

## Using the Mirror function.

In this thread, you will see how to mirror a part in the XYZ interface.

**NOTE: All XYZ locations are based upon a 0,0,0 global location. Which means that each location is referenced to an absolute location. The start point does NOT need to be 0,0,0.**

A couple other things to note:

- The XYZ interface requires at least 2 bends in order to mirror.
- It will mirror off of the mid-point of your part, not the beginning.

In order for Bend-Tech to allow you to mirror, you must enter the next full x,y,z coordinate past the halfway point.

For parts with an odd number of bends, it will be the middle bend (2 of 3, 3 of 5, etc). In the following picture, you can see that since we're not at that halfway point yet, the "Mirror" buttons are still unavailable for use.

The screenshot shows the 'XYZ Input' dialog box. At the top, there are three buttons: 'Zero X', 'Zero Y', and 'Zero Z', which are circled in green. Below them are three buttons: 'Mirror X', 'Mirror Y', and 'Mirror Z', which are greyed out. To the right, 'Number of Bends' is set to 3. Below that, 'Verification Points' is unchecked and 'Refresh on Key Stroke' is checked. There are also 'Detailed List' and 'Custom CLR' buttons. The main table has columns for X, Y, Z, and Dim Type. The 'start' row has X=0, Y=0, Z=0. 'bend: 1' has X=0, Y=0, Z=10. 'bend: 2' and 'bend: 3' have empty X, Y, Z cells. The 'end' row is also empty.

	X	Y	Z	Dim Type
start	0	0	0	
bend: 1	0	0	10	apex
bend: 2				apex
bend: 3				apex
end				

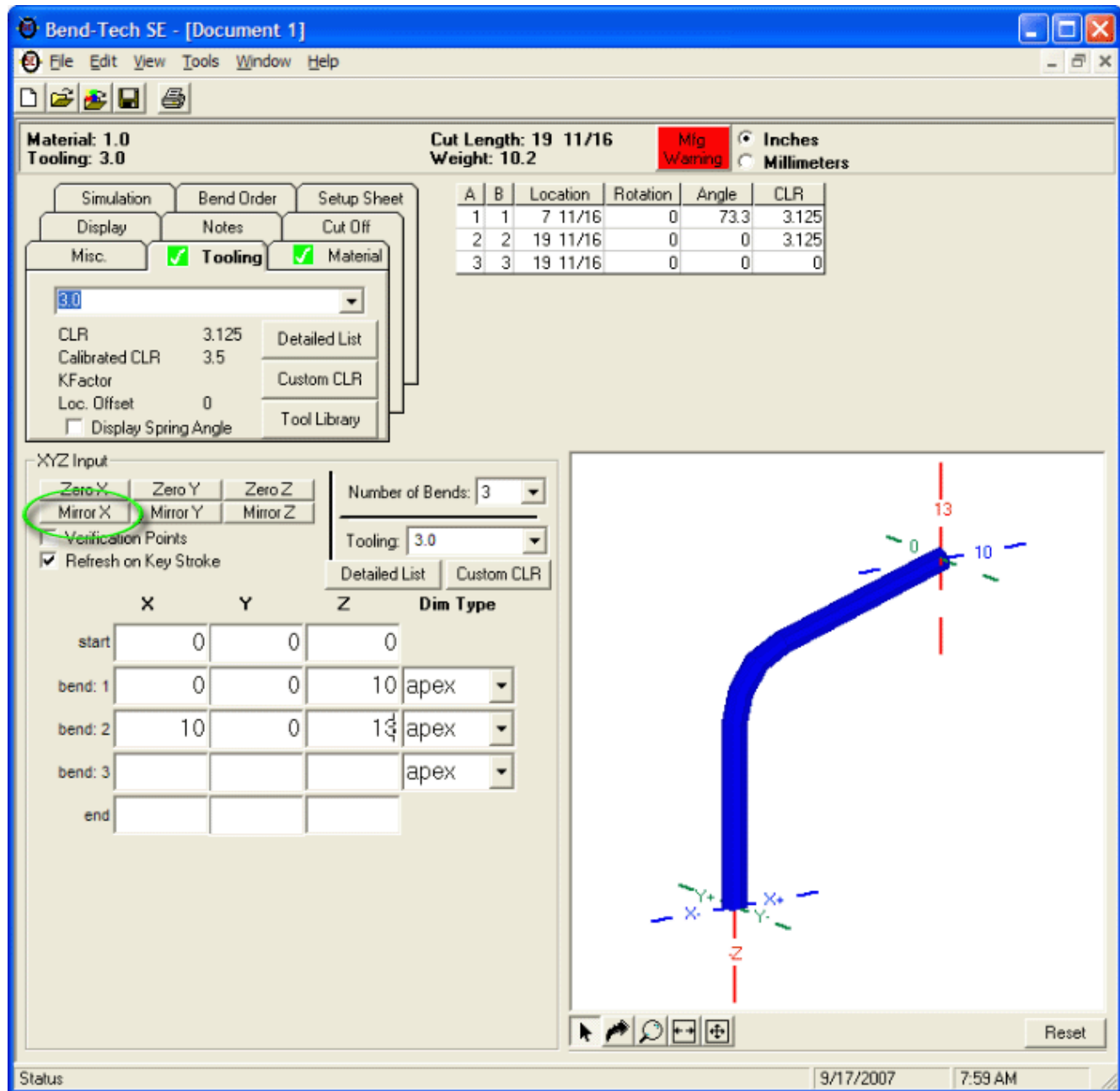
Once we get the second of three bends entered, the buttons are available.

