

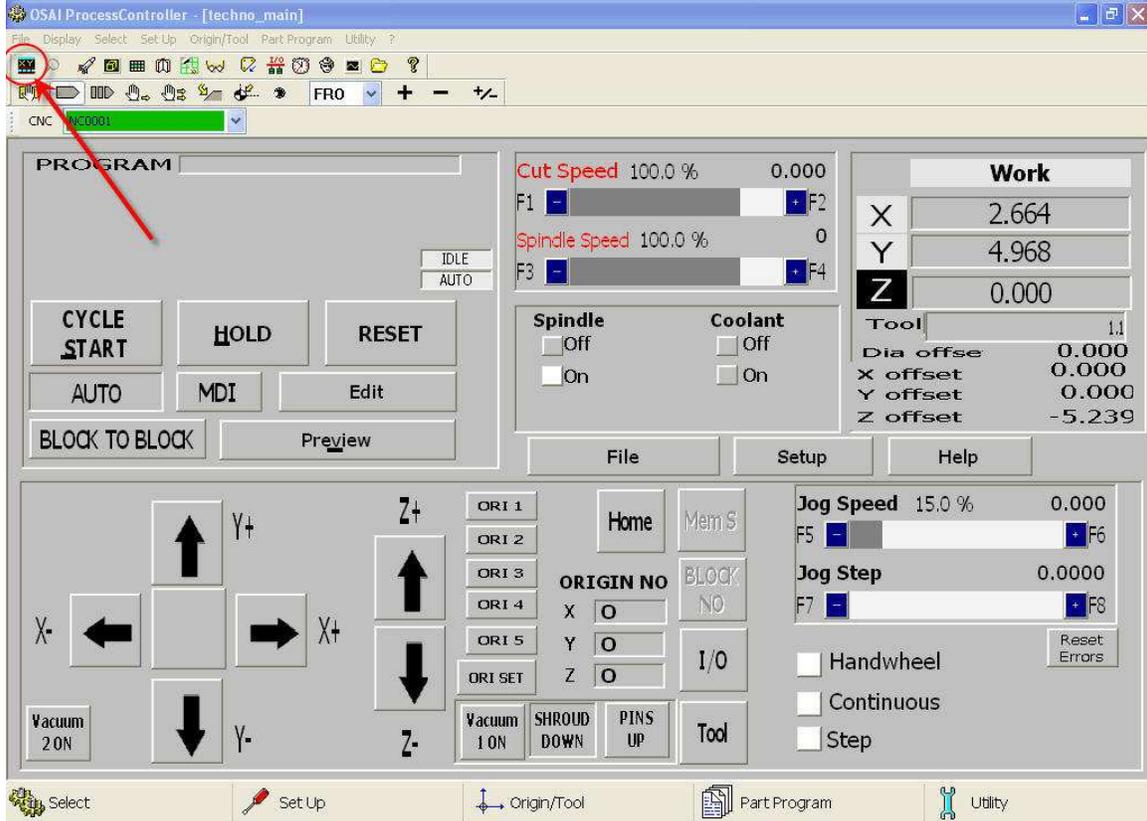
How To Learn Tool Stand Locations on HDS Machines

First: you must write down the X, Y, and Z coordinates of where the tool stands are. The best way find those numbers is (with a tool in the spindle) use “Handwheel” jog mode to gently guide the tool to where it is comfortably seated in the stand. Once the tool is in place, look at the coordinates in the upper right corner of the computer screen and write them down on a piece of paper. Repeat for all 8 tool stands.

