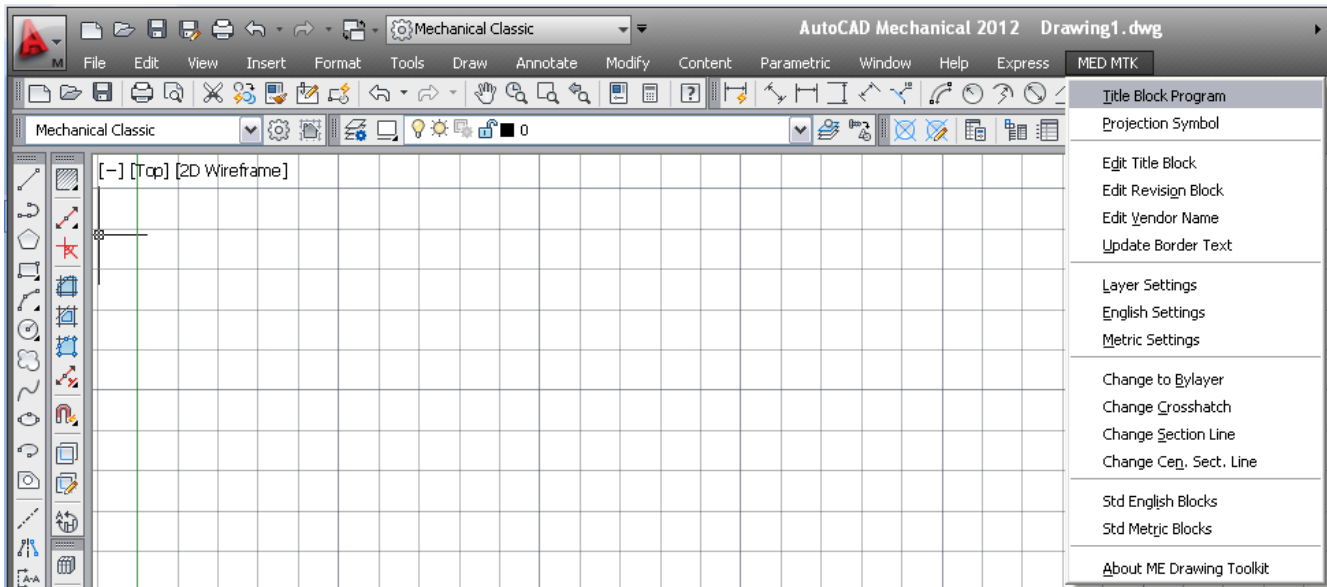
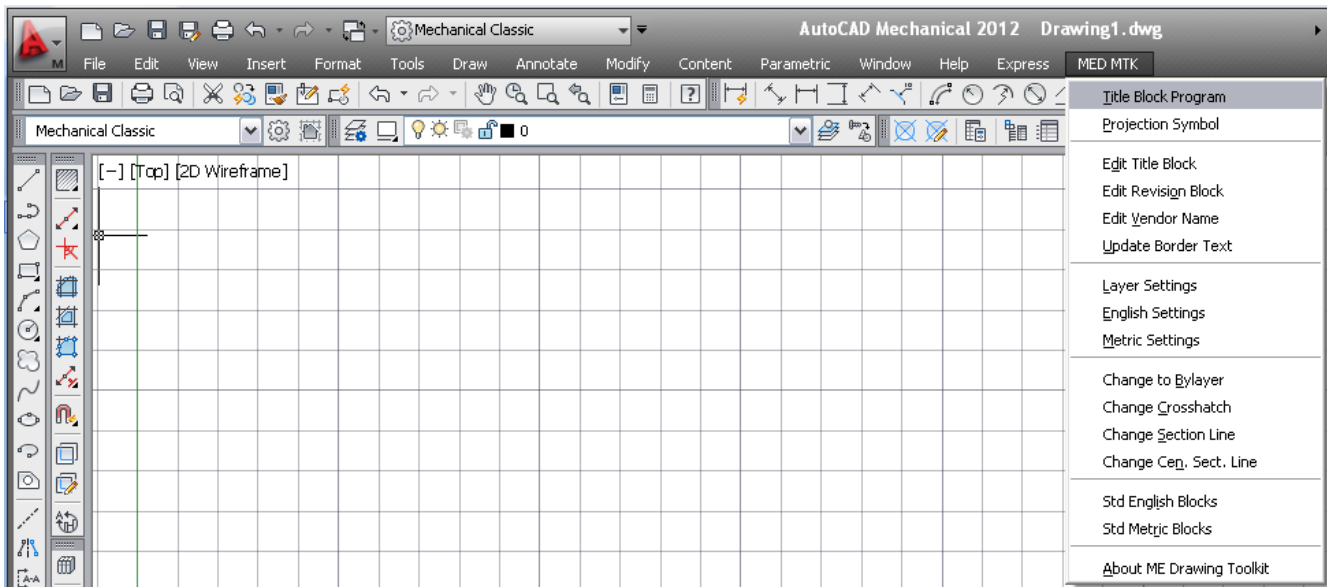


# Manufacturing Engineering Drawing Toolkit for AutoCAD

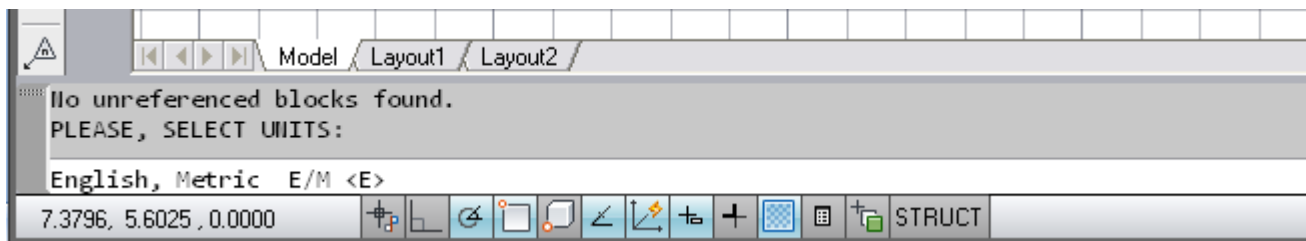
User Interface—Drop down menu options



## Title Block Program

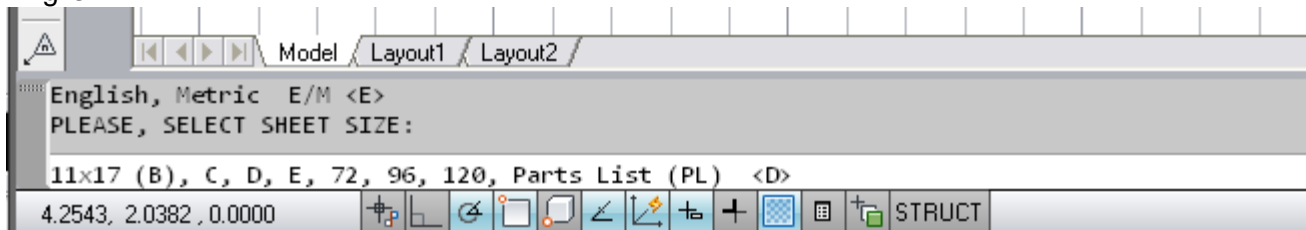


Opens a Command line dialog in the lower left corner for building a drawing sheet  
Identify measuring units

