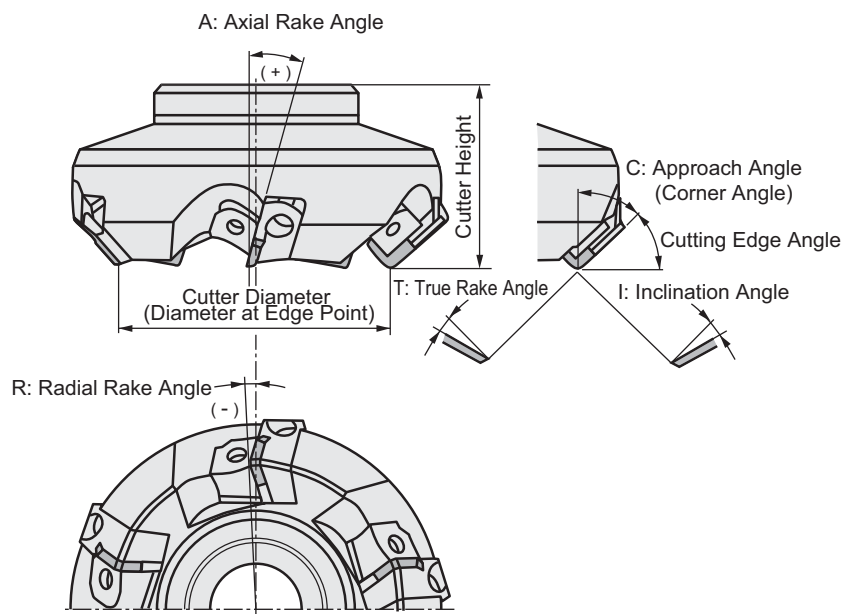
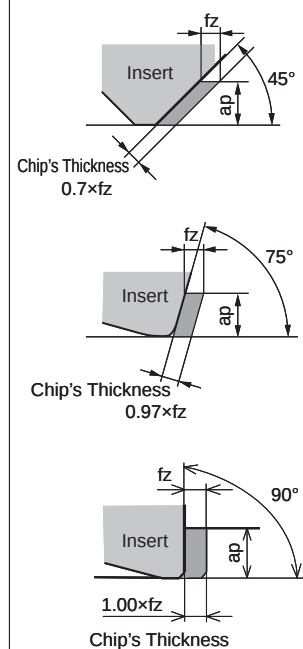


Terms and Angles of Milling Cutter



Lead Angle and Chip Thickness



Function of Tool Angle

Symbol	Name	Function	Effect
A	Axial Rake Angle: A.R.	Controls chip flow direction and cutting force	When it is positive --- Good cutting performance and less chip welding
R	Radial Rake Angle: R.R.	Controls chip flow direction and cutting force	When it is negative--- Good chip evacuation
C	Approach Angle	Controls chip thickness and chip flow direction	When it is large --- Thinner chip thickness Less cutting load
T	True Rake Angle	Actual rake angle	When it is positive --- Good cutting performance and less chip welding, but lower edge strength When it is negative--- Higher edge strength but easier to weld
I	Inclination Angle	Controls chip flow direction	When it is positive --- Good chip evacuation Less cutting resistance Lower edge strength at corner part

$$\tan T = \tan R \times \cos C + \tan A \times \sin C$$

$$\tan I = \tan A \times \cos C - \tan R \times \sin C$$