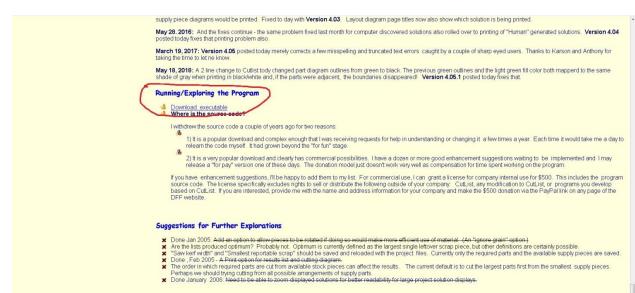
FREE CUTLIST PROGRAM

When I was reviewing the project to build the desks for HAART, I wanted to make sure we had enough wood and we also optimized our cutting to minimize the waste wood. I found a free Cutlist program that I saw recommended on a few woodworking forums and decided to give it a try. It seems to work pretty good and thought I would share with you on where you can download it and how to use it.

The website to download the program is <u>http://www.delphiforfun.org/Programs/CutList.htm</u> This is what you should see when you go to this website:

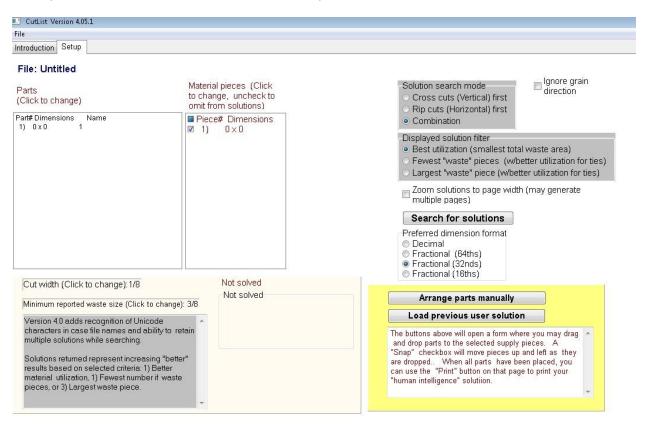
	Cut List [Home] [Puzzles & Projects] [Delphi Techniques] [Math topics] [Library] [Utilities] Problem Description	·
Search Search WWW Search DelphiForFun org Search now	A "Cut List" shows woodworkers how to cut a set of parts from a set of available stock. This program creates a diagram showing the stock pieces and how the required parts may be cut from them.	
As of October, 2016, Embarcadero is offering a free release of Delphi (Delphi 10.1 Berlin Statter Edition). There are a few restrictions, built is a welcome step toward making more programmers aware of the joys of Delphi. They do say "Offer may be withdrawn at any time", so don't delay if you want to check it out. Please use the feedback link to let me know if the link stops working.	Background & Techniques This program was originally written 10 years ago, in 1993, to solve a particular woodworking problem. This year 1m making picture frames for motivational posters for our 7 grandkids and needed to decide whether to buy the backing and Plexiglas pieces precut or cut it myself from 4%8' sheets. (Only 6 pieces 22%28'' can be cut from a sheet, so precuts were a better choice.) Idecided to update and publish the program for others to play with. Thave included several sample files which should make things clear. A couple of potentially confusing points: Width' of boards is represented vertically on the screen. "Length' of boards is represented in the horizontal screen direction. The there a three options controlling the solution search (Cross cuts first, RR) public first, and Combination). The commend trying all three and using the one you like best. The "Combination" option tries all combinations of ripping and cross cutting to find the best solution. The best solution here is defined as the cutting pattern which produces the leftover piece with the largest area.	
Support DFF - Shop If you shop at Amazon anyway, consider using this link.	Non-programmers are welcome to read on, but may want to jump to bottom of this page to <u>download the executable program now.</u> Programmer's Notes:	

Scroll down the page to almost the bottom and you will see a section called "Running/Exploring the Program".



In this section, there will be a link labelled "Download Executable". Click on this link and select Save File. It will download a zipped file to your computer called Cutlist.zip. You will then need to unzip this file and save it to whatever folder on your computer you would like to keep it.

After you unzip the file, go to the folder on your computer where you saved the files and you should see a file called CUTLIST400.exe. Double click on that file name to start the program. When the program starts you should see a screen like this on the "Setup" Tab:



The box on the left is labelled "Parts". This is where you add the dimensions for all the pieces that you want to cut out. The box on the right of it labelled "Material pieces". This is where you add the size of the pieces of wood you will be cutting from.

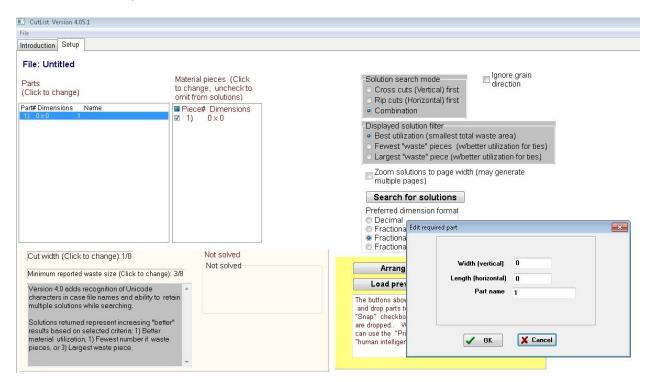
I will go thru an example of what I did to generate a cutlist for the 3/4" hardwood pieces for the 2 HAART desks that we were going to build. To start adding the pieces that you want to cut out, you will first click on Part #1 to select it and it will be highlighted in blue.

