Yes. The following steps are required to use a recipe table:

1. Create the Recipe Table in the CSV file format. Create the recipe table using an application that can save the CSV (comma separated value) file format. Many applications such as Microsoft Word, Excel, or Notepad can create CSV files.

Determine the type of data contained in the CSV file so that it can be properly imported into MotionWorks+. The table below provides information on the data type categories.
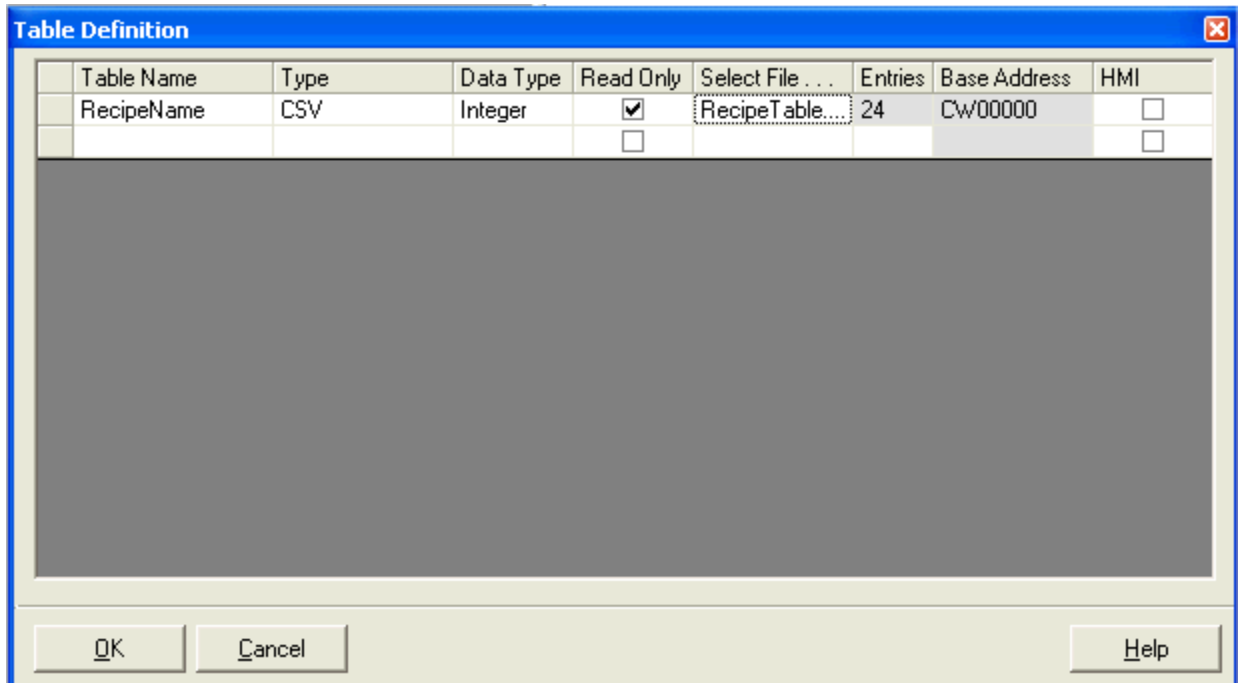
Data Type	Data Range
Integer (Word)	-32768 to +32767
Long	-2147483648 to +2147483647
Float	+/- (1.175E-38 to 3.402E+38), 0

When importing the data, the correct data type setting is the most important part. For instance, if all the data in the CSV file are integer values ranging from 0 to 1500, then Integer is the proper data type. However, Long is the appropriate data type if the range is from 0 to 200,000. Lastly, if the data contains a decimal point, Float is the appropriate data type.

2. Import the Recipe Table into MotionWorks+. Open the Table Definitions screen by double-clicking the Tables icon contained in the data folder.
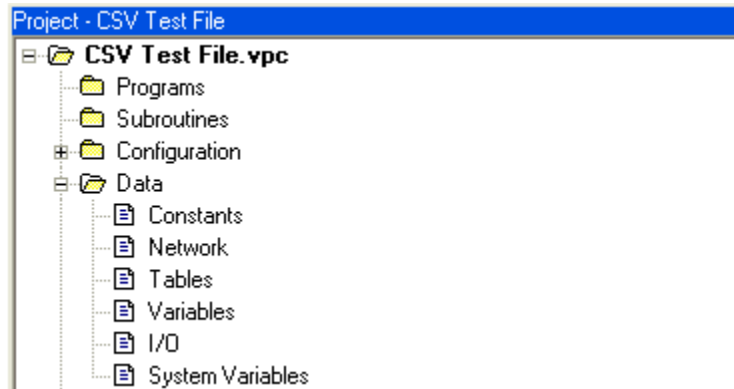
The Table Definition screen is shown below. Use this screen load Tables for use as cams and data arrays. The table below shows how each entry should be filled out by the user when importing the recipe table.

