



FIGURE A-12

The Moody chart for the friction factor for fully developed flow in circular pipes for use in the head loss relation $h_L = f \frac{L V^2}{D 2g}$. Friction factors in the turbulent flow are evaluated from the Colebrook equation $\frac{1}{\sqrt{f}} = -2 \log_{10} \left(\frac{\epsilon/D}{3.7} + \frac{2.51}{Re \sqrt{f}} \right)$.