Setting up TJ-YardMate™ Cut Optimization To Complement the Way You Do Business

Goal: The ultimate goal of TJ-YardMate Cut analysis is to minimize waste.

Default Analysis: By default, TJ-YardMate is designed to find perfect matches between the Cut Order lengths, or combinations of Cut Order lengths, and existing Inventory lengths. This *Perfect Match* process is first attempted by the Cut analysis, and never produces any waste or returns any Offcuts to stock. When the *Perfect Match* cannot be accomplished and no other default **Cut Preferences** are used, those Cut Order items are placed into the **Remaining Cuts** tab to be addressed manually.

In addition to the default Cut analysis, you can also select any combination of four **Cut Preferences** to influence Cut analysis beyond the *Perfect Match*. To select these user-defined defaults, select **Defaults** from the **Tools** menu to open the **Defaults** dialog box. In this dialog box, select the **Cut Defaults** tab and locate the **Cut Preferences** list box**.** Click to check the preferences you want to affect Cut analysis. You can also adjust the sequence in which these **Cut Preferences** are applied during Cut analysis. Simply reorganize them in order of most influential to least influential, using the arrow buttons on the right of the list box.

Cut Preferences

Accept Maximum Waste This allows Cut analysis to select Inventory lengths longer than the Cut Order item length. The Offcut material is considered waste. The maximum amount of waste created per pattern is determined from the user-defined **Max Waste** value set on the **Cut Defaults** tab.

> **Example:** Max Waste value = 2'
> Ordered item length = 16'
> Inventory lengths = 13', 17', 19', 23'
>
> *TJ-YardMate cuts the 16' Order item length from the 17' Inventory length, since the Offcut is less than or equal to the Max Waste value of 2'.*

Should I use this preference?

- Only if you are willing to accept a set amount of waste per cut pattern by adding some cut flexibility to keep your Inventory moving. *Remember* that you can move this preference lower in the **Cut Preferences** sequence to minimize its occurrence.

Use Offcuts for Blocking This allows Cut analysis to utilize product Offcuts for random-length blocking material rather than returning them to stock. Only **Cut Pattern** Offcuts longer than the **Minimum Blocking** default value and shorter than the **Maximum Blocking** default value are considered for Blocking use. These user-defined values can be set on the **Cut Defaults** tab.

> **Example:** Minimum Blocking value = 2'

Maximum Blocking value = 10'
Random Length Blocking = 54'
Ordered item length = 18'
Inventory lengths = 19', 24', 30'

TJ-YardMate cuts the 18' Order item length from a 24' Inventory length and uses the 6' Offcut for blocking rather than returning it to stock. Following this cut, the random Blocking length is reduced to 48'.

Should I use this preference?

- If you do <u>not</u> precision-cut or stock pre-cut blocking panels, this is an excellent opportunity to keep returned-to-stock Offcuts to a minimum by utilizing them for random length blocking.

Return Preferred Length Offcuts to Stock   This allows Cut analysis to develop cut patterns that allow the Offcut lengths proven to most often accommodate the needs of future Cut Orders. Think of it as a method of producing inventory for your lengths most commonly sold. You can define these lengths for each product on the **Preferred Lengths** tab of the **Defaults** dialog box; you can also rank them in order of preference from 1-10**.**

     Example: 11 7/8" TJI$^{®}$ / Pro$^{™}$ 150 joist
                                Preferred Lengths = 16', 18', 17'
                                Ordered item length = 22'
                                Inventory lengths = 23', 28', 40', 48'

*TJ-YardMate cuts the 22' Order item length from a 40' Inventory length to create an Offcut of 18', one of the user-defined **Preferred Lengths**.*

Should I use this preference?

- If you know what your most frequently used lengths are for each product in stock, this feature can build inventory lengths from Offcuts to ensure quick turns. (TJ–YardMate keeps a history of all past cuts to help make this determination.)

- If you do <u>not</u> make cuts in the yard (full lengths are shipped & cut on the job-site) we recommend that you <u>not</u> use this preference.

Return Lengths (ft) > Product Depth (in)   This preference allows Cut analysis to create cut patterns that result in practical Offcut lengths for use as **Available Inventory** in the future. These Offcuts are not any specific length, they are merely greater than that products depth (in inches) X 12. This preference makes the process of completing cut patterns faster. When no other perfect matches can be found *or* all other preferences are exhausted, it helps by limiting the number of *manual cuts* you have to create.

     Example: Offcuts from an 11 7/8" 1.9E Microllam$^{®}$ LVL will only be created if they are longer than 12 feet.

Should I use this preference?

- If you do <u>not</u> make cuts in the yard (full lengths are shipped and cut on the job-site) we recommend that you <u>not</u> use this preference.

- It is recommended that this preference be organized at or near the bottom of the list for a final consideration.