsis to the right to open the **Tab Special Lead-in** dialog, the choose a special lead-in from the drop-down and click **OK** to select it.



Note that the special lead-ins available in the drop-down are set by selecting the **Available as Standard Lead-in** check box from within **Special Lead-in** dialog box.

Duplicate Parts Prompt Added



You can now activate a prompt that pops up when you import parts with the same name. Activate this prompt by accessing the **Defaults** tab in the **Configuration** settings, and then checking the **Prompt when importing duplicate parts** box within the **Part Defaults** section. Next time you import duplicate parts, a menu will pop up with a list of actions for you to choose from. You can choose from the following options:

- **Overwrite this part.** Overwrites the existing part with the newly imported part.
- **Skip this part.** Keeps the existing part and does not import the new part.
- **Add part quantities.** Adds the quantity of the newly imported part to the quantity of the existing part.
- **Keep both parts.** Renames the newly imported part to keep both parts and quantities separate.

Parts List Search Enhancement

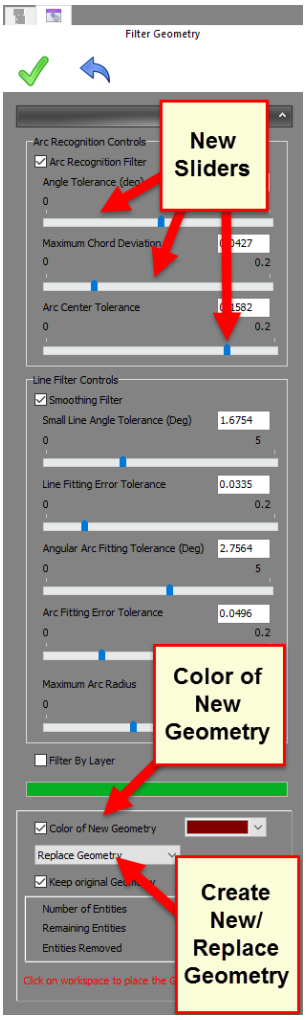
You can now **Include Sub Directories** when using the search function in the Parts List. To do this, click **Search** button in the Parts List, enter your search parameters, and then use the **Search in** drop-down to select **Include Sub Directories**.

New Generate All Nest REPs Function

Previously, you could export nesting results to a .REP file for a single task by typing **GenerateNestREP** into the **Intelli-search**. We have renamed this function to **Generate Nest REP**, and also added the **Generate All Nest REPs** function, which generates a .REP file for all tasks in the work-space.

Enhancements to the Filter Module

We have made several significant enhancements to the **Filter** module in this release. The Filter dialog has been replaced with a side menu to the left of the work-space. All of the same parameters are present, with one notable change - the addition of sliders. You can use these sliders to dynamically update the values for each variable, watching your changes take place in the work-space almost instantaneously.



Another addition to the **Filter** module is the **Color of New Geometry** function. Click this check-box to enable color coding of new geometry, and use the drop-down to the right of the check-box to select the color of your choice.

Finally, you can now choose how SigmaNEST handles the new and original geometries in relation to each other. A drop-down allows you to choose between **Create New Geometry** or **Replace Geometry**.

- **Create New Geometry.** Creates new geometry with the selected settings. Click a location in the work-space to place the new geometry. The original geometry remains the same.
- **Replace Geometry.** Deletes the original geometry and replaces it with the new geometry. Choosing this option enables the **Keep Original Geometry** check box, which, if checked, overlays the original geometry with the new geometry.

Enhancements to Punching in Nesting NC Mode

You can now access the following functions in **Nesting NC** mode (formerly only available in **Part Mode**):

- **Mirror Punch - Vertical**
- **Mirror Punch - Horizontal**
- **Old New Copy Punch**
- **Old New Move Punch**

You can access these functions by clicking the drop-down arrow beneath the **Single Punch** icon in the **Punching / Drilling** group.

Mirror Punch Old New - Vertical & Horizontal Functions

Mirror Punch Old New - Vertical is a new function that allows you to take existing tooling and mirror it vertically using a specified point of reference. Likewise, **Mirror Punch Old New - Horizontal** allows you to mirror existing tooling horizontally using a specified point of reference.

You can access both of these functions from the **Parts** tab in the **Punch - Part Mode** group. Click the drop-down arrow under **Single Punch**, and then select either **Mirror Punch Old New - Vertical** or **Mirror Punch Old New - Horizontal**. Alternatively, you can access them from the drop-down arrow under **Single Punch** in the **Punching / Drilling** group of the **Nesting NC** tab.

Note that these functions are not to be confused with **Mirror Punch - Vertical** and **Mirror Punch - Horizontal**, which only allow you to select the axis of reflection, and not a specific point of reference.

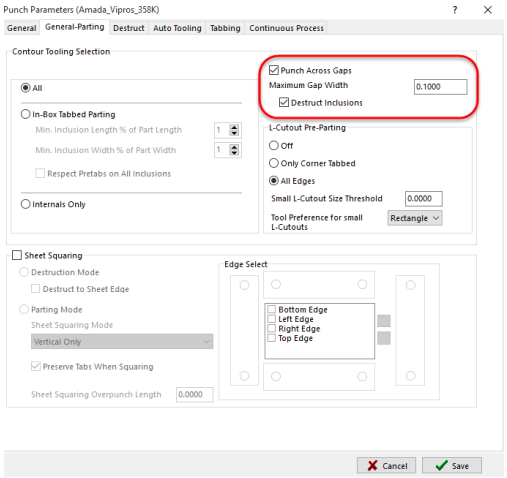
Do Corner Overlap Added to Nibble Entity

A check-box for **Do Corner Overlap** has been added to the **Nibble Entity** menu. Check this box to compensate for machine tolerances that could otherwise leave an unintended sliver on the corner.

