

## Series 4200 & 4300

### TWO FLUTE LOW HELIX FINISHERS

Our double edge low helix spirals are recommended for cutting hard plastics, such as acrylics and phenolics. The lower helix angle produces less “lifting” and “fluttering” on plastic materials. Tools are extremely sharp, producing very clean edges that require little secondary work. These bits also provide great finishes in hardwoods and are recommended for “open cell” foam applications.



Upcut - Series 4200



Downcut - Series 4300

UPCUT PART #	DOWNCUT PART #	CED	CEL	SHK DIA	OAL
4208	4308	6mm	20mm	6mm	64mm
4220	4320	3/16	5/8	1/4	2 1/2
4230	4330	1/4	3/8	1/4	3
4230L	--	1/4	3/8	1/4	3
4233	4333	1/4	3/4	1/4	3
4235	4335	5/16	1	5/16	3
4240	4340	3/8	1	3/8	3
4245	4345	1/2	1	1/2	3 & 3 1/2
4246	4346	10mm	25mm	10mm	76mm
4250	4350	1/2	1 1/4	1/2	3 1/2
4253	4353	12mm	35mm	12mm	88mm
--	4350L	1/2	1 1/4	1/2	3 1/2
4260	4360	1/2	1 3/4	1/2	4
4260L	--	1/2	1 3/4	1/2	4
4280	4380	3/4	2 1/2	3/4	5 & 6

L = Left Hand Rotation

## Series 4400 & 4500

### THREE FLUTE LOW HELIX FINISHERS

The combination of the low helix angle and flute geometry makes these tools razor sharp. They are recommended as a super finishing tool for acrylic, phenolic, UHMW, solid surface and dense hardwoods. The three flute geometry provides faster feed rate capabilities, while producing ultra smooth finishes.



Upcut - Series 4400



Downcut - Series 4500

UPCUT PART #	DOWNCUT PART #	CED	CEL	SHK DIA	OAL
4430	4530	1/4	3/8	1/4	3
4433	4533	1/4	3/4	1/4	3
4435	4535	5/16	1	5/16	3
4438	4538	3/8	5/8	3/8	3
4440	4540	3/8	1	3/8	3
4445	4545	1/2	1	1/2	3 & 3 1/2
4450	4550	1/2	1 1/4	1/2	3 1/2
4460	4560	1/2	1 3/4	1/2	4
4460L	4560L	1/2	1 3/4	1/2	4
4480	4580	3/4	2 1/2	3/4	5 & 6

L = Left Hand Rotation

## Series 5000 & 5100

### TWO FLUTE "LOW HELIX" ROUGHERS

Roughing tools are designed for high feed rates on CNC routers and are used when surface finish is not important in dense materials such as hardwoods, particle board, plywood and plastic. The low helix design of these tools is a less aggressive version of Series 1000/1100 and 1600/1700. They will produce less "lifting and fluttering" of the material. These tools will produce a rippled edge cut and are extremely quiet and smooth cutting even in heavy cuts and high feed rates.



Upcut - Series 5000

UPCUT PART #	DOWNCUT PART #	CED	CEL	SHK DIA	OAL
5050	5150	1/2	1 1/4	1/2	3 1/2
5060	5160	1/2	1 3/4	1/2	4
5080	5180	3/4	2 1/2	3/4	5 & 6

## Series 5200 & 5300

### THREE FLUTE "LOW HELIX" ROUGHERS



Upcut - Series 5200

UPCUT PART #	DOWNCUT PART #	CED	CEL	SHK DIA	OAL
5240	5340	3/8	1	3/8	3
5250	5350	1/2	1 1/4	1/2	3 1/2
5260	5360	1/2	1 3/4	1/2	3 1/2 & 4
5280	5380	3/4	2 1/2	3/4	5 & 6

CED = Cutting Edge Diameter  
 CEL = Cutting Edge Length  
 SHK DIA = Shank Diameter  
 OAL = Overall Length