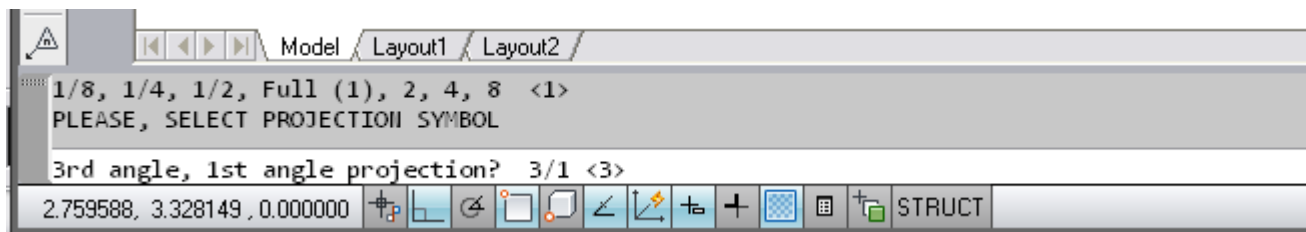
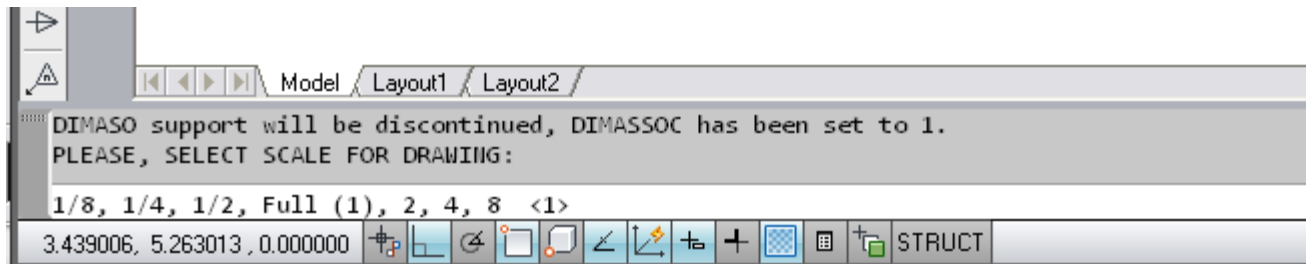
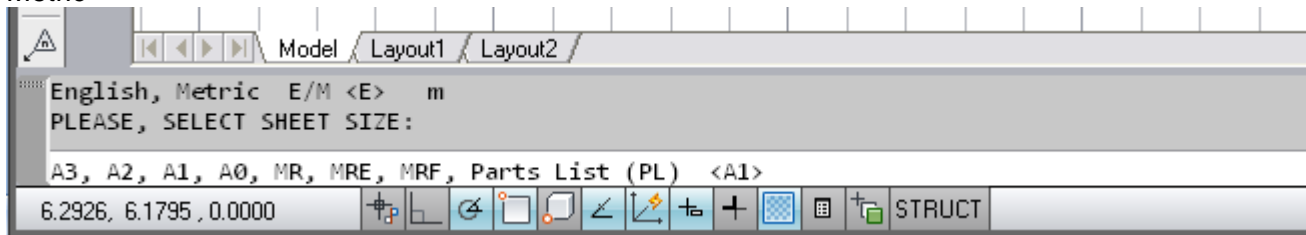


## Select Sheet Size

### English



### Metric





### Title Block data entry window prompt 1

**Edit Attributes**

Block name: ETITLEBLK

PREFIX - DRAWING NUMBER - SHEET

No Entry Req'd (SHEET)

No Entry Req'd (SHTS)

No Entry Req'd (PLANT)

First Line of Description

Second Line of Description

Third Line of Description

Design Approved By

OK Cancel Previous Next Help

(ETITLEBLK for English MTITLEBLK for Metric)

No data entry is required for SHEET, SHTS, and PLANT. These are placeholders to facilitate alignment of the of legacy Delphi title block data to the Nexteer title block.

### Title Block data entry window prompt 2

**Edit Attributes**

Block name: ETITLEBLK

Drawn By

Drawing Checked By

Drawing Scale

Date Drawing was Checked

Drawing Date

Part Number 1

Part Number 2

Part Number 3

OK Cancel Previous Next Help

(ETITLEBLK for English MTITLEBLK for Metric)

Title Block data entry window prompt 3

**Edit Attributes**

Block name: ETITLEBLK

Drawing Checked By

Drawing Scale

Date Drawing was Checked

Drawing Date

Part Number 1

Part Number 2

Part Number 3

Part Number 4

OK Cancel Previous Next Help

(ETITLEBLK for English MTITLEBLK for Metric)

Revision Block data entry window prompt 1

**Edit Attributes**

Block name: EREVBLK

Revision Symbol (Line 1)

