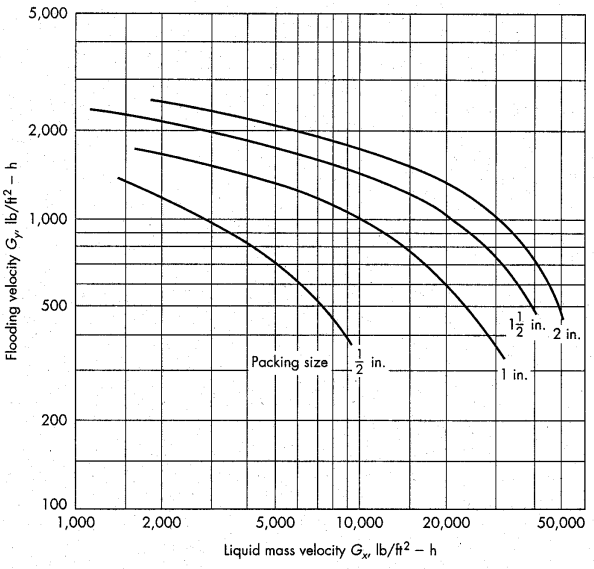
**CHE 305 – Separation Processes**
**Spring 2010 - Exercise on Stripping Units**

A 40,000 $ft^3$/hr air stream is contaminated with 1% acetone by volume. Water is to be used for absorption of 99% of the acetone in a packed column. Use the correlated data for a column packed with 1.5 inch Intalox saddles to determine the following parameters.

Given:

- Column Diameter = 2.5 ft
- P = 1 bar
- R = 0.08314 L bar/mol K
- T = 25°C
- $G_y = 0.6(G_y)_{flood}$
- 1 lb = 454 g




**a. Gas phase density**

**b. Gas mass flow rate**

**c. $G_y$**

**d. $G_x$**

**e. ΔP for a 10 ft tall column**