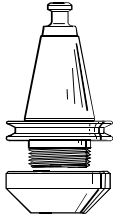
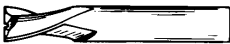
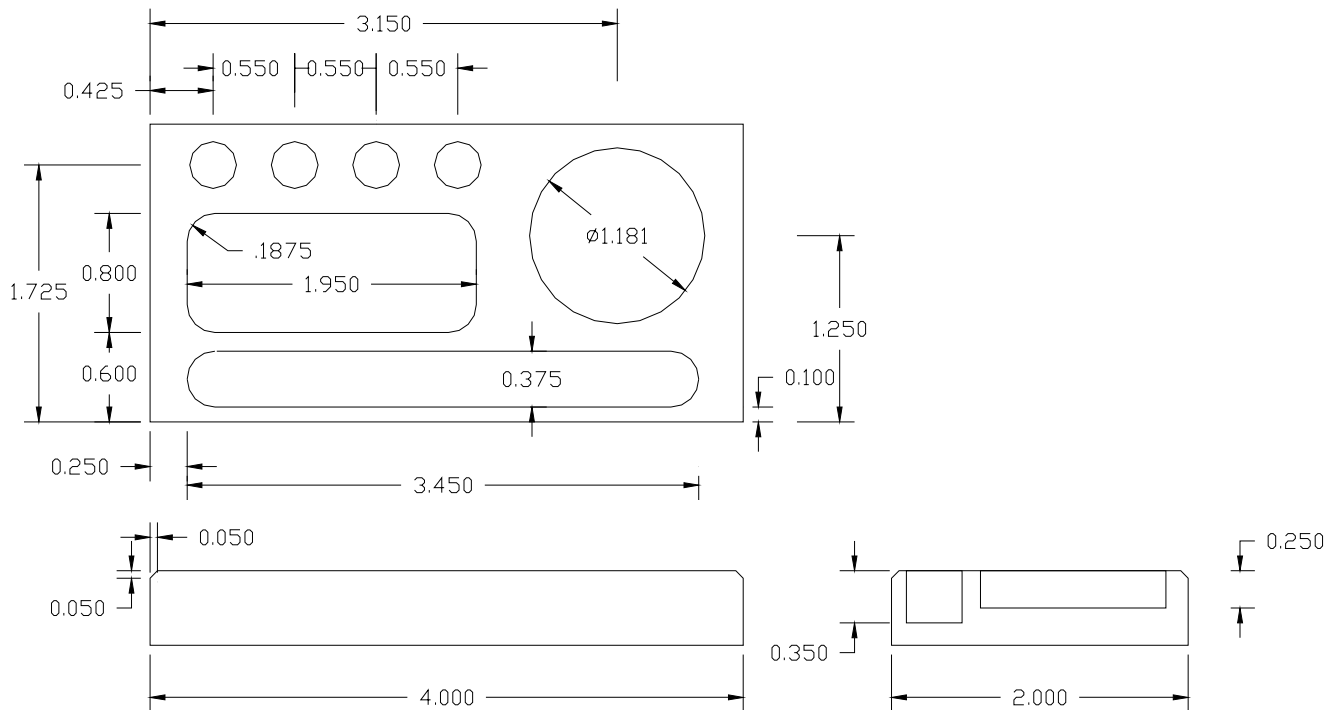


