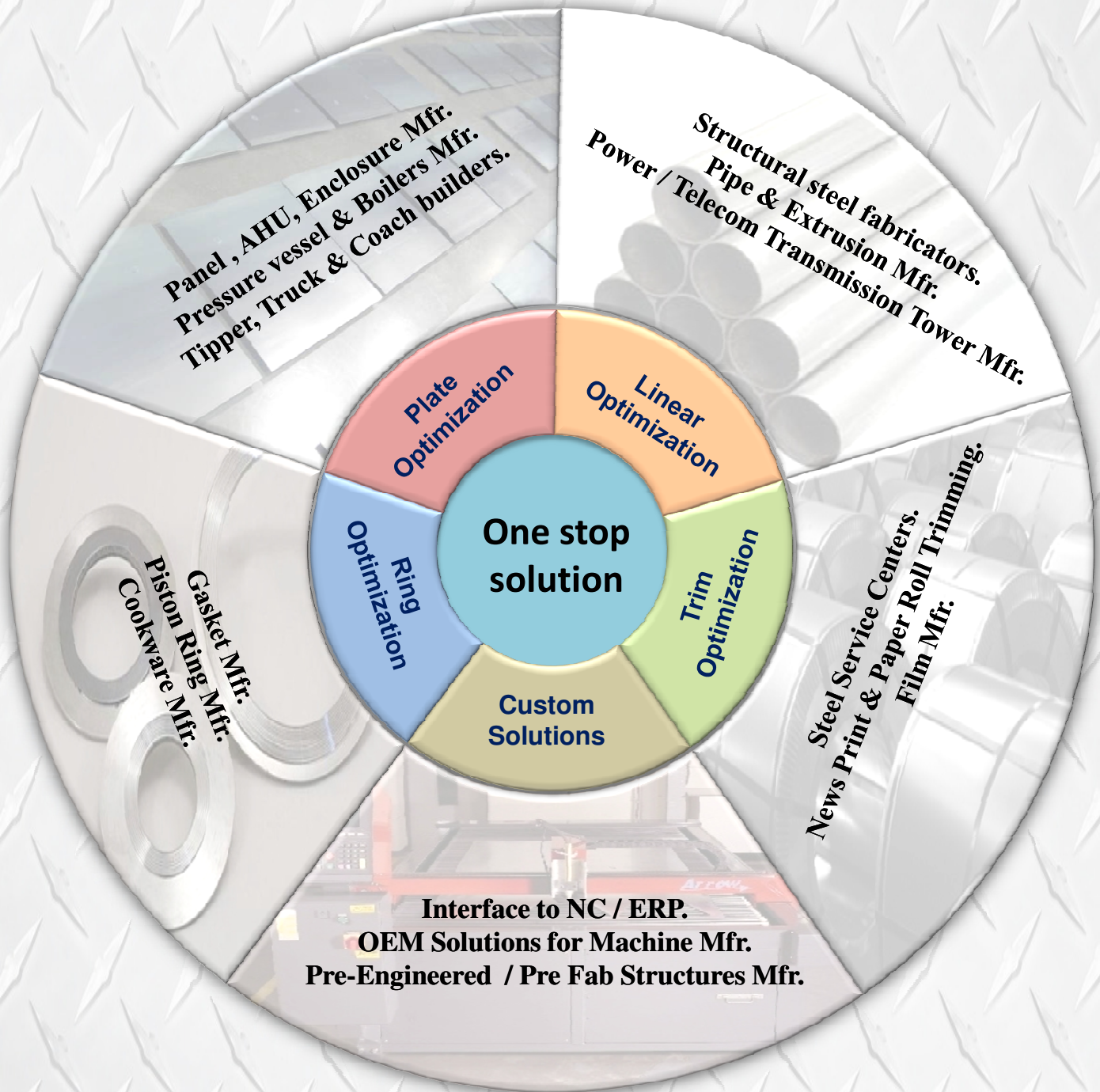




# Nirvana Technologies Pvt. Ltd.

## Optimization Solutions for Sheet Metal Industry



**PROVEN**

**Save Time**

**POWERFUL**

**Save Material**

**PROFITABLE**

**Improve Automation**

# PLUS 2D - Metal



**PLUS 2D – Metal** is a state of the art nesting software for generating optimized layouts and reducing scrap generated by two Dimensional cutting processes. Whether your stock is in the form of Sheets or Coils (rolls), once you define your cutting job, the layout software requires just one mouse click to arrange the parts on appropriate stocks.

