

# What's New in SigmaNEST X1.5

## Software Licensing

SigmaNEST X1.5 uses a software license (via network connection) rather than a physical SIM.

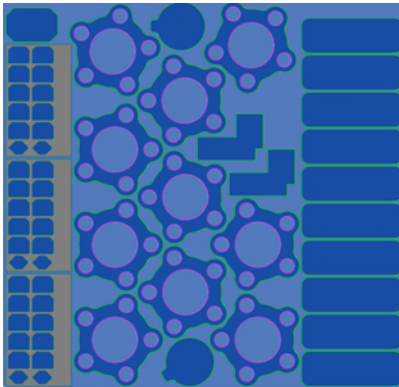
To learn more about this transition and get started with software licensing, please visit the SigmaNEST Knowledge Base at [sigmanest.zendesk.com](https://sigmanest.zendesk.com) and view our license transfer guide.

## HD Advanced TrueShape

The new HD Advanced TrueShape Nesting engine offers improved yields for nests that contain a medium to large number of unique parts.

## MiniNests

The new MiniNest feature nests small parts of your choice on small "mini sheets" that can then be nested on standard sheets.



Tabbing these parts into their corresponding mini sheets makes it easy for part handlers to pick up and offload small parts.

## Expanded Machine Support

We're excited to announce expanded support for the following punch-laser combination machines.

- TRUMPF TruMatic 7000 (with full SheetMaster automation)
- TRUMPF TruMatic 1000 Fiber (with full SheetMaster automation)
- Amada EMLK Punch/Laser Combination (with PRIII and TK-style part sorting and stacking systems)

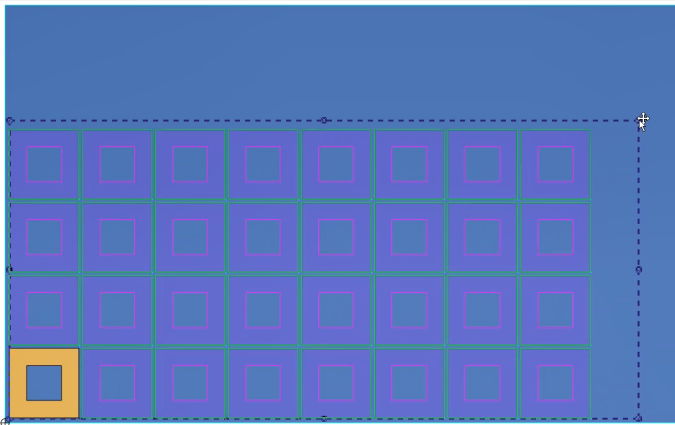
## Redesigned Task Setup Window

The Task Setup window has been redesigned to make frequently used options more accessible, improve workflow, and provide a more consistent user experience.

- Options across the bottom such as Part List, BOM List, Work Orders, Sheet List, and Task Parameters are now the same, whether you are viewing the Parts or Sheets tab.
- Filtering options across the top of the Parts and Sheets tabs have improved, so redundant filters were removed from the right side of the Parts tab.
- On the Sheets tab, the customer name is now displayed for consignment and reserved sheets.

## Nesting Improvements

- The lookup values in the Task Parameters are now populated based on the material and thickness of the stock or task sheets in the current task. If no stock or task sheets have been added, the parameters are based on the first part in the task.
- You can use the new Dynamic Array feature to quickly create a grid of parts by dragging and dropping a bounding box around a single part or part group.



- Customers with the Continuous Nesting module can now group parts by customer, due date, priority, and other part data during nesting.
- Move Common Line Pair makes it easy to manually nest common cut parts by snapping the selected part edges together.
- The HD SuperNest engine now supports clamps and the Continuous Nesting module.
- The Tread and Strip nesting engines are controlled by the new software licensing; no additional setup required.

## Redesigned Filter Module

The Filter interface has been simplified so that you only have to specify one tolerance instead of six. Depending on the geometry, it may be up to 70% faster and reduce entity count by up to 20%.

## New CAD System Support

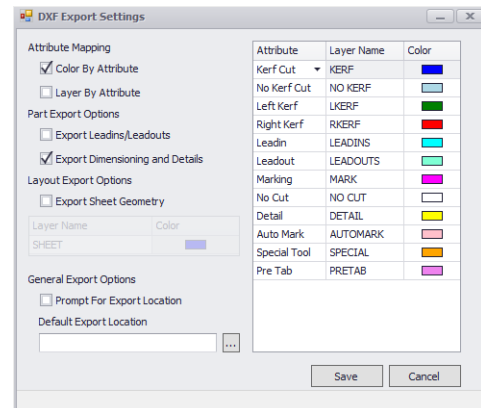
SigmaNEST now supports the following CAD system versions (for customers with the corresponding import modules).

- AutoCAD 2019
- Inventor 2019
- Vault 2019
- Solid Edge 2019
- Creo 5.0

## Advanced DXF Export

The Advanced DXF Export feature makes it easy to customize export options and generate a modern, cross-compatible DXF.

