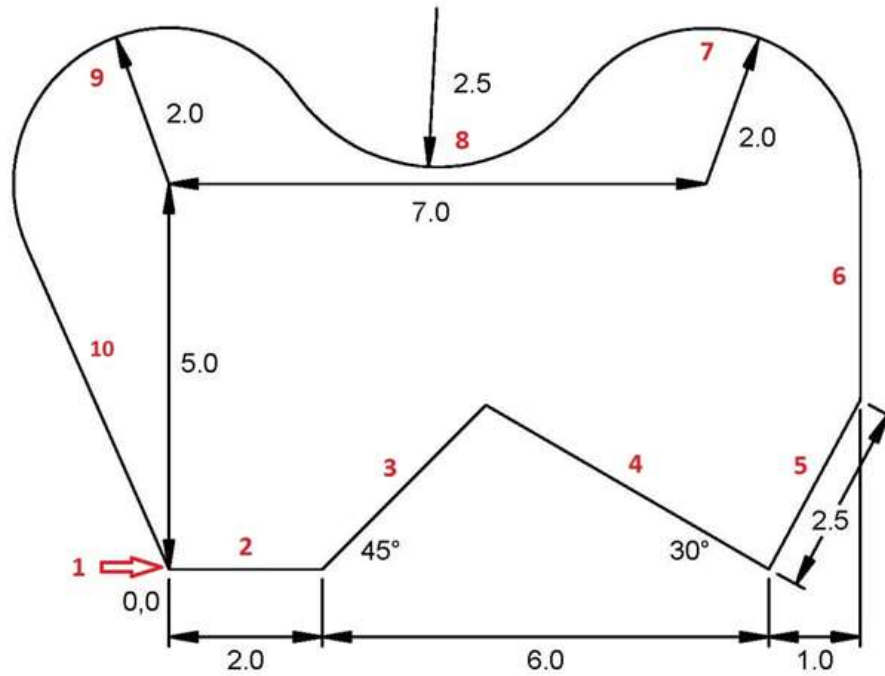


The chord angle is the angle that is measured counter clockwise as positive from the beginning to the end points.

### 10.13 Sample A.G.E. program



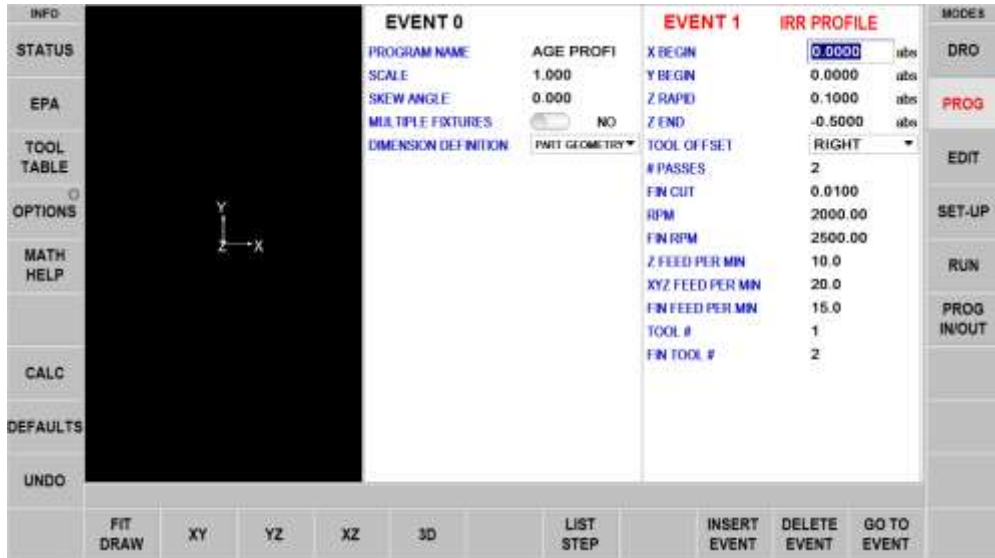
Consider this profile made up of 9 lines and arcs

Notice what is not known:

- Intersection of lines 3 and 4
- Intersection of lines 5 and 6
- Intersection of arcs 7 and 8
- Center of arc 8
- Intersection of arcs 8 and 9
- Intersection of arc 9 and line 10

## Event 1

The first programmed event is known as the Header. In this sample, this will be Event 1. To begin the A.G.E. you must start by programming the Header and a mill or arc that is fully known, that is, all the needed dimensions are there. The 2" line segment (2) starting at 0,0 is fully known, so this is where we'll start.



