



## Nirvana Technologies Pvt. Ltd.

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### Bar Nesting Software - PLUS 1D Report

#### Project Details

<b>Project Name</b>	
File Name	//Server/dev-nirvanatec.com/downloads/largeparts/plus1d_samples/sample3.p1D
Job Order	
Date	Wednesday, September 17, 2008
PLUS 1D Version No.	7.54

#### Summary of Optimization Results

<b>Project Name</b>	
Number of Layouts	10
Number of Stock Used	19
Total Parts Required	28
Total Parts Nested	28
Total Utilization	98.284
Overall Cost	213920
Minimum Offcut Size	Offcuts Not Allowed
Loss per cut	0
Total Part Length	211.31 [m]
Total Stock Length	215 [m]
Total Stock Weight	215
Total Part Weight	211.31
Total Scrap Weight	3.69
Cutting time (in Minutes)	9
Machine loading time (in Minutes)	19
Total Machine (in Minutes)	28

#### Summary of Layouts

No.	Stock	Size	Qty	Utl %	Rest	Details [PartLength x Qty]
1	2	12500	4	100	0	12500x1
2	2	12500	2	100	0	12500x1
3	1	10000	2	100	0	10000x1
4	1	10000	4	100	0	10000x1
5	2	12500	1	99.01	124	8722x1 3655x1

No.	Stock	Size	Qty	Util %	Rest	Details [PartLength x Qty]
6	1	10000	1	100	0	7064x1 2936x1
7	2	12500	1	95.01	624	8222x1 3655x1
8	1	10000	1	95.27	473	6591x1 2936x1
9	2	12500	2	94.58	678	4443x2 2936x1
10	1	10000	1	88.86	1114	4443x2

## Stock Details

Stock	Length	Qty	Used	Remarks
1	10000	25	9	
2	12500	25	10	

## Part Details

Part	Length	Qty	Cut	Weight	Remarks
1	13655	1	1	13.655	674
2	13655	2	2	13.655	325
3	12936	4	4	12.936	400
4	16943	1	1	16.943	750
5	16943	4	4	16.943	400
6	16943	2	2	16.943	363

## Splitting Rules

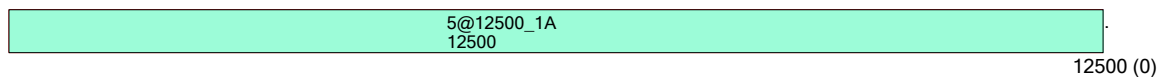
Conditions	Values
Minimum Part Length considered for splitting	6000
Minimum smaller piece Length of part after splitting	1200
Minimum Joint Distance from end for flange	0.200000
Maximum Joint Distance from end for flange	0.333333
Joint Distance from end for web	0.500000
Tolerance allowed for web joint	+/- 250.000000
Maximum joints allowed, in case of multiple joints	2

## Joint Part Details

Part Name	Length	Qty	Cut	Layout_Qty
1	13655	1	1	
1@7064_1A	7064	1	1	6_1
1@6591_1B	6591	1	1	8_1
2	13655	2	2	
2@10000_1A	10000	2	2	3_2
2@3655_1B	3655	2	2	5_1,7_1
3	12936	4	4	
3@10000_1A	10000	4	4	4_4
3@2936_1B	2936	4	4	6_1,8_1,9_2
4	16943	1	1	
4@8722_1A	8722	1	1	5_1
4@8222_1B	8222	1	1	7_1
5	16943	4	4	
5@12500_1A	12500	4	4	1_4
5@4443_1B	4443	4	4	9_4
6	16943	2	2	
6@12500_1A	12500	2	2	2_2
6@4443_1B	4443	2	2	10_2

