

## **Pump Affinity Laws for Speed Change**

$$\frac{Q_1}{Q_2} = \frac{N_1}{N_2}$$

$$\frac{\mathsf{H}_1}{\mathsf{H}_2} = \left\{ \frac{\mathsf{N}_1}{\mathsf{N}_2} \right\}^2$$

$$\frac{BHP_1}{BHP_2} = \left\{ \frac{N_1}{N_2} \right\}_{\text{Chemical Engineering Site}}^{3}$$