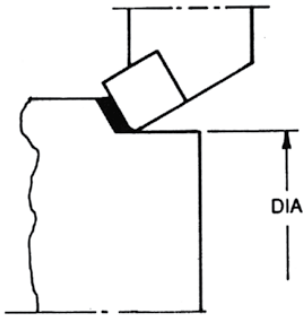
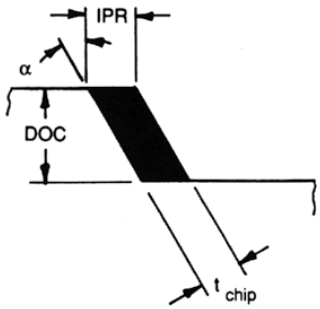
для заказа - kyocera@kyocera-tools.ru

Turning





Surface Speed per Minute
SFM= 0.262 × DIA × RPM

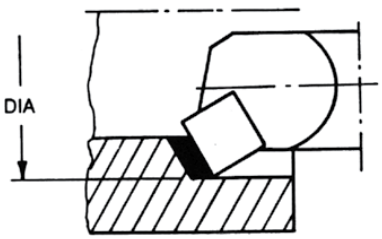
Revolutions per Minute
$$RPM= \frac{3.820 \times SFM}{DIA}$$

Feedrate (inches/minute)
IPM= IPR × RPM

Chip Thinning for Non-Round Inserts (inches/revolution)
$$\text{Programmed IPR}= \frac{t_{chip\ Max}}{\cos 1}$$

Chip Thinning for Round Inserts (inches/revolution)
$$\text{Programmed IPR}= \frac{t_{chip\ Max}}{\sqrt{\frac{4ap}{ic} \cdot \left(\frac{2ap}{ic}\right)^2}}$$

Boring



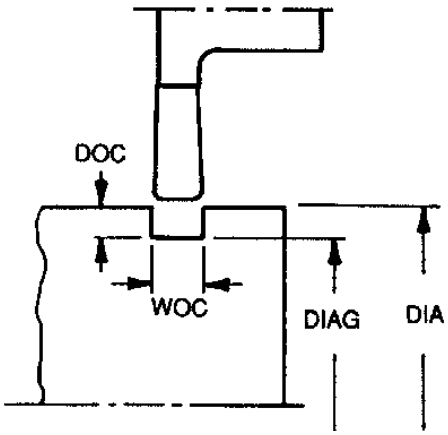
Metal Removal Rate
Q= 12 × DOC × IPR × SFM (in^3/minute)

Horsepower Required at the Spindle
HPS= Q × UHP

Horsepower Required at the Motor
$$HPM= \frac{HPS}{EFF}$$

Time in Cut (seconds)
$$T= \frac{15.7 \times DIA \times LOC}{SFM \times IPR}$$
or
$$T= \frac{60 \times LOC}{IPM}$$

External Grooving



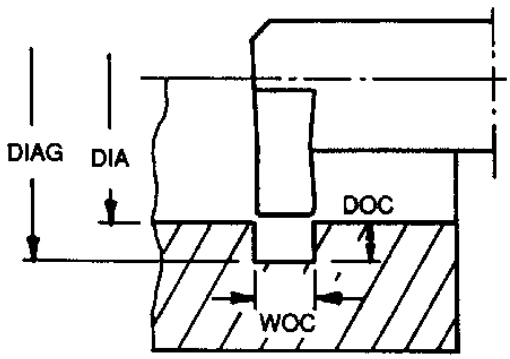
Surface Speed per Minute
SFM= 0.262 × DIA × RPM

Revolutions per Minute
$$RPM= \frac{3.820 \times SFM}{DIA}$$

Feedrate (inches/minute)
IPM= IPR × RPM

Feedrate (inches/revolution)
$IPR= t_{chip}$

Internal Grooving



Metal Removal Rate
Q= 12 × WOC × IPR × SFM (cu.in/minute)

Horsepower Required at the Spindle
HPS= Q × UHP

Horsepower Required at the Motor
$$HPM= \frac{HPS}{EFF}$$

Time in Cut (seconds)
$$T= \frac{7.85 \times DOC \times (DIA + DIAG)}{SFM \times IPR}$$
or
$$T= \frac{60 \times LOC}{IPM}$$

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