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You then <u>right</u> click on that highlighted Part #, and you will get a dialog box of options to choose from:

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Move u Move a	qu	Zoom solutions to page width (may generate multiple pages)
		Search for solutions
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characters in case file names and multiple solutions while searching.		The buttons above will open a form where you may drag and drop parts to the selected supply pieces. A "Snap" checkbox will move pieces up and left as they are dropped. When all parts have been placed, you

I clicked on "Modify selected item...". You will then get a dialog box that pops up asking you for the dimensions of that part:



Enter in the Width and Length of the first piece you want to cut out. You can enter the dimensions as either decimal or fractional (e.g. 4.125 or 4 1/8). You can then enter the Part Name. So I added the Horizontal Face Frame piece which is $1 \frac{1}{2}$ wide and $9 \frac{1}{2}$ long.

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1) 11/2x91/2 Horz Face Frame	☑ 1) 0×0	 Displayed solution filter Best utilization (smallest total waste area) Fewest "waste" pieces (w/better utilization for ties) Largest "waste" piece (w/better utilization for ties)
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		"Snap" checkbox will move pieces up and left as they are dropped. When all parts have been placed, you can use the "Print" button on that page to print your "human intelligence" solutiion.

After you click on "OK", you will see the piece added to the Parts List box.

Since we were building 2 desks and there are 2 identical sized Horizontal Face Frame pieces per desk, I needed a total of 4 Horizontal Face Frame pieces. So I selected the Horizontal Face Frame piece by clicking on it and then right clicking on it to bring up the dialog box of options. I then selected the option to "Insert Duplicate after selected". Since I needed 3 more pieces to make a total of 4 pieces, I entered 3 into the "How many to add?" field.

CutList Version 4.05.1 File		
File: Untitled Parts (Click to change) Part# Dimensions Name 1 11/2 x 91/2 Hore Frame	Material pieces (Click to change, uncheck to omit from solutions) Piece# Dimensions 1 10 0 x 0	Solution search mode Ignore grain Cross cuts (Vertical) first Rip cuts (Horizontal) first Combination
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2) 1 1/2 x 9 1/2 Horz Face Frame 3) 1 1/2 x 9 1/2 Horz Face Frame 4) 1 1/2 x 9 1/2 Horz Face Frame		 Displayed solution filter Best utilization (smallest total waste area) Fewest "waste" pieces (w/better utilization for ties) Largest "waste" piece (w/better utilization for ties) 	
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		The buttons above will open a form where you may drag and drop parts to the selected supply pieces. A "Snap" checkbox will move pieces up and left as they are dropped. When all parts have been placed, you can use the "Print" button on that page to print your "human intelligence" solutiion.	

After you click on "OK", you will see 3 more identical pieces added to the Parts list:

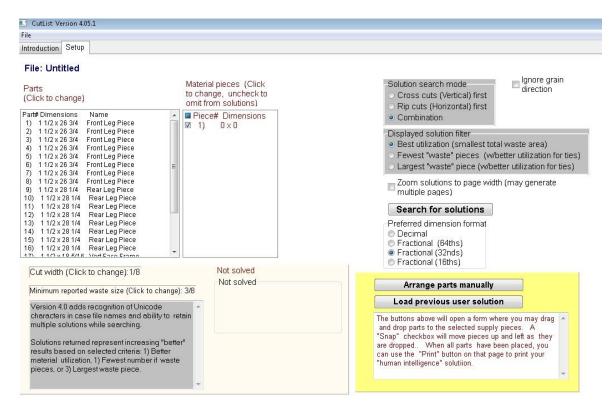
I then continued adding the other pieces. I clicked on Part #1 to select it, right clicked on it to bring up the option dialog box and then selected "Insert before selected". I then added the Vertical Face Frame pieces which are $1 \frac{1}{2}$ " x 18 5/16" and I need 2 of these pieces since we are making 2 desks.