WinCAM Milling Level 2

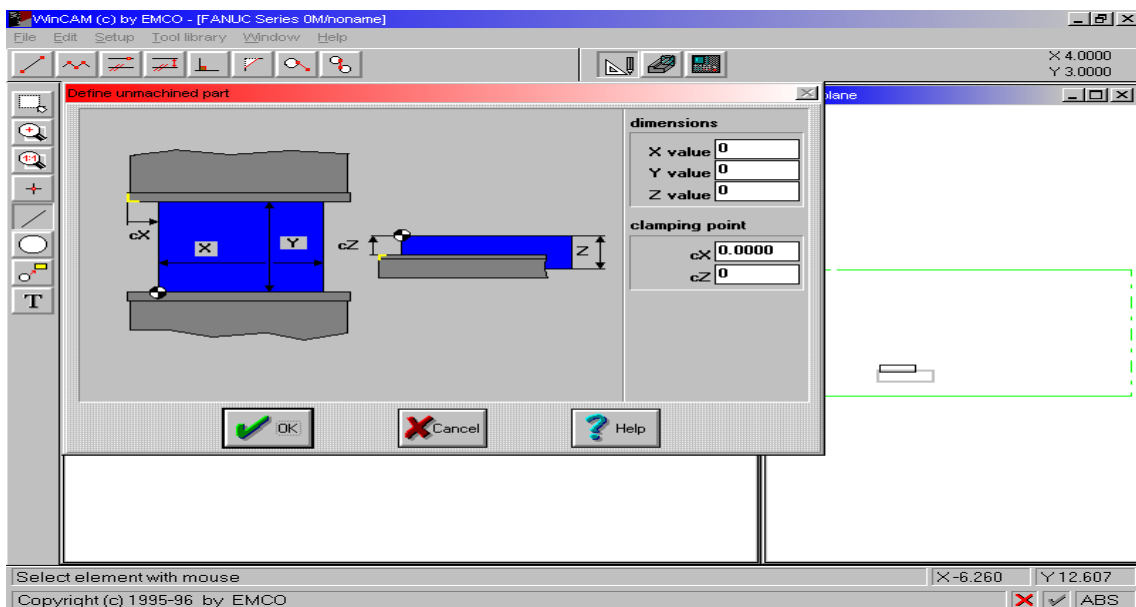
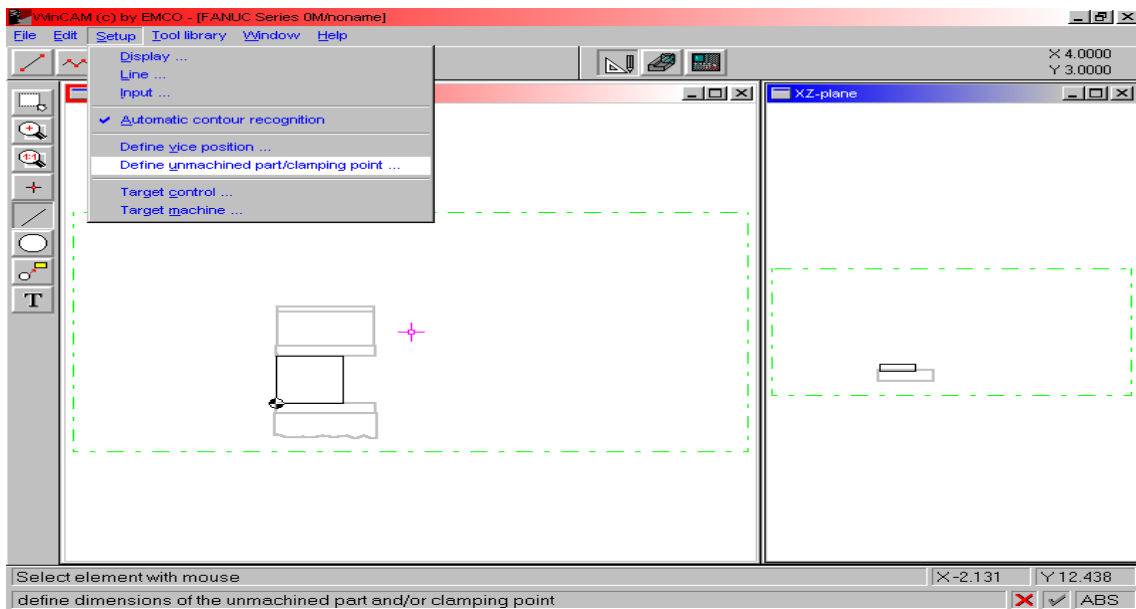
F1Z 010	<u>Collet holder</u>	For ESX-25 collets	
225 100	(9.0-10.0mm)Ø 3/8"	ESX 25 COLLETS	
764 308	Acc. to DIN 327, shape B cutting-Ø10 mm / shank-Ø10mm or a 3/8 end mill	<u>Slot end mill, HSS</u>	


