Dimension Style Manager

The dimension style box has undergone significant change. The older command ddim is now an alias for dimstyle [acad.pgp]. The DIMSTYLE command invokes Dimension Style Manager. This command is found in the Dimension menu and on the dimension toolbar. As always, the command can be typed in at the command prompt. Either dimstyle or ddim will start the manager.

The new dimstyle manager is visually and functionally more efficient than its predecessor. The main page contains two panes. The left pane is a list of currently loaded dimstyles including the active or current style. (The 'Standard' style is loaded for a new drawing.) The right pane displays a preview of the currently selected style.

Besides Close and Help, there are five command buttons on the main page of the Dimension Style Manager.

- **Set Current**: sets the selected style as the current style
- **New**: create a new style, also used to create children styles
- **Modify**: modify the variables in the current style
- **Override**: temporarily override the settings of certain variables in the current style
- **Compare**: compares two loaded dimstyles

Selecting either New, Modify or Override will bring up the dialogue area of the dimstyle manager.
The dialogue area has six tabs associated with it allowing users to change any of the 66 dimension variables. The design of this new interface is more intuitive and easy to use when designing a new dimension style, or when changing an existing one. Coupled with other changes to the software related to dimensions and dimension styles (Design Center)(Property Manager and right click shortcuts), changing the settings for dimension variables has never been easier.

First and foremost of the improvements in dimension styles is that if a dimension style already exists in another drawing then with Design Center, users can quickly load a dimension style from another file without having to open the drawing. Keep favorite dimstyles in one drawing and load them as needed for new work.

Launch Autocad Design Center; locate the drawing containing the desired dimension style, select dimstyle. This will produce a list of dimstyles in that drawing. Select the style desired, drag and drop the icon from Design Center to the currently active drawing.
Creating New dimstyles, although easy, is not for everyone. If the changes you are going to make are something you want to use all the time then create a new dimension style that meets those needs. If only a few dimensions need to be changed, then properties or other short-cut methods should be used to make the changes. If temporary changes are made to a dimension style, always discard those overrides after use, by setting the parent as current.

For the purpose of definition, a Parent dimension is the currently selected dimension style. Each parent has ‘children’ that represent the categories of dimensions. The children are:

- Linear
- Angular
- Radius
- Diameter
- Ordinate
- Leaders and tolerances

Changes made to a parent affect all children. Changes made to a child do not affect other children in the currently selected parent.

Whenever a new style is created, or when modifying an existing style, the six dimension style tabs are displayed. They are grouped as:

- **Lines and arrows** dimension lines, extension lines, arrowheads, center marks
- **Text** text appearance, text placement, text alignment
- **Fit** fit options, text placement, overall scale, fine tune placement
- **Primary Units** linear, angular
- **Alternate Units** alternate units, placement
- **Tolerances** format, tolerance

These tabs present the dialogue areas for changing the values for most of the 66 dimension variables in Autocad 2002. They are consistently laid out, easy to read, and easy to understand. Whenever a value for a variable is changed, the preview pane will display how the change will impact dimensions. However, not all options are currently functioning, for example, line weight for dimension and extension lines does not update, but all other values on the lines and arrows tab do update in the preview window.

What follows is a brief description of each tab pertaining to the parts of a dimension that are affected by each group of variables. View each page (tab) in the dimension style manager.
The **lines and arrows** tab controls the color, line weight, and spacing of dimension lines and extension lines. The control for 'arrowheads' or how the ends of the dimension lines are represented, including size, and how leader line 'arrows' are drawn is here. Center marks for arcs and circles can be sized, represented as a cross, or with lines, or not at all.

The **Text** tab controls the font, color, and size (height) of dimension text. There are controls for the placement and alignment of text within the dimension.

The **Fit** tab basically answers the question, what should 'give way' when a dimension, as defined, won't fit in the required space?

There is included, a method for manually moving text within a dimension. The overall dimension scale factor is on this tab and the variable for setting the dimscale to scale to a layout. (dimscale=0)
The **Primary Units** tab is the one most likely to be changed for a new dimstyle, or at least for temporary overrides or changes. The unit format is selected from a list containing, scientific, decimal, engineering, architectural, and fractional units, as well as the precision. The decimal separator can be changed, prefixes and suffixes can be added, and the values rounded. There are separate controls for angular dimension format and precision. As with all units, leading and/or trailing zeros can be suppressed.

The **Alternate Units** tab has a switch to turn this feature on, as well as a unit format, precision, multiplier, rounding, prefix/suffix, zero suppressions and placement of the text for alternate units.
The **Tolerance** tab allows display of limits and how they are represented within a dimension. There are five methods including **none**. **Symmetrical** is a single line plus/minus representation of a tolerance. **Deviation** is a dimension followed by a separate plus tolerance and minus tolerance. **Limits** presents a maximum and minimum value in place of the dimension. **Basic** boxes in a dimension. There is a control for the placement of the main dimension aligned to its tolerance, at either the middle, bottom or top.

\[
\begin{align*}
1.0000 \pm 0.2000 & \quad 1.2000 \quad 0.8000 \\
\text{Symmetrical} & \quad \text{Limits} \\
1.0000 +0.2000 & \quad 1.0000 \\
\text{Deviation} & \quad \text{Basic}
\end{align*}
\]
To create a **NEW** dimension style it must be named. The **Create New Dimension Style** box appears. The options are a name for the new style, and an existing style to use as a base for the new style. This ensures that dimensions will work by passing at least default values for all dimension variables to the new style. This box also allows changes to apply to all dimensions (parent) or only to certain dimension types 'children'. Make selections as required and press the continue button.

The dimension variable tabs become available. Make the required changes for each tab and press the **ok** button at the bottom of the dialogue box. You are returned to the Dim Style manager where the style can be set as current or left for later use. The new style has been created and is saved in the drawing (provided the drawing is saved to disk). The **Close** button closes the Dimension Style Dialogue and returns to the drawing editor. If dimensions are not updated automatically, then use the **Update** command, and select the desired dimensions to update to the new style. (Including all)

The **Compare** button is used to view the differences between two dimension styles. Each of the variables that differ from ‘Standard’ are listed for easy comparison.