



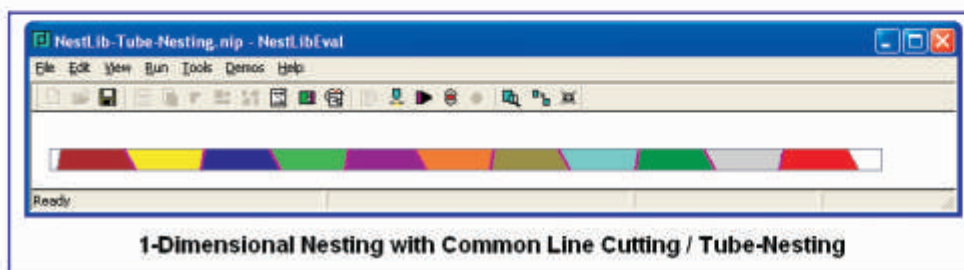
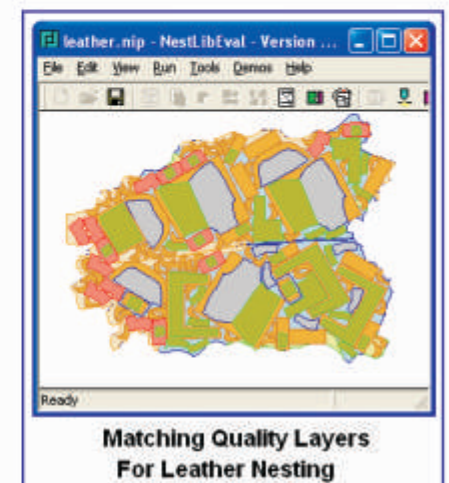
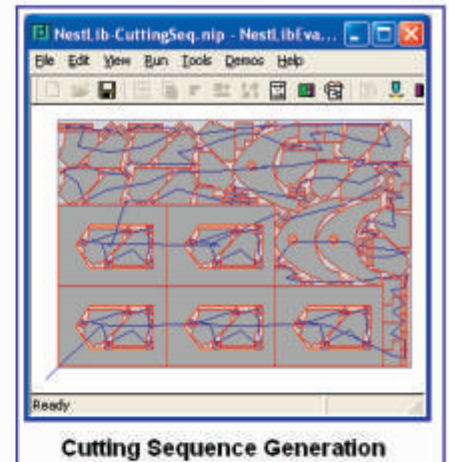
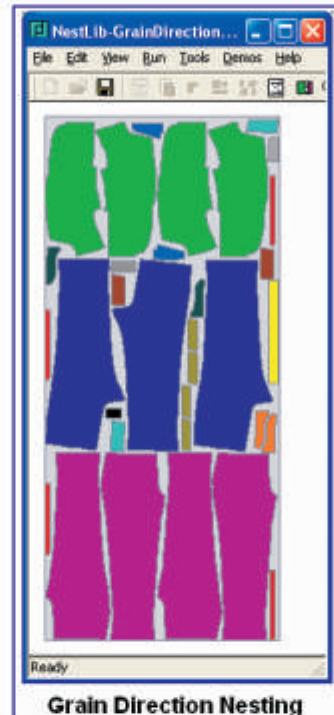