PART SIZE = "2 X 2 X .5" OF 2024-T4 ALUMINUM

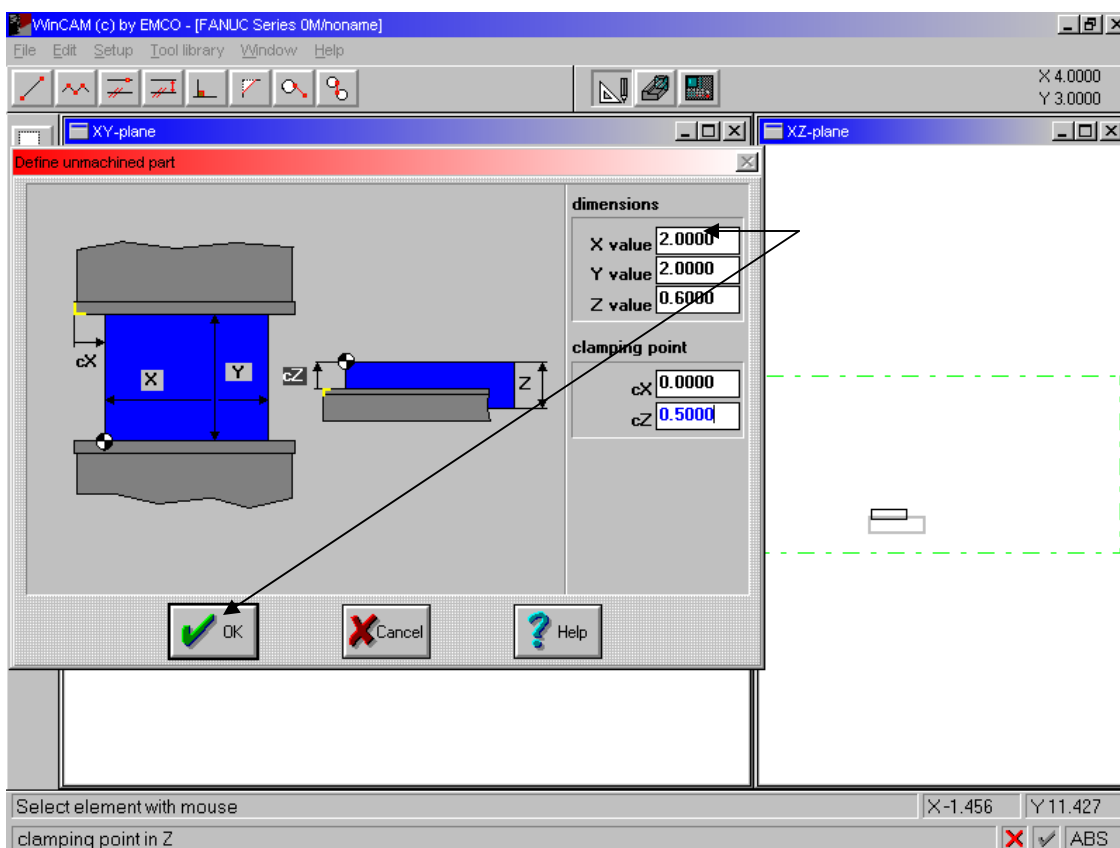


WinCAM Mill Step by Step CAD Setup


1. LEFT CLICK ON **SETUP** (THE TOP BAR OF THE SCREEN)
2. CLICK ON DEFINE **UNMACHINED PART/CLAMPING POINT**

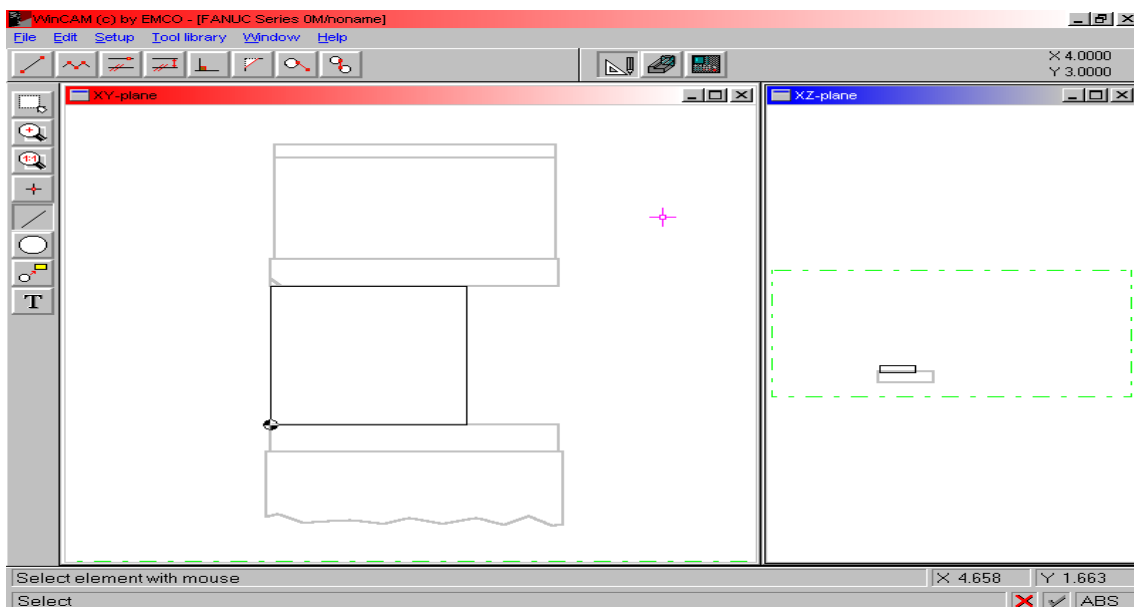
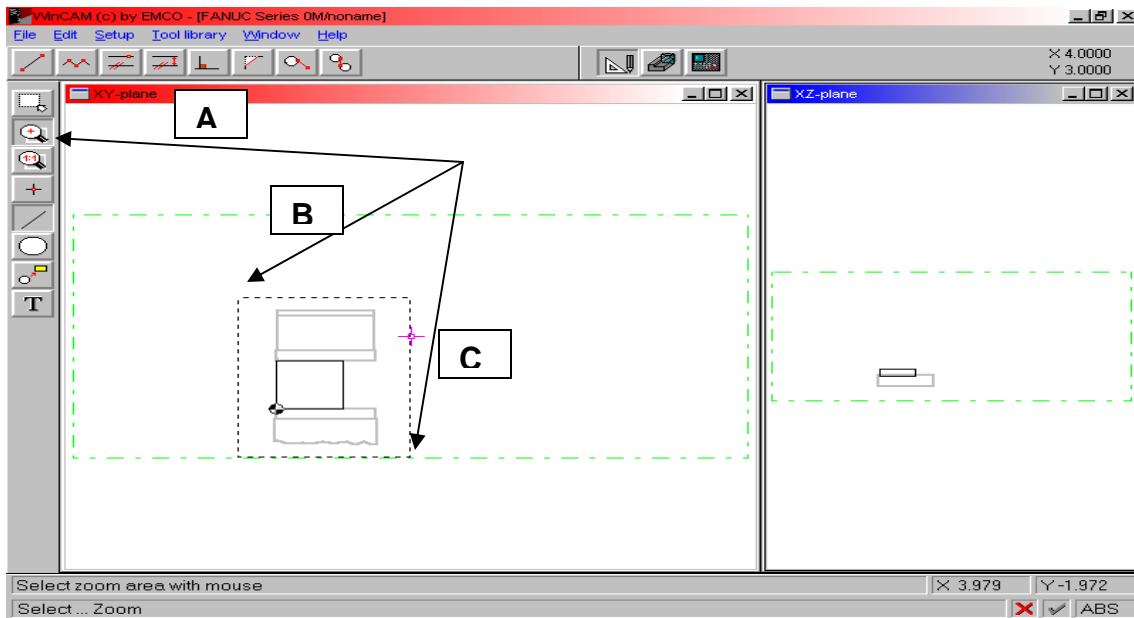



