

John Crawford
Honeywell FM&T
816-997-3495
jrcrawford@kcp.com

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Comments and pictures added by Karen Moore 816-997-4611 kmoore@kcp.com

The table below list new symbol applications that Pro/E does not support. Physical description of the symbols can be found in Figure 3-11 of ASME Y14.5-2009. The table denotes where the symbols should be accessible in Pro/E and the last column shows where the physical construction guidelines are located in ASME Y14.5-2009

Symbol per ASME Y14.5-2009 Figure 3-11 sheet 42	Add symbol to Pro/E Note text Symbol box	Add symbol to Pro/E Geometric Tolerance symbol table	ASME Y14.5-2009 Form & Preparation Figure (sheet 194-196)
Translation	X	X	C4
Tangent Plane		X	C4
Unequally Disposed Profile	X This one never worked, although the symbol is now WF4 but does not put the phantom lines offset	X This is in WF4	C4
Independency	X		C4
Continuous Feature	X		C5
Arc Length	X WF5?		C5
All Over		X	C3
Spotface symbol per para3.3.13	X		C5

Fig. C-3 Form and Proportion of Geometric Dimensioning Symbols

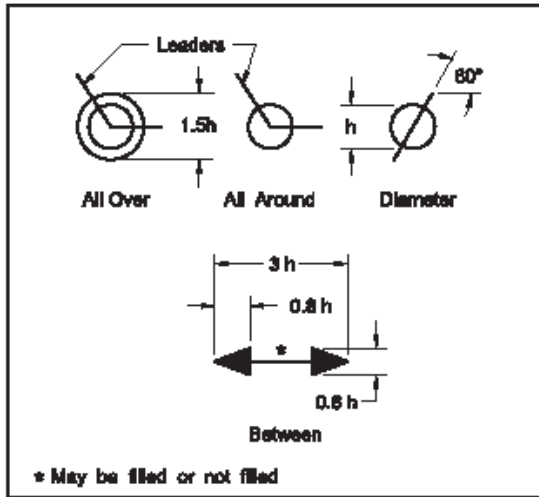
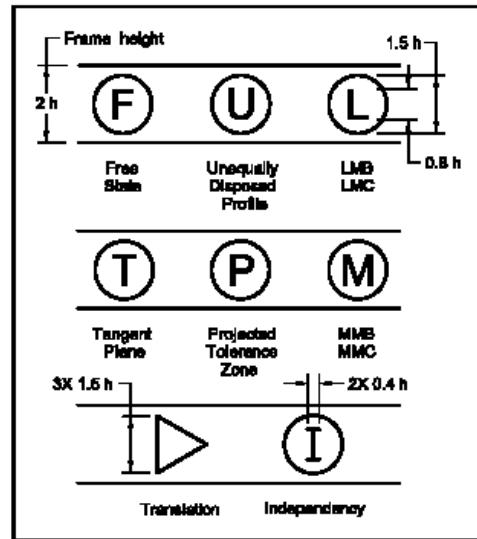
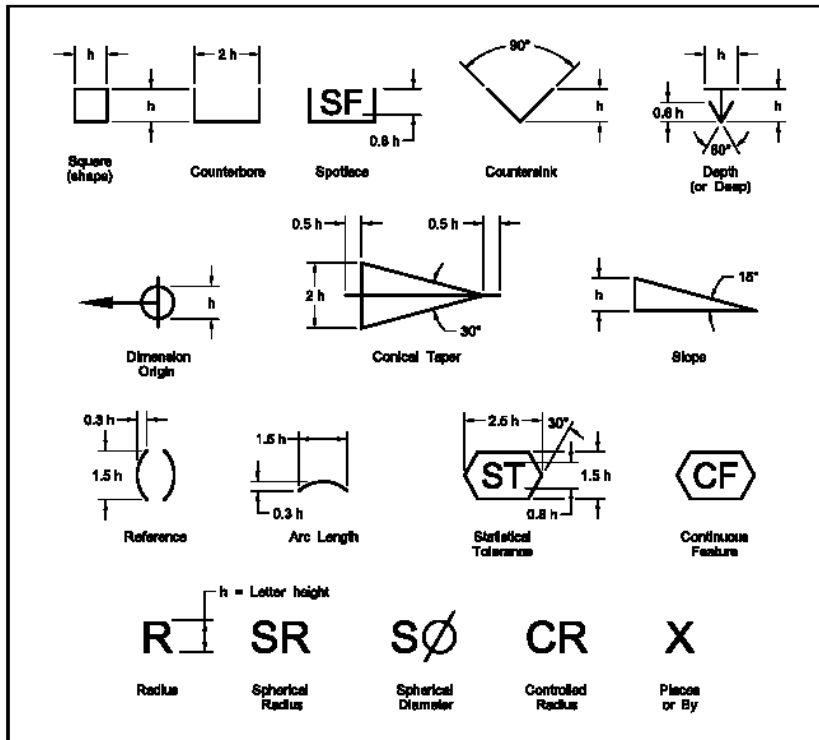


