

2 Flutes Square Endmills for Aluminium AC-ES2

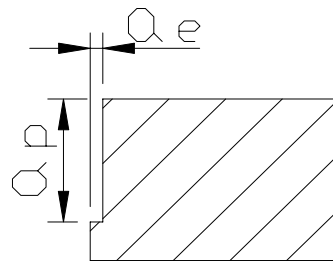


SIDE MILLING

Workpiece	Aluminium alloy (Si < 4%)		Aluminium alloy (Si < 12%)		Aluminium alloy (Si < 14%)		Aluminium alloy (die casting)	
	N (rpm)	F mm/min	N (rpm)	F mm/min	N (rpm)	F mm/min	N (rpm)	F mm/min
Mill DIA ϕ D (m)	V=250~500m/min		V=200~400m/min		V=150~350m/min		V=100~250m/min	
3	39800	7960	31800	6360	26500	5300	20000	3200
4	29850	5970	24000	4800	20000	4200	17700	2850
5	24000	4800	20000	4800	19100	4584	15000	2700
6	20000	4200	18500	5550	17700	5321	13270	2654
8	15920	3820	13270	3980	12750	3825	9800	2000
10	13270	3980	11150	3565	10500	3360	7960	1750
12	11150	3350	10600	3500	9000	3240	6630	1590
14	10600	3180	9000	3240	7960	2865	5650	1350
16	9550	3000	7960	2950	6960	2600	4970	1280
20	7960	2700	6360	2500	5300	2120	3980	1150

Depth of cut

$$a_p \leq 1.5D \quad a_e \leq 0.1D$$



1. These mill conditions are for a mill where the tool extension length is 5 times the diameter of the endmill.
2. When length of the tool extension from the machines is long, reduce the speed and feed and milling depth.
3. Use high-stiffness and precise machine and holder; if the machine stiffness is low or the workpiece is not well installed, or chattering occurs, please reduce the speed and rate **proportionately**.
4. Reduce by 30% the above cutting parameters for uncoated endmills. The uncoated type endmills are not recommended for over HRC40.
5. High pressure coolant or air-jet to be supplied for good chip removal.

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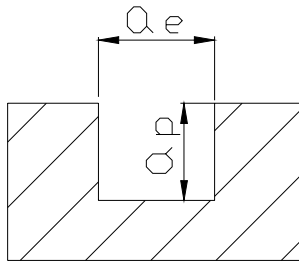


SLOTTING

Workpiece	Aluminium alloy (Si < 4%)		Aluminium alloy (Si < 12%)		Aluminium alloy (Si < 14%)		Aluminium alloy (die casting)	
Mill DIA ϕ D (m)	V=100~300m/min		V=100~250m/min		V=100~200m/min		V=80~150m/min	
	N (rpm)	F mm/min	N (rpm)	F mm/min	N (rpm)	F mm/min	N (rpm)	F mm/min
3	21200	2120	20000	2000	15920	1500	12750	1275
4	20000	2000	17700	1800	11950	1200	9550	1145
5	17700	1800	15000	1800	9550	1050	7650	1000
6	15000	1800	13270	1600	7960	955	6360	900
8	10600	1500	9800	1370	6000	960	4770	760
10	9550	1500	7960	1200	5300	1060	3980	720
12	7960	1400	6630	1060	4800	960	3600	720
14	6750	1350	5650	900	3980	875	3180	700
16	5750	1250	4970	850	3580	850	2980	715
20	4750	1150	3980	800	3180	800	2380	600

Depth of cut

$$a_p \leq 1D$$



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