Detail Number

One Line of Change

1st of Two Lines

2nd of Two Lines

Drawn By

Checked By

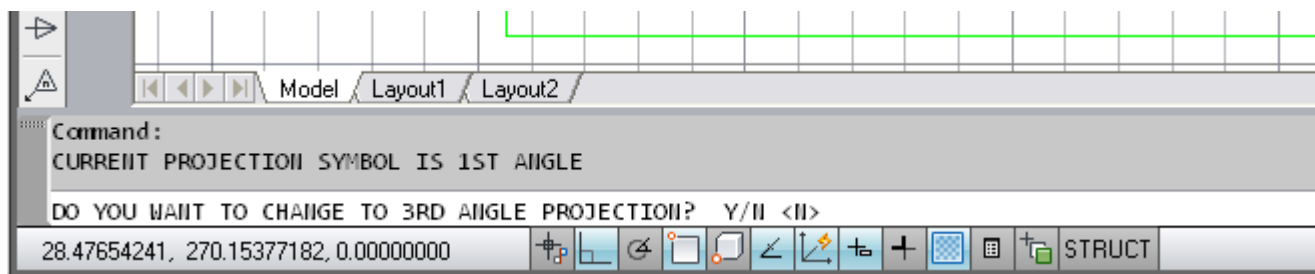
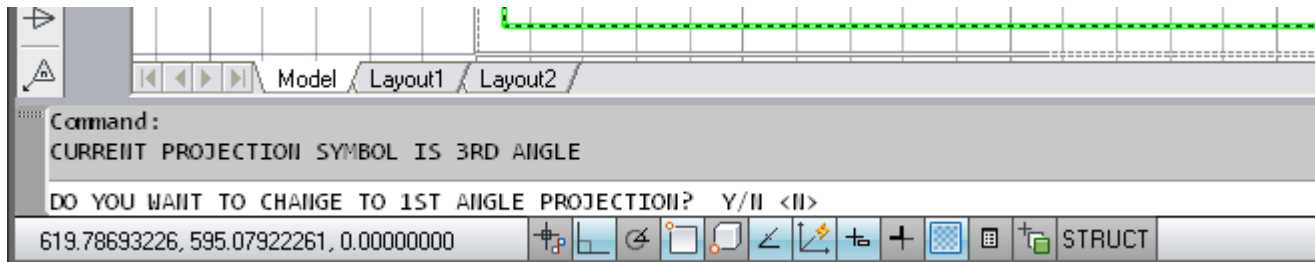
Drawn Date

OK Cancel Previous Next Help

(EREVBLK for English MREVBLK for Metric)

## Projection Symbol

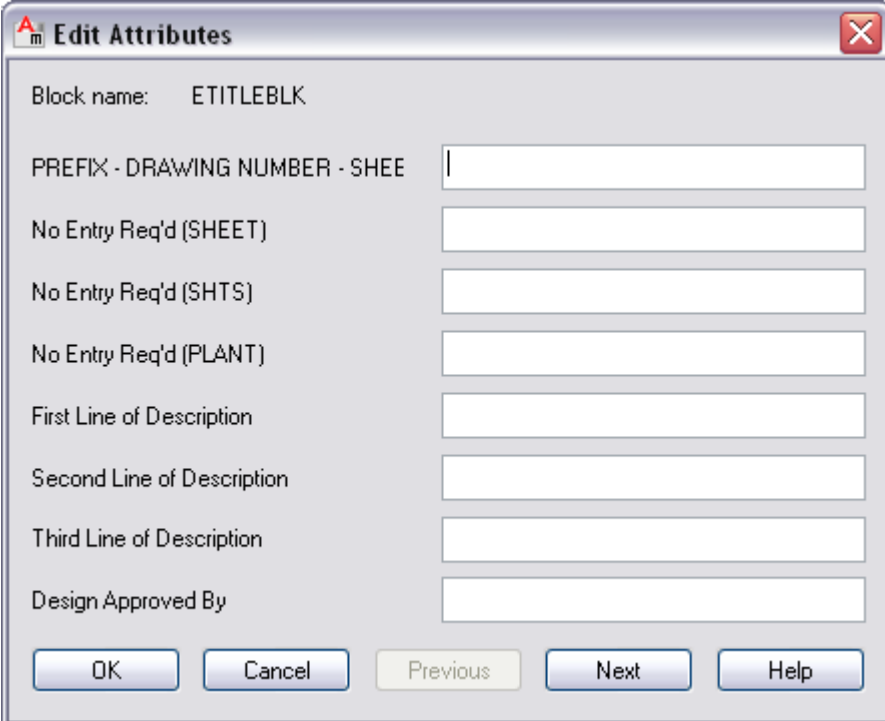
This function swaps the projection symbol in a ME Drawing Title Block sheet between First and Third Angle Projection.



## Edit Title Block

This function allows modification of title block parameters on drawing templates created with the AutoCAD ME Drawing Toolkit.

Edit Title Block--Screen 1 of 3



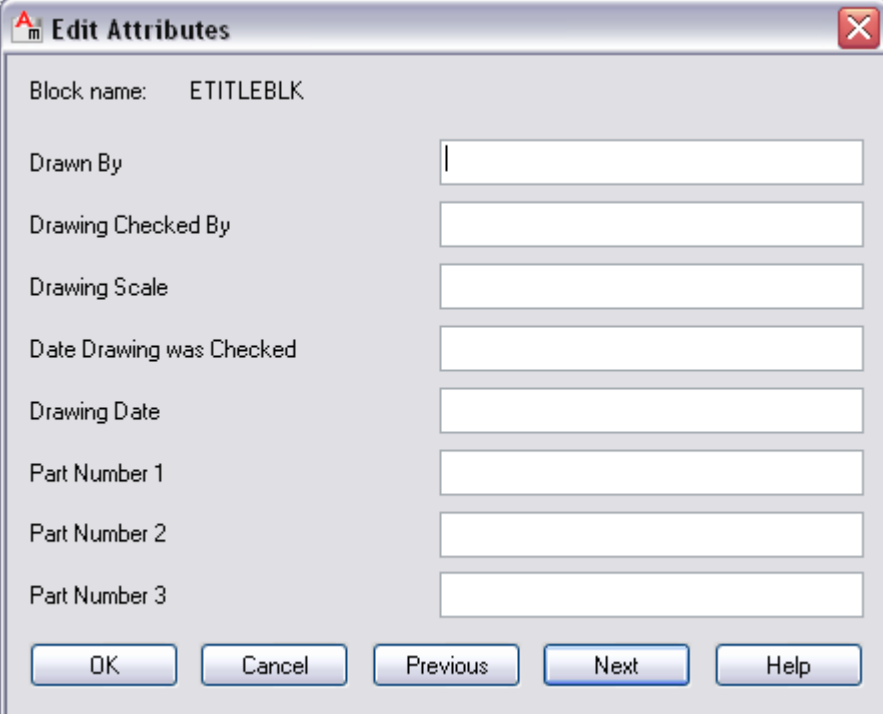
The screenshot shows a Windows-style dialog box titled "Edit Attributes" with a close button (X) in the top right corner. The dialog contains the following fields and controls:

- Block name: ETITLEBLK
- PREFIX - DRAWING NUMBER - SHEET: A text input field with a cursor.
- No Entry Req'd (SHEET): A text input field.
- No Entry Req'd (SHTS): A text input field.
- No Entry Req'd (PLANT): A text input field.
- First Line of Description: A text input field.
- Second Line of Description: A text input field.
- Third Line of Description: A text input field.
- Design Approved By: A text input field.
- Buttons at the bottom: OK, Cancel, Previous (disabled), Next, and Help.