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2) 11/2 x 91/2 Horz Face Frame 3) 11/2 x 91/2 Horz Face Frame 4) 11/2 x 91/2 Horz Face Frame		 Displayed solution filter Best utilization (smallest total waste area) Fewest "waste" pieces (w/better utilization for ties) Largest "waste" piece (w/better utilization for ties)
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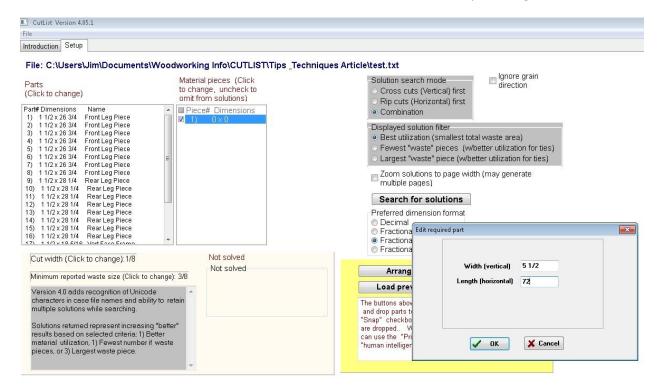
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'arts Click to change)	Material pieces (Click to change, uncheck to omit from solutions)	Solution search mode Cross cuts (Vertical) first Rip cuts (Horizontal) first
art#Dimensions Name I) 1 1/2 x 18 5/16 Vert Face Frame	■ Piece# Dimensions ▼ 1) 0 × 0	 Combination
2) 1 1/2 x 18 5/16 Vert Face Frame 3) 1 1/2 x 9 1/2 Horz Face Frame 4) 1 1/2 x 9 1/2 Horz Face Frame 5) 1 1/2 x 9 1/2 Horz Face Frame 6) 1 1/2 x 9 1/2 Horz Face Frame 6) 1 1/2 x 9 1/2 Horz Face Frame		 Displayed solution filter Best utilization (smallest total waste area) Fewest "waste" pieces (w/better utilization for tie: Largest "waste" piece (w/better utilization for ties)
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Solutions returned represent increasing "better" results based on selected criteria: 1) Better material utilization, 1) Fewest number if waste pieces, or 3) Largest waste piece.		"Snap" checkbox will move pieces up and left as they are dropped. When all parts have been placed, you can use the "Print" button on that page to print your "human intelligence" solutiion.

After clicking "OK", the 2 Vertical Face Frame pieces are added above the Horizontal Face Frame pieces.

I then continued adding all the different pieces needed like the Rear and Front leg pieces and ended up with this Parts List:



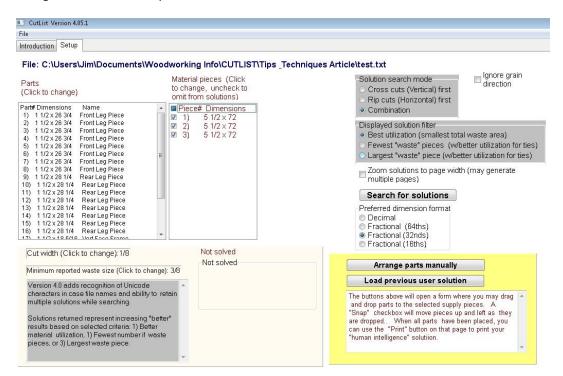
Now you need to enter in the size of the wood pieces you have to cut from. I have 6 foot long 1x6's that are $\frac{3}{4}$ " thick so following the same process as used on the Parts, I click on the Piece# 1 in the Material pieces box and then right click on it the bring up the option dialog box and select "Modify selected item ...". I then enter the dimensions of the 1x6 to cut from which is 5 $\frac{1}{2}$ " wide by 72" long.



After clicking on "OK", the piece shows up in the Material pieces box.

CutList Version 4.05.1		
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ile: C:\Users\Jim\Documents\Woo	dworking Info\CUTLIST\Tips _Technic	
arts Click to change) art# Dimensions Name 1 11/2 x 26 3/4 Front Leg Piece	Material pieces (Click to change, uncheck to omit from solutions) Piece# Dimensions	 Solution search mode Cross cuts (Vertical) first Rip cuts (Horizontal) first Combination
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Th 1 1/2 v 10 6/18 Mart Eaco Eramo		 Fractional (32nds) Fractional (16ths)
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characters in case file names and ability to re multiple solutions while searching. Solutions returned represent increasing "better results based on selected criteria: 1) Better material utilization, 1) Fewest number if waste pieces, or 3) Largest waste piece.	X _{ii}	The buttons above will open a form where you may drag and drop parts to the selected supply pieces. A "Snay" checkbox will move pieces up and left as they are dropped. When all parts have been placed, you can use the "Print" button on that page to print your "human intelligence" solution.

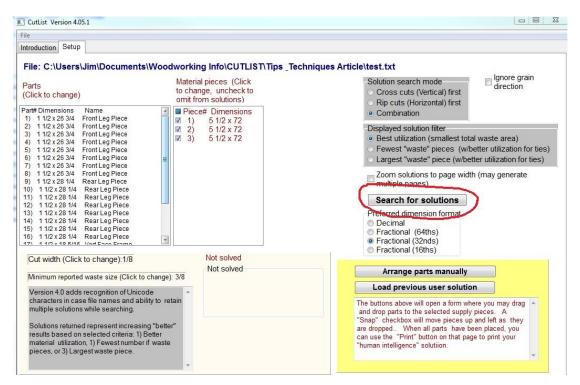
Since I think I need 3 pieces of the 1x6, I then click on the Piece #1 and right click on it to bring up the option dialog box and select "Insert/Duplicate after selected" and add 2 other identical pieces. After doing this, the Material piece list should look like this:



Now, the last thing I need to do is tell the program the thickness (kerf) of the blade I'm using to cut the wood so it can take that into account. Just below the Parts List box is a box that says "Cut width (click to change):". Click on it and it will ask you to enter is the blade thickness. I entered 1/8" as the thickness of my blade.

