



$$T_4 = \frac{P_1 * (\#G_4) * R_2}{(\#G_3) * V_1}$$

$T_4$  = Torque at Gear 4

$P_1$  = Power Measured

$(\#G_4)$  = # of Teeth of Gear 4

$(\#G_3)$  = # of Teeth of Gear 3

$R_2$  = Radius of Wheel 2

$V_1$  = Velocity Measured

For the Current Power Rig Set up

$(\#G_4) = 34 \text{ teeth}$ ,  $(\#G_3) = 20 \text{ teeth}$ ,  $R_2 \approx 12.75$