It accurately estimates material requirements, and provides the answer you need, in a fraction of the time it takes to calculate manually, significantly reducing the time for costing, estimation and production.

**PLUS 2D is the single most cost effective tool you can add to your business.**

## Key Features

- Multiple stocks in a single job.
- Supports **De-coiling** (stock is in the form of coils/rolls)
- Metric and English units (**mm or Inches**)
- Import non-rectangular parts through DXF / DSTV.
- Parametric Part library and standard shapes.
- Support for machine blade length.
- Standard Material library.
- Integrated inventory database.
- Import data using simple copy and paste from spreadsheets and CSV files.

## Simple no-nonsense output

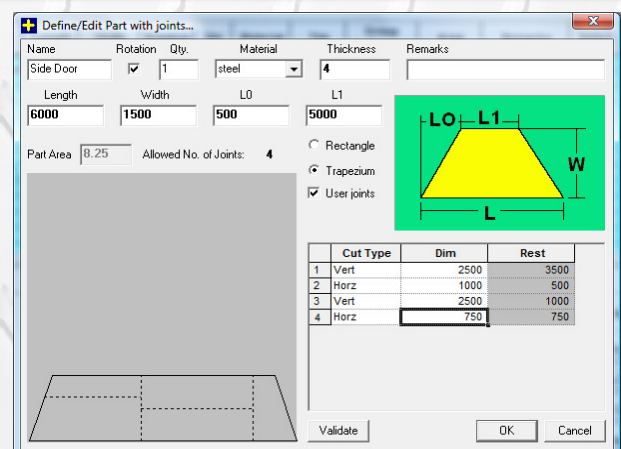
Summary of Optimization Results:	
Grinding Margin	0
Saw Width	0
Number of Layouts	21
Number of Stock Used	31
Total Utilization	98.65 %
Total Parts Required	
Total Parts Nested	
Reusable Offcuts	
Total Stock Weight	
Total Part Weight	
Total Offcut Weight	
Total Scrap Weight	
ScrapWt/PartWt	

- Detailed customizable reports.
- Complete layout drawing.
- Material requirements and balance lists.
- Summaries of each layout.
- Weight, areas of components, stocks, Offcut & scrap.
- Cutting list, cutting instructions and bill of materials.
- Interface to CAD via DXF exports.

## Large Parts with Joints (Optional)

**Large part** - A part having either length or width larger than length or width of the available stocks and is made with Joints. Large Part with Joints module provides :

- To split Large Parts into smaller parts, which when nested, maximum utilization is achieved.
- Option to either split the parts with own Joints or automatically as per BHEL Quality rules.
- Applicable to Rectangles and Trapeziums only.

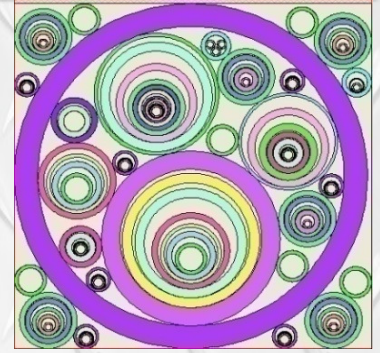




## Rings Optimization

**PLUS 2D** allows you to nest Rings & discs of different sizes in such a manner, so that we get concentric or non-concentric ring patterns.

- Enter any number of rings and/or discs of any size.
- Enter the quantity, Inner Diameter (ID) and Outer Diameter (OD).
- Minimizes scrap.
- Concentric or Non-Concentric ring optimization possible.



## CNC Interface (Optional)



- Support for controllers like Osai, Fanuc, etc.
- NC Links to cutting machines like Messer, Fabgear.
- Interface like ESSI, G – Code, Flowmaster, LOS, etc.

# PLUS 1D



**PLUS 1D** is a Bar Nesting optimization software, which helps reduce the waste in cutting any lineal material like pipe, bar, angles, sections, flange, rod, tube, channel, frame, profiles, extrusions etc.

The nesting technology based on sophisticated algorithms ensures that **PLUS 1D** consistently delivers high utilization patterns drastically reducing waste and maximizing operator productivity. It provides material requirements, cost estimates, for accurate budgeting, planning and scheduling to give you a competitive edge.