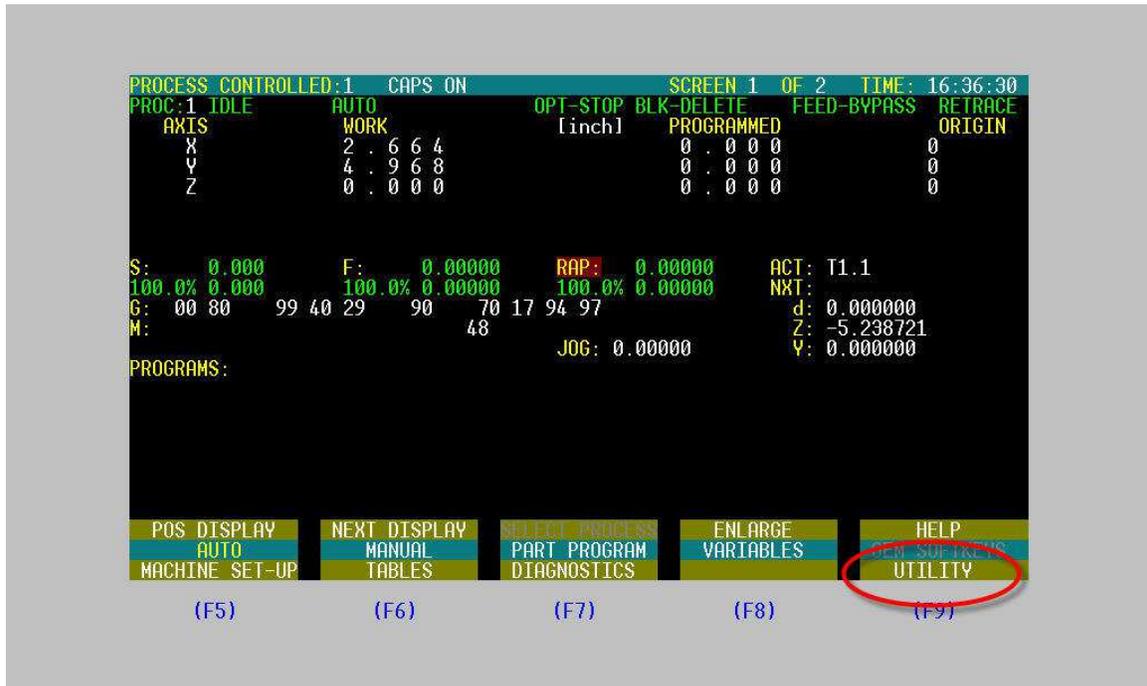
Note: No origin (or Origin 0) should be active. Those numbers will reflect the current distance from the home position.

Once you have your coordinates written down, you have to go into the controller settings to apply them. The controller will have to be re-started for them to take effect.

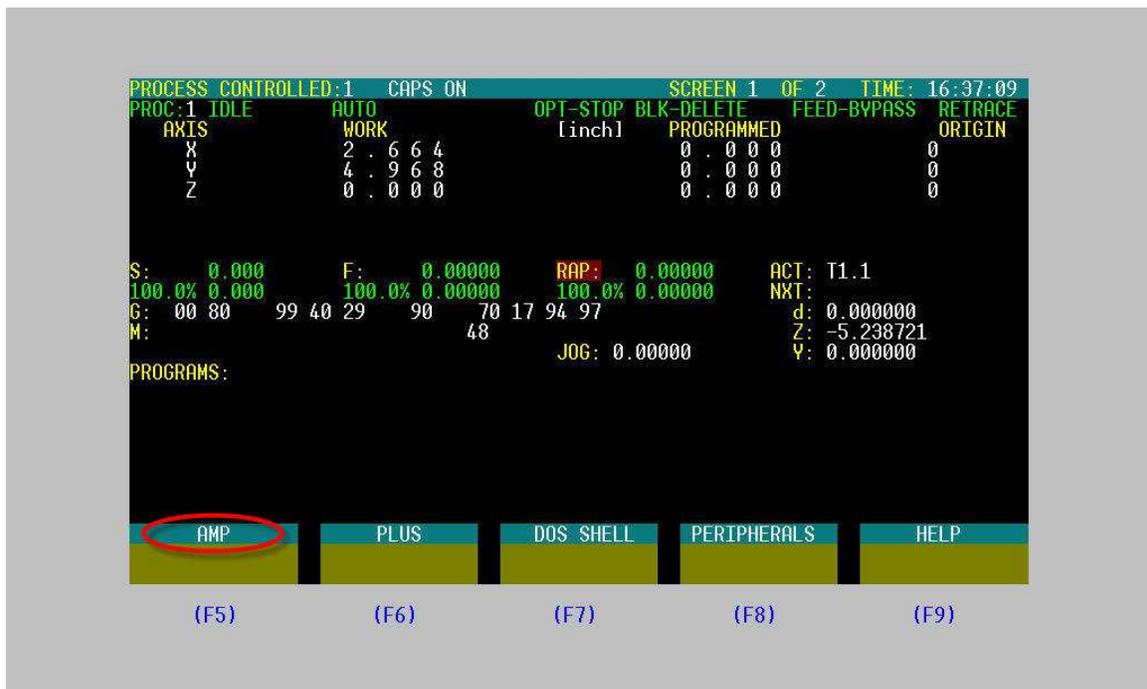
Note: To navigate through the menus in the controller screens: use F10 to scroll the highlight bar and then the corresponding function key to select what’s highlighted.



