

Viewing a Solution

Introduction

This chapter discusses the various ways in which you can view a completed manifest. You will learn ways to progressively load or unload the vehicle to see how the load is constructed. This chapter will also discuss in detail the various text reports that are available after calculating a solution.

Though the process of building the various types of manifests is dramatically different, the options provided when viewing a solution are generally quite similar. The majority of what we discuss in this chapter applies to the solutions calculated when building all four manifest types (truck, pallet, tote, single SKU). Any differences will be highlighted.

The various topics outlined in this chapter are as follows:

- ❖ Manifest View Screen
 - Toolbar
 - View Buttons
 - Other View Options
 - Additional Viewing Options
 - Load Statistics
 - Tabs
 - Sol List
 - Placement List
 - Load List
 - Cut List
- ❖ Viewing Items on the Cut List
- ❖ SKU Information

Manifest View Screen

To view a load, follow these instructions:

1. Key in all of the necessary parameters in the Manifest Pick List screen and click on the Calculate button.

If the load has been previously calculated, open the manifest from the File menu and click on the View button. The software will redraw what has already been calculated, and saved rather than recalculating the solution.

System Response: The View screen appears. The MaxLoad Pro Manifest View screen, as pictured below, contains the primary results of your loaded manifest. This screen includes both the loading diagram and all information associated with the manifest.

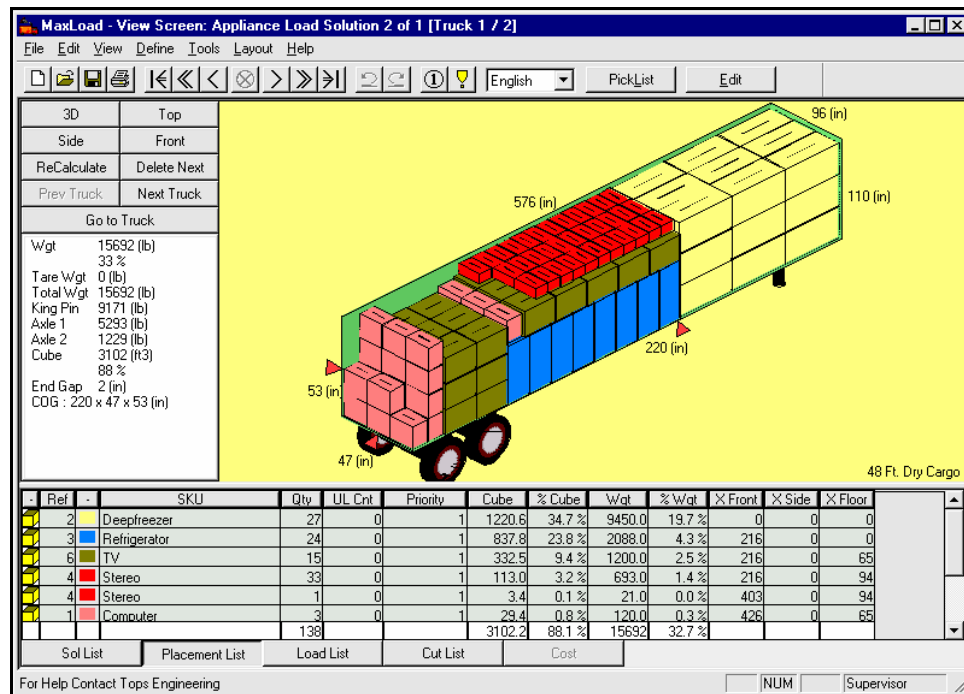


Figure 8.1 Manifest View Screen







The Menu Bar is essentially the same in this screen as it was in the Manifest Pick List screen, but notice the following differences:










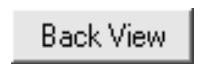
- ❖ **Toolbar:** Icons, lists, and buttons below the Menu bar.

