

**Power Transmission Formulas****T=Torque      HP=Horsepower**

1 HP = 3 ft lbs. T @ 1750 RPM

1 HP = 36 in lbs. T @ 1750 RPM

$$\text{HP} = \frac{\text{T (in. lbs.)} \times \text{RPM}}{63,025}$$

$$\text{T (in. lbs.)} = \frac{\text{HP} \times 63,205}{\text{RPM}}$$

$$\text{Efficiency} = \frac{\text{HP out}}{\text{HP in}}$$

$$\text{FPM} = .2618 \times \text{diameter} \times \text{RPM}$$

$$\text{RPM} = \frac{63,025 \times \text{HP}}{\text{Torque}}$$

$$\text{RPM} = \frac{\text{FPM}}{.2618 \times \text{diameter}}$$