e roduction Setup ille: C:\Users\Jim\Documents\Woodworking Info\CUTLIST\Tij	
arts Material pieces (Click to change, uncheck to click to change, uncheck to mit form solutions) Name I const form solutions 1 112 x28 Front Leg Piece I for x72	Solution search mode Cross cuts (Vertical) first Rip cuts (Horizontal) first Combination
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1 112 x 8 34 Front Lag Piece 1 112 x 28 14 Front Lag Piece 1) 112 x 28 14 Fear Lag Piece	Zoom solutions to page width (may generate multiple pages) Search for solutions Preferred dimension format Decimal Fractional (64ths) Fractional (32nds) Fractional (18ths)
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Version 4.0 adds recognition of Unicode characters in case file names and ability to retain multiple solutions while searching. Solutions returned represent increasing "better" results based on selected criteria. 1) Better meterial utilization, 1) Fewest number if weste picces, or 3) Lengest waste picce.	Enter width as a decimal or fractonal inches (e.g. 0.125 or 1/8) Tel CK Cancel are dropped. When all parts have been placed, you can use the "Print" button on that page to print your "human intelligence" solution.

Ok, now I'm ready to run the program to generate a cut list. I click on the "Search for solutions" button



After clicking the button, it will tell you there a many possible ways to cut the parts and you will click the "OK". You will see a progress box showing the % progress and below that box you will start seeing the number of Solutions found.

CutList Version 4.05.1	
troduction Setup	
File: C:\Users\Jim\Documents\Woodworking Info\CUTLIST\Tips _Technique	s Article\test.txt
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You can wait until it goes thru all the different combinations or you can click on Stop once you see several solutions. Typically the higher numbered solution is the optimum one. If you click on Stop or you click on the "View Solution" Tab, you will see the selected solution.