3. UNDER DIMINSIONS HIGHLIGHT **X value** 2.0000
4. TYPE **4.** (LENGTH OF THE PART); THEN PRESS TAB
5. TYPE **2.** IN THE **Y** VALUE BOX (WIDTH) THEN PRESS TAB
6. TYPE **.5** IN THE **Z** VALUE BOX (HEIGHT) THEN PRESS TAB
7. TYPE **0.** IN THE **cX** VALUE BOX (AMOUNT OF STOCK STICKING IN OR OUT OF THE VICE) THEN PRESS TAB
8. TYPE **.4** IN THE **cZ** VALUE (STOCK ABOVE THE VISE)
9. CLICK OK  OK

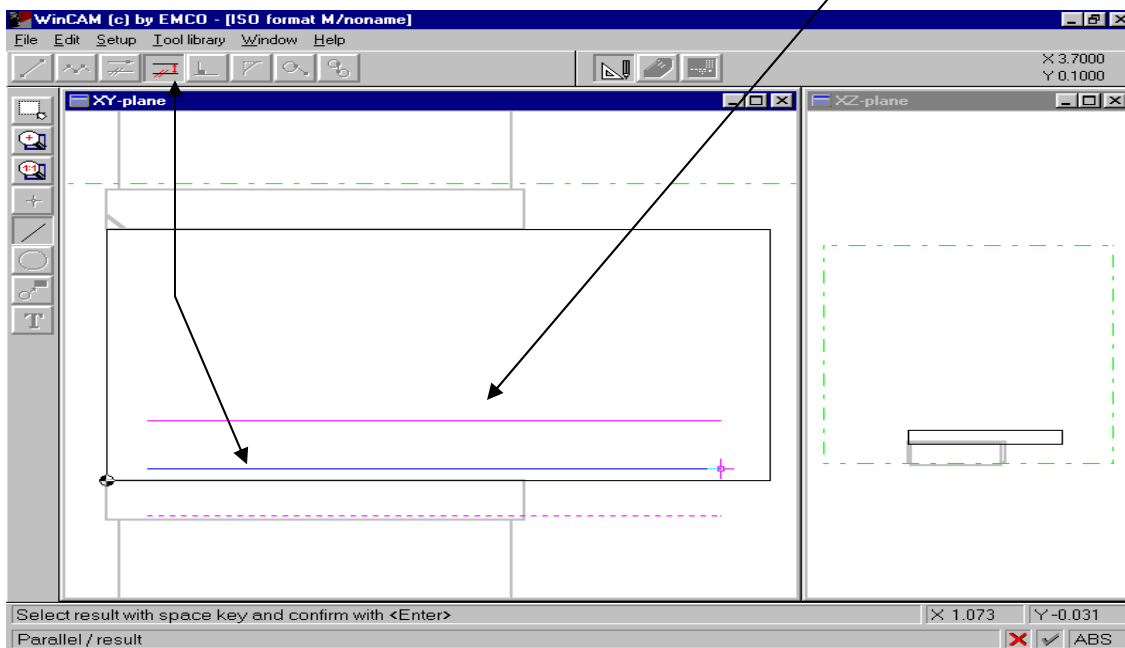


NOTE: PLACE THE MOUSE POINTER OVER ANY ICON AND WINCAM AUTOMATICALLY IDENTIFY THE ICON AT THE LOWER LEFT OF THE SCREEN.

