FORMULAE

$$(I_1 + I_2) + \left(\frac{2S_1}{\Delta t} - Q_1\right) = \left(\frac{2S_2}{\Delta t} + Q_2\right)$$

$$t = \frac{\gamma hr}{\sigma_{all}}$$

$$\frac{y_2}{y_1} = \frac{1}{2}(\sqrt{1+8F_1^2} - 1)$$
, $F = \frac{u}{\sqrt{gy}}$, $\Delta E = \frac{(y_2 - y_1)^3}{4y_1y_2}$, $y_c = \sqrt[3]{\frac{q^2}{g}}$

$$Q_o = C_o L H^{3/2}$$
, $Q = \frac{A}{n} R^{2/3} \sqrt{S_0}$, $E = y + \frac{u^2}{2g}$

$$L = L' - 2(nK_p + K_a)H_o, \quad Q = \frac{2}{3}(2g)^{0.5}CL(H_1^{3/2} - H_2^{3/2}), \quad \Sigma \vec{F} = \rho Q(\vec{u}_2 - \vec{u}_1)$$

$$h_f = \frac{8fL}{g\pi^2 D^5} Q^2$$

$$u = \frac{r^2 S}{4Tt}$$
, $s = \frac{Q}{4\pi T}W(u)$

$$Q_p = \frac{\text{CiA}}{3.6}, \quad Q = \frac{0.312}{N} D^{8/3} \sqrt{S}$$

$$Q = AFq_{max}$$