15: 1.5 x 28.25 2: 1.5 x 26.75 22: 1.5 x 9.5 5: 1.5 x 7.125 16: 1.5 x 28.25 3: 1.5 x 26.75 6: 1.5 x 16.75 1: 1.5 x 26.75 1 4: 1.5 x 26.75 7: 1.5 x 16.75 1: 2 0625 r 335 -15 0625 r 43.635 -15 0625 r 43.635	11: 1.5 x 28.25 12: 1.5 x 28.25 21: 1.5 x 9.5 2. 15 x 56.25 13: 1.5 x 28.25 14: 1.5 x 28.25 20: 1.5 x 9.5 4: 15 x 56.25 10: 055 13.85 14: 0.55 x 28.25 20: 1.5 x 9.5 4: 15 x 56.25 10: 055 13.85 15: 1.5 x 28.25 21: 1.5 x 26.75 22: 1.5 x 9.5 5: 1.5 x 7.125 16: 1.5 x 28.75 16: 1.5 x 26.75 16: 1.5 x 16.75 16: 1.5 x 16.75 17: 065 13.85 16: 1.5 x 26.75 16: 1.5 x 16.75 19: 065 13.85 16: 1.5 x 26.75 16: 1.5 x 16.75 10: 065 13.85 15: 1.5 x 26.75 15: 1.5 x 26.75 10: 1.5 x 26.75 15: 1.5 x 26.75 15: 1.5 x 16.75 10: 1.5 x 26.75 15: 1.5 x 26.75 15: 1.5 x 18.25 17: 1.5 x 26.75 15: 1.5 x 26.75 15: 1.5 x 18.25 17: 1.5 x 18.313 16: 1.5 x 18.313 13: 1.5 x 35.124	11: 1.5 x 28.25 12: 1.5 x 28.25 21: 1.5 x 9.5 2 1.5 x 5.625 13: 1.5 x 28.25 14: 1.5 x 28.25 20: 1.5 x 9.5 4 1.5 x 5.625 19 piece 2 15: 1.5 x 28.25 22: 1.5 x 9.5 5: 1.5 x 7.125 16: 1.5 x 28.25 2: 1.5 x 28.75 22: 1.5 x 9.5 5: 1.5 x 7.125 16: 1.5 x 28.75 11 4: 1.5 x 28.75 15: 1.5 x 18.75 19 piece 3 5: 1.5 x 26.75 10: 0.633 + 0.655 19 piece 3 5: 1.5 x 26.75 15: 1.5 x 18.25 17: 1.5 x 28.75 6: 1.5 x 26.75 9: 1.5 x 18.25 17: 1.5 x 28.75 8: 1.5 x 18.25 11.5 x 18.25 17: 1.5 x 18.313 18: 1.5 x 18.313 13: 1.5 x 35: 124	11: 1.5 x 28 25 13: 1.5 x 28 25 10:055 7835 ply piece 2 15: 1.5 x 28 25 16: 1.5 x 28 25 16: 1.5 x 28 25 16: 1.5 x 28 25 17: 055 7835 17: 055 7835 15: 055 785 15: 055 78	12: 1.5 x 28:25 14: 1.5 x 28:25 2: 1.5 x 28:75 3: 1.5 x 28:75 4: 1.5 x 26:75 4: 1.5 x 26:75	21: 1.5 x 9.5 2.1 5 x 5.625 20: 1.5 x 9.5 4.1 5 x 5.625 22: 1.5 x 9.5 5.1.5 x 7.125 22: 1.5 x 9.5 5.1.5 x 7.125	
13: 15 x 28.25 14: 1.5 x 28.25 20: 1.5 x 9.5 4: 1.5 x 5.625 11: 065: 13: 25 22: 1.5 x 9.5 4: 1.5 x 26.75 22: 1.5 x 9.5 16: 1.5 x 28.25 3: 1.5 x 28.75 6: 1.5 x 16.75 16: 1.5 x 28.75 1 4: 1.5 x 26.75 7: 1.5 x 16.75 10: 065: 13: 35 1 4: 1.5 x 26.75 7: 1.5 x 16.75 10: 065: 13: 35 1 4: 1.5 x 26.75 7: 1.5 x 16.75 10: 065: 13: 26.75 1 4: 1.5 x 26.75 1: 0.65: 1.5 x 16.25 10: 065: 13: 26.75 1: 0.65: 1.5 x 26.75 1: 0.65: 1.5 x 26.75 17: 1.5 x 26.75 8: 1.5 x 16.25 9: 1.5 x 16.25 17: 1.5 x 18.313 18: 1.5 x 18.313 18: 1.5 x 18.25	13: 1.5 x 28.25 14: 1.5 x 28.25 20: 1.5 x 9.5 4: 15 x 56.25 19 in 665 178.65 10: 1.5 x 28.25 21: 1.5 x 26.75 22: 1.5 x 9.5 5: 1.5 x 7.125 16: 1.5 x 28.75 11: 1.5 x 26.75 12: 1.5 x 26.75 13: 1.5 x 26.75 14: 1.5 x 26.75 10: 0455 178.65 11: 0455 178.675 12: 0455 178.675 15: 1.5 x 76.75 15: 1.5 x 76.75 17: 0455 178.55 15: 1.5 x 26.75 15: 1.5 x 26.75 15: 1.5 x 26.75 15: 1.5 x 18.25 17: 1.5 x 18.313 16: 1.5 x 18.313 13: 1.5 x 35.124	13: 1.5 x 28.25 14: 1.5 x 28.25 20: 1.5 x 9.5 4: 1.5 x 56.25 10: 0557 0357 10: 0557 0357 10: 0557 03: 0557 <td colspan<="" th=""><th>13: 1.5 x 28 25 110 65 7333 ply piece 2 15: 1.5 x 28 25 16: 1.5 x 28 25 16: 1.5 x 26 75 17 2 665 7333 17 0 655 7333 17 0 655 7333</th><th>14: 1.5 x 28.25 2: 1.5 x 28.75 3: 1.5 x 28.75 4: 1.5 x 28.75 4: 1.5 x 26.75</th><th>20: 1.5 x 9.5 4: 15 x 5.625 22: 1.5 x 9.5 5: 1.5 x 7.125 22: 1.5 x 9.5 5: 1.5 x 7.125</th></td>	<th>13: 1.5 x 28 25 110 65 7333 ply piece 2 15: 1.5 x 28 25 16: 1.5 x 28 25 16: 1.5 x 26 75 17 2 665 7333 17 0 655 7333 17 0 655 7333</th> <th>14: 1.5 x 28.25 2: 1.5 x 28.75 3: 1.5 x 28.75 4: 1.5 x 28.75 4: 1.5 x 26.75</th> <th>20: 1.5 x 9.5 4: 15 x 5.625 22: 1.5 x 9.5 5: 1.5 x 7.125 22: 1.5 x 9.5 5: 1.5 x 7.125</th>	13: 1.5 x 28 25 110 65 7333 ply piece 2 15: 1.5 x 28 25 16: 1.5 x 28 25 16: 1.5 x 26 75 17 2 665 7333 17 0 655 7333 17 0 655 7333	14: 1.5 x 28.25 2: 1.5 x 28.75 3: 1.5 x 28.75 4: 1.5 x 28.75 4: 1.5 x 26.75	20: 1.5 x 9.5 4: 15 x 5.625 22: 1.5 x 9.5 5: 1.5 x 7.125 22: 1.5 x 9.5 5: 1.5 x 7.125
110 005 72553 110 005 72553 15: 1.5 x 28.25 2: 1.5 x 26.75 16: 1.5 x 28.25 3: 1.5 x 26.75 16: 1.5 x 28.75 1 17: 0.05 72535 1 16: 1.5 x 28.75 1 17: 0.05 72535 1 17: 0.05 72535 1 17: 0.05 72535 1 17: 0.05 72535 1 17: 0.05 72535 1 17: 0.05 72535 1 18: 1.5 x 28.75 1 17: 1.5 x 28.75 8: 1.5 x 28.75 17: 1.5 x 28.75 8: 1.5 x 28.75 17: 1.5 x 18.313 18: 1.5 x 18.313	Information Information r piece 2 15: 15 x 28.25 15: 15 x 28.25 2: 15 x 26.75 16: 15 x 28.75 1 17: 15 x 28.75 1 18: 15 x 28.75 1 19: 15 x 28.75 1 10: 15 x 28.75 1 10: 15 x 28.75 1 17: 15 x 28.75 15: 15 x 28.75 17: 15 x 28.75 8: 15 x 28.75 17: 15 x 18.313 18: 15 x 18.313	It of 05178 57 It of 05178 57 1y piece 2 22: 1.5 x 28.75 16: 1.5 x 28.25 3: 1.5 x 28.75 11: 1.5 x 28.75 6: 1.5 x 18.75 12: 0.517 10 57 1 14: 1.5 x 28.75 7: 1.5 x 18.75 17: 0.517 10 57 1 19 piece 3 6: 1.5 x 26.75 5: 1.5 x 26.75 6: 1.5 x 26.75 7: 1.5 x 28.75 8: 1.5 x 18.25 17: 1.5 x 18.313 18: 1.5 x 18.313	110051335 ply piece 2 15: 1.5 x 28.25 16: 1.5 x 28.25 1: 1.5 x 26.75 1: 2.6551335 12 0651335	2: 1.5 x 26.75 3: 1.5 x 26.75 4: 1.5 x 26.75	22: 1.5 x 9.5 5: 1.5 x 7.125	