10. CLICK ON THE **ZOOM DRAWING ELEMENT** ICON  (A)
11. PLACE THE **MOUSE POINTER** OR + SIMBOL TO THE UPPER LEFT SIDE OF THE VICE (B)
12. CLICK & HOLD THE **LEFT** MOUSE BUTTON & DRAG TO THE BOTTOM RIGHT SIDE OF THE VICE (C)
13. LET GO OF MOUSE; YOUR VEW WILL ENLARGE



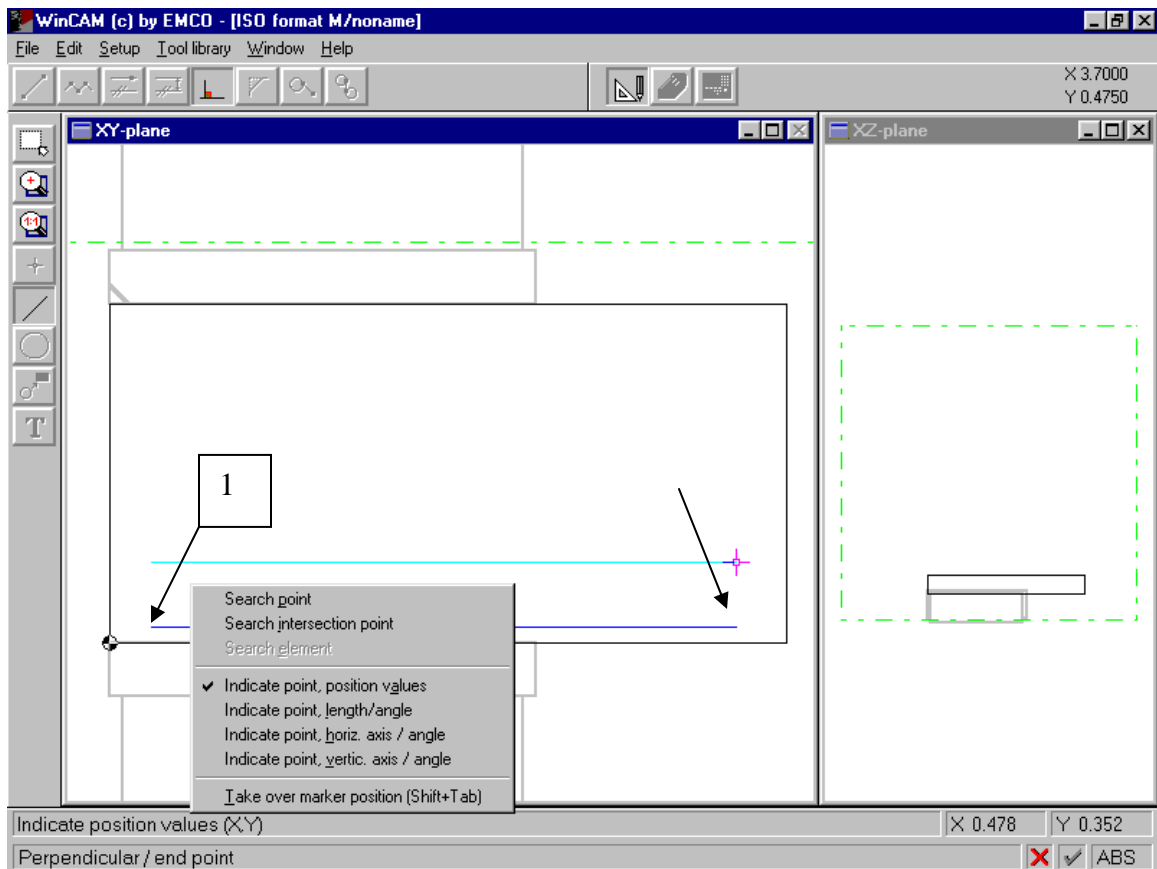
14. CLICK ON THE **DRAW LINE** ICON  (SINGLE LINE)
15. TYPE **.250, .100** FOR THE START POINT / THEN PRESS **ENTER** ON THE PC KEYBOARD
16. TYPE **3.700, .100** FOR THE END POINT / PRESS **ENTER**
17. CLICK ON THE **PARALLEL WITH DISTANCE**
18. CLICK ON THE LINE THAT WAS JUST CREATED
19. TYPE **.375** OR IF 10MM IS USED TYPE **.393** /PRESS **ENTER**
20. USE THE SPACE BAR TO BOLD THE UPPER LINE /
PRESS **ENTER**



NOTES:

