

SEER[®] FOR MANUFACTURING



G A L O R A T H

Understand Manufacturing Part and Assembly Costs — SEER[®] for Manufacturing brings together Design, Manufacturing, and Cost engineers to assess vital part and assembly manufacturing cost decisions. Based on sophisticated predictive analytics, the SEER-MFG™ modeling environment helps organizations assess up-front project feasibility, optimize manufacturing and assembly costs, and assess trade-offs, risks and probabilities.

Solve Complex Problems — SEER-MFG focuses on simulating, estimating, and optimizing process options including cost, labor (setup, direct, inspection, and rework), material, and tooling, and can be used to model virtually any manufacturing operation, including customer-defined processes.

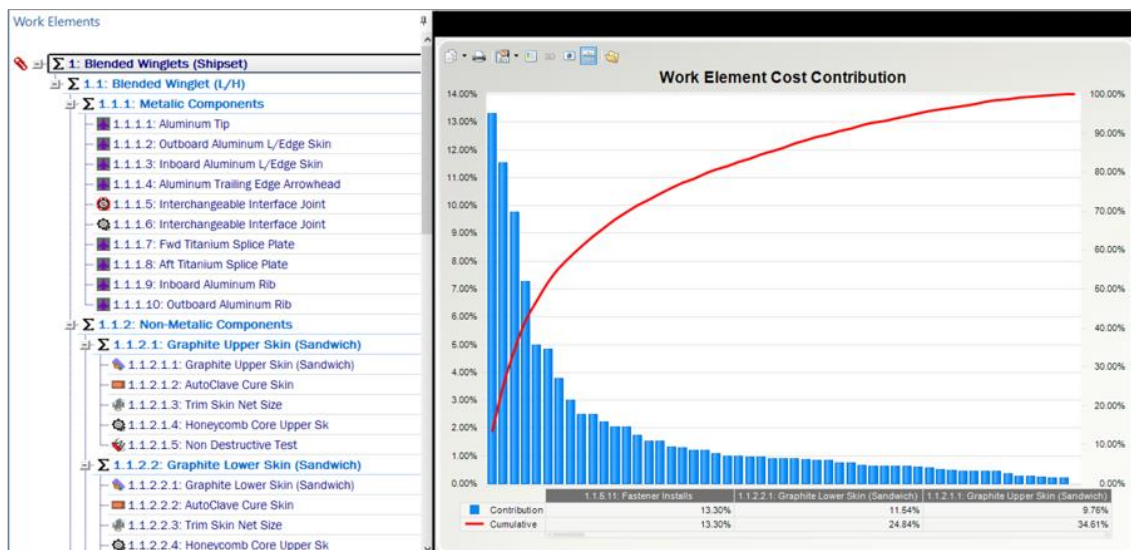
Cost Modeling Framework — SEER-MFG employs a multi-faceted approach to estimating and costing, leveraging industry metrics such as time and motion studies, proven formulaic cost relationships, as well as the ability to define your own modeling rates, factors and formulas.

Predictive Analytics Compute process time and labor based on descriptive inputs such as process type, process-specific parameters, material, and geometry.

Rate & Quantity Easily set up for rapid calculation of effort and cost when basic variables are known.

User Defined Models and relationships can be defined and used to supplement the built-in parametrics. You can create high-level inputs and map them to detailed SEER-MFG parameters to enable meaningful trades and cost simulations.

Pareto Analysis Identify cost contribution and optimize product cost by identifying elements, process areas within an element, and which process steps drive the greatest cost.





Knowledge Based Process Models offer out of the box expertise for default process rates, factors and other costs related to manufacturing cost drivers. SEER for Manufacturing offers the most comprehensive set of process models ranging from machining, assembly, composites, additive manufacturing, sheet metal and many more. They enable users to develop first-look estimates using standard rates and assumptions, and to refine those estimates as details become available over time.

CAD to Cost options offer streamlined costing from 3D models using part geometry and your virtual factory attributes. Evaluate cost impact of design changes before the design is committed. Batch processing offers efficient and reliable means for generating costings for numerous parts.

The screenshot displays the SEER 3D software interface. The main window shows a 3D model of a part with dimensions: 110 mm and R12.5 mm. The interface includes a settings panel on the left and a 3D view on the right.

Product Description

Name:	Griffin Support
Process group:	Machining
Manufacturing environment:	Manual Operations
Production Quantity:	1
Setup Amort. Quantity:	1

Material

Material Origin:	Raw Stock
Material:	Aluminum Alloys

Engineering Description

Raw Shape:	Rectangular
Operation type:	Milling
Bounding box mode:	<input type="radio"/> Inertia-based <input checked="" type="radio"/> Original <input type="radio"/> User-defined
Machining Z-axis:	Auto Selected <input type="button" value="Select Axis"/> <input type="button" value="Select Orientation"/>
Raw Dimensions (mm):	129.80 . 121.00 . 75.00
Excess (mm):	11.80 . 11.00 . 5.00

Part properties

RawStock Volume (mm ³):	1,177,935.00
RawStock Weight (kgs):	3.195266481
Finished Part Volume (mm ³):	224,737.14
Finished Part Weight (kgs):	0.609621968
Finished Part Surface Area (mm ²):	40,516.89
Volume to Remove (mm ³):	933,647.73

Fully Scalable Costing Solutions — Process-specific work elements are building blocks used to describe the manufacture and assembly process steps. Each element has a set of parameters, estimating models, built-in calculations, rates and factors to generate a set of outputs. Users have instant visibility into all the cost drivers at any granular level desired to allow them to make informed decisions. Users can examine and manipulate many possible trade-offs through quick and easy “what if” analyses, allowing insight into risks that might not otherwise be identified or understood.