

Inlet Airstream Density

Non-Standard Air

❖ Non-standard air density = standard air density x the density factor, or (0.075) x (df)

❖ $df = (df_{\text{elevation}}) \times (df_{\text{pressure}}) \times (df_{\text{temperature}}) \times (df_{\text{moisture}})$

❖ $df_e = [1 - (6.73 \times 10^{-06}) \times (z)]^{5.258}$

❖ $df_p = (407.5 + SP) \div 407.5$

❖ $df_t = (530) \div (460 + T)$

❖ $df_m = (1 + \omega) \div [1 + (1.607\omega)]$

❖ Airstream Density =

❖ (0.075 lb/cu ft air stream density) x (all applicable df's)