- 1: CORDINATES ARE ABSOLUTE FROM REFERENCE POINT
- 2: ALL VALUES TYPED IN ARE LOCATED AT LOWER LEFT OF THE SCREEN

21. CLICK ON PERPENDICULAR AND CLICK ON TOP LINE
22. RIGHT CLICK ON MOUSE BUTTON
23. **HIGHLIGHT SEARCH POINT** THEN **LEFT** CLICK
24. CLICK ON THE OTHER SIDE OF THE ENDING LINE
SEGMENT (1)
25. DO STEP 21 THRU 24 BUT CLICK ON THE OTHER SIDE

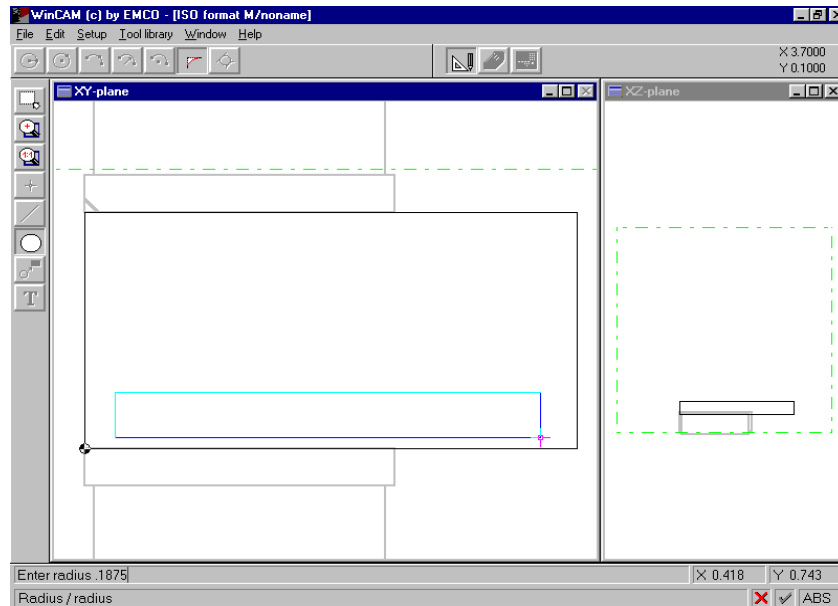


26. CLICK ON **CIRCLE** ICON 

27. CLICK ON THE **INSERT RADIUS**

28. CLICK ON ANY LINE IN THE BOX BELOW AND THEN
TYPE IN **.1875 (3/8)** THEN PRESS ENTER

29. DO STEP 26 AND 27 FOR THE OTHER 3 SIDES



30.

31. CLICK ON **CIRCLE WITH CENTER AND RADIUS** ICON



32. TYPE **1.0,1.0** LOCATES CENTER OF THE PART / THEN
PRESS ENTER

**33. TYPE .25 FOR THE RADIUS OF THE CIRCLE / THEN
PRESS ENTER**

- 1. CLICK ON FILE (TOP LEFT OF THE SCREEN)**
- 2. CLICK ON SAVE AS**
- 3. TYPE HEX**
- 4. CLICK OK**

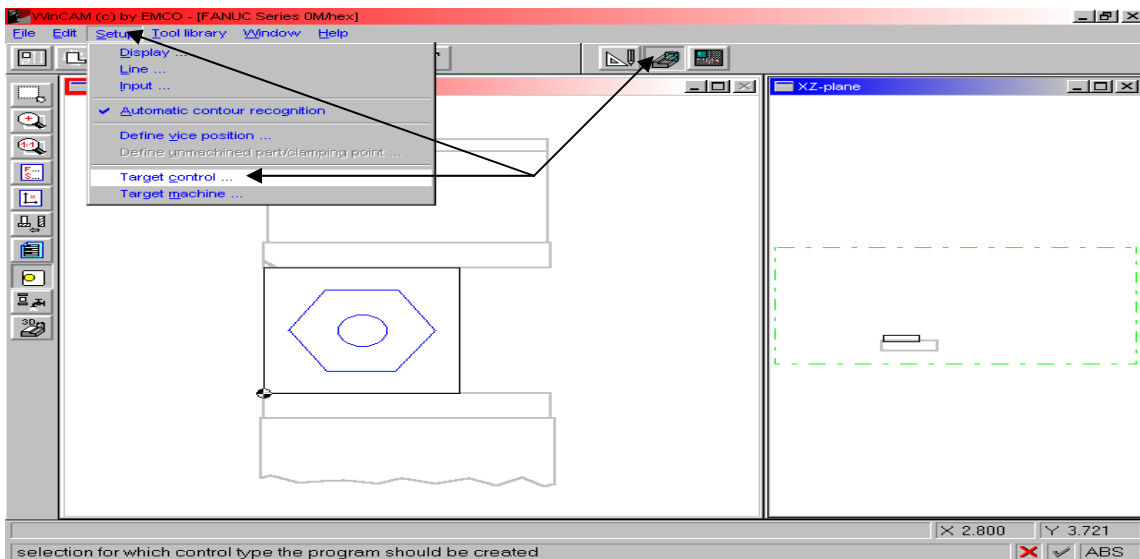
You have just completed the CAD portion
of the Step by Step guide, go to the next
page for CAM