Complete this first or header event as you would any mill event except there is no prompt for X end or Y end.

## Event 2

Select AGE Mill

Input X end (2.0) and Y end (0) as shown on the screen

There is no CONRAD to the next event

Note the OK label next to the event line



### Event 3

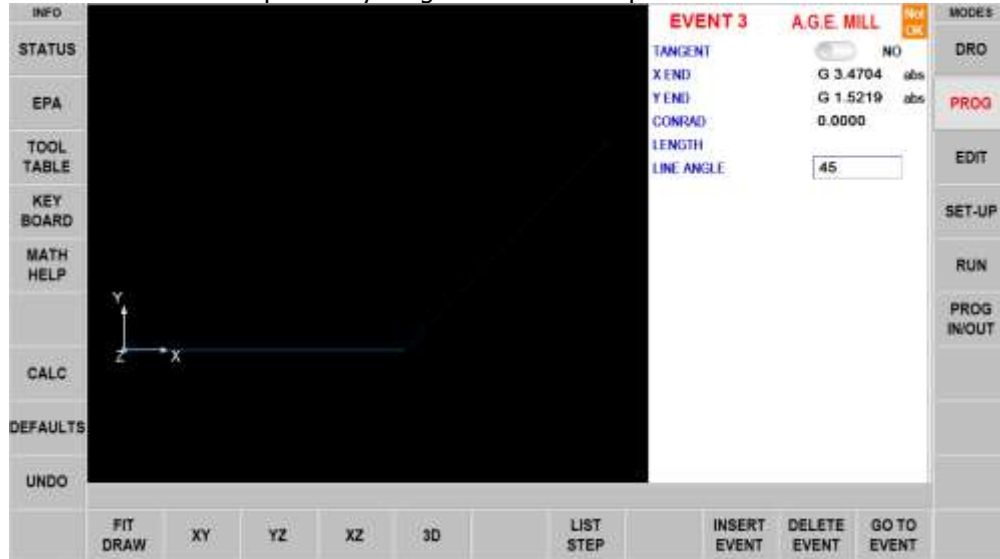
Select AGE MILL

The line in event 3 is not tangent to the line in event 2 (no 2 straight lines can be tangent to each other) X end and Y end are not known. Tap Guess and select the screen above and to the right of Line 1 for each dimension.

Line angle is  $45^\circ$  measured from an imaginary positive X line from the beginning of Line 2

The line length is not known, skip.

