

#### 4. Bubble-cap Distillation Column

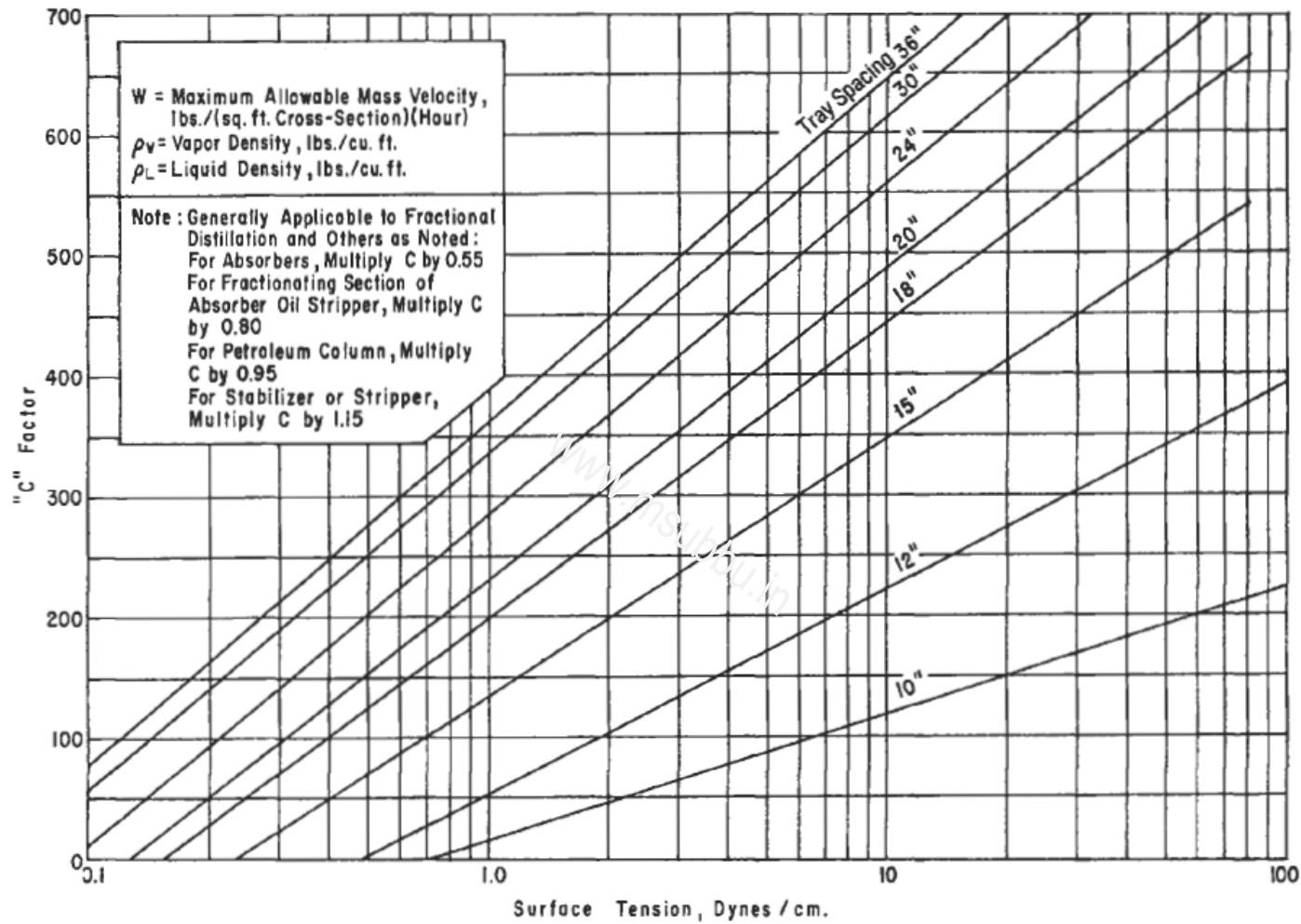


Figure 8-82. "C" factors for column diameter using bubble cap trays. Adapted by permission, The American Chemical Society, Souders, M., Jr., and Brown, G. G. *Ind. and Eng. Chem.* V. 26 (1934), p. 98, all rights reserved.