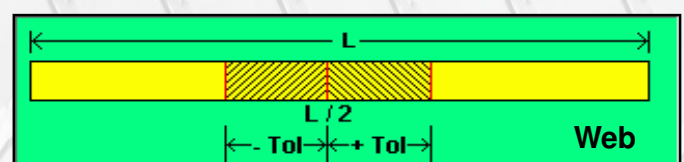
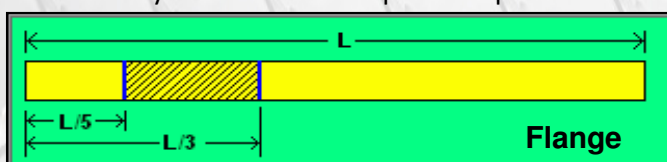
- Import data from a variety of sources . (Comma Separated Value files, spreadsheets etc.).
- Comprehensive and concise reports that satisfies Production, Planning and Purchase departments.
- Integrated inventory module tracks stocks and promotes reuse of offcuts.
- Options to specify end trims, cut allowances.
- Easily integrates with in-house databases.
- Metric and English units (**mm or Inches**)

3	14-r	14	14-r	15	15			
2-r	4	4-r	4	7	2			
7	7	11	11	11	9			
1	1	1	6	6	6	6	14	14

## Large Parts with Joints (Optional)

The part that has length more than that of stock length is called Large Part. In PLUS 1D you can automatically split the large parts into small pieces and then these small pieces can be optimize to maximize yield.

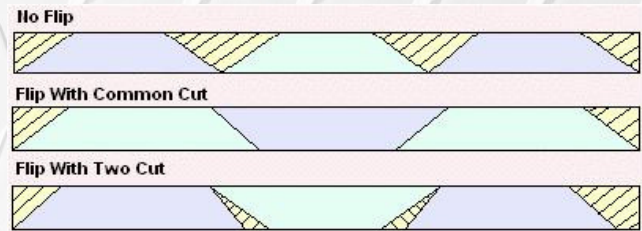
- Parts are split such that they follow engineering constraints.
- Manually edit or add new splits to a part.



## Miter Parts (Optional)

This module provides a simple interface to input miter parts (parts with angled cuts on one or both sides) and nests them to save material while minimizing number of cuts. It considers if the part can be flipped which depends on the symmetry of the section.

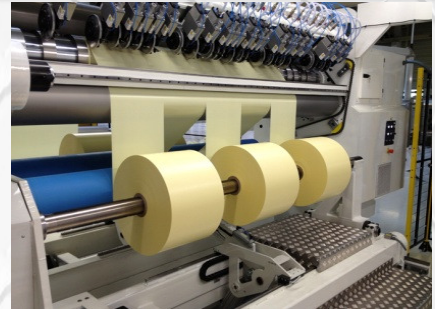
- Easy Import of part / cutlist from csv or excel file.
- Report in form of RTF giving details of nesting of parts.



## PLUS Slitting

PLUS Slitting is a Trim optimization software which helps to reduce the waste in Slitting Coils, Paper Rolls, Cloths, Films etc.

- Accurately estimates jumbo requirement
- Tailor made reports in the form of RTF file,
- Simple and concise report with layout drawings for the shop floor.



## Company Profile

**Nirvana Technologies Pvt. Ltd.** Is an India based company specializing in providing optimization technologies and custom software solutions for the sheet metal, glass and wood working industries. We pride ourselves in providing software solutions that enhance our customer productivity and profitability because they are easy to use, of good quality and competitively priced.

## Testimonials

*A great program, does exactly what we need.*

**Robert Berger, Window Tech., USA**

*We are looking for optimization software for some time and finally came to Nirvanatec which offer and excellent solution simplified to use. Your support has been unique experience in speed and accurate answer. We are glad to have chosen PLUS 2D.*

**PolyVision NV**

## Customization

*Nirvana will gladly customize **PLUS 2D** to meet your specific needs. We are adding custom links to CNC controllers.*

*CNC equipment manufactures and OEM's interested in bundling our software along with their machines can get in touch with us for developing a custom interface to cutting tables, saw and routers.*

Available in English, Chinese, French, German, Spanish, Turkish languages and more.

For more information visit: [www.nesting-software.com](http://www.nesting-software.com)



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