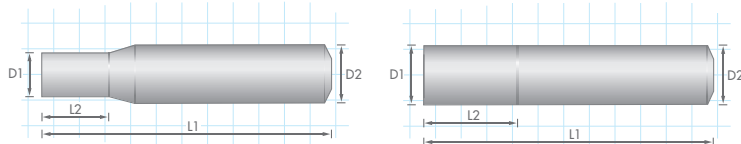
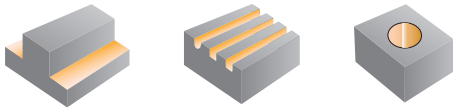


Tool Series 35I: HPC Hard Milling Carbide End Mills



Tolerance	(Uncoated*)	(Coated):
D1:	3-6: -0.007 -0.020	h8
D1:	8-10: -0.007 -0.024	h8
D1:	12: -0.007 -0.026	h8
D2:	h5	h5

* Tools are recommended to be operated in "coated condition" only. Uncoated tolerances allow for custom coatings by third parties.

Uncoated Tool Number	Coated Tool Number	DI	D2	L1	L2	Z
35I-4030	35I-4030-R	3	6	50	8	4
35I-4040	35I-4040-R	4	6	50	11	4
35I-4050	35I-4050-R	5	6	50	13	4
35I-4060	35I-4060-R	6	6	50	13	4
35I-4080	35I-4080-R	8	8	63	19	4
35I-4100	35I-4100-R	10	10	75	22	4
35I-4120	35I-4120-R	12	12	75	26	4



Technical Information

Material:	Alloy Steel Stainless Steel Carbon Steel		Pre Hardened Steel		Hardened Steel Titanium		High Temp. Alloys Inconel		Cast Iron	
Hardness:	25-35 HRC		35-45 HRC		45-55 HRC				150-200 HB	
Cutting Depth:	axial (l) ap: 0.2DI		axial (l) ap: 0.2DI		axial (l) ap: 0.2DI		axial (l) ap: 0.2DI		axial (l) ap: 0.5DI	
	radial (-) ae: IDI		radial (-) ae: IDI		radial (-) ae: IDI		radial (-) ae: IDI		radial (-) ae: IDI	
Condition:	HSC		HSC		Normal		Normal		HSC	
Vc (m/min):	70		60		30		15		120	
Speed & Feed:	n	Vf	n	Vf	n	Vf	n	Vf	n	Vf
	RPM	mm/min	RPM	mm/min	RPM	mm/min	RPM	mm/min	RPM	mm/min
Slotting										
DI: 3	7,467	593	6,402	513	3,196	131	1,598	60	12,804	1,025
DI: 4	5,598	673	4,804	573	2,402	191	1,196	101	9,598	1,156
DI: 5	4,472	628	824	538	1,920	231	960	116	7,688	1,231
DI: 6	3,739	603	3,196	513	1,598	251	804	131	6,402	1,276
DI: 8	2,804	563	2,402	482	1,196	191	603	101	4,804	1,347
DI: 10	2,241	543	1,920	462	965	191	482	101	3,839	1,226
DI: 12	1,869	523	1,598	452	804	191	402	101	3,196	1,146

This data recommendation may serve as a general guidance only. The actual cutting parameters may vary in each application. A proportional feed rate adjustment is necessary when the actual RPM is lower than the stated recommendation.

Tool Series 35I: Technical Support

Technical Information: 35I Series Hard Milling Carbide End Mills

Material:	Alloy Steel Stainless Steel Carbon Steel		Pre Hardened Steel		Hardened Steel Titanium	
Hardness:	25-35 HRC		35-45 HRC		45-55 HRC	
Cutting Depth:	axial (l) ap: 1.5DI		axial (l) ap: 1.5DI		axial (l) ap: 1.52DI	
	radial (-) ae: 0.1DI		radial (-) ae: 0.1DI		radial (-) ae: 0.05DI	
Condition:	HSC		HSC		HSC	
Vc (m/min):	150		120		100	
Speed & Feed:	n	Vf	n	Vf	n	Vf
	RPM	mm/min	RPM	mm/min	RPM	mm/min
Side Milling						
DI: 3	16,000	1,276	12,804	1,025	10,673	422
DI: 4	12,000	1,437	9,598	1,156	8,000	643
DI: 5	9,598	1,347	7,688	1,075	6,392	769
DI: 6	8,000	1,276	6,402	1,025	5,337	854
DI: 8	6,000	1,196	4,804	965	4,000	643
DI: 10	4,804	1,156	3,839	925	3,196	643
DI: 12	4,000	1,116	3,196	894	2,663	643

Material:	Titanium		High Temperature Alloys Inconel		Cast Iron	
Hardness:					150 - 200 HB	
Cutting Depth:	axial (l) ap: 1.5DI		axial (l) ap: 1.5DI		axial (l) ap: 1.5DI	
	radial (-) ae: 0.05DI		radial (-) ae: 0.05DI		radial (-) ae: 0.1DI	
Condition:	HSC		HSC		HSC	
Vc (m/min):	60		25		220	
Speed & Feed:	n	Vf	n	Vf	n	Vf
	RPM	mm/min	RPM	mm/min	RPM	mm/min
Side Milling						
DI: 3	6402	251	2663	111	23467	1879
DI: 4	4804	382	2000	161	17608	2111
DI: 5	3839	462	1598	196	14070	2251
DI: 6	3196	513	1337	211	11738	2352
DI: 8	2402	382	1005	161	8804	2462
DI: 10	1920	382	804	161	7045	2251
DI: 12	1598	382	663	161	5869	2111

This data recommendation may serve as a general guidance only. The actual cutting parameters may vary in each application. A proportional feed rate adjustment is necessary when the actual RPM is lower than the stated recommendation.