(ETITLEBLK for English MTITLEBLK for Metric)

No data entry is required for SHEET, SHTS, and PLANT. These are placeholders to facilitate alignment of the of legacy Delphi title block data to the Nexteer title block.

## Edit Title Block--Screen 2 of 3

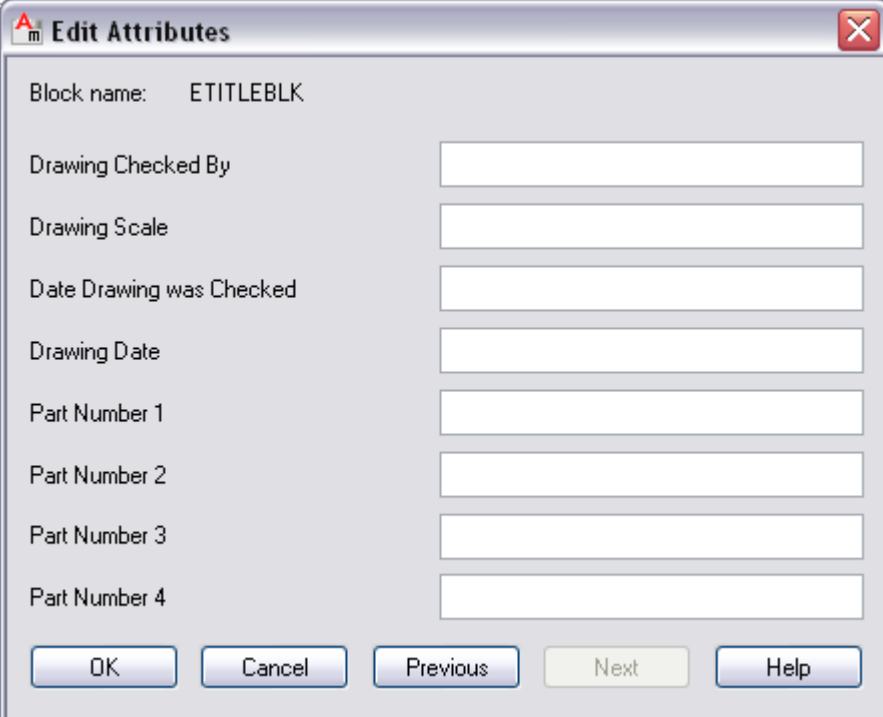


The dialog box is titled "Edit Attributes" with a red 'X' button in the top right corner. It contains the following fields and buttons:

- Block name: ETITLEBLK
- Drawn By: [text box]
- Drawing Checked By: [text box]
- Drawing Scale: [text box]
- Date Drawing was Checked: [text box]
- Drawing Date: [text box]
- Part Number 1: [text box]
- Part Number 2: [text box]
- Part Number 3: [text box]
- Buttons: OK, Cancel, Previous, Next, Help

(ETITLEBLK for English MTITLEBLK for Metric)

## Edit Title Block--Screen 3 of 3



The dialog box is titled "Edit Attributes" with a red 'X' button in the top right corner. It contains the following fields and buttons:

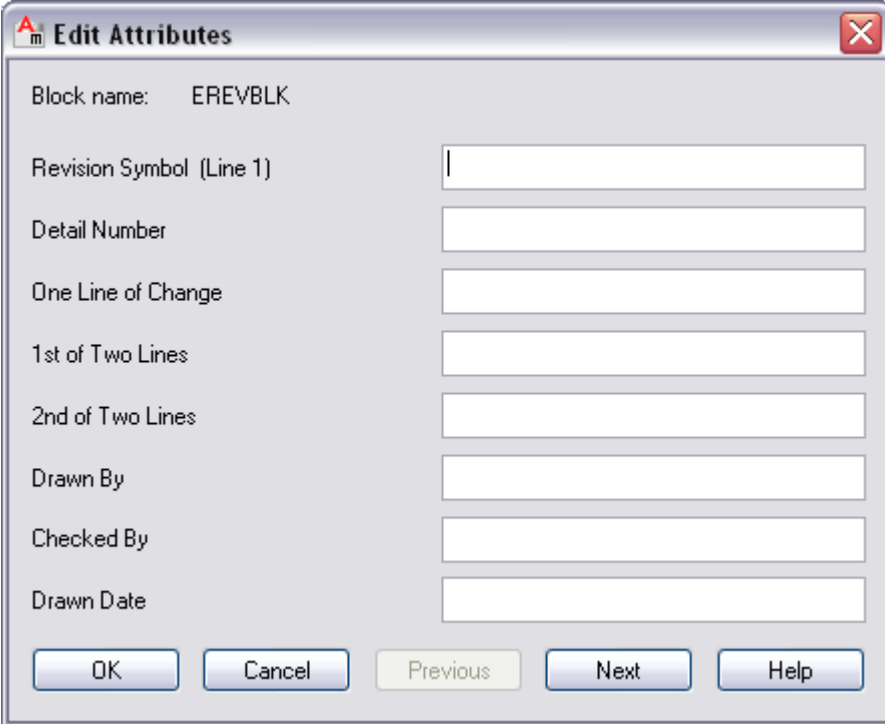
- Block name: ETITLEBLK
- Drawing Checked By: [text box]
- Drawing Scale: [text box]
- Date Drawing was Checked: [text box]
- Drawing Date: [text box]
- Part Number 1: [text box]
- Part Number 2: [text box]
- Part Number 3: [text box]
- Part Number 4: [text box]
- Buttons: OK, Cancel, Previous, Next, Help

(ETITLEBLK for English MTITLEBLK for Metric)



## Edit Revision Block

This function allows modification of revision block parameters on drawing templates created with the AutoCAD ME Drawing Toolkit.