biece 2 15: 1.5 x 28.25 2: 1.5 x 26.75 22: 1.5 x 9.5 5: 1.5 x 7.125 16: 1.5 x 28.25 3: 1.5 x 26.75 6: 1.5 x 16.75 1: 1.5 x 28.75 1 4: 1.5 x 26.75 7: 1.5 x 16.75 1: 0.685 x 0.625 1 4: 1.5 x 26.75 1: 0.685 x 0.625 0: 0.5 x 26.75 6: 1.5 x 26.75 8: 1.5 x 26.75 8: 1.5 x 18.25 17: 1.5 x 26.75 8: 1.5 x 26.75 9: 1.5 x 18.25 1: 1.5 x 18.25 17: 1.5 x 18.313 16: 1.5 x 18.313 13: 1.5 x 35.124	piece 2 2: 15 x 28.25 2: 15 x 26.75 2: 15 x 9.5 5: 15 x 7.125 16: 1.5 x 28.25 3: 1.5 x 26.75 6: 1.5 x 16.75 7: 1.5 x 16.75 1: 1.5 x 26.75 1 4: 1.5 x 26.75 7: 1.5 x 16.75 1: 0.651 x 38.5 1 4: 1.5 x 26.75 7: 1.5 x 16.75 1: 0.651 x 38.5 1: 0.651 x 38.5 1: 0.651 x 38.5 7: 1.5 x 16.75 1: 0.651 x 38.75 1: 0.651 x 38.5 1: 0.651 x 38.5 1: 0.651 x 38.5 1: 0.651 x 38.75 1: 0.651 x 38.5 1: 0.651 x 38.5 1: 0.651 x 38.5 1: 0.5 x 26.75 1: 0.5 x 26.75 1: 0.651 x 38.5 1: 0.651 x 38.5 1: 1.5 x 26.75 1: 0.5 x 26.75 1: 0.5 x 35.124 1: 0.5 x 18.25 17: 1.5 x 18.313 16: 1.5 x 18.313 13: 15 x 35.124 1: 0.5 x 35.124	ly piece 2 2: 15 x 28.25 2: 15 x 26.75 22: 1.5 x 9.5 5: 1.5 x 7.125 16: 1.5 x 28.25 3: 1.5 x 26.75 6: 1.5 x 16.75 1: 1.5 x 26.75 1: 1.5 x 26.75	ply piece 2 15: 1.5 x 28.25 16: 1.5 x 28.25 1: 1.5 x 28.75 1: 0.5 x 28.25 1: 0.5 x 28.55 1: 0.5 x 28.55	2: 1.5 x 26.75 3: 1.5 x 26.75 4: 1.5 x 26.75	22: 1.5 x 9.5 5: 1.5 x 7.125	
15: 15 x 28.25 2: 15 x 28.75 2: 15 x 9.5 5: 15 x 7.125 16: 15 x 28.25 3: 1.5 x 26.75 6: 1.5 x 16.75 1: 15 x 26.75 1 4: 1.5 x 26.75 7: 1.5 x 16.75 1: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0: 0:	15: 1.5 x 28.25 2: 1.5 x 26.75 2: 1.5 x 9.5 5: 1.5 x 7.125 16: 1.5 x 28.25 3: 1.5 x 26.75 6: 1.5 x 16.75 1: 1.5 x 28.75 1 4: 1.5 x 28.75 7: 1.5 x 18.75 1: 1.5 x 28.75 1 4: 1.5 x 28.75 7: 1.5 x 18.75 1: 1.5 x 28.75 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.052 (4).05 1: 0.051 (4).05 1: 0.051 (4).05 1: 0.052 (4).05 1: 0.052 (4).05 1: 0.052 (4).05 1: 0.052 (4).05 1: 0.052 (4).05 1: 0.052 (4).05 1: 0.052 (4).05 1: 0.052 (4).05 </th <th>15:15 x 28.25 2:15 x 26.75 2:15 x 9.5 5:15 x 7.125 16:15 x 28.25 3:15 x 28.75 6:15 x 18.75 1:15 x 28.75 1:4:15 x 28.75 7:15 x 18.75 1:005 x 28.75 1:005 x 28.75 7:15 x 18.75 5:15 x 26.75 6:15 x 26.75 8:15 x 18.25 7:15 x 28.75 8:15 x 28.75 9:15 x 18.25 17:15 x 18.313 18:15 x 18.313 13:15 x 35.124</th> <th>15: 1.5 x 28:25 16: 1.5 x 28:25 1: 1.5 x 26:75 12: 065: 03:55 ply piece 3</th> <th>3: 1.5 x 26.75 4: 1.5 x 26.75</th> <th>6: 1.5 x 16.75</th>	15:15 x 28.25 2:15 x 26.75 2:15 x 9.5 5:15 x 7.125 16:15 x 28.25 3:15 x 28.75 6:15 x 18.75 1:15 x 28.75 1:4:15 x 28.75 7:15 x 18.75 1:005 x 28.75 1:005 x 28.75 7:15 x 18.75 5:15 x 26.75 6:15 x 26.75 8:15 x 18.25 7:15 x 28.75 8:15 x 28.75 9:15 x 18.25 17:15 x 18.313 18:15 x 18.313 13:15 x 35.124	15: 1.5 x 28:25 16: 1.5 x 28:25 1: 1.5 x 26:75 12: 065: 03:55 ply piece 3	3: 1.5 x 26.75 4: 1.5 x 26.75	6: 1.5 x 16.75	
1: 1.5 x 26.75 1 4: 1.5 x 26.75 7: 1.5 x 16.75 1: 0.625 : 0.355 5: 1.5 x 26.75 6: 1.5 x 26.75 8: 1.5 x 18.25 7: 1.5 x 26.75 8: 1.5 x 26.75 9: 1.5 x 18.25 17: 1.5 x 26.75 8: 1.5 x 26.75 9: 1.5 x 18.25 17: 1.5 x 18.313 18: 1.5 x 18.313 13: 1.5 x 35.124	1: 1.5 x 26.75 1 4: 1.5 x 26.75 7: 1.5 x 16.75 y piece 3 5: 1.5 x 26.75 6: 1.5 x 26.75 6: 1.5 x 26.75 7: 1.5 x 26.75 6: 1.5 x 26.75 9: 1.5 x 18.25 7: 1.5 x 10, 75 8: 1.5 x 26.75 9: 1.5 x 18.25 17: 1.5 x 10, 75 10: 1.5 x 10, 75 11: 1.5 x 10, 75	1: 1.5 x 26.75 1 4: 1.5 x 26.75 7: 1.5 x 16.75 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 35 7: 1.5 x 16.75 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 37 1/2 0453 18 35 1/2 0453 18 35 1/2 0453 18 313 1/2 15 x 16.313 1/2 15 x 35 124	1: 1.5 x 26.75 1 12 065 1353	4: 1.5 x 26.75		
No. 15 x 26.75 6: 1.5 x 26.75 8: 1.5 x 18.25 7: 1.5 x 26.75 8: 1.5 x 26.75 9: 1.5 x 18.25 17: 1.5 x 28.75 8: 1.5 x 28.75 9: 1.5 x 18.25	12 0805 1833 12 0805 1833 r piece 3 6: 1.5 x 26.75 5: 1.5 x 26.75 6: 1.5 x 26.75 7: 1.5 x 26.75 8: 1.5 x 26.75 17: 1.5 x 18.313 16: 1.5 x 18.313	IV 0455 128.55 IV 0455 128.55 by piece 3 6: 1.5 x 26.75 5: 1.5 x 26.75 6: 1.5 x 26.75 7: 1.5 x 26.75 8: 1.5 x 18.25 17: 1.5 x 18.313 18: 1.5 x 18.313	12: 0625 x 25 25		-7:15×1675	
S: 1.5 x 26.75 6: 1.5 x 26.75 8: 1.5 x 18.25 7: 1.5 x 26.75 8: 1.5 x 26.75 9: 1.5 x 18.25 17: 1.5 x 18.313 18: 1.5 x 18.313 13: 1.5 x 35.124	/ piece 3 6: 1.5 x 26.75 8: 1.5 x 18.25 7: 1.5 x 26.75 8: 1.5 x 18.25 17: 1.5 x 18.313 16: 1.5 x 18.313	by piece 3 6: 1.5 x 26.75 8: 1.5 x 18.25 7: 1.5 x 26.75 8: 1.5 x 18.75 9: 1.5 x 18.25 17: 1.5 x 18.313 18: 1.5 x 18.313 13: 1.5 x 35.124	ply piece 3	1		
			17: 1.5 x 18.313 18: 1.5 x	8: 1.5 x 26.75	9: 1.5 x 18.25	
			10: 0 625 118 313	16.0623 x 83.862		

