

SigmaNEST[®]

The World's Leading CAD/CAM Nesting System

Automating fabrication processes boosts productivity. Powered by the industry's most advanced CAD/CAM nesting engine, SigmaNEST drives nearly every type of cutting, punching, or bending machine. SigmaNEST saves you valuable materials and manpower while never sacrificing quality. Integration with the most popular CAD and NC programs, a simple interface, and the best customer support in the business, are all reasons why SigmaNEST is the industry leader with over 21,000 systems installed worldwide.



Manpower Efficiency

Quick to Learn, Easy to Use

Reduce wasted time in your shop by empowering your team with fast software and increased automation. Programming is completed 5 times faster on average.

- ▶ One software platform for multiple machine types
- ▶ Transfer programs from one machine to another in seconds
- ▶ Built in SigmaNEST CAD
- ▶ Customizable detailed reports
- ▶ Direct 3D CAD assembly/part import
- ▶ Automatically sort by material/thickness, nest parts, apply tool path, and post programs with one click
- ▶ Quoting, tracking, and inventory tools for accurate, real-time updates

Motion Optimization

Reduce Cycle Time

Cut faster and more efficiently to increase your shop's capacity. Experience 20% faster cut times.

- ▶ Optimal tool path sequencing for machine cycle-time reduction
- ▶ Common-line and continuous cutting
- ▶ Cut direction and sequence
- ▶ Multi-head programming
- ▶ Automatic pierce reduction
- ▶ Sharp corner navigation with optional time-saving exact stop motion
- ▶ Head down rapid movement with automatic tip-up part avoidance
- ▶ Motion planning for tool life extension, part quality

Material Utilization

Waste Less, Save More

Waste less on material through higher nest yield. On average, customers save 4% on material when they switch to SigmaNEST.

- ▶ Best yield from raw materials with minimum waste
- ▶ Consume less material for same production output, lowering cost per part
- ▶ Material Inventory automatically tracks heat numbers on jobs

- ▶ Part-in-part nesting reduces rectangular part cost
- ▶ Selective material grain consideration for repeatability and accuracy
- ▶ Nesting for complex machines: under and/or around clamps, repositioning, bevel cutting, and multiple processes
- ▶ Remnant Nesting captures scrap to nest with Best Sheet analysis for increased yield

Fully Customizable Solution

Built to meet your shop's needs

Your shop is like no other so why would your software needs be the same as everyone else's? SigmaNEST empowers you to operate your shop, your way by letting you select the that modules that you require.

Management

Intelligent Data Integration

Integrate data from all areas of your operation to gain key insights and run more smoothly.

- ▶ Inventory management and stock control
- ▶ Part quoting cost estimation module
- ▶ MRP/ERP systems supported or integration
- ▶ SimTrans Enterprise MRP/ERP integration, SimTrans PDM integration
- ▶ Full integration with 2D and 3D CAD systems
- ▶ Automation and shop floor optimization services available

Machines

Total Operating Flexibility

Run your machines from one seat of software, adding convenience and flexibility to your process. Doing this frees up more capacity for greater yield per machine.

- ▶ Laser
- ▶ Plasma
- ▶ Waterjet
- ▶ Oxyfuel
- ▶ Punch
- ▶ Combo
- ▶ Tube/Pipe
- ▶ Press Brake
- ▶ Router
- ▶ Knife
- ▶ Multi-process
- ▶ Multi Access Machining

	SIGMANEST PACKAGES				
	AutoNEST	True Shape	Techno	Maximizer	PowerPack
LEGEND					
Module Included	☑				
Module Optional	⊗				
GEOMETRY MODULES					
CAD Import DXF, DWG, IGES, DSTV	☑	☑	☑	☑	☑
2D CAD Package	☑	☑	☑	☑	☑
Standard Shapes Library	☑	☑	☑	☑	☑
Smoothing Filter	⊗	⊗	⊗	⊗	⊗
Scanline Raster to Vector	⊗	⊗	⊗	⊗	⊗
Parts Database	☑	☑	☑	☑	☑
NESTING MODULES					
Rectangular Nesting	☑	☑	☑	☑	☑
Part to Part Nesting	☑	☑	☑	☑	☑
Shear Nesting	⊗	⊗	⊗	⊗	⊗
True Shape Nesting		☑	☑	☑	☑
HD True Shape		☑	☑	☑	☑
Advanced Nesting	⊗	⊗	☑	☑	☑
SuperNEST HD	⊗	⊗	⊗	⊗	⊗
Continuous Nesting				⊗	⊗
SigmaNEST SX Unfolder Module	⊗	⊗	⊗	⊗	⊗
SigmaNEST SX Develop Module	⊗	⊗	⊗	⊗	⊗
TOOLPATH MODULES					
Profile AutoNC	☑	☑	☑	☑	☑
Advanced NC Profiling Module			☑	☑	☑
Common Line	⊗	⊗	☑	☑	☑
CurvyRapids™	⊗	⊗	☑	☑	☑
TurboDestruct™	⊗	⊗	☑	☑	☑
iPierce	⊗	⊗	☑	☑	☑
Knife Cutting Module	⊗	⊗	⊗	⊗	⊗
Router Module	⊗	⊗	⊗	⊗	⊗
Advanced Router Module	⊗	⊗	⊗	⊗	⊗
Drilling Module	⊗	⊗	⊗	⊗	⊗
Waterjet Cutting Module	⊗	⊗	⊗	⊗	⊗
Bevel Programming	⊗	⊗	⊗	⊗	⊗
Profile/Punch Combination Machine Module	⊗	⊗	⊗	⊗	⊗
Right Angle Shear NC Module	⊗	⊗	☑	☑	☑
Common Line Punching	⊗	⊗	☑	☑	☑
AutoDynamic Punch	⊗	⊗	☑	☑	☑
BHQ	⊗	⊗	⊗	⊗	⊗
PRODUCTIVITY MODULES					
Job Tracking and Scheduling Module	⊗	⊗	⊗	☑	☑
Inventory Control Module	⊗	⊗	⊗	☑	☑
Quoting and Estimating Module	⊗	⊗	⊗	⊗	⊗
Supply Chain Advisor					⊗
INTEGRATION MODULES					
SimTrans Real-Time MRP Interface				⊗	⊗
SimTrans SOLIDWORKS Enterprise PDM Interface				⊗	⊗
SimTrans Teamcenter PDM Interface				⊗	⊗
SimTrans Windchill PDMLink Interface				⊗	⊗
AUTOMATION MODULES					
SigmaNEST Automation Development Kit					⊗
SigmaNEST API Module					⊗
SigmaNEST Advanced Batch Module					☑
Load/Unload Programming Module			⊗	⊗	☑
SigmaNEST FMS Line Control Interface				⊗	⊗
SigmaNEST Sim Genie FMS Line Controller System				⊗	⊗
CAD INTERFACE MODULES					
SOLIDWORKS Interface	⊗	⊗	⊗	⊗	⊗
Autodesk Inventor Interface	⊗	⊗	⊗	⊗	⊗
Siemens Solid Edge Interface	⊗	⊗	⊗	⊗	⊗
Siemens PLM NX CAD Geometry Interface	⊗	⊗	⊗	⊗	⊗
CATIA Interface	⊗	⊗	⊗	⊗	⊗
Creo Interface	⊗	⊗	⊗	⊗	⊗
SpaceClaim Interface	⊗	⊗	⊗	⊗	⊗
Onshape Interface	⊗	⊗	⊗	⊗	⊗
Windchill PDMLink Interface	⊗	⊗	⊗	⊗	⊗