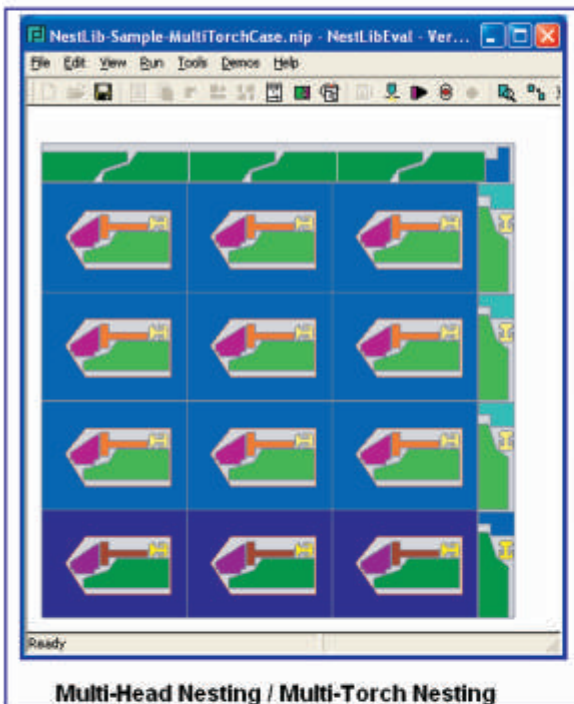
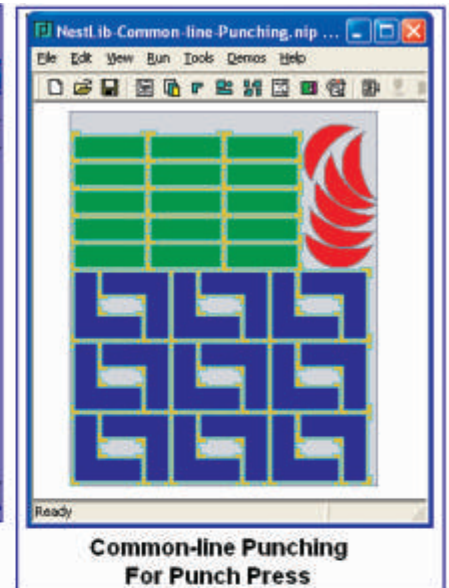
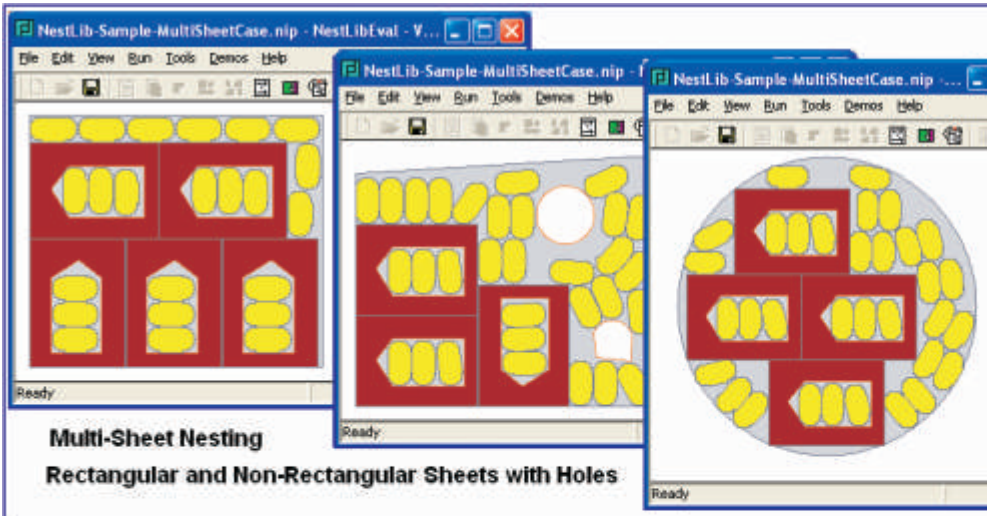
An HCL Technologies Product