Note NOT OK label. We have input everything we know so swipe to the next event



### Event 4

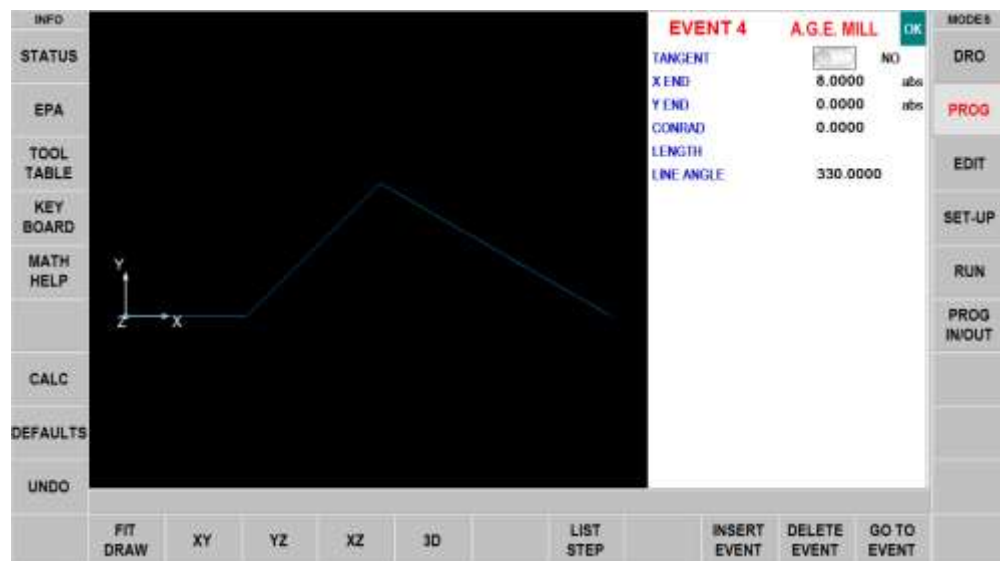
Select AGE MILL

The line in event 4 is not tangent to the line in event 3.

X end is known (8.0) and Y end is known (0)

The line angle is  $330^\circ$  measured from an imaginary position X line from the beginning of Line 3 in a counter-clockwise direction

Note this event as well as the previous event are now OK



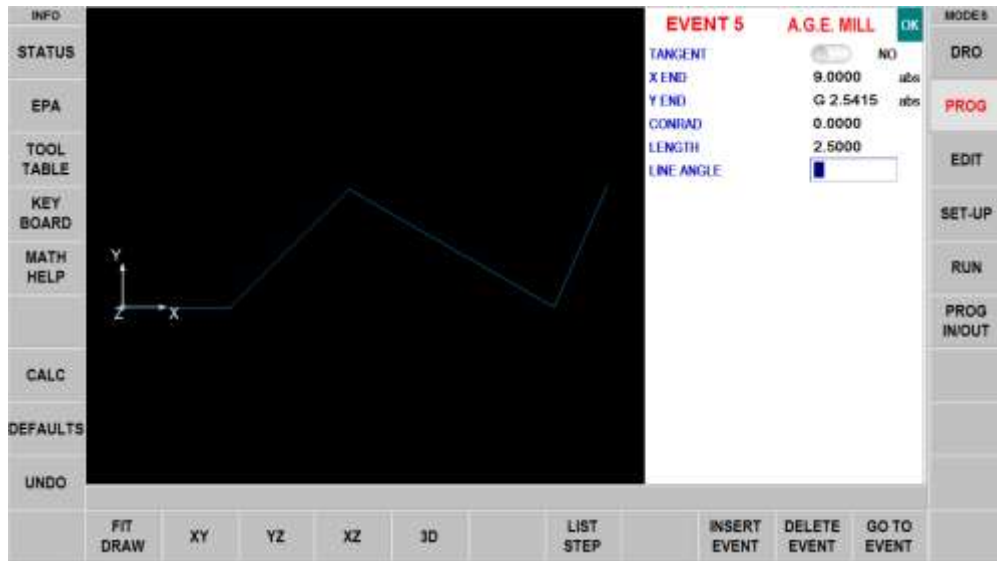
### Event 5

Select AGE MILL

X end for line 5 is known (9.0) but Y end is not known. Tap Guess and tap the screen approximately where the Y end is

