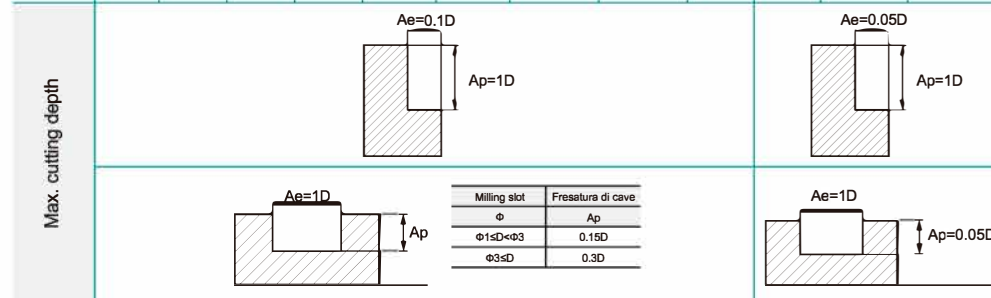


E452 Series

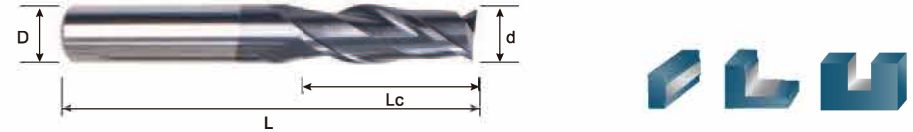
Recommended cutting data

Workpiece material	Cast iron, Nodular cast iron		Carbon steel, Alloy steel -750N/Mm ²		Carbon steel, Alloy steel -30HRC		Pre-hardened steel, Quenched and tempered steel-40HRC		Stainless steel		Pre-hardened steel, Quenched and tempered steel-50HRC	
	Diameter (mm)	Rotating (min ⁻¹)	Feed (mm/min)	Rotating (min ⁻¹)	Feed (mm/min)	Rotating (min ⁻¹)	Feed (mm/min)	Rotating (min ⁻¹)	Feed (mm/min)	Rotating (min ⁻¹)	Feed (mm/min)	Rotating (min ⁻¹)
1	20000	165	20000	165	20000	135	20000	135	20000	50	20000	100
2	15000	265	15000	265	15000	240	15000	235	11150	70	13000	150
3	14000	455	14000	455	13000	420	10600	350	7500	100	8500	275
4	10800	465	10800	465	10000	430	8000	355	5500	110	6500	280
5	8200	485	8200	485	7600	450	6400	370	4500	110	5000	295
6	7000	500	7000	500	6400	460	5300	385	3700	115	4200	300
8	5200	495	5200	495	4800	455	4000	380	2800	115	3200	305
10	4200	485	4200	485	3800	450	3200	370	2200	115	2500	290
12	3500	485	3500	485	3200	450	2650	370	1850	115	2100	290
14	3000	455	3000	455	2700	420	2300	350	1600	110	1800	275
16	2600	455	2600	455	2400	420	2000	350	1400	100	1600	275
18	2300	445	2300	445	2100	410	1800	345	1250	100	1400	270
20	2050	445	2050	445	1900	410	1600	345	1100	100	1250	270



- The above table shows the standard value of side milling. When slot milling, of rotating speed 50%-70% and feed rate like mentioned above 40%-60%.
- Please select high precise machine and tool holder.
- Please use air blow or cutting liquid with high mist retardant property.
- Down milling is recommended in side milling.
- Vibration and unusual noise may be generated if the machine rigidity and workpiece fixture stability is low, Please reduce the rotating speed and feed rate like mentioned above.
- Make overhang as short as possible if no interference.

2 Flute Micro Grain Solid Carbide Flattened End Mills Standard Size (HRC45)



Type	Description(d×Lc×D×L)	d	D	Lc	L	Z(Teeth)
E452010	E45-1×3×4×50×2F E	1	4	3	50	2
E452015	E45-1.5×4×4×50×2F	1.5	4	4	50	2
E452020	E45-2×6×4×50×2F	2	4	6	50	2
E452025	E45-2.5×7×4×50×2F	2.5	4	7	50	2
E452030	E45-3×8×4×50×2F	3	4	8	50	2
E452040	E45-4×11×4×50×2F	4	4	11	50	2
E452050	E45-5×13×6×50×2F	5	6	13	50	2
E452060	E45-6×16×6×50×2F	6	6	16	50	2
E452080	E45-8×20×8×60×2F	8	8	20	60	2
E452100	E45-10×25×10×75×2F	10	10	25	75	2
E452120	E45-12×30×12×75×2F	12	12	30	75	2
E452140	E45-14×32×14×100×2F	14	14	32	100	2
E452160	E45-16×45×16×100×2F	16	16	45	100	2
E452180	E45-18×45×18×100×2F	18	18	45	100	2
E452200	E45-20×45×20×100×2F	20	20	45	100	2

Material Overview · Panoramica materiali

●=Very suitable ○=Suitable

KMG303	Workpiece material											
	Carbon steel	Alloy steel	Quenched and tempered steel		Handened steel		Stainless steel	Cast iron, Nodular	Copper alloy	Aluminum alloy	Titanium alloy	Heat resist alloy
			~40HRC	~50HRC	~55HRC	~68HRC						
●	●	●	○				○	○				