- DXFs are formatted to be readable by other CAD programs
- Export options such as whether to export an entire nest or single part, a part's details and dimensions, customization of layers and colors, and more, are available
- Attributes are mapped based on how you configure the export

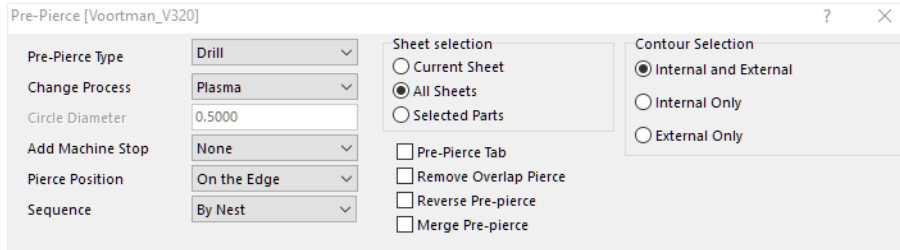


## New Import Features

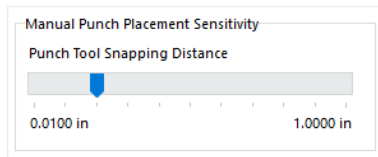
- You can now import 3D DWGs into SigmaNEST from the Import menu on the Workspace tab.
- If you use SigmaMRP, you can now automatically create BOMs when importing parts and assemblies from SOLIDWORKS, Inventor, Solid Edge, or NX.
- When importing SOLIDWORKS parts and assemblies, you can now automatically suppress unwanted partial depth and/or drill features. You can also now filter parts and assemblies by configuration.
- SigmaNEST now offers batch support for STEP and Vault PDM import.

## New NC Features

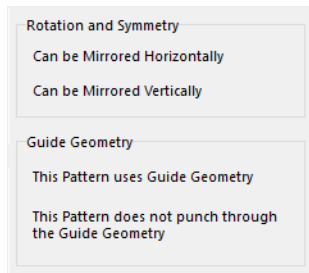
- When applying pre-piercing, you can choose whether to pre-pierce internal contours, external contours, or both.



- You can adjust the sensitivity of your cursor to reduce user fatigue and hand strain when manually applying tooling in the Punch Parameters on the General tab.



- A window-select option is available in Part Removal to make sequencing easier.
- When creating or editing Pattern Tooling, information about the guide geometry is now displayed so that you know exactly how it will behave.



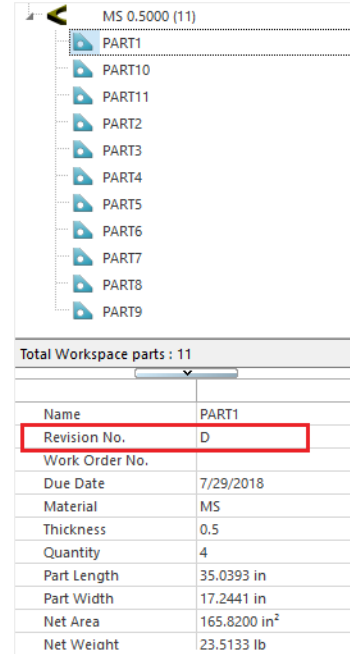
- PartData14-18 have been added to the post processor.
- Bevel height sensing is now more reliable, especially in cases where a cut crosses a gap created by a previous cut.

## User Interface Enhancements

- In cases where you have part geometry hidden behind a nest layout, you can now hide (and restore) the nest layout as needed from the Quick Access Toolbar.



- Revision numbers are now displayed in the part information section of the left panel.
- The following Configuration settings have been rearranged so that you can find them more easily.
  - Auto Save now has its own box on the System2 tab where you can choose how often to automatically save your workspace, where to save it, and whether or not SigmaNEST should prompt you to save your parts after making changes.
  - All Unit settings are now grouped together on the System tab.
  - On the Defaults tab, a new Nesting section is now available that contains the following settings (previously located on the System and System2 tabs).
    - Export nesting results to text file
    - Nest only WO parts on stock sheets
    - Allow nesting of invalid parts
    - Use virtual crop to calculate nested area on a parameter sheet
    - Virtual crop line
    - Remove unused layouts after auto nesting
    - HD SuperNest Part Tolerance
  - The CRM Integration list has been moved from the Costing tab to the Database tab.
- To prevent inventory errors where one customer's sheet is mistakenly allocated to a different customer, you can now disallow part/sheet mismatches on the Configuration > Defaults tab in the Nesting section.
- You can now manually modify the time intervals for HD SuperNest on the Configuration > Defaults tab in the Nesting section.
- Themes (previously called skins) have been updated to match new Microsoft Office styles. You can view the new themes on the Configuration > System tab.

A screenshot of the SigmaNEST interface showing a part list and a table of properties. The part list on the left shows a hierarchy starting with 'MS 0.5000 (11)' and containing parts PART1 through PART9. Below the list, a table titled 'Total Workspace parts : 11' displays properties for 'PART1'. The 'Revision No.' field is highlighted with a red box.

Total Workspace parts : 11	
Name	PART1
Revision No.	D
Work Order No.	
Due Date	7/29/2018
Material	MS
Thickness	0.5
Quantity	4
Part Length	35.0393 in
Part Width	17.2441 in
Net Area	165.8200 in <sup>2</sup>
Net Weight	23.5133 lb