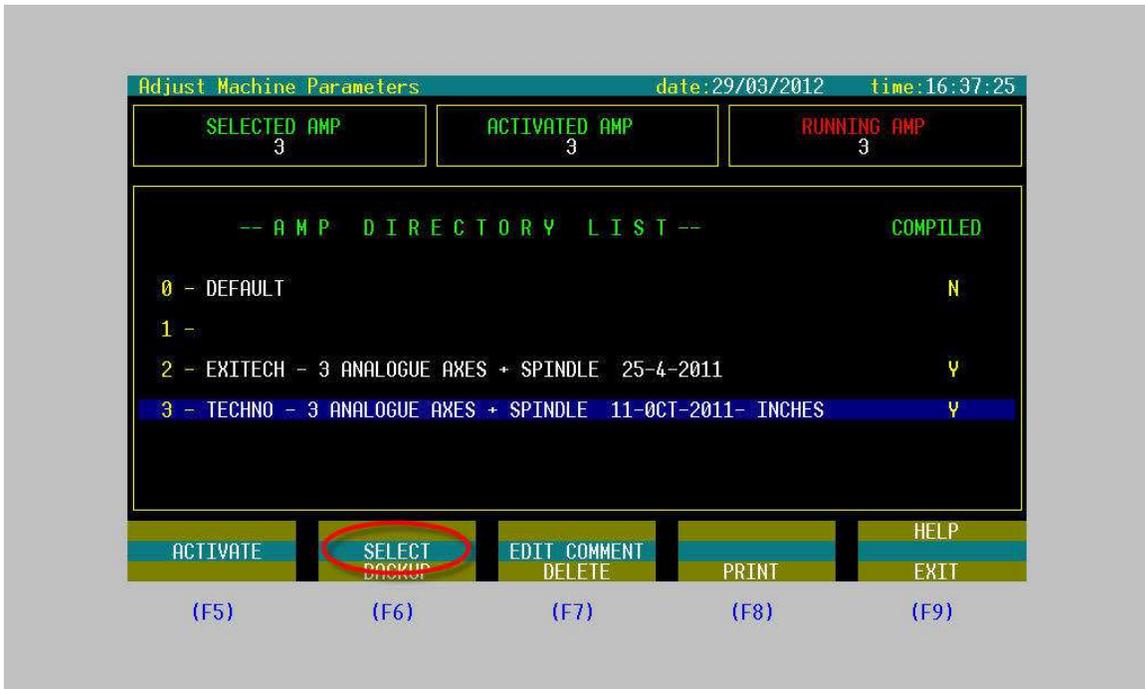
Click on the 'CNC Vision' icon to bring up the controller screen.



