**Full Cover Braid Condition and Lay**

\[ d = \text{Hose/Mandrel diameter} \]

\[ W = \text{Width of Side x Side Ribbon of wires from carrier} \]

\[ \sin \theta = \frac{W}{H} \quad \therefore H = \frac{W}{\sin \theta} \]

\[ \Theta = \text{Braiding or Lay angle} \]

\[ \cos \Theta = \frac{W \times \text{half no. of carriers}}{d} \quad \text{Also Lay} = \frac{d}{\tan \theta} \]

**Example for Full Cover** (using 96 carriers)

Using 10" dia. mandrel and flat braid (ribbon) width .35"

**Braid angle** = \[ \frac{\cos 0.35 \times 48}{x 10} = 57.67^\circ \]

**Lay produced** = \[ \frac{x 10}{\tan 57.67^\circ} = 19.88" \]