- ❖ **View Buttons:** Buttons, located in the upper, left-hand section of the screen providing quick and easy ways to view the solution from different angles.
- ❖ **Load Statistics:** Brief load statistics displayed under the view Buttons
- ❖ **Tabs:** A series of tabs/buttons, located at the bottom of the screen, displaying a number of lists with information about the load.
- ❖ **g.o.d. Window:** Displays a 3-dimensional graphic image of the container or pallet

Toolbar (View Screen)

The Toolbar on the View Screen is significantly different from the Toolbar on the Manifest Pick List screen. It consists of various icons, lists, and buttons that are designed to make it easier to perform certain functions. Items in the Toolbar are described in detail below:

Toolbar Options	
This Icon ...	Allows You To Do This
	New: Displays the Manifest Pick List, where you can start a new manifest file.
	Open: Displays the File Open dialog box, which allows you to open an existing manifest.
	Save: Saves the active manifest.
	Print: Prints a hard copy of the active manifest.
	Remove All: Completely unloads the vehicle or pallet. MaxLoad Pro automatically transfers all SKU's in the load to the Cut List.
	Remove Placement: Removes one placement, section or stop-off/priority from the vehicle or pallet.

	Remove SKU: Removes one SKU from the vehicle or pallet.
	Put SKU: Adds one SKU to the vehicle or pallet.
	Put Placement: Add one placement, section or stop-off/priority to the vehicle or pallet.
	Put All: Completely loads the vehicle or pallet.
	Labels: Turns SKU labels on and off.
	Violations: Displays a report highlighting all current stacking violations.
	Units: Switches measurement units from English to Metric and vice versa.
	Pick List: Displays the Manifest Pick List screen, where you can change the parameters of the manifest.
	Edit: Displays the Editor screen, where you can edit the solution.
	Back View: Displays the load from the back side of the diagram.

View Buttons (View Screen)

The View buttons allow you to view the loaded container, pallet, or tote from four angles: Top, Side, Front and 3D. These buttons are found in the upper-left portion of the Manifest View screen, just above the load statistics.

- ❖ **3D Button:** Displays a standard 3-dimensional view of the diagram.
- ❖ **Top Button:** Displays the load from the top, looking down into the diagram.

- ❖ **Side Button:** Displays the load from the right side of the diagram.
- ❖ **Front Button:** Displays the load looking forward from the rear of the diagram.

Other View Options

- ❖ **Rotate:** In addition to the four standard view described above (Top, Side, Front, and 3D), you also have the option of viewing the load diagram from additional angles. Any conceivable angle is possible.

To rotate the diagram, follow these instructions:

1. Use the mouse to click anywhere on the diagram portion of the screen. This action makes the diagram portion of the screen active, thus making it available to be rotated.
2. Use the arrow keys on your keyboard to rotate the diagram to the desired position for viewing. All four arrow keys are available to you, allowing you to rotate the diagram to view from the front, rear, top, bottom, right side, and left side (and any angle in between) of the vehicle.

When rotating the solution diagram, it will appear as if the diagram is stationary, and you are moving. For instance, when using the “up” arrow (↑), it will appear as if you are being raised up and over the diagram, allowing you to see the top of the solution. When you click the “right” arrow (→), it will appear as if you are moving around the solution to the right. The same is true of the other two arrow keys (down and left).

- ❖ **Zoom In and Out:** MaxLoad Pro also allows you to “zoom in” and “zoom out” of a solution diagram. Zooming in gives you a more detailed view of the load. Zooming out gives you a “big picture” perspective.

To “zoom in” or “zoom out” on the vehicle diagram, follow these instructions:

1. Click on the diagram window to make it active.
2. Press on the “T” key on your keyboard to “zoom in.” Press on the “Y” key to “zoom out.” Continue to press on the respective key until the diagram is sized to your liking.

Additional Viewing Options

In addition to being able to rotate the solution diagram, MaxLoad Pro also gives you three additional viewing options: By Placement, By Leading Edge, or By Priority/Stop-Off. These three options can be accessed from the View Menu on the Menu Bar. These options work in conjunction with the arrow buttons found on the Toolbar. See the section regarding the Toolbar for more information.

- ❖ **View by Placement:** Allows you to load or unload a manifest “by placement.” A placement is a group of like SKU’s loaded with the same dimension vertical and with the same dimension parallel to the vehicle or pallet.
- ❖ **View by Leading Edge:** Allows you to view the load one section at a time. MaxLoad Pro will load the first placement of cargo, as defined above. Other SKU’s will be loaded around the first placement, but will not extend beyond the leading edge of the first placement. Once the first section of SKU’s are loaded, another placement is loaded as far forward as possible up against the leading edge of the prior section, and up against the left wall of the vehicle, or left edge of the pallet.
- ❖ **View by Priority/Stop-Off:** Allows you to view the load one priority or stop-off at a time. Remember that you can build a load by priority or stop off when defining your manifest in the Manifest Pick List screen.

