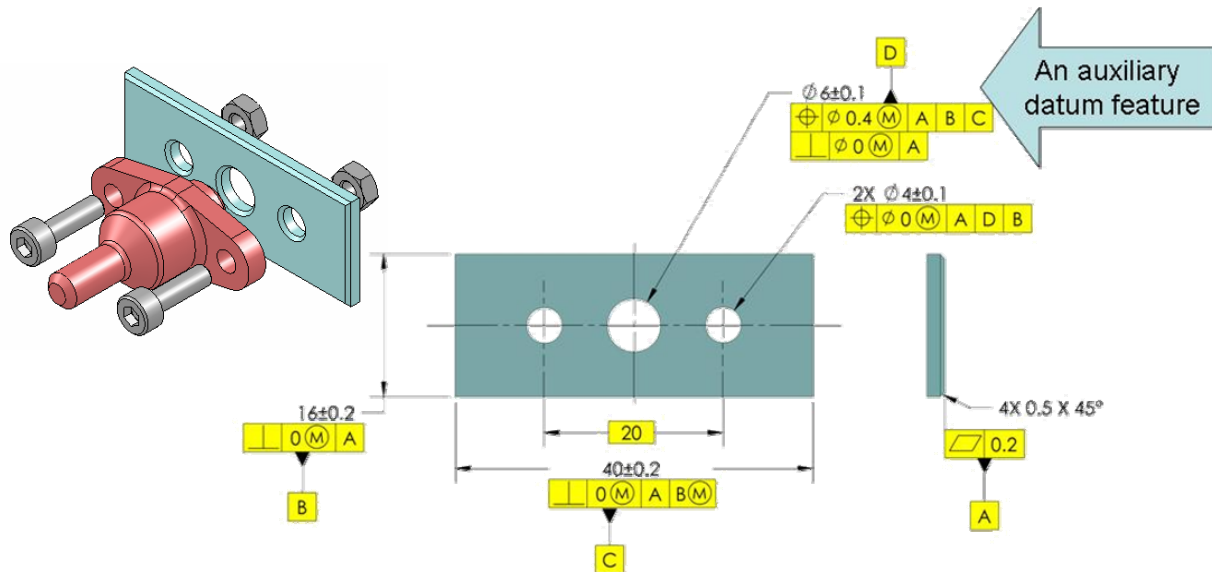


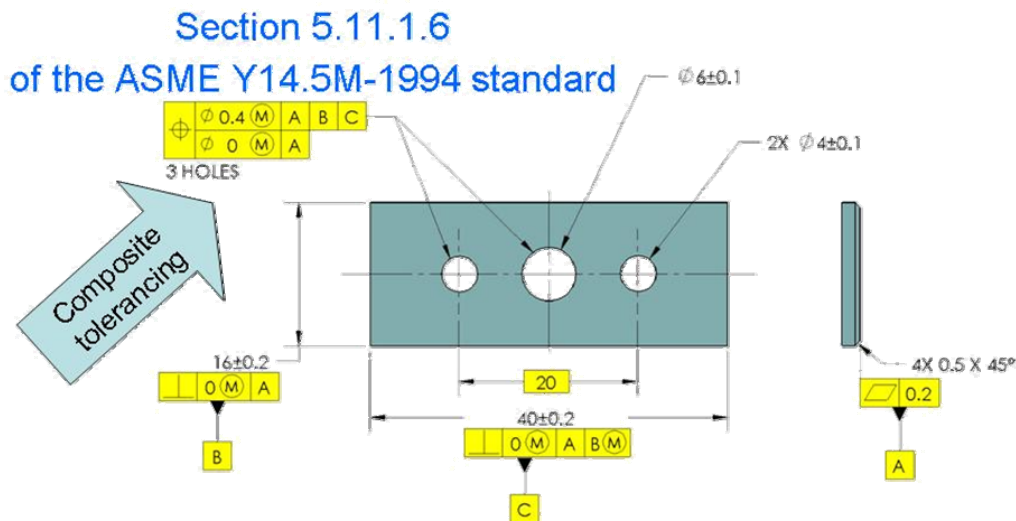
August 2008 Tip-of-the-Month

Add a Note to Expand a Pattern for Composite Tolerancing

Some folks think that composite tolerancing cannot be applied to a pattern of holes that have different sizes. When they have a group of holes of different sizes to control as a pattern it is not uncommon to locate one hole, make it a datum feature and control the other holes relative to that new datum feature. In this case, to guarantee a close fit, a refinement of perpendicularity is also required. Technically, this approach is OK. However, it does require a new set-up to inspect the part as well as the additional perpendicularity tolerance. The first drawing shows this approach.



Another approach is shown on the second drawing. Here all three holes are made a single pattern by the note, 3 HOLES. This approach gives the desired fit in the assembly while eliminating a set-up to establish an auxiliary datum reference frame and an additional inspection of the perpendicularity refinement on the larger hole.



Go to <http://www.tec-ease.com/tips/Aug-08.htm> to view a video clip of Don Day explaining this Tip.

Please email us any suggestions or topics that you would like to see covered in our Tip-of-the-Month series.

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