Fig. C-4 Form and Proportion of Modifying Symbols



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Fig. C-5 Form and Proportion of Dimensioning Symbols and Letters



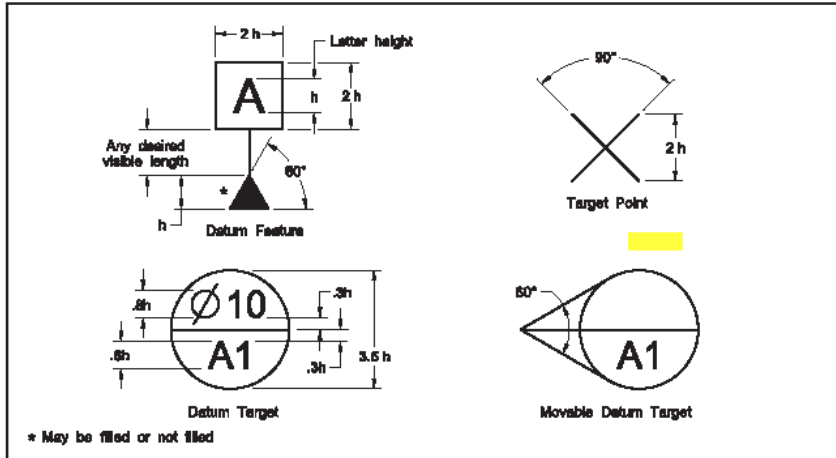
- The Movable Datum Target Symbol as defined in ASME Y14.5-2009 Para 3.3.27 needs to be added to drawing mode in "INSERT/DRAFT DATUM" Symbol

configuration is described in Figure C1, sheet 194.

3.3.27 Movable Datum Target Symbol

This symbol indicates that a datum target is not fixed at its basic location and is free to translate. See Figs. 3-22, 4-47, and 4-49 and para. 4.2.4.6.

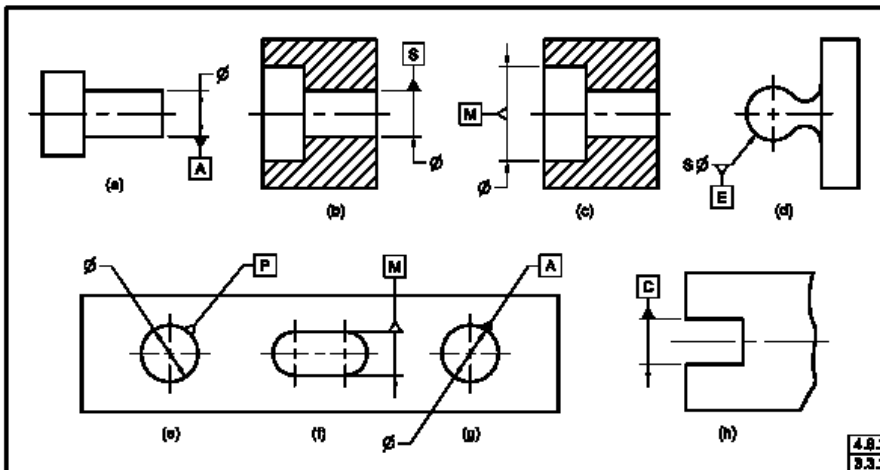
Fig. C-1 Form and Proportion of Datum Symbols