## Layout 1 of 10

Stock:2	Length:12500	Qty:4	Utl %:100.00
[5@12500_1A] 12500x1			
12500x1			



### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	12500	0	5@12500_1 A	0	0

### Layout 2 of 10

Stock:2	Length:12500	Qty:2	Utl %:100.00
[6@12500_1A]	12500x1		
12500x1			

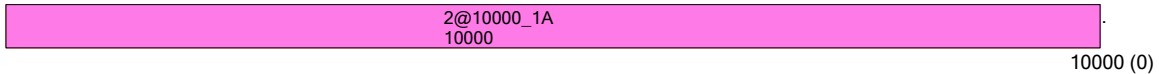


### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	12500	0	6@12500_1 A	0	0

### Layout 3 of 10

Stock:1	Length:10000	Qty:2	Utl %:100.00
[2@10000_1A]	10000x1		
10000x1			

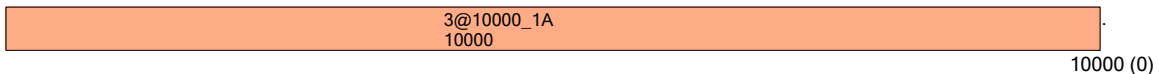


### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	10000	0	2@10000_1 A	0	0

### Layout 4 of 10

Stock:1	Length:10000	Qty:4	Utl %:100.00
[3@10000_1A]	10000x1		
10000x1			

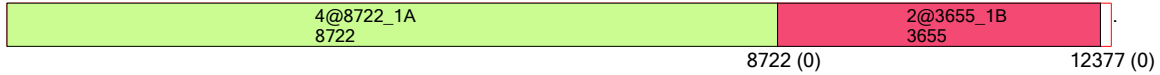


### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	10000	0	3@10000_1 A	0	0

### Layout 5 of 10

<b>Stock:2</b>	<b>Length:12500</b>	<b>Qty:1</b>	<b>Utl %:99.01</b>
[4@8722_1A] 8722x1	[2@3655_1B] 3655x1		
8722x1	3655x1		



### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	8722	0	4@8722_1A	0	0
2	12377	0	2@3655_1B	0	0

### Layout 6 of 10

<b>Stock:1</b>	<b>Length:10000</b>	<b>Qty:1</b>	<b>Utl %:100.00</b>
[1@7064_1A] 7064x1	[3@2936_1B] 2936x1		
7064x1	2936x1		



### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	7064	0	1@7064_1A	0	0
2	10000	0	3@2936_1B	0	0

### Layout 7 of 10

<b>Stock:2</b>	<b>Length:12500</b>	<b>Qty:1</b>	<b>Utl %:95.01</b>
[4@8222_1B] 8222x1	[2@3655_1B] 3655x1		
8222x1	3655x1		



### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	8222	0	4@8222_1B	0	0
2	11877	0	2@3655_1B	0	0

### Layout 8 of 10

<b>Stock:1</b>	<b>Length:10000</b>	<b>Qty:1</b>	<b>Utl %:95.27</b>
[1@6591_1B] 6591x1	[3@2936_1B] 2936x1		
6591x1	2936x1		

1@6591_1B 6591	3@2936_1B 2936	
6591 (0)	9527 (0)	

### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	6591	0	1@6591_1B	0	0
2	9527	0	3@2936_1B	0	0

### Layout 9 of 10

<b>Stock:2</b>	<b>Length:12500</b>	<b>Qty:2</b>	<b>Utl %:94.58</b>
[5@4443_1B] 4443x2 [3@2936_1B] 2936x1			
4443x2 2936x1			

5@4443_1B 4443	5@4443_1B 4443	3@2936_1B 2936	
4443 (0)	8886 (0)	11822 (0)	

### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	4443	0	5@4443_1B	0	0
2	8886	0	5@4443_1B	0	0
3	11822	0	3@2936_1B	0	0

### Layout 10 of 10

<b>Stock:1</b>	<b>Length:10000</b>	<b>Qty:1</b>	<b>Utl %:88.86</b>
[6@4443_1B] 4443x2			
4443x2			

6@4443_1B 4443	6@4443_1B 4443	
4443 (0)	8886 (0)	

### Cut Details

Cut No	Cut Position	Angle	Part No	Flipped	Rotated (180)
1	4443	0	6@4443_1B	0	0
2	8886	0	6@4443_1B	0	0

### Offcut/Drops List

No.	From Stock	Size	Qty	Weight
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### Material Usage Summary (All Lengths in "[m]")

Section	Used Len	Used Wt	Scrap Len	Total Scrap Weight	Off Len	Total Offcut Weight
Default	215	215	3.69	3.69	0	0