The screenshot shows a Windows-style dialog box titled "Edit Attributes" with a standard red 'X' close button in the top right corner. The dialog contains a list of attributes for a block named "EREVBLK". Each attribute is followed by a text input field. The attributes are: "Block name:" (pre-filled with "EREVBLK"), "Revision Symbol (Line 1)", "Detail Number", "One Line of Change", "1st of Two Lines", "2nd of Two Lines", "Drawn By", "Checked By", and "Drawn Date". At the bottom of the dialog, there are five buttons: "OK", "Cancel", "Previous" (which is disabled), "Next", and "Help".

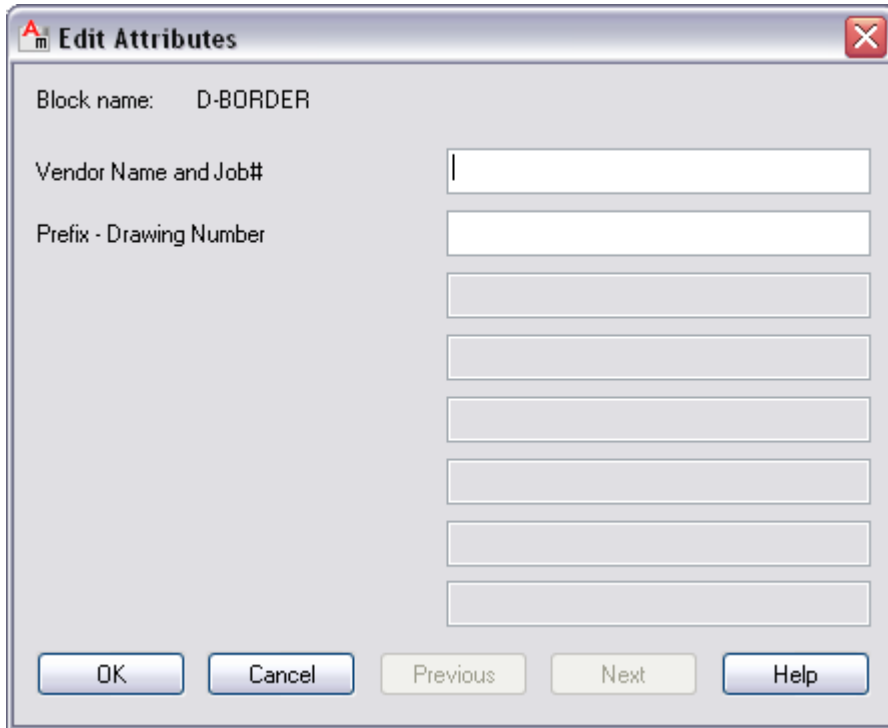
Attribute	Value
Block name:	EREVBLK
Revision Symbol (Line 1)	
Detail Number	
One Line of Change	
1st of Two Lines	
2nd of Two Lines	
Drawn By	
Checked By	
Drawn Date	

Buttons: OK, Cancel, Previous, Next, Help

(EREVBLK for English MREVBLK for Metric)

## Edit Vendor Name

This function allows modification of drawing border parameters on drawing templates created with the AutoCAD ME Drawing Toolkit.



The 'Edit Attributes' dialog box is shown with the following fields and buttons:

- Block name: D-BORDER
- Vendor Name and Job#: [Text Input Field]
- Prefix - Drawing Number: [Text Input Field]
- [Text Input Field]
- [Text Input Field]
- [Text Input Field]
- [Text Input Field]
- [Text Input Field]
- [Text Input Field]
- [Text Input Field]
- Buttons: OK, Cancel, Previous, Next, Help

(Variable BORDER depending on sheet size; D-size shown:D-BORDER)

## Update Border Text

This function refreshes arguments of the drawing border parameters on drawing templates created with the AutoCAD ME Drawing Toolkit. Upon completion the pop-up window below is shown.



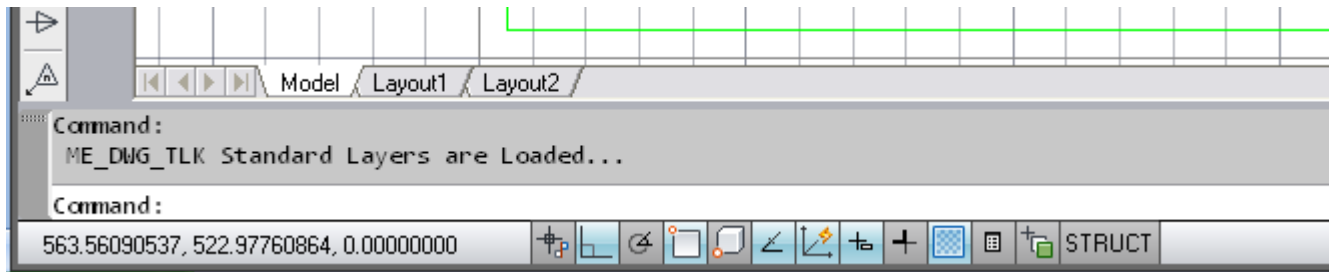
The 'AutoCAD Message' dialog box displays the message:

BORDER TEXT UPDATE COMPLETE

With an OK button at the bottom.

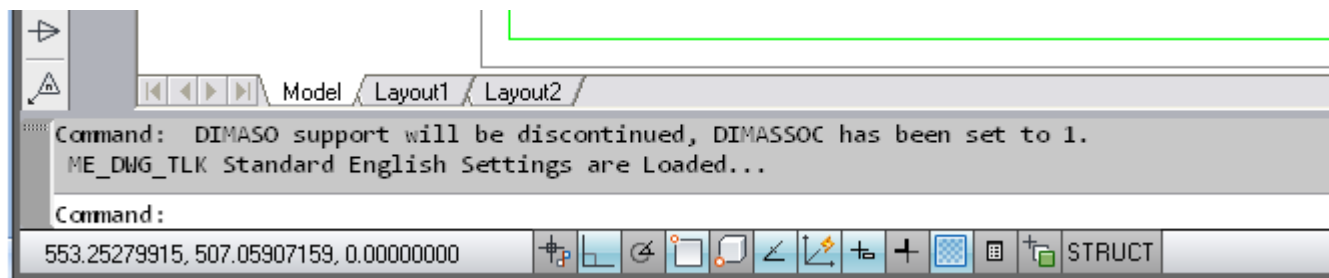
## Layer Settings (See Appendix)

The Layer Settings function loads the defined standard layers, colors, linetypes detailed in the AutoCAD Manufacturing Engineering Standards document.