Optimize  
material use  
increase  
productivity

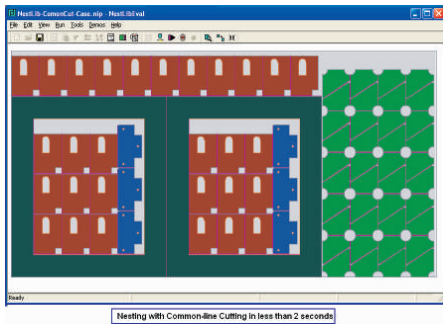
Nestlib® is an automatic nesting software that increases productivity through optimal utilization of raw material. NestLib studies the requirements of heterogeneous parts to obtain the most efficient way of producing them. In addition to saving material while producing the parts, the software also allows reuse of the waste material for future requirements. Auto manufacturing, textile, printing, sheet metal and shipping industries actively use NestLib to achieve their production targets faster.

NestLib comes with a highly flexible and customizable base module that incorporates core algorithms and techniques for automatic nesting. It also offers a host of additional functionalities to customize the nesting application for diverse requirements, and optional advanced modules for highly specialized requirements.

## Nesting software solution for diverse industry application



We have satisfied customers in over 80 OEM and ISV's



### Nestlib increases productivity

- Provides complete nesting in a matter of few seconds
- Automates the production line completely

### NestLib saves material

- Provides optimized and compact layout, reducing raw material consumption
- Reuses waste material
- Predicts inventory requirement

### Nestlib is easy to integrate

- Integrates with existing system or product in less than five days
- Requires minimal programming knowledge

### Nestlib is flexible

- Can be customized to meet diverse requirements
- Classified modules for industry specific needs

## Features of Base Module

### Fully Automatic Solution

- Efficient nesting on multiple sheets of different sizes and shapes in a single run
- Corner and direction specification for each sheet
- Grain direction control for parts and sheets
- Lead-in and lead-out support for each part
- Support to attach priority to each part
- Preferential nesting of parts in holes of larger parts
- Multiple corner support for each sheet
- Nest filler parts for improved material utilization

### True Shape Nesting

- Facility to nest collection of inter-related parts as a single unit
- Guillotine cut feature
- Utilizes best nesting direction for optimum utilization
- Local area feature to nest in specific region on the sheet

### Optional Advanced Modules

- Clusters and common cut
- Multiple torch
- Master plate
- Common punch
- Grid fit
- Optimizer
- Shear nesting
- Optimized rectangular nesting
- Inventory forecasting
- Cutting sequence generation
- Remnant & scrap generation
- Strip nesting
- Speed nesting
- Leather nesting
- Tube nesting
- Snap nesting

## Industries using Nestlib

- Agriculture equipment manufacturer
- Aircraft/ Composites
- Automotive
- CAD/ CAM Solution provider
- Construction
- Engraving/ Sign making
- Leather
- Machine Tool
- Oil
- Packaging
- Plastic/ Marble/ Glass/ Granite
- Printing
- Sheet metal
- Shipping
- Shoe manufacturing

## NestLib Successes

### Enterprise wide efficiencies for a global heavy equipment manufacturer

A global Fortune 500 company increased its material utilization and efficiency by sharing and reuse of engineering expertise across the enterprise. The solution involved integration of heterogeneous design formats and platforms into a browser based design tool, to generate nested designs, collaborate and capture engineering knowledge for sheet metal cutting. The design processes were automated using NestLib technology. This led to *significant savings of over 20 man-years of direct development effort* and resulted in *over 4% improvement in enterprise wide material utilization*.

### A US based machine manufacturer increases productivity with NestLib

A leading US machine manufacturer of foam products required a solution for nesting and cutting parts from foam blocks. Specific modules from the NestLib technology were deployed to automate the manufacturing process. A sequential cutter path was generated specially for the nested parts, thus addressing the blade twisting constraint faced by the customer. This unique solution allowed parts to be cut vertically from a foam block, reduced programming time and manufacturing cost, to give the customers a leading edge.

NestLib is available on Windows platform as:

- |                         |                         |                              |
|-------------------------|-------------------------|------------------------------|
| • 32 bit static library | • 64 bit static library | • Support for COM DLL        |
| • 32 bit DLL            | • 64 bit DLL            | • Support for .NET           |
| • 32 bit executable     | • 64 bit executable     | • Library with JAVA wrappers |

Also available on UNIX, LINUX, SUN Solaris



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