If you click on "File" on the Toolbar at the top, you can select "Print" and it will give you several options. I checked all of them to show you what you will get.

CutList Version 4.05.1			
File			
Introduction Setup View Solution			
Supply piece 1			
9: 1.5 x 28.25	10: 1.5 x 28.25	19: 1.5 x 9.5 3: 1.5 x 5.625	
11: 1.5 x 28.25	12: 1.5 x 28.25	21: 1.5 x 9.5 2: 1.5 x 5.625	
13: 1.5 x 28.25	14: 1.5 x 28.25	20: 1.5 x 9.5 4: 1.5 x 5.625	
11: 0.625 × 28: 25	14.0625 x 43.625		
Supply piece 2 15: 1.5 x 28.25	2: 1.5 x 26.75	22: 1.5 x 9.5 5: 1.5 x 7.125	
15.1.5 x 28.25	3: 1.5 x 26.75	6: 1.5 x 16.75	
1: 1.5 x 26.75 What to p	~~~~	7: 1.5 x 16.75	
12 0.625 x 28 25	25 1 43 525		
Supply piece 3	1.111		
5. 1.5 X 20.15	elect items to print		
	Required parts	9: 1.5 x 18.25	
17: 1.5 x 18.313	Supply pieces == 13: 1.5 x 3	35.124	
	Leftover pieces		
	Parts layout diagram		
	OK Cancel		