Table Definition

Table Name	Type	Data Type	Read Only	Select File . . .	Entries	Base Address	HMI
RecipeName	CSV	Integer	☑	RecipeTable....	24	CW00000	☐
			☐				☐

[OK] [Cancel] [Help]

Field	Instructions
Table Name	Enter a name for the array that contains the recipe table. As shown above, the name is RecipeName, and points within the recipe table are accessed by: RecipeTable[i] Where i is the array index number.
Type	Select CSV from the pull-down box.
Data Type	Enter the proper data type as determined above.
Read Only	Check read-only if the recipe data will not be modified. If any manipulations will be performed on the array, leave the box unchecked so the data is stored in writeable data registers.
Selected File	Click on this box and browse for the location of the CSV file containing the recipe table.
HMI	Check this box if the data is to be accessed via an HMI. Doing so will place the data in registers that can be accessed via Modbus or Memobus. MW+ will also add information to the HMI.DAT file that can be imported by an HMI.

After entering the above information and clicking OK, the CSV file will be copied to the project folder and data can be referenced using the table name in its array format.

NOTE: If data in the CSV file is updated, it must be reimported to MW+ to update the program.

3. Properly address the Recipe Table data in the MotionWorks+ program. As mentioned in the table above, recipe table data is referenced in MotionWorks+ using an array. The Expression Builder can be used to properly offset the address indices.
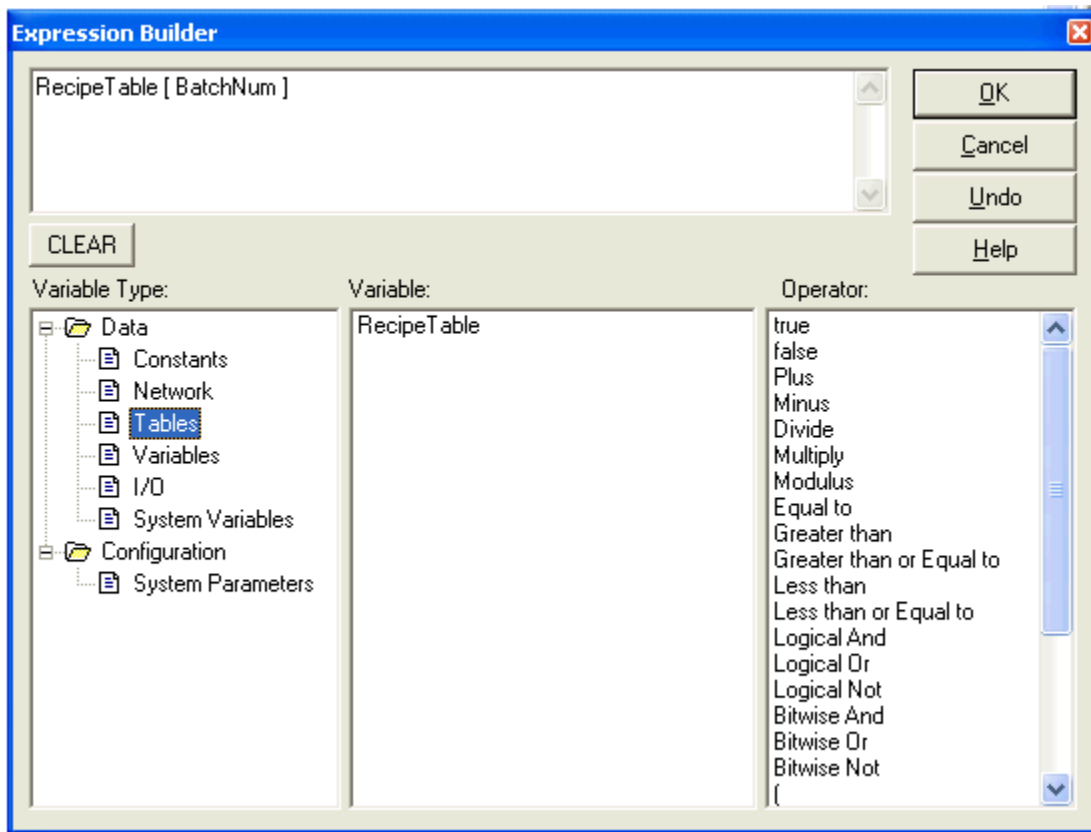
As shown above, the array element read from the RecipeTable array is determined by the variable BatchNum which indicates the data to be read from the table. Furthermore, if the recipe table contains five variable settings for each different batch, batch variables can properly addressed by using the following offset procedure:

RecipeVariable1 = RecipeTable [BatchNum]
RecipeVariable2 = RecipeTable [BatchNum + 1]
RecipeVariable3 = RecipeTable [BatchNum + 2]
RecipeVariable4 = RecipeTable [BatchNum + 3]
RecipeVariable5 = RecipeTable [BatchNum + 4]

NOTE: Table memory is always referenced by words. If a data type of Long or Float is used, the array index will be as follows:

RecipeVariable1 = RecipeTable [BatchNum]
RecipeVariable2 = RecipeTable [BatchNum + 2]
RecipeVariable3 = RecipeTable [BatchNum + 4]
RecipeVariable4 = RecipeTable [BatchNum + 6]
RecipeVariable5 = RecipeTable [BatchNum + 8]