Load Statistics (View Screen)

Load Statistics, as pictured below, are displayed on the left side of the Manifest View screen, just below the View Buttons.

Wgt	20648 (lb)
	43 %
Tare Wgt	0 (lb)
Total Wgt	20648 (lb)
King Pin	8461 (lb)
Axle 1	10710 (lb)
Axle 2	1476 (lb)
Cube	2742 (ft3)
	78 %
End Gap	5 (in)
COG :	297 x 41 x 46 (in)

Figure 8.2 Load Statistics

Following are some of the fields available under the load statistics section:

- ❖ **Wgt:** Total weight and percentage weight of the load.
- ❖ **TareWgt:** The weight of empty container.
- ❖ **TotalWgt:** Sum total of Wgt. and Tare Wgt.
- ❖ **King Pin, Axle 1, & Axle 2:** Total load weight on King Pin and each axle.
- ❖ **Cube:** The percentage volume of the container filled with product
- ❖ **End Gap:** The distance between the last loaded SKU from the end of the container.
- ❖ **COG:** Center of Gravity.

Note: For Single SKU the information provided in the Load Statistics is the SKU and Container's length, width, and height.

Tabs (View Screen)

The List Tabs, at the bottom of the View Screen, allow you to see various statistics regarding the load that you are viewing.

Sol List

The Sol List or the Solution List, as pictured below, appears whenever multiple solutions are calculated for the manifest, depending upon multiple container sizes or loading algorithms.

Truck	Algorithm	Qty	Cube	% Cube	Wgt	% Wgt	CutList Cnt
48 Ft. Dry Van	Space Evenly	1000	2257.8	63 %	12500	27.8 %	0
48 Ft. Dry Van	L/R Space Even	1000	2257.8	63 %	12500	27.8 %	0
48 Ft. Dry Van	L/R Floor to Ceiling	1000	2257.8	63 %	12500	27.8 %	0
48 Ft. Dry Van	Load Floor to Ceiling	1000	2257.8	63 %	12500	27.8 %	0
53 Ft. Dry Van	Load Floor to Ceiling	1000	2257.8	57 %	12500	27.8 %	0
53 Ft. Dry Van	L/R Floor to Ceiling	1000	2257.8	57 %	12500	27.8 %	0
53 Ft. Dry Van	Space Evenly	1000	2257.8	57 %	12500	27.8 %	0
53 Ft. Dry Van	L/R Space Even	1000	2257.8	57 %	12500	27.8 %	0

Figure 8.3 Sol List

MaxLoad Pro even calculates multiple solutions when performing a Single-SKU loading analysis. For more information, please refer to Chapter 7, Loading a Single-SKU Manifest.

- ❖ **Truck / Tote:** Lists the selected containers for a particular manifest
- ❖ **Algorithm:** Displays the loading algorithm used to calculate the solution
- ❖ **Qty:** The count of SKUs loaded in to the container or on the pallet
- ❖ **Cube:** The total volume of the loaded SKUs
- ❖ **%Cube:** The percentage of the container or pallet's volume that loaded SKU's occupy
- ❖ **Wgt:** Total weight of the product
- ❖ **%Wgt:** The percentage of the maximum weight that the SKUs weighs
- ❖ **CutList Cnt:** The total number of the SKUs which could not be loaded in to the container or pallet

Use the scroll bar to scroll through the list. Also, you can use the mouse to highlight a different solution. Notice that each time you select a different solution, the manifest solution diagram redraws to reflect the selected solution.

Placement List

The Placement List, as pictured below, displays the information for each SKU.

