Making a Solid Model and Drawing in Metric Units with Pro/E

In the School of Engineering and Engineering Technology computer labs, Pro/ENGINEER is configured to create models using the units Inch – Pounds – Seconds (IPS). In order to create a drawing in SI units*, complete the following steps before beginning to model:

1. Change the Pro/E modeling units to SI by:
   a. using the menu sequence Edit – Setup – Units;
   b. Select the millimeter – Newton – Seconds option in the Systems of Units window of the Units Manager dialog box;
   c. Pick the Set button to change the units;
   d. Select the option for converting existing numbers. For example, if a feature is modeled as 1-inch, then selecting the Convert Existing Numbers (Same Size) option would make the dimension for the feature 25.4-millimeters, which is the same size. The Interpret Existing Numbers (Same Dims) option would make the same feature 1-millimeter.

2. Note that Pro/E will automatically display a zero before the decimal of any dimensions less than one millimeter. It will also not show any zeros or the decimal point following whole millimeter numbers. Read Section 9.12 in MGC for the scoop on using decimal points and zeros in dimensioning metric parts.

3. It is important to indicate that a drawing is made in metric units. The following figure shows the proper symbol and its location on a drawing.

*In engineering, parts modeled in the SI system of units typically have units of length expressed in millimeters, not meters.