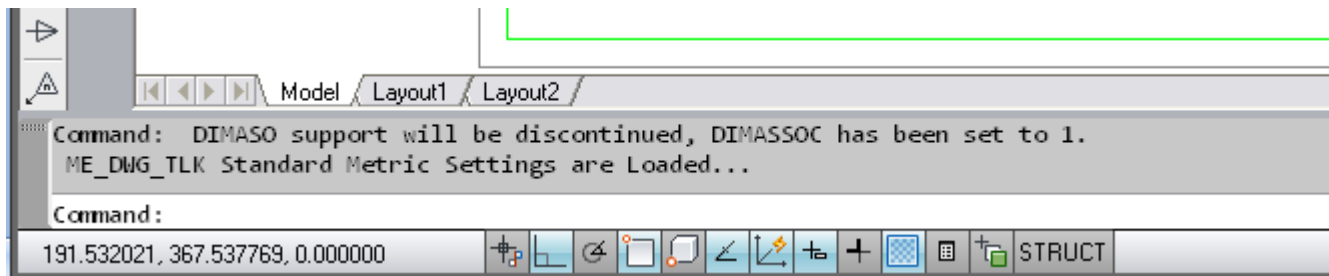
## English Settings (See Appendix)

The English Settings function loads variables for the defined standard English settings detailed in the AutoCAD Manufacturing Engineering Standards document.



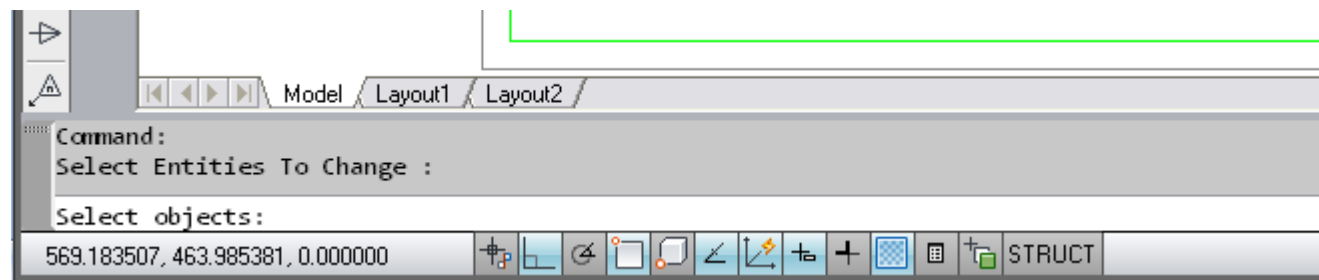
## Metric Settings (See Appendix)

The Metric Settings function loads variables for the defined standard Metric settings detailed in the AutoCAD Manufacturing Engineering Standards document.



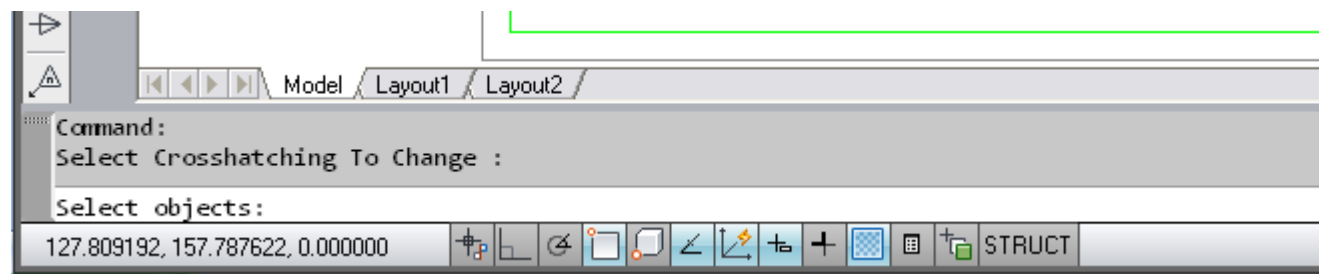
## Change to Bylayer

This function changes properties of selected objects to bylayer.



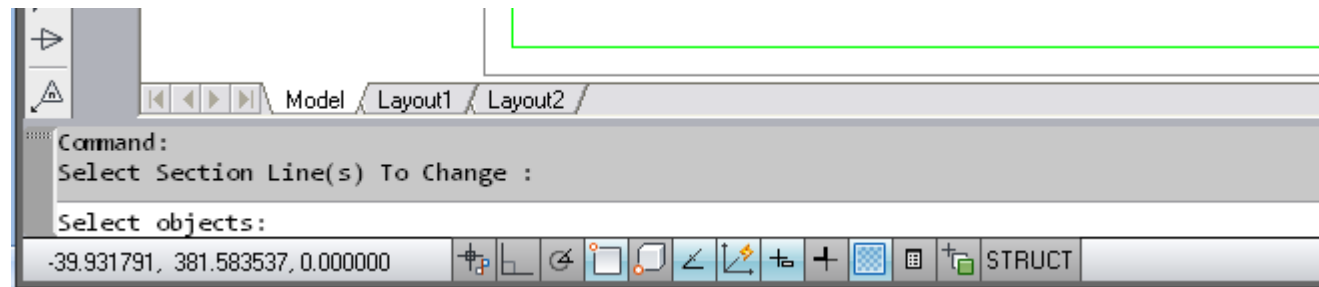
## Change Crosshatch

This function changes properties of selected objects crosshatching.



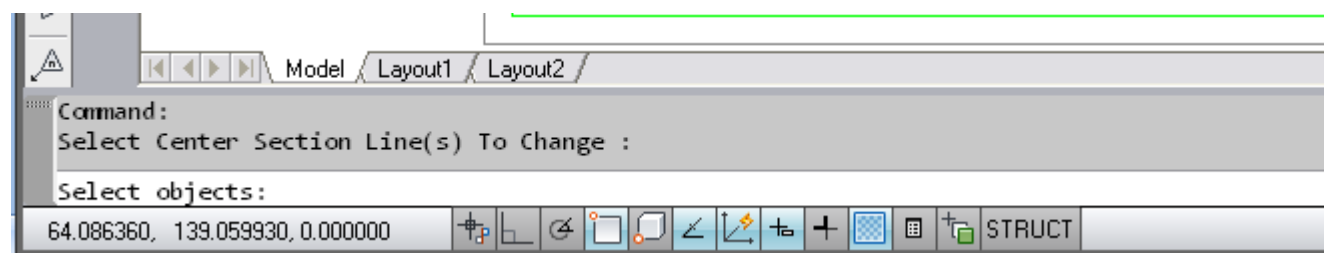
## Change Section Line

This function changes properties of selected section lines(s).