WinCAM Mill Step by Step CAM Setup

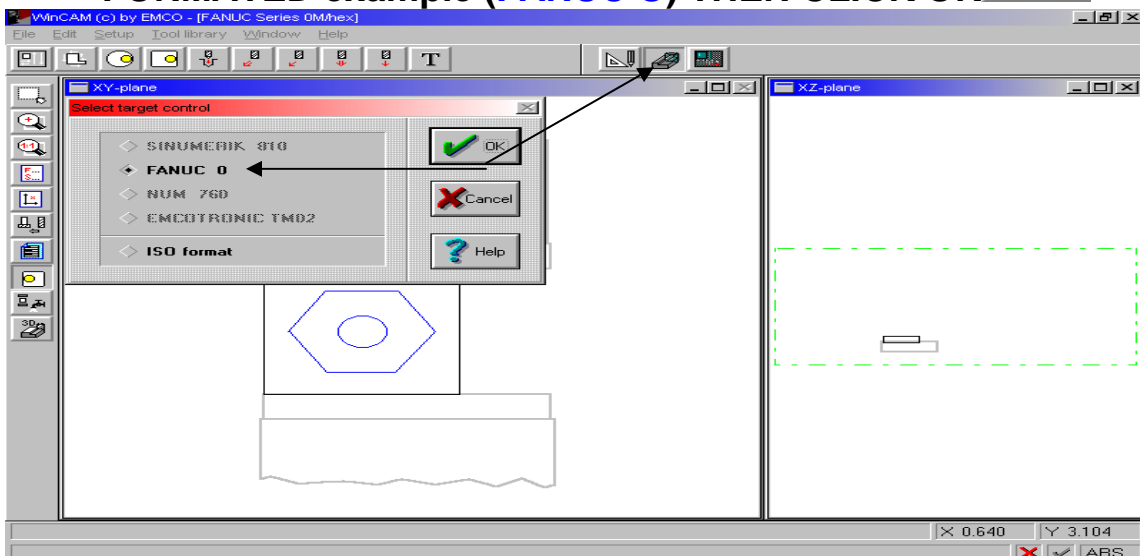
1. CLICK ON **CAM** ICON (UPPER MIDDLE OF SCREEN) 
THIS SWITCHES MODES TO COMPUTER AIDED MACHINING






Note: Only use steps (2, 3 & 4) if you purchased the option(s) for Siemens, Fanuc, Num 760 or Emcotronic TM02

2. CLICK ON **SETUP** (TOP LEFT OF THE SCREEN)
3. CLICK ON **TARGET CONTROL**



4. CLICK ON THE **POST** FOR THE PROGRAM TO BE FORMATED example (**FANUC 0**) THEN CLICK OK 



5. CLICK ON **TOOL LIBRARY** (TOP LEFT OF THE SCREEN)
6. CLICK THE GRAY BOX   #3: 3/8" endmill (UNDER TOOL LIBRARY)
7. CLICK THE GRAY BOX  T1, empty (UNDER TOOL HOLDER)
8. CLICK ON THE **TRANSFER** ICON  (THIS PLACES TOOL IN TOOL HOLDER)
9. CLICK OK  OK

10. CLICK ON THE **TOOL CHANGE** ICON 

11. CLICK ON THE GRAY BOX  T1, #3: 3/8" endmill / THEN
CLICK OK 

12. CLICK ON THE **PERIPHERY** ICON 

13. CLICK ON **MAIN SPINDLE ON RIGHT**  (M03)

14. CLICK ON **MACHINE** ICON 



15. CLICK ON **MOVEMENT IN RAPID MOTION IN PLANE** ICON



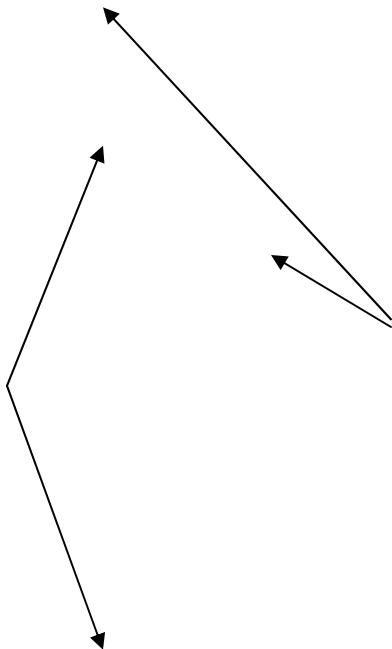
(X, Y)