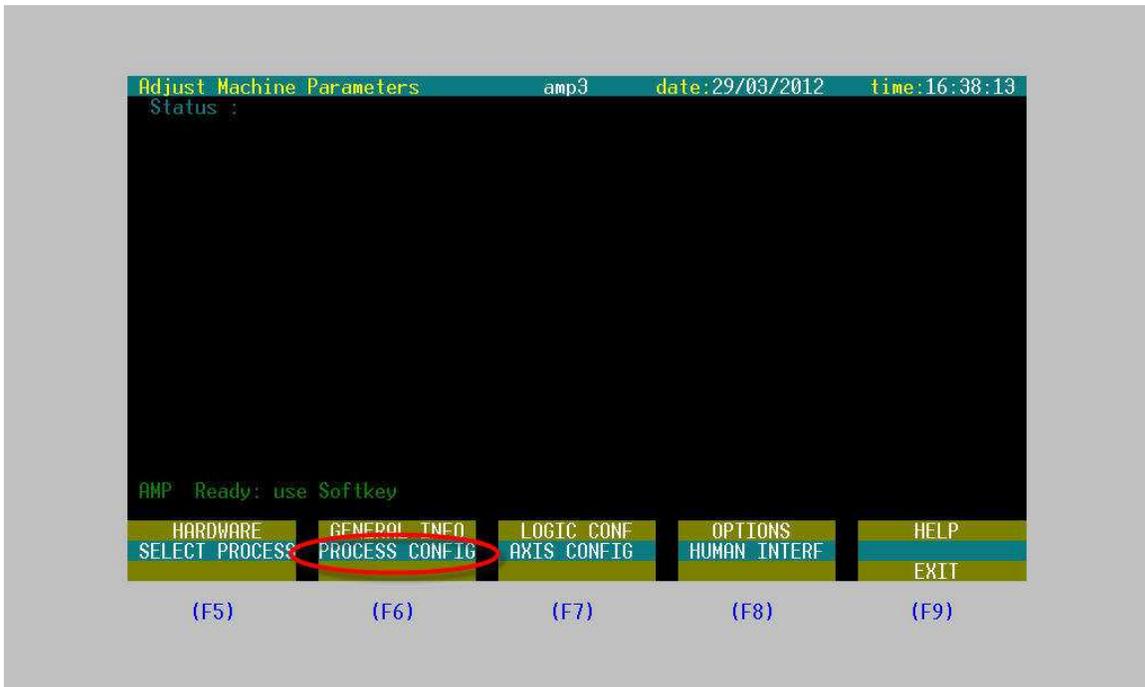
Hit F4 to go to the top menu. Use F10 to move the highlight bar until it is on the bottom line, and then hit F9 to go to the 'Utility' menu.



Go to the 'AMP' menu.



Hit 'Select' to activate the current configuration.



Go to 'Process Config'

```
Adjust Machine Parameters    amp3    date:29/03/2012    time:16:38:31
Status : Process number 1

GTL      VIRTUAL AXES  E PARAMETERS  USER VARIABLES  HELP
PROC CHAR  PROC VARIABLES  PROGR CHAR    M CODES        G CODES
(F5)      (F6)          (F7)          (F8)          (F9)
EXIT
```

Go to 'User Variables'

```
Adjust Machine Parameters    amp3    date:29/03/2012    time:16:38:50
Status : Process number 1

-- USER VARIABLES SELECTION --
name 1 : !PKTPOS.LR          elements 1 : 8
name 2 : !YPKTPOS.LR        elements 2 : 8
name 3 : !ZPKTPOS.LR        elements 3 : 8
name 4 :                      elements 4 : 0
name 5 : !ZPRBTBL.LR        elements 5 : 1
name 6 : !XPRBPOS.LR        elements 6 : 1
name 7 : !YPRBPOS.LR        elements 7 : 1
name 8 :                      elements 8 : 0
name 9 :                      elements 9 : 0
name 10 :                     elements 10 : 0
name 11 :                     elements 11 : 0
name 12 :                     elements 12 : 0
name 13 :                     elements 13 : 0
name 14 :                     elements 14 : 0
name 15 :                     elements 15 : 0
- select variable name :
page 1 of 2

GTL      VIRTUAL AXES  E PARAMETERS  USER VARIABLES  HELP
PROC CHAR  PROC VARIABLES  PROGR CHAR    M CODES        G CODES
(F5)      (F6)          (F7)          (F8)          (F9)
EXIT
```

This is where the coordinates will be stored.

```

Adjust Machine Parameters      amp3      date:29/03/2012      time:16:39:20
Status : Process number 1

  -- USER  VARIABLES  SELECTION  --

name 1 : !PKTPOS.LR          elements 1 : 8
name 2 : !YPKTPOS.LR        elements 2 : 8
name 3 : !ZPKTPOS.LR        elements 3 : 8
name 4 :                      elements 4 : 0
name 5 : !ZPRBTBL.LR        elements 5 : 1
name 6 : !XPRBPOS.LR        elements 6 : 1
name 7 : !YPRBPOS.LR        elements 7 : 1
name 8 :                      elements 8 : 0
name 9 :                      elements 9 : 0
name 10 :                    elements 10 : 0
name 11 :                    elements 11 : 0
name 12 :                    elements 12 : 0
name 13 :                    elements 13 : 0
name 14 :                    elements 14 : 0
name 15 :                    elements 15 : 0
- select variable name : !PKTPOS.LR

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GTL      VIRTUAL AXES  E PARAMETERS  USER VARIABLES  HELP
PROC CHAR  PROG VARIABLES  PROG CHAR  N CODES  G CODES
(F5)      (F6)      (F7)      (F8)      (F9)
EXIT