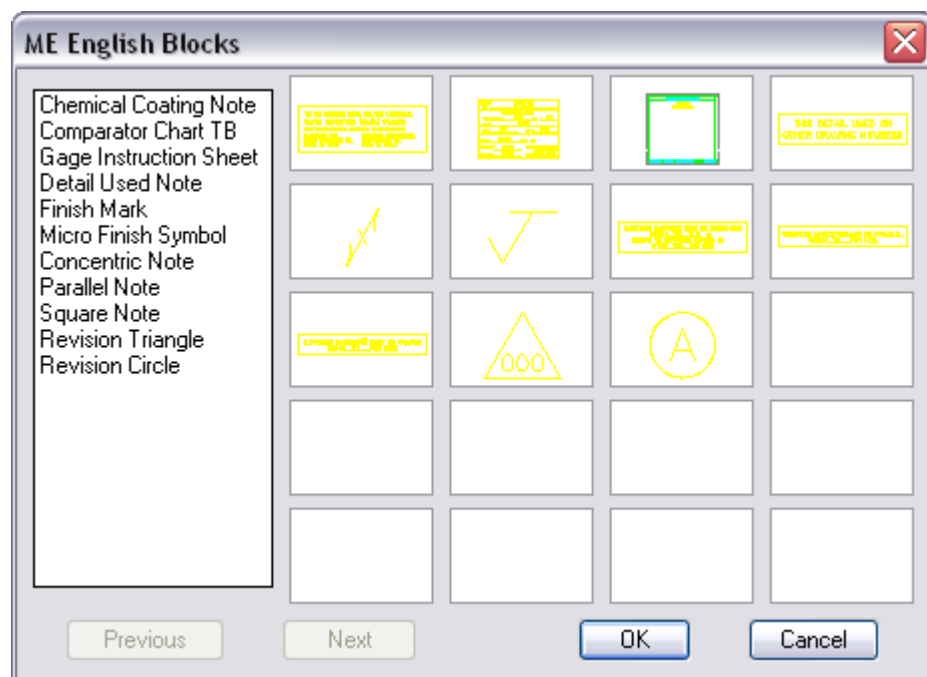
## Change Cen. Sect. Line

This function changes properties of selected center section line.



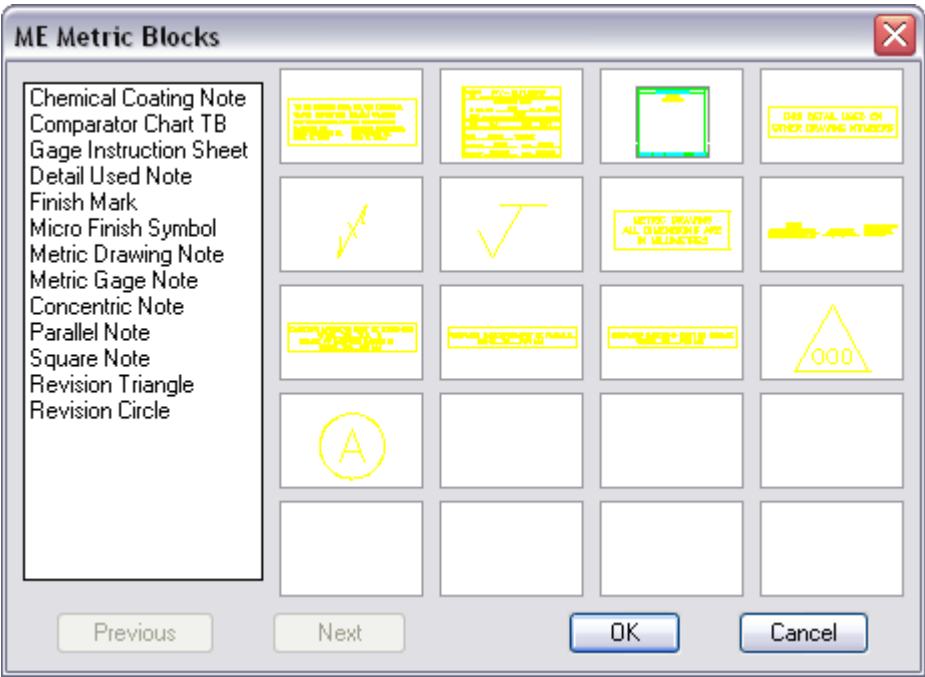
## Standard English Blocks

The menu allows insertion of selected standardized defined English drawing blocks.



**Standard Metric Blocks**

The menu allows insertion of selected standardized defined Metric drawing blocks.



**About ME Drawing Toolkit**

Displays the loaded version of the ME Drawing Toolkit



## APPENDIX

### AutoCAD Default Layer Settings (**Layer Settings**)

```
(defun setlayers ()
  (setq cdeo (getvar "CMDECHO"))
  (setvar "cmdecho" 0)
  (command "._layer" "_C" "7" "0"
    "M" "HID" "C" "6" "HID" "LT" "HIDDEN" "HID"
    "M" "CEN" "C" "4" "CEN" "LT" "CENTER" "CEN"
    "M" "CUT" "C" "135" "CUT" "LT" "PHANTOM" "CUT"
    "M" "CCUT" "C" "135" "CCUT" "LT" "CENTER" "CCUT"
    "M" "DIMS" "C" "2" "DIMS" "LT" "CONTINUOUS" "DIMS"
    "M" "HATCH" "C" "5" "HATCH" "LT" "CONTINUOUS" "HATCH"
    "M" "OBJ_BRK" "C" "1" "OBJ_BRK" "LT" "CONTINUOUS" "OBJ_BRK"
    "M" "DIM_BRK" "C" "2" "DIM_BRK" "LT" "CONTINUOUS" "DIM_BRK"
    "M" "REF" "C" "202" "REF" "LT" "PHANTOM" "REF"
    "M" "PART" "C" "12" "PART" "LT" "PHANTOM2" "PART"
    "M" "PART2" "C" "30" "PART2" "LT" "PHANTOM2" "PART2"
    "M" "PART3" "C" "190" "PART3" "LT" "PHANTOM2" "PART3"
    "M" "VIEW_BNDS" "C" "253" "VIEW_BNDS" "LT" "PHANTOM" "VIEW_BNDS"
    "M" "BORDER" "C" "90" "BORDER" "LT" "CONTINUOUS" "BORDER"
    "M" "CONTROLS" "C" "7" "CONTROLS" "LT" "CONTINUOUS" "CONTROLS"
    "M" "BORDER_TXT" "C" "130" "BORDER_TXT" "LT" "CONTINUOUS" "BORDER_TXT"
    "M" "OBJ" "C" "3" "OBJ" "LT" "CONTINUOUS" "OBJ" "")
  (setvar "cmdecho" cdeo)
  (princ)
)
```

