

Calculation of the average chip thickness in relation with the a_e (Radial Engagement) if a_e is less than 50% of Dia.

Formula: Programme Feed Rate (f_z)

$$f_z = h_m \times \sqrt{\frac{d}{a_e}}$$

h_m = Average chip thickness
a_e = Radial engagement
f_z = Feed per tooth
d = Cutter diameter

Formula: Average Chip Thickness (h_m)

$$h_m = f_z \times \sqrt{\frac{a_e}{d}}$$

7745VT16 Technical Information

Feed rate compensation: For 45° cutting, divide the h_m value by the sine of the approach angle (the sine of 45° = 0,707)

i.e.: $\frac{h_m}{0,707}$ or $\frac{0,08mm}{0,707}$ = 0,11mm programmed feed rate



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Feed rate compensation: For 60° cutting, divide the h_m value by the sine of the approach angle (the sine of 60° = 0,866)

i.e.: $\frac{h_m}{0,866}$ or $\frac{0,08mm}{0,866}$ = 0,092mm programmed feed rate