The screenshot shows the 'XYZ Input' dialog box. The 'Mirror X', 'Mirror Y', and 'Mirror Z' buttons are now active (not greyed out). The 'Number of Bends' is still 3. The 'Verification Points' is unchecked and 'Refresh on Key Stroke' is checked. The 'Detailed List' and 'Custom CLR' buttons are present. The main table has columns for X, Y, Z, and Dim Type. The 'start' row has X=0, Y=0, Z=0. 'bend: 1' has X=0, Y=0, Z=10. 'bend: 2' has X=10, Y=0, Z=13. 'bend: 3' has empty X, Y, Z cells. The 'end' row is also empty.

	X	Y	Z	Dim Type
start	0	0	0	
bend: 1	0	0	10	apex
bend: 2	10	0	13	apex
bend: 3				apex
end				

For parts with an even number of bends, it will be the bend past the mid point (3 of 4, 4 of 6, etc).

1) Using the same values as in the previous pictures, we'll mirror a part on the x axis using the "**Mirror X**" button.



2) After clicking the "**Mirror X**", Bend-Tech will fill in the remaining x,y,z values in order to symetrically finish off the part.

**Bend-Tech SE - [Document 1]**

File Edit View Tools Window Help

Material: 1.0  
Tooling: 3.0

Cut Length: 39 3/16  
Weight: 20.4

Mfg Waring  
Inches  
Millimeters

A	B	Location	Rotation	Angle	CLR
1	1	7 11/16	0	73.3	3.125
2	2	18 3/4	360	33.4	3.125
3	3	27 11/16	360	73.3	3.125

Simulation Bend Order Setup Sheet  
Display Notes Cut Off  
Misc.  Tooling  Material

3.0

CLR 3.125 Detailed List  
Calibrated CLR 3.5 Custom CLR  
KFactor  
Loc. Offset 0  
 Display Spring Angle Tool Library

XYZ Input

Zero X Zero Y Zero Z  
Mirror X Mirror Y Mirror Z

Verification Points  
 Refresh on Key Stroke

Number of Bends: 3  
Tooling: 3.0  
Detailed List Custom CLR

	X	Y	Z	Dim Type
start	0	0	0	
bend: 1	0	0	10	apex
bend: 2	10	0	13	apex
bend: 3	20	0	10	apex
end	20	0	0	

Reset

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