

Type of tool	Technical specification	Applications
End mill 2-flute fish	<ul style="list-style-type: none"> - Solid carbide-end mill Ø1.0 mm - Double-flute - Fishtail bottom - Upcut- or downcut spiral 	<ul style="list-style-type: none"> - Universally applicable - Aluminum - Plastics - Wood
End mill diamond	<ul style="list-style-type: none"> - Solid carbide-end mill Ø1.0 mm - Diamond toothed - Fishtail 	<ul style="list-style-type: none"> - Glass fiber - Carbon fiber - Wood - Printed circuit boards
End mill single flute	<ul style="list-style-type: none"> - Solid carbide-end - Single-flute - Flat bottom - Upcut- or downcut spiral 	<ul style="list-style-type: none"> - High quality contours - Has only one flute, much space for chip evacuation - Very good for soft materials - Soft plastics - PE, teflon, plexiglas, styrofoam - Soft aluminum
End mill spiral	<ul style="list-style-type: none"> - Solid carbide-end mill Ø 2 mm - Spiral toothed - Fishtail - Upcut- or downcut spiral 	<ul style="list-style-type: none"> - Glass fiber - Carbon fiber - Wood - Printed circuit boards
Radius mill	<ul style="list-style-type: none"> - Solid carbide-radius mill - Center cut (diving possible) 	<ul style="list-style-type: none"> - Universal usability of all materials - Wood - Aluminum - Non-ferrous metals
V-bit	<ul style="list-style-type: none"> - Solid carbide V-router bit - tip angel from 30° to 120° - Single-cut with upcutting spiral 	<ul style="list-style-type: none"> - Engraving printed circuit boards - Engravings on many materials - Chamfering

MID = Maximum infeed depth per cycle [mm]

RPM = Revolution per minute of the HFS [1000x n/min.]

V→ = Horizontal feed speed (X-/Y-direction) [mm/s]

V↓ = Vertical speed (Z-direction) [mm/s]

Ø = Diameter of end mill [mm]

Material	Type of end mill	Ø 1				Ø 2				Ø 3			
		MID	RPM	V↓	V→	MID	RPM	V↓	V→	MID	RPM	V↓	V→
Softwood	End mill spiral	5	20	4	12	6	15	5	18	8	10	5	14
Hardwood	End mill spiral	2	18	3	4	3	12	4	6	4	8	4	5
Carbon fiber	End mill diamond or spiral	3	20	3	4	3	16	4	4	2	12	4	3
Glass-fiber reinforced plastic	End mill diamond or spiral	3	20	3	4	3	16	4	4	2	12	4	3
Soft plastic	End mill single flute	5	12	4	4	6	12	5	6	8	6	5	6
Hard plastic	End mill single flute	2	18	3	3	3	14	4	5	4	10	3	4
Acrylic glass	End mill 2-flute fish	2	15	1	3	3	12	2	5	3	8	2	4
Aluminum (alloy with plumb)	End mill 2-flute fish	0.5	20	1	2	1	17	1	2	1	14	1	2
Brass	End mill 2-flute fish	0.5	20	1	2	1	17	1	2	1	14	1	2