

$$"d" = \frac{\text{Log} \left[\frac{R}{60N} \right]}{\text{Log} \left[\frac{12W}{10^6 D} \right]}$$

$$K_f = \frac{R \times 10^6}{W/D \times N}$$

R = PENETRATION RATE, FT./HR.
 N = ROTARY SPEED, RPM
 W = WEIGHT ON BIT, LBS.
 D = DIAMETER OF BIT, INCHES

