

Using an Angle Level



For guys who have NOT purchased the LRA Extension Module and want to use a dial level, please follow this thread carefully.

Bend-Tech as a default (without the LRA module) uses incremental rotations between bends. In other words, after each bend is performed that current rotation angle becomes 0 degrees.

After the 2nd bend you will need to calculate the absolute (rotations from 1st bend position) rotations.

Here is an example:

Custom Part - 1

Die & Material | Part Details | Settings | Tools | Manuf. Warning | Display

Die: 3.0 Cut Length: 98
Material: 2.0 Part Weight: 0

Dimension Location: Start Machine: None Units: Inches Millimeters

Decimal / Fraction: Decimal n

Print Design Instructions
 Print Transitions
 Print Tri-Star
 Print Dimensions

LRA Settings

A	B	Location	Rotation	Angle	Spring Angle	CLR	Bend Length	Orientation
1	1	18	0	74	74	3	4	From Start
2	2	37	-85	74	74	3	4	From Start
3	3	56	0	74	74	3	4	From Start
4	4	75	85	74	74	3	4	From Start

Number of Bends: 4 Start Angle: 0

Refresh on Keystroke
 Verification Points
 Display Dimensions

#	Length	Rotation	Angle	Dim Type	Die
Bend 1	20	0	74	Apex	3.0
Bend 2	20	-85	74	Apex	3.0
Bend 3	20	0	74	Apex	3.0
Bend 4	20	85	74	Apex	3.0
End	20				

There are several types of angle levels available and many of them use different angle call outs. We are going to cover the 2 most common:

1) Your angle level is numbered from 0 to 360

Here are your results from our example

bend 1) 0 = 0 (the first one is always 0 degrees)

bend 2) -85 = 275 ($360 + -85 = 275$)

bend 3) 0 = 275 ($275+0 = 275$)

bend 4) 85 = 0 ($275+85 = 360 = 0$)

2) Your angle level is numbered from 0 to 180 and 0 to -180

bend 1) 0 = 0 (the first one is always 0 degrees)

bend 2) $-85 = -85$ ($0 + -85 = -85$)

bend 3) $0 = -85$ ($-85 + 0 = -85$)

bend 4) $85 = 0$ ($-85 + 85 = 0$)