The 2.5 length is known

Note the event is OK



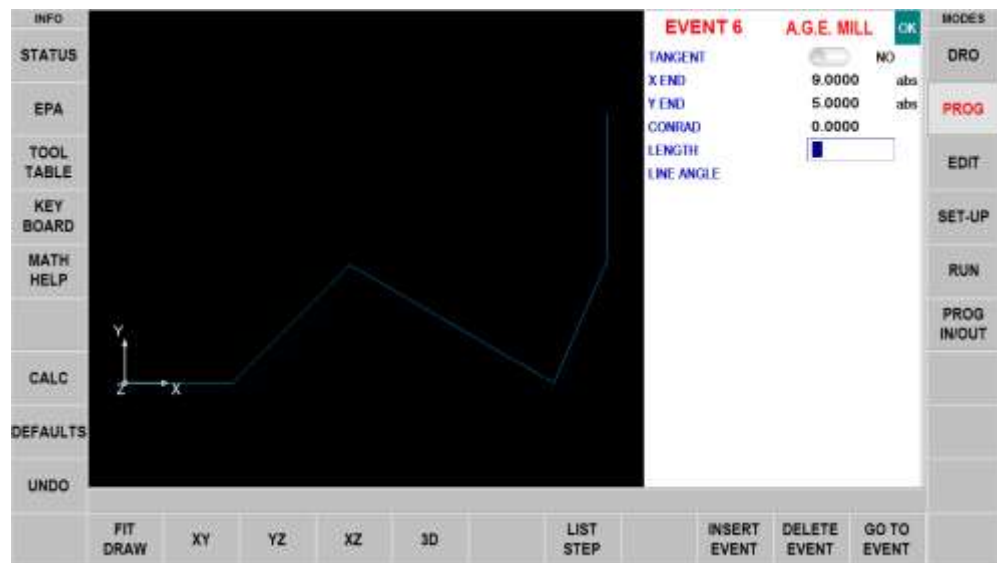
### Event 6

Select AGE MILL

The line in event 6 is not tangent to the line in event 5.

X end (9.0) is known and the 5.0 Y end is known

Note the event is OK



### Event 7

Select AGE ARC

The arc is tangent to the line in event 6.

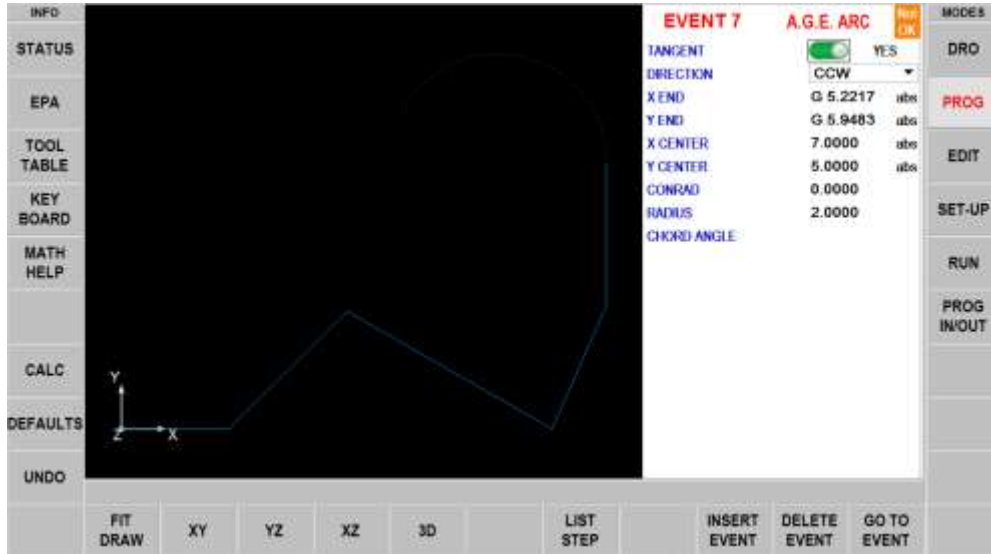
The arc is counter-clockwise

X end and Y end are not known. Tap Guess and tap the screen approximately where Arcs 6 and 7 meet.