Ref	SKU	Qty	UL Cnt	Priority	Cube	% Cube	Wgt	% Wgt	X Front	X Side	X Floor
6	TV	36	0	1	798.0	22.7 %	2980.0	6.0 %	0	0	0
5	Stove	28	0	1	1032.4	29.3 %	14000.0	29.2 %	168	0	0
4	Stereo	32	0	1	109.6	3.1 %	672.0	1.4 %	168	0	84
1	Computer	20	0	1	195.9	5.6 %	800.0	1.7 %	168	74	0
4	Stereo	2	0	1	6.8	0.2 %	42.0	0.1 %	284	0	84
3	Refrigerator	12	0	1	418.9	11.9 %	1044.0	2.2 %	455	0	0
6	TV	2	0	1	44.3	1.3 %	160.0	0.3 %	455	0	65

Figure 8.4 Placement List

- ❖ **Ref / No:** Reference number or the Placement number for the SKU
- ❖ **Color:** The color assigned to the SKU
- ❖ **SKU:** SKU Number
- ❖ **Qty:** Quantity of SKU's loaded in the container or pallet
- ❖ **ULCnt:** Unitload count (if applicable) is the number of whole unitloads for the corresponding SKU in the container or on the pallet.

- ❖ **Priority/Stop-Off number:** Determines the order in which the SKU is loaded by Priority / Stop Off, respectively
- ❖ **Cube:** The volume of that particular SKU times the quantity loaded
- ❖ **%Cube:** The percentage of the total volume of that container that total volume occupied by that quantity of the SKU
- ❖ **Wgt:** Weight of each SKU times Qty
- ❖ **%Wgt:** The percentage of the maximum weight that the SKUs weighs
- ❖ **XFront, XSide, & XFloor:** The location the SKU is loaded from front, side, and floor of the container or pallet

Note: You can print this report through the File menu. This report can even be exported through the Tools menu

Load List

The Load List, as pictured below, provides a summary of all SKUs in the load. The information provided in Load List is identical to that provided in the Placement List. Like Placement List this list can also be printed or exported.

-	-	SKU	Qty	Priority	Cube	% Cube	Wgt	% Wgt
		Computer	20	1	195.9	5.6 %	800.0	1.7 %
		Deepfreezer	3	1	135.6	3.9 %	1050.0	2.2 %
		Refrigerator	12	1	418.9	11.9 %	1044.0	2.2 %
		Stereo	34	1	116.4	3.3 %	714.0	1.5 %
		Stove	28	1	1032.4	29.3 %	14000.0	29.2 %
		TV	38	1	842.3	23.9 %	3040.0	6.3 %
		Total	135		2741.6	77.9 %	20648	43 %

Figure 8.5 Load List

Cut List

The Cut List is the list of SKU's that did not fit into the selected container or the pallet, when CalcAllTrucks feature is turned off. The information displayed in this list is identical to that of the Load List (with the addition of a Unitload Count column).

-	-	SKU	Qty	UL Cnt	Priority	Cube	% Cube	Wgt	% Wgt
		Deepfreezer	25	0	1	1130.2	32.1 %	8750.0	18.2 %
		Refrigerator	14	0	1	488.7	13.9 %	1218.0	2.5 %
		Stove	2	0	1	73.7	2.1 %	1000.0	2.1 %
		Total	41			1692.7	48.1 %	10968	22.9 %

Figure 8.6 Cut List

If you do not want any SKUs to appear in the CutList, check the CalcAllTrucks feature in the Global Configuration. For more information on Calculate All Trucks feature, please refer to Chapter 11, Configuration.

Cut List can also be printed through the File menu.

Note: Cut List is not available for Single-SKU manifests.

Viewing Items on the Cut List

Once a solution has been calculated, if MaxLoad Pro determines that the entire manifest will not fit in the selected vehicle, you have the option to take items from the Cut List and load them into other vehicles. **This assumes you are not using the CalcAllTrucks feature.**

To determine if the entire manifest fits into the vehicle, simply look at the Cut List. If there are any SKU's in the Cut List, then the entire manifest did not fit. If the Cut List is empty, then everything in this manifest fits on the selected vehicle. Another way to determine if all SKU's fit is to check the Next Truck button, which is located under the View buttons. If the Next Truck button is "grayed out," then all SKU's fit into one container. If the Next Truck button is activated, then this manifest requires additional vehicles.

To view items on the Cut List and load them into another container, follow these instructions:

1. Click on the Next Truck button.

System Response: The New Truck dialog box appears, as pictured below.

Note: In situations where you chose to analyze more than one loading algorithm or selected more than one vehicle to calculate, MaxLoad Pro will warn you that "All solutions other than the one currently being viewed will be deleted." If this is acceptable, click on OK. If deleting the additional solutions is not acceptable, click on the Cancel button.

