104.1.2 Straight Pipe Under Internal Pressure —
Seamless, Longitudinal Welded, or Spiral Welded (and
Operating Below the Creep Range)

(a) Minimum Wall Thickness. The minimum thickness
of pipe wall required for design pressures and for
temperatures not exceeding those for the various mate-
rials listed in the Allowable Stress Tables, including allow-
ances for mechanical strength, shall not be less than that
determined by eq. (7) or (8), as follows:

\[ t_m = \frac{PD_0}{2(SEW + Py)} + A \]  \hspace{1cm} (7)

\[ t_m = \frac{Pd + 2SEWA + 2yPA}{2(SEW + Py - P)} \]  \hspace{1cm} (8)

Design pressure shall not exceed