

## 4-Flute Double End Stub Length Miniature HSCO



Suitable for finishing of precision components such as watch, camera, and electronic apparatus molds.



Speeds & Feeds > P. A44

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
<b>Inch</b>					
1/16	3/16	3/32	2	103461	24.04
5/64	3/16	1/8	2	103462	22.67
3/32	3/16	9/64	2	103463	22.67
7/64	3/16	5/32	2	103464	20.51
1/8	3/16	3/16	2	103465	22.67
9/64	3/16	7/32	2	103466	19.75
5/32	3/16	15/64	2	103467	24.04
11/64	3/16	1/4	2	103468	19.75
3/16	3/16	9/32	2	103469	19.75

## 4-Flute Double End Regular Length Miniature HSCO



Suitable for finishing of precision components such as watch, camera, and electronic apparatus molds, etc.



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Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
<b>Inch</b>					
1/16	3/16	3/16	2-1/4	103470	22.67
5/64	3/16	15/64	2-1/4	103471	22.67
3/32	3/16	9/32	2-1/4	103472	22.67
7/64	3/16	21/64	2-1/4	103473	22.67
1/8	3/16	3/8	2-1/4	103474	22.67
9/64	3/16	13/32	2-1/4	103475	24.04
5/32	3/16	7/16	2-1/4	103476	22.67
11/64	3/16	1/2	2-1/4	103477	21.69
3/16	3/16	1/2	2-1/4	103478	22.67

## 4-Flute Double End Long Length Miniature HSCO



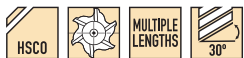
Longer flute length. Suitable for finishing of precision components such as watch, camera and electronic apparatus molds.



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Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
<b>Inch</b>					
1/16	3/16	7/32	2-1/2	103479	24.44
5/64	3/16	1/4	2-1/2	103480	23.51
3/32	3/16	9/32	2-5/8	103481	24.44
7/64	3/16	9/32	2-5/8	103482	21.15
1/8	3/16	3/4	3-1/8	103483	26.04
9/64	3/16	3/4	3-1/8	103484	25.04
5/32	3/16	7/8	3-1/4	103485	26.04
11/64	3/16	7/8	3-1/4	103486	25.46
3/16	3/16	1	3-3/8	103487	26.04

## Multi-Flute Centre Cut Heavy Duty HSCO



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Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
<b>