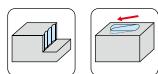
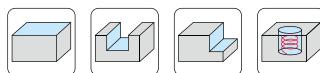
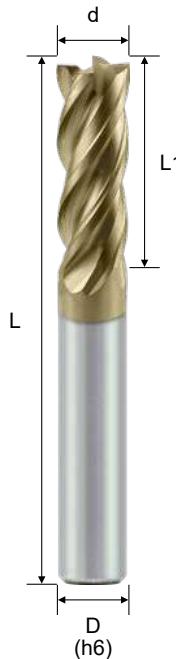


Solid Carbide Endmills**V520 - Variable Spacing · Square · 4F**

- Unequal flute spacing for anti-vibration.
- High removal rate for steel and alloy steel machining.
- Low cutting force and burr prevention.
- SICO coating includes Al, Ti, Si, N elements.

E M S S V

d Tolerance	
$d \leq 6$	0 ~ -0.02
$6 < d \leq 12$	0 ~ -0.03
$d > 12$	0 ~ -0.04

Order No.	Dia. (d)	CL (L1)	OAL (L)	Shank (D)	Flutes (F)
EMSSV403000S	3	8	50	6	4
EMSSV444000S	4	10	50	4	4
EMSSV404000S	4	10	50	6	4
EMSSV406000S	6	15	50	6	4
EMSSV408000S	8	20	60	8	4
EMSSV410000S	10	25	75	10	4
EMSSV412000S	12	30	75	12	4
EMSSV416000S	16	35	100	16	4

Cutting conditions : Table 062

Recommended Cutting Conditions

Table 062

V520 Series EMSSV4, EMSHV4, EMSRV4, EMSSV4, EMSCV4, EMSSV4, EMSCV4

※If the machine not stable, please reduce the feed about 20%.

Working Material	Cutting Application	ae (mm)	ap (mm)	Vc (m/min)	fz (mm/z)					
					4mm	6mm	8mm	10mm	12mm	16mm
Carbon steel (S45C, S55C)	Slot milling	1×d	0.5 ~ 1.0×d	80 ~ 145	0.025	0.030	0.040	0.050	0.060	0.080
	Side roughing	0.4 ~ 0.9×d	0.7 ~ 1.0×d	90 ~ 160	0.030	0.035	0.050	0.060	0.075	0.100
	Side finishing	0.1 ~ 0.3×d	0.7 ~ 1.5×d	130 ~ 225	0.020	0.025	0.035	0.045	0.055	0.072
Alloy steel (SK, SCM)	Slot milling	1×d	0.5 ~ 1.0×d	70 ~ 130	0.024	0.029	0.038	0.048	0.057	0.076
	Side roughing	0.4 ~ 0.9×d	0.7 ~ 1.0×d	80 ~ 145	0.029	0.033	0.048	0.057	0.071	0.095
	Side finishing	0.1 ~ 0.3×d	0.7 ~ 1.5×d	95 ~ 180	0.019	0.024	0.033	0.043	0.052	0.068
Tool steel (SKD)	Slot milling	1×d	0.5 ~ 1.0×d	65 ~ 110	0.020	0.025	0.035	0.045	0.055	0.072
	Side roughing	0.4 ~ 0.9×d	0.7 ~ 1.0×d	70 ~ 130	0.030	0.035	0.045	0.055	0.070	0.088
	Side finishing	0.1 ~ 0.3×d	0.7 ~ 1.5×d	90 ~ 160	0.020	0.025	0.035	0.040	0.050	0.064
Stainless steel (SUS304, SUS316)	Slot milling	1×d	0.5 ~ 1.0×d	50 ~ 65	0.015	0.020	0.030	0.035	0.040	0.056
	Side roughing	0.4 ~ 0.9×d	0.7 ~ 1.0×d	65 ~ 100	0.020	0.025	0.035	0.045	0.055	0.072
	Side finishing	0.1 ~ 0.3×d	0.7 ~ 1.5×d	80 ~ 110	0.020	0.025	0.035	0.040	0.050	0.064
Superalloy & Hardened steel	Slot milling	1×d	0.5 ~ 1.0×d	30 ~ 60	0.015	0.020	0.025	0.030	0.035	0.048
	Side roughing	0.4 ~ 0.9×d	0.7 ~ 1.0×d	50 ~ 90	0.015	0.020	0.030	0.035	0.040	0.056
	Side finishing	0.1 ~ 0.3×d	0.7 ~ 1.5×d	65 ~ 120	0.020	0.025	0.035	0.040	0.050	0.064

