that they are slightly larger than the diameter of a solder plug. Plugs are inserted in the holes with the gasket resting on a flange facing. The test joint assembly is assembled, preloaded to some prescribed tightening torque, then disassembled immediately. Compressed thickness measurements are made on the solder plugs. These measurements are equal to the compressed thickness exhibited by the gasket when it was loaded in the joint assembly.

8. CALCULATION AND INTERPRETATION

8.1 Equation for calculating the compression as a percentage of the original gasket thickness is:

$$c = \frac{t_o - t_c}{t_o} \times 100$$

where:

c = percentage compression in the gasket,

t_o = initial uncompressed thickness of the gasket, in,

t_c = compressed gasket thickness as measured on a solder plug, in.

8.2 Figure 3, illustrates a graph for plotting compressed thickness values for the gasket. The particular points of compression were selected to reveal the bending distortion in the flange facing between bolt centers. Bending is revealed by drawing a curve through the gasket compressed thickness data which are represented by vertical dark bars. Percentage compression is indicated below each bar.