Solid Edge 2D Nesting

Optimize cutting patterns, saving time and material costs

Benefits
- Reduce time and material costs
- Automatically place complex shapes and large quantities of shapes
- Nest using multiple sheet sizes to reduce tailings or partial sheets
- Establish better costing estimates

Features
- Next-generation nesting algorithm
- Comprehensive control of part quantities, sheet sizes and part rotation
- Continuous nesting improvement until user ends optimization
- Fully integrated with Solid Edge, launches with a single click
- Export data to Solid Edge CAM Pro for CNC programming

Summary
Siemens Solid Edge® 2D Nesting is a powerful standalone module designed to generate optimized layouts for the two-dimensional cutting of fabrication materials, including sheet metal, plastic, wood, fabric and textiles. 2D Nesting saves fabricators time by allowing them to manage material use more effectively.

The process of 2D nesting, or the organization of 2D shapes efficiently on a single cutting plane, is much like processes dressmakers have used for decades. The optimized nesting patterns, created using a next-generation nesting algorithm, markedly reduce preparation time, waste and costs.

Powerful nesting, comprehensive control
With Solid Edge 2D Nesting, you have full control over all the nesting settings needed to meet the demands of any cutting technology or material. An intuitive user interface (UI) makes it easy to select part quantities, sheet sizes and part rotation.

With the ability to select multiple sheet sizes, 2D Nesting gives you the ability to select the most efficient nest, eliminating tailings, or partial sheets. These tailings often result in wasted material, as the odd leftover sheets take up valuable shop space and often go unused.

Not only does Solid Edge 2D Nesting help you find excellent, efficient nests quickly and easily, but also uses a powerful algorithm that continuously seeks improvements, by searching for the optimal combination of sheets sizes and orientations to reduce waste. Users can redefine the algorithm’s runtime or stop the process once the right nest has been identified. With multiple nesting options, you can select the nest that best fits your needs.

Integration with Solid Edge Mechanical Design and CAM Pro
Closely integrated with Solid Edge’s world-class portfolio of products, 2D Nesting launches from Solid Edge Mechanical Design with a single click. Selecting parts to import for nesting is quick and easy. 2D Nesting supports Solid Edge sheet metal and part files (PSM and PAR), as well as neutral data.
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formats including DXF and DWG, automatically extracting flat pattern data. CAM Pro or exported to another computer-aided manufacturing (CAM) system for computer numerical control (CNC) programming. 2D Nesting can share data as Solid Edge part and drafting file formats (PAR and DFT) as well as DXF and DWG.

The integrated round trip within the Solid Edge environment saves time and avoids data translation. From start to finish, 2D Nesting makes creating optimized nests quick and easy.

Minimum system configuration
- Windows 10 Enterprise or Professional (64-bit only) version 1709 or later
- 8 GB RAM
- 65K colors
- Screen resolution: 1920 x 1080
- 6.5 GB of disk space required for installation

Extending value
Solid Edge is a portfolio of affordable, easy to deploy, maintain and use software tools that advance all aspects of the product development process – mechanical and electrical design, simulation, manufacturing, technical documentation, data management and cloud-based collaboration.

Once shapes have been identified for nesting, you can easily adjust quantity requirements and investigate any shapes that may present issues during production. Intuitive controls and an easily understandable legend guide you through the process with rich visual feedback, displaying shapes as they are examined.

After you have selected the ideal nest, results can be quickly sent to Solid Edge Mechanical Design for additional drawings or to create detailed reports. The nests can also be sent to Solid Edge CAM Pro or exported to another computer-aided manufacturing (CAM) system for computer numerical control (CNC) programming. 2D Nesting can share data as Solid Edge part and drafting file formats (PAR and DFT) as well as DXF and DWG.