## **AutoCAD and Its Applications BASICS**

## **Exercise 27-4**

- 1. Continue from Exercise 27-3 or start AutoCAD.
- 2. Open the EX27-3 file you saved during Exercise 27-3.
- 3. Save a copy of EX27-3 as EX27-4. The EX27-4 file should be active.
- 4. Open the HEAVY HEX NUT block in the **Block Editor**.
- 5. Set the drawing units length precision to 0.0000.
- 6. Use the **Angular**, **Diameter**, and **Linear** options of the **BCPARAMETER** command to add the constraint parameters exactly as shown. Include a single grip with each constraint parameter, except the angular values. The angular constraint parameters establish relationships only.



- 7. Enter the **Test Block Window**.
- 8. Select the block to display grips. Pick the Width\_Across\_Flats grip and change the width. Repeat this process for each grip.
- Close the Test Block Window and make changes to the block if the objects did not adjust as expected.
- 10. Retest the block if you made changes.
- 11. Save the block and exit the **Block Editor**.
- 12. Enable dynamic input if it is currently not on. Insert the block into the current drawing and select it to display grips.

- 13. Use each grip and the corresponding dynamic input field to create a 1-8 heavy hex nut according to the following specifications: Width across flats = 1.6250, major diameter = 1.0000, minor diameter = .8775.
- 14. Resave and close the file.
- 15. Keep AutoCAD open for the next exercise, or exit AutoCAD if necessary.