16. PLACE THE **MOUSE** IN THE CENTER OF THE PART /

LEFT CLICK OR YOU CAN TYPE IN 1,1 THEN ENTER

17. THE TOOL WILL LOOK AS IF IT IS THROUGH THE PART

OR



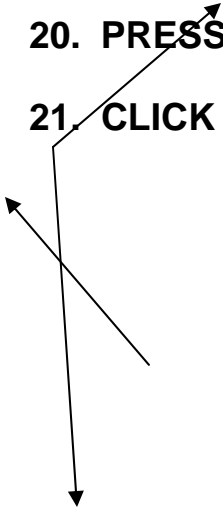
18. CLICK ON **MOVEMENT IN RAPID MOTION IN FEED**

DIRECTION ICON  (Z)

19. TYPE IN **.100** FOR THE HIEGHT (ABOVE THE PART)

20. PRESS **ENTER** ON PC KEYBOARD


21. CLICK ON **POCKET MILLING WITH ISLAND** ICON 

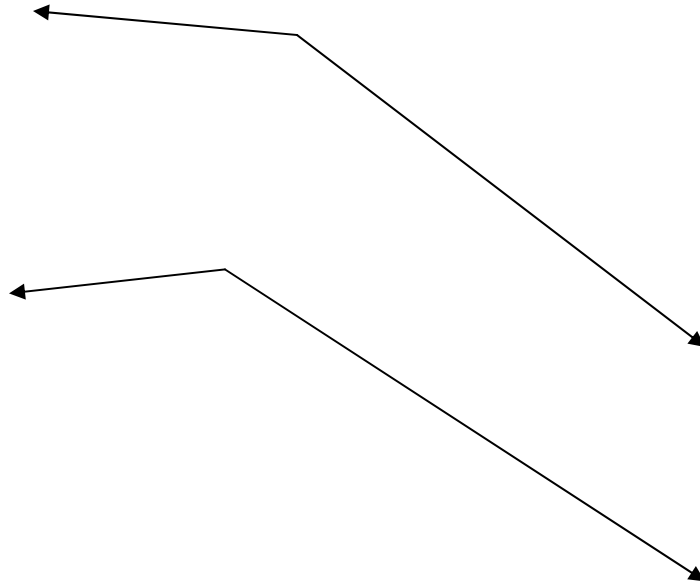


22. CLICK ON THE **HEX**

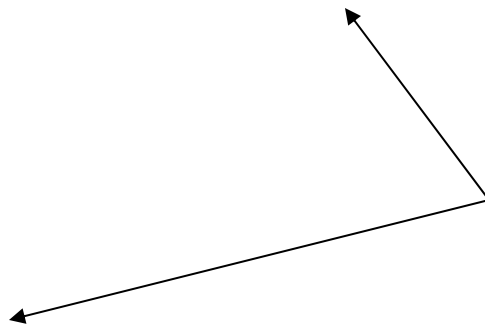
23. CLICK THE **GREEN** CHECK MARK  (BOTTOM RIGHT)

24. CLICK ON THE **CIRCLE** (MIDDLE OF THE PART)

25. CLICK THE **GREEN** CHECK MARK  2 TIMES (THIS IS COMFIRMATION OF THE SELECTED ITEM)



26. DOUBLE CLICK ON THE **T** = DEPTH (WHITE AREA)
27. TYPE IN **-.1** / THEN PRESS TAB
28. TYPE IN **.05** IN **Z(t)** FOR ADVANCE DEPTH / PRESS TAB
29. TYPE IN **.1** IN **RE** FOR RETURN PLANE / PRESS TAB
30. TYPE IN **0** IN **SE** FOR START PLANE / PRESS TAB
31. TYPE IN **0** IN **SA** FOR FINISH OFFSET / PRESS TAB
32. TYPE IN **3** IN **F(t)** FOR Z FEED (FEED PER MINUTE) /
PRESS TAB
33. TYPE IN **5** IN **F(f)** FOR X,Y FEED (FEED PER MINUTE) /
PRESS TAB
34. TYPE IN **1500** IN **S** FOR SPINDLE SPEED (DIRECT RPM)
35. CLICK ON **OK**




36. CLICK ON **MOVEMENT IN RAPID MOTION IN FEED**

DIRECTION ICON  (Z)

37. TYPE **2.** / PRESS ENTER

38. CLICK ON **MOVEMENT IN RAPID MOTION IN PLANE** ICON

 (X, Y)

39. MOVE THE **MOUSE** TO THE UPPER RIGHT CORNER OF THE **WISE** PART (1) / THEN LEFT CLICK

1. CLICK ON **FILE** (TOP LEFT OF THE SCREEN)

2. CLICK ON **SAVE AS**

3. CLICK  **HEX.DFM**

4. CLICK YES TO FILE ALREADY EXISTS

5. CLICK OK