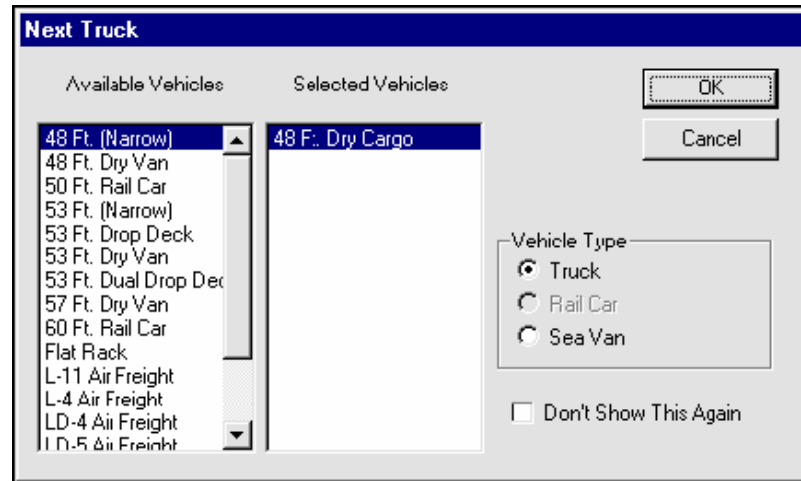


Figure 8.7 Next Truck Dialog Box

2. You will next be asked to select another vehicle from a Next Truck dialog box. You can either select the same vehicle or choose a new one.

Note: If you only load one type of vehicle and do not want to see this dialog box, you can turn it off through the Configuration dialog box. For more information, please refer to Chapter 11, Configuration.

3. Click on OK.

System Response: MaxLoad Pro draws a new solution with the items previously on the Cut List. MaxLoad Pro updates the Cut List to reflect that fewer items (if any) remain to be loaded as part of this manifest. If the Cut List still contains freight, repeat this procedure until all items from the manifest have been loaded onto a vehicle.

Note: If at any time you wish to see the previous vehicle in the sequence, click on the Prev (Previous) Truck button. The previous solution will appear.

During the process of loading items from the Cut List, the page title will list container or pallet – first, second, etc. – you’re currently viewing. This will prevent you from “getting lost” when viewing multiple vehicles in sequence.

SKU Information

MaxLoad provides a right-click function that displays properties information for a selected SKU. To display SKU information, start from the View Screen and follow these instructions:

1. Position the pointer over the SKU for which you want to display information.
2. Right-click on the SKU.

System Response: A Properties button appears.

3. Click on the Properties button.

System Response: The Properties window appears, as pictured on the next page.

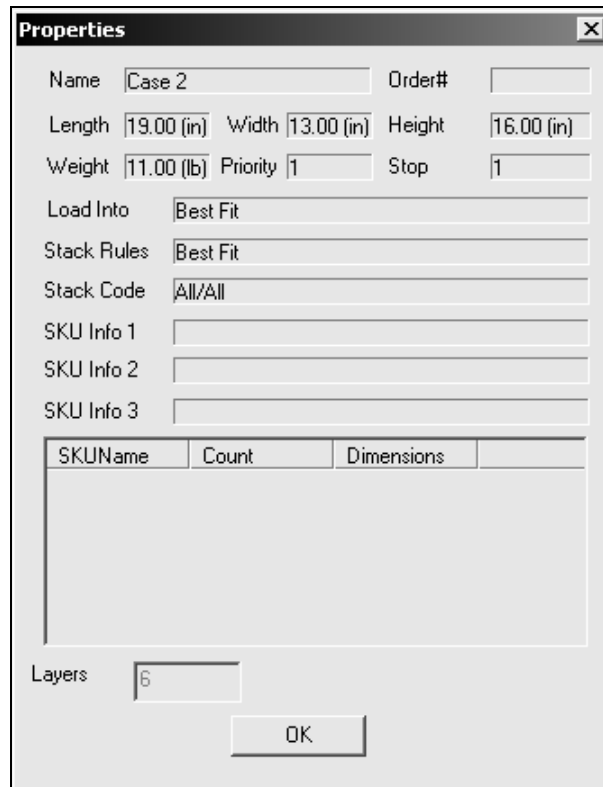


Figure 8.8 SKU Properties Window

As you can see, the Properties window displays a range of basic properties for the selected SKU: name, length, width, height, etc.