New Punch Across Gaps Function

We have added a new function called **Punch Across Gaps**, which is accessible from the **Nibble Entity** function and the **Punch Parameters** dialog. This function allows you to punch in a straight line across gaps for fewer hits and tool changes. You can set a value for **Maximum Gap Width** to specify the longest gap distance to be jumped.

You can also choose to **Destruct Inclusions**, which destructs the enclosed area of a gap that has been punched across.

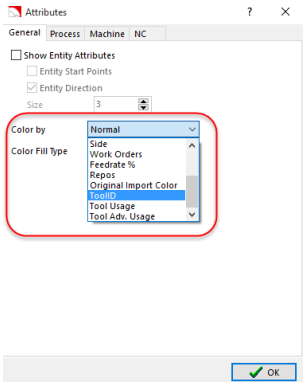


New Stretch Nibble Function

You can now stretch or shrink existing nibble entities using the new **Stretch Nibble** function. Access the function from the **Parts** tab in the **Punch - Part Mode** group. Click the drop-down arrow under **Tool Viewer**, and then select **Stretch Nibble**. Alternatively, you can access it from the drop-down arrow under **Tool Viewer** in the **Punching / Drilling** group of the **Nesting NC** tab.

Color by Tool

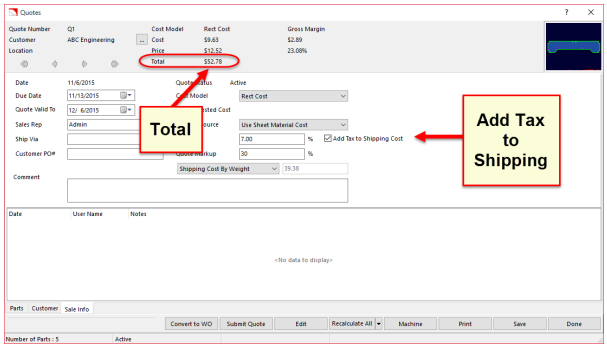
You can now use the **Color by** feature in the **Attributes** dialog to color by **ToolID**, **Tool Usage**, or **Tool Adv. Usage**.



Quotes View Enhancements

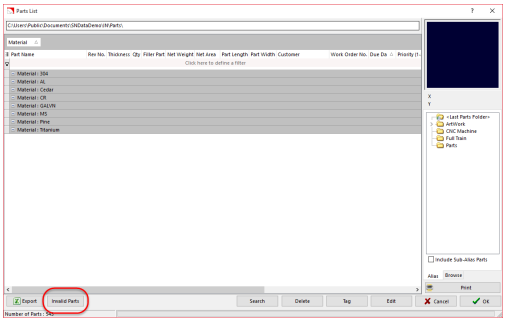
The **Total** is now displayed in the **Quotes View** header.

We've also added a check-box to the **Sale Info** tab to allow you to **Add Tax to Shipping Cost**.



Invalid Parts Accessible from Parts List

You can now access the **Invalid Parts** dialog directly from the **Parts List** using the new **Invalid Parts** button.

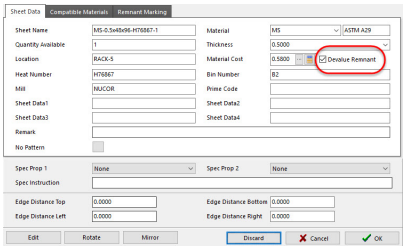


Update to Invalid Parts Dialog

We've fixed a bug in the **Invalid Parts** dialog that allowed you to accept an invalid part even if it had not been repaired. Now you may only accept a part if it has been repaired.

New Devalue Remnant Function

You can now devalue remnants upon creation from the **Nest Remnants** dialog. Do this by checking the **Devalue Remnant** box, which is located to the right of **Material Cost**.



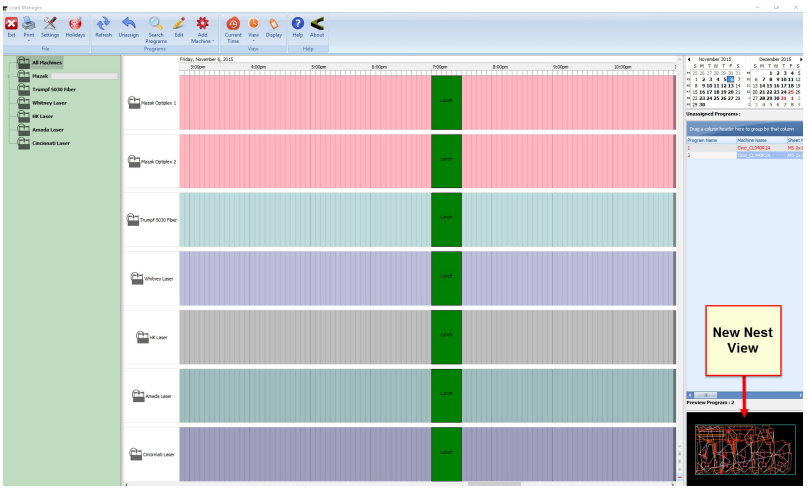
SimTrans

We've made three major enhancements to SimTrans in this release:

- Support for material standards has been added.
- QT10 Transaction has been updated to handle tax rate.
- SN60 Transaction has been updated to support material groups.

Load Manager

We've added a **Nest View** that allows you to preview a nest by selecting the corresponding program from the **Unassigned Programs** list.



Also, the GUI has been updated to handle 20+ machines at a time.