```

Type the directory you would like to edit and hit 'Enter'.

```

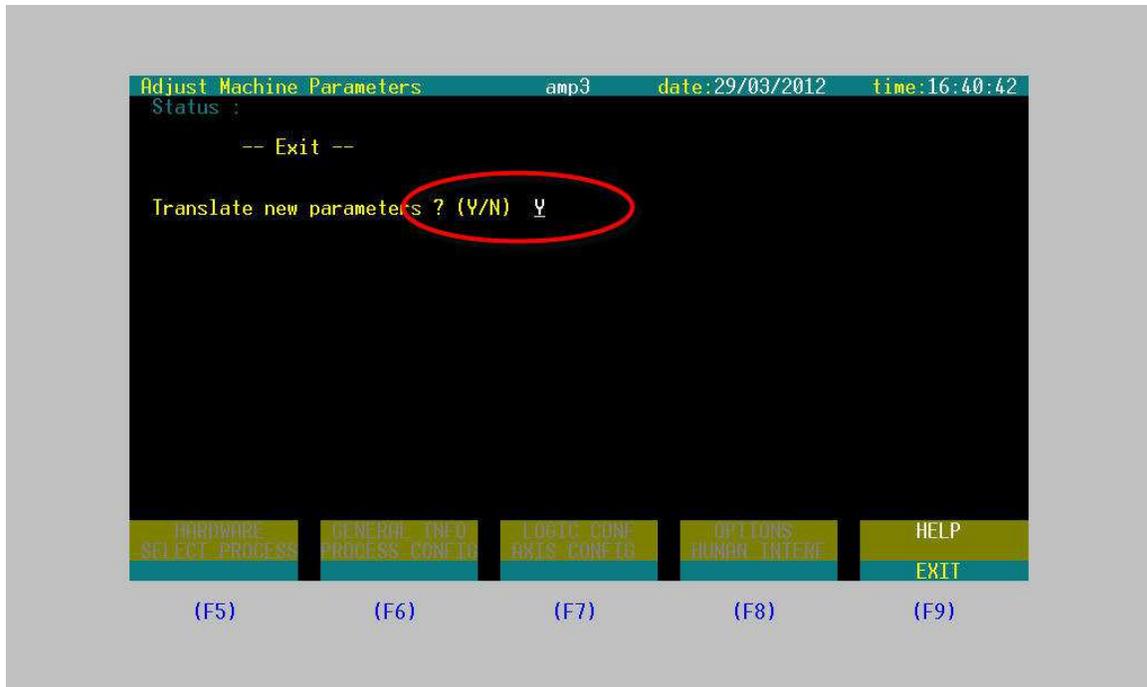
Adjust Machine Parameters      amp3      date:29/03/2012      time:16:39:40
Status : Process number 1
User Variable name !PKTPOS.LR
USER  VARIABLES  SET UP --
value (-99999.99999...+99999.99999)
- 0 : 5.90120
- 1 : 11.07970
- 2 : 16.20080
- 3 : 21.31420
- 4 : 26.45600
- 5 : 31.56820
- 6 : 36.71560
- 7 : 41.84930

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GTL      VIRTUAL AXES  E PARAMETERS  USER VARIABLES  HELP
PROC CHAR  PROG VARIABLES  PROG CHAR  N CODES  G CODES
(F5)      (F6)      (F7)      (F8)      (F9)
EXIT

```

Enter the numbers you wrote down earlier. '!PKTPOS.LR' will be for your X coordinates, '!YPKTPOS.LR' is for Y, and '!ZPKTPOS.LR' is for Z. Use the arrows on the keyboard to move from line to line. Hit 'Enter' when done.



Navigate back through the menus by hitting 'Exit'. When prompted to 'Translate New Parameters', type 'Y' and hit 'Enter'.

Reminder: You will have to re-start the controller for these changes to take effect.

IMPORTANT!! DO NOT exit out of the AMP settings without determining if you want to 'Translate New Parameters'. This could result in the controller settings not being compiled – which would mean that the machine WILL NOT run. Even if you say 'N', that's fine. However, the changes you made will not be saved.