C - Entrainment factor

Source: Ludwig, *Applied Process Design*, 2<sup>nd</sup> Volume, 3<sup>rd</sup> Edition

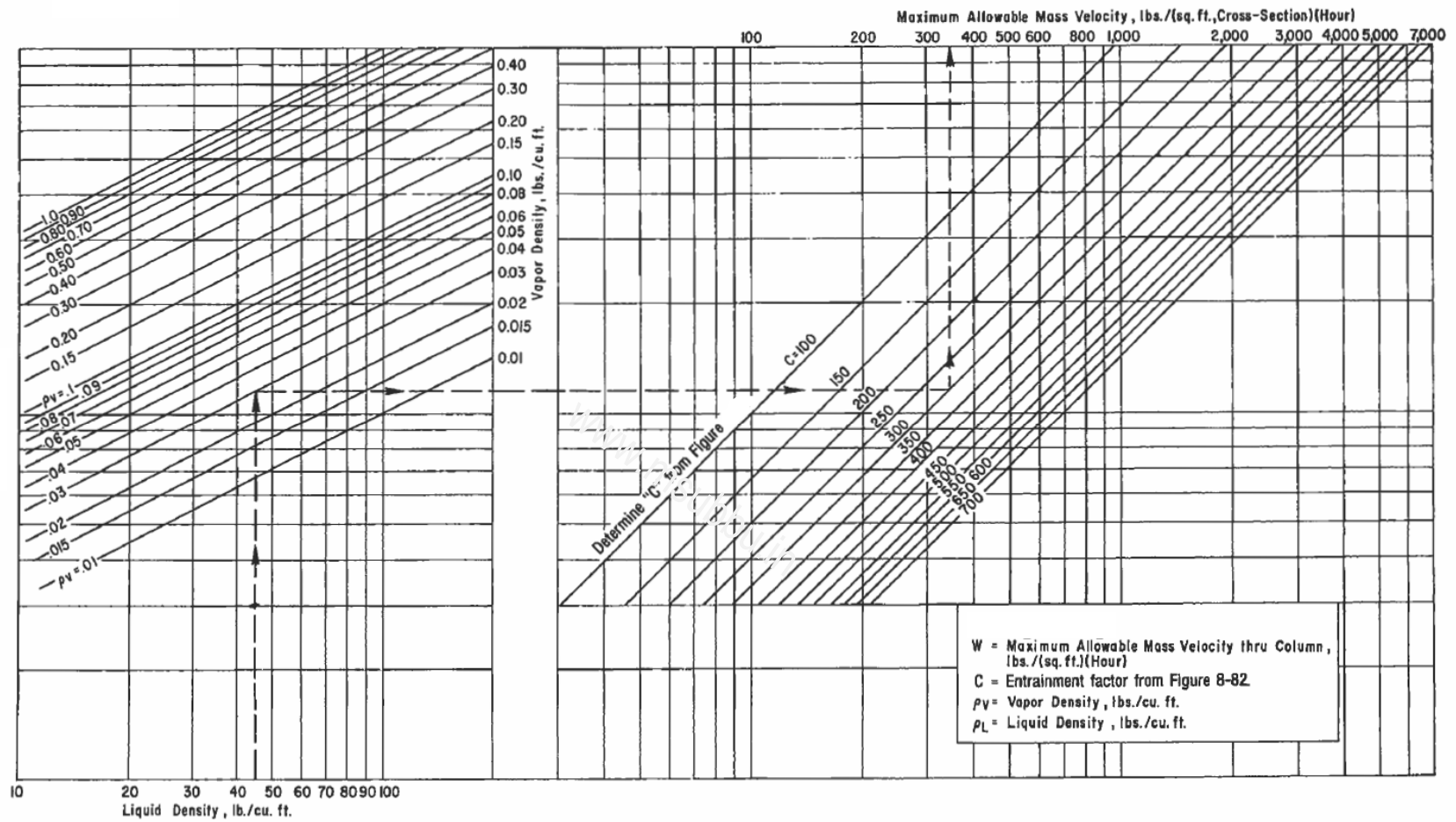


Figure 8-83. Allowable mass velocity for fractionation, absorption, and stripping columns.

W - Maximum allowable mass velocity of vapor  
 Source: Ludwig, *Applied Process Design, 2<sup>nd</sup> Volume, 3<sup>rd</sup> Edition*