X center at 7.0 and Y center at 5.0 are known

The radius at 2.0 is known

This is all we know. Note NOT OK



### Event 8

Select AGE ARC

The arc is tangent to Arc 7

The arc is machined clockwise

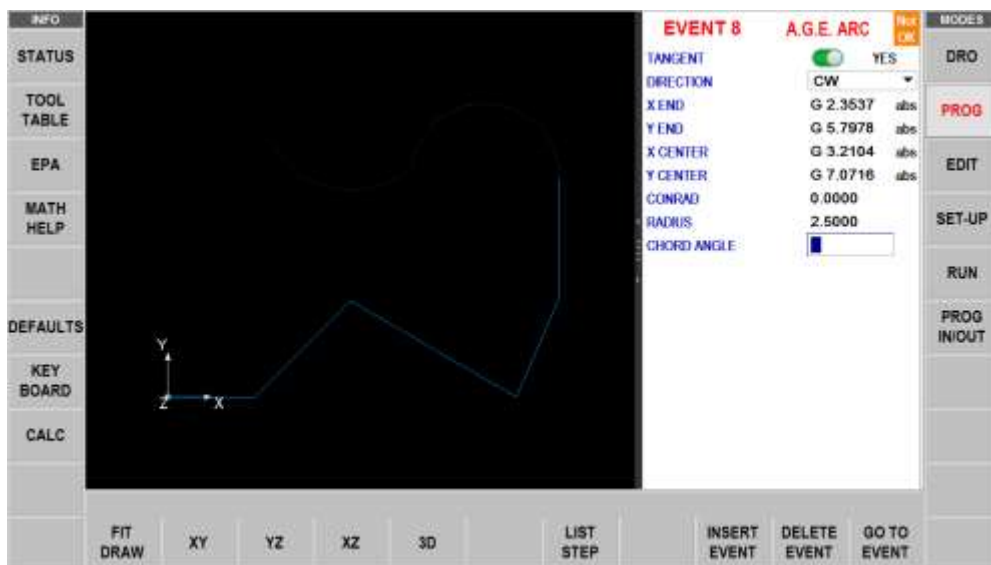
X end and Y end are not known. Tap Guess and tap the screen approximately where Arcs 8 and 9 meet

X center and Y center are not known. Tap Guess and tap the screen approximately at the center of Arc 8

The radius is 2.5

This is all we know. Note Event 8 is NOT OK and Event 7 is NOT OK yet either

No worry - page forward to next event



### Event 9

Select AGE ARC

The arc is tangent to Arc 8

The arc is machined counter-clockwise

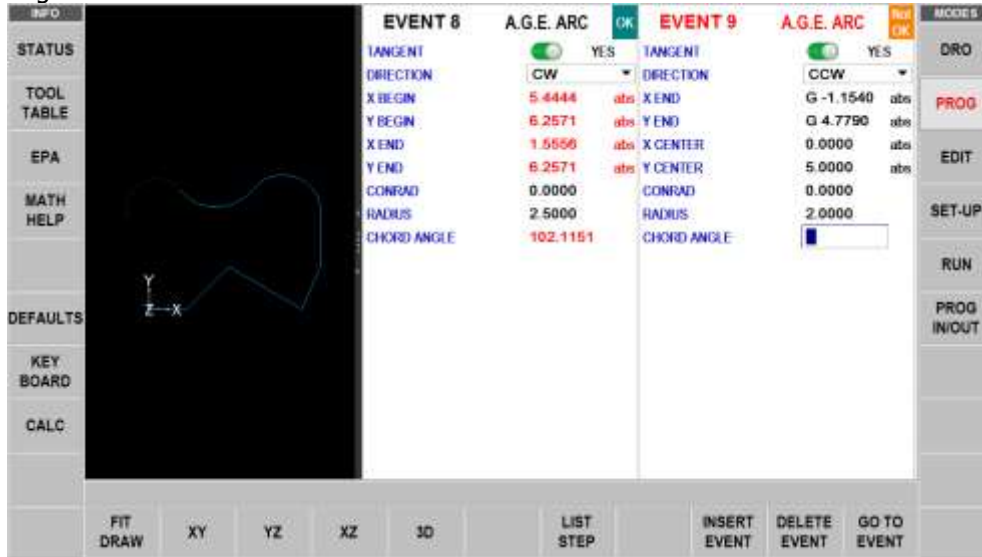
X end and Y end are not known. Tap Guess and tap approximately where Arc 9 and Line 10 meet

The arc center is known: X center 0 ABS and Y center 5 ABS

The radius is 2.0

Note Event 9 is NOT OK but now Events 7 and 8 can be fully calculated and are OK

Page forward to next event



### Event 10

Select AGE MILL

Line 10 is tangent to Arc 9

X end at 0.0 and Y end at 0.0 are known

Note Event 10 is OK as well as Event 9

The entire profile has now been programmed

Page forward and tap END AGE