ADDITIONAL COMMENTS:

- The datum attachment methods portrayed in ASME Y14.5-2009 FIGURE 3-4 c and d on sheet 40 are not supported by Pro/E.

Fig. 3-4 Placement of Datum Feature Symbols on Features of Size



- Although the Regardless of Feature Size (RFS) symbol is not a requirement of ASME Y14.5-2009 or ASME Y14.5-1994 the symbol should be left in the Geometric Tolerance Symbol Table as to cover legacy drawings that were created with the symbols. RFS was used on many drawings even though they were created during the 1994 period.

- ASME Y14.5-2009 should not be indorsed as the complex dimensioning standard until authorized by a revision to 9900000, paragraph 3.1 listing the new document and effectively date.
- Dimension Origin Symbol very obscure to find in Pro/E. Must right click dimension leader, select “ARROW STYLE/DOT”
- The “NON-UNIFORM” Profile control note configuration described in ASME Y14.5-2009 Para 8.3.2.1 and Figures 8-9, 8-10 and 8-11 cannot be created by the Pro/E Geometric Tolerance Symbol Table. The table will not allow letters in the tolerance block section.

8.3.2.1 Drawing Indication. For the non-uniform tolerance zone, the leader line from the feature control frame is directed to the true profile. See Fig. 8-9.

Where individual segments of a profile are toleranced, the extent of each profile segment may be indicated by use of reference letters to identify the extremities or limits of each segment. See Fig. 8-10.

Fig. 8-9 Non-Uniform Profile Tolerance Zone

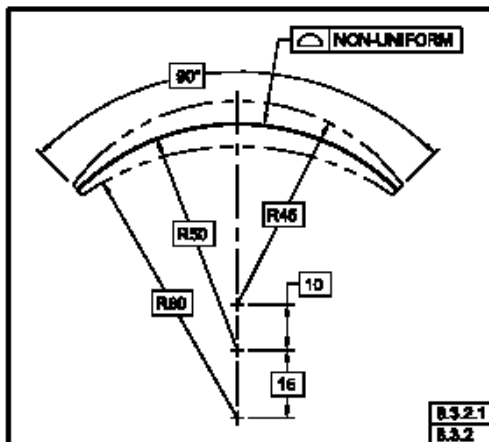
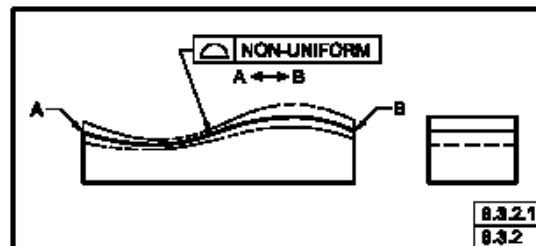


Fig. 8-10 Non-Uniform Profile Tolerance Zone



- Even though the term “BOUNDARY” as used an attachment to the true position callout is an optional practice in ASME Y14.5-2009 Para 8.8, I would leave the option in the Pro/E Geometric Tolerance Symbol Table, Symbols and Modifiers pick as it is. I think many of us will still want to use the “SET BOUNDARY” pick.
- Would be nice to see “SEP REQ” added as a Symbols and Modifiers pick in the Geometric Tolerance Symbol Table. Maybe I’m the only one that has trouble remembering the correct spelling.