Here is what the printout will look like:

Parts List for test.txt

Part≓	Dimensions	Name
1)	1 1/2 x 26 3/4	Front Leg Piece
2)	1 1/2 x 26 3/4	Front Leg Piece
3)	1 1/2 x 26 3/4	Front Leg Piece
4)	1 1/2 x 26 3/4	Front Leg Piece
5)	1 1/2 x 26 3/4	Front Leg Piece
6)	1 1/2 x 26 3/4	Front Leg Piece
7)	1 1/2 x 26 3/4	Front Leg Piece
8)	1 1/2 x 26 3/4	Front Leg Piece
9)	1 1/2 x 28 1/4	Rear Leg Piece
10)	1 1/2 x 28 1/4	Rear Leg Piece
11)	1 1/2 x 28 1/4	Rear Leg Piece
12)	1 1/2 x 28 1/4	Rear Leg Piece
13)	1 1/2 x 28 1/4	Rear Leg Piece
14)	1 1/2 x 28 1/4	Rear Leg Piece
15)	1 1/2 x 28 1/4	Rear Leg Piece
16)	1 1/2 x 28 1/4	Rear Leg Piece
17)	1 1/2 x 18 5/16	Vert Face Frame
18)	1 1/2 x 18 5/16	Vert Face Frame
19)	1 1/2 × 9 1/2	Horz Face Frame
20)	1 1/2 × 9 1/2	Horz Face Frame
21)	1 1/2 x 9 1/2	Horz Face Frame
22)	1 1/2 × 9 1/2	Horz Face Frame

- Material List for test.txt

 1)
 5 1/2 x 72

 2)
 5 1/2 x 72

 3)
 5 1/2 x 72

Leftover Pieces List for test.txt Piece# Dimensione

Piece#	Dimensions
1)	1.5 x 1.375
2)	1.5 x 5.625
3)	1.5 x 5.625
4)	1.5 x 5.625
5)	1.5 x 7.125
6)	1.5 x 16.75
7)	1.5 x 16.75
8)	1.5 x 18.25
9)	1.5 x 18.25
10)	0.625 x 18.313
11)	0.625 x 28.25
12)	0.625 x 28.25
13)	1.5 x 35.124
14)	0.625 x 43.625
15)	0.625 x 43.625

15) 0.625 x 43.625 16) 0.625 x 53.562

Cutting Diagram Solution 8 for test.txt

9: 1.5Dx 28.25	10: 1.50x 28.25	19: 1.50x 9.50
11: 1.50x 28.25	12: 1.50x 28.25	21: 1.50x 9.50
13: 1.50x 28.25 11: 0.63x 28.25	14: 1.50x 28:25	43.63 20: 1.50x 9.50
pply piece 2	<i>11</i>	
15: 1.50x 28.25	2: 1.50x 26.75	22: 1.50x 9.50 5
16: 1.5Dr 28.25	3: 1.50x 26.75	6: 1.50x 16.75
1- 1 50v 35 75 12: 0.63x 28 25	1 4: 1.50x 26.75 15: 0.63x	7: 1.50x 16.75
poly piece 3		
5: 1.50x 26.75	6: 1.50x 26.75	8: 1.50x 18.25
7: 1.50x 26.75	8: 1.50x 26.75	9: 1.50x 18.25

I guessed that I needed 3 - 1x6's and it worked out. If I happened to select only 2 - 1x6's it would not have found a solution. If I would have selected more than I needed, like 4 - 1x6'x, the solutions would show only 3 pieces of wood being used.

Also, if grain direction is important, you will need to make sure you enter the dimensions of the parts correctly to get the grain running in the right direction. For example, when I enter in the hardwood as my Material pieces, I inputted it as 5 1/2 " wide(vertical) and 72" length (horizontal). Therefore, the grain of the board is running in the length or horizontal direction. Therefore, when you add parts, the grain will always be running in whatever dimension you enter into the length/horizontal input box.

You can save the cutlist by clicking on "File" on the Toolbar at the top and selecting "Save" or "Save As" and then the next time you start the program you can bring up the saved cutlist by using the "Open" command.

I tried to show the basic method to use this program. There are several other options in this program I haven't used but you can experiment with them to see if they are helpful. Good luck!