

BASIC MORNING FORMULAS (Metric)

Milling

True Rake Angle

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

True Rake Angle

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

- A : Axial Rake Angle (A.R.) [°] (-90° < A < 90°)
- R : Radial Rake Angle (R.R.) [°] (-90° < R < 90°)
- C : Approach Angle [°] (0° < C < 90°)
- T : True Rake Angle [°] (-90° < T < 90°)
- I : Inclination Angle [°] (-90° < I < 90°)

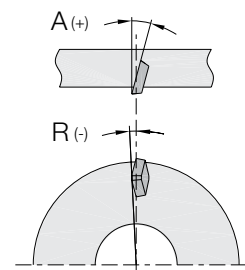
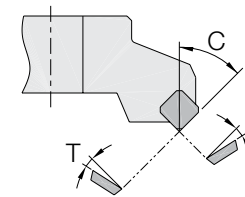
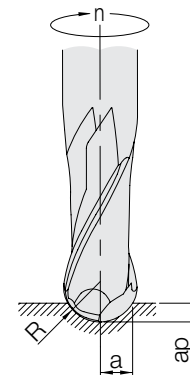


Table Feed & Feed per Tooth

$$n = \frac{1,000 \times Va}{2 \times \pi \times \sqrt{a(2R-ap)}}$$

- n : Revolution [min⁻¹]
- R : Radius of Ball-Nose End Mill (Ball Part's Radius [mm])



GRADES	A
LINEUP / INSERTS	B
45° / 70° LEAD	C
75° LEAD	D
90° LEAD	E
HIGH FEED	F
MULTI-FUNCTION	G
SLOT MILLS	H
RADIUS / BALL-NOSE	J
OTHER APPLICATIONS	K
TOOL HOLDING	O
SPARE PARTS	P
TECHNICAL	R
INDEX	T