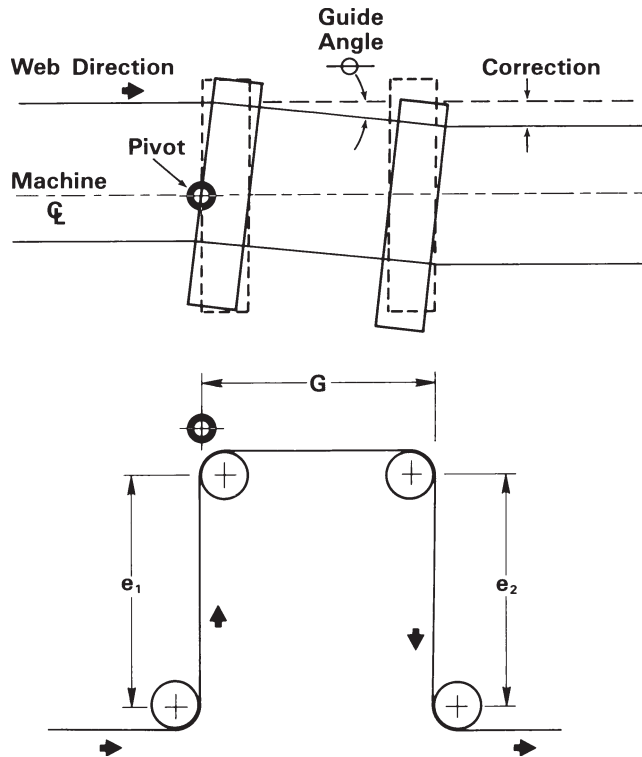


DISPLACEMENT GUIDES
Entry and Exit Span Calculations for Metals Industry



NOMENCLATURE

- C = Correction (inches)**
- G = Guide Span (inches)**
- W = Web Width (inches)**
- e₁ = Entry Span (inches)**
- e₂ = Exit Span (inches)**
- S = Stress (psi)**
- T = Tension (pounds)**
- t = Web Thickness (inches)**
- Θ = Guide Angle (degrees)**
- E = Material Modulus (psi)**

FORMULA

$$C = G (\sin \Theta)$$

$$e_1 \text{ or } e_2 = (0.00357) W \cdot \Theta \sqrt{\frac{E}{S_{AVG.}}}$$

$$S_{EDGE} (\text{Max.}) = 3 (S_{AVG.}) \text{ at Critical}$$

$$S_{AVG.} = \frac{T}{Wt}$$

Sin of 1° = 0.0174

2° = 0.0349

3° = 0.0523

4° = 0.0697

5° = 0.0872

6° = 0.1045

7° = 0.1219