### AutoCAD Default English Parameters (**English Settings**)

```
(defun setenglish ()
  (setq cdeo (getvar "CMDECHO"))
  (setvar "cmdecho" 0)
  (setvar "aunits" 1)
  (setvar "auprec" 2)
  (setvar "blipmode" 0)
  (setvar "cecolor" "bylayer")
  (setvar "celtype" "bylayer")
  (setvar "chamfera" 0.125)
  (setvar "chamferb" 0.125)
  (setvar "cmlscale" 0.5)
  (setvar "coords" 1)
  (setvar "dimalt" 0)
  (setvar "dimaltd" 2)
  (setvar "dimaltf" 25.4)
  (setvar "dimaso" 1)
  ... 2002 vars
  ... (setvar "dimassoc" 1)
  ... (setvar "dimlwd" -1)
  ... (setvar "dimlwe" -1)
  ... 2002 vars
  (setvar "dimasz" 0.125)
  (setvar "dimcen" 0.0625)
```

```

(setvar "dimclrd" 256)
(setvar "dimclre" 256)
(setvar "dimclrt" 256)
(setvar "dimdli" 0.25)
(setvar "dimexe" 0.09375)
(setvar "dimexo" 0.0625)
(setvar "dimgap" 0.0625)
(setvar "dimlfac" 1.000)
(setvar "dimrnd" 0.0000)
(setvar "dimsho" 1)
(setvar "dimtad" 0)
(setvar "dimtih" 1)
(setvar "dimtoh" 1)
(setvar "dimtxt" 0.125)
(setvar "dimtzin" 4)
(setvar "dimunit" 2)
(setvar "dimzin" 4)
(setvar "dragmode" 2)
(setvar "donutid" 0.0)
(setvar "donutod" 0.125)
(setvar "expert" 4)
(setvar "fillmode" 1)
(setvar "filletrad" 0.125)
(setvar "gridmode" 0)
; (setvar "gridunit" '(1.0 1.0))
(setvar "highlight" 1)
(setvar "insbase" '(0.0 0.0 0.0))
(setvar "limcheck" 0)
(setvar "lunits" 2)
(setvar "luprec" 8)
(setvar "menuecho" 1)
(setvar "measureinit" 0)
(setvar "measurement" 0)
(setvar "mirrtext" 0)
(setvar "orthomode" 1)
(setvar "qtextmode" 0)
(setvar "regenmode" 1)
(setvar "sketchinc" 0.1000)
(setvar "snapbase" '(0 0))
(setvar "snapmode" 0)
(setvar "snapstyl" 0)
(setvar "snapunit" '(0.125 0.125))
(setvar "ucsicon" 0)
(setvar "unitmode" 0)
(command "._viewres" "_Y" "2000")
(command "._style" "standard" "simplex" "" "" "" "" "" "")
(setvar "cmdecho" cdeo)
(princ)
)

```



## AutoCAD Default Metric Parameters (**Metric Settings**)

```
(defun setmetric ()  
  (setq cdeo (getvar "CMDECHO"))  
  (setvar "cmdecho" 0)  
  (setvar "aunits" 1)  
  (setvar "auprec" 2)  
  (setvar "blipmode" 0)  
  (setvar "cecolor" "bylayer")  
  (setvar "celtype" "bylayer")  
  (setvar "chamfera" 3.000)  
  (setvar "chamferb" 3.000)  
  (setvar "cmlscale" 12.5)  
  (setvar "coords" 1)  
  (setvar "dimalt" 0)  
  (setvar "dimaltd" 2)  
  (setq altf (/ 1.0 25.4))  
  (setvar "dimaltf" altf)  
  (setvar "dimaso" 1)  
  ;;; 2002 vars  
  ;;; (setvar "dimassoc" 1)  
  ;;; (setvar "dimlwd" -1)  
  ;;; (setvar "dimlwe" -1)  
  ;;; 2002 vars  
  (setvar "dimasz" 3.000)  
  (setvar "dimcen" 1.500)  
  (setvar "dimclrd" 256)  
  (setvar "dimclre" 256)  
  (setvar "dimclrt" 256)  
  (setvar "dimdli" 6.000)  
  (setvar "dimexe" 2.000)  
  (setvar "dimexo" 1.500)  
  (setvar "dimgap" 1.500)  
  (setvar "dimlfac" 1.000)  
  (setvar "dimrnd" 0.0000)  
  (setvar "dimsho" 1)  
  (setvar "dimtad" 0)  
  (setvar "dimtih" 1)  
  (setvar "dimtoh" 1)  
  (setvar "dimtxt" 3.000)  
  (setvar "dimtzin" 0)  
  (setvar "dimunit" 2)  
  (setvar "dimzin" 0)  
  (setvar "dragmode" 2)  
  (setvar "donutid" 0.0)  
  (setvar "donutod" 3.000)  
  (setvar "expert" 4)  
  (setvar "fillmode" 1)  
  (setvar "filletrad" 3.000)  
  (setvar "gridmode" 0)  
  ; (setvar "gridunit" '(25 25))  
  (setvar "highlight" 1)  
  (setvar "insbase" '(0.0 0.0 0.0))
```

```

(setvar "limcheck" 0)
(setvar "lunits" 2)
(setvar "luprec" 6)
(setvar "menuecho" 1)
(setvar "measureinit" 1)
(setvar "measurement" 1)
(setvar "mirrtext" 0)
(setvar "orthomode" 1)
(setvar "qtextmode" 0)
(setvar "regenmode" 1)
(setvar "sketchinc" 1.000)
(setvar "snapbase" '(0 0))
(setvar "snapmode" 0)
(setvar "snapstyl" 0)
(setvar "snapunit" '(3.0 3.0))
(setvar "ucsicon" 0)
(setvar "unitmode" 0)
(command "._viewres" "_Y" "2000")
(command "._style" "standard" "simplex" "" "" "" "" "" "" "")
(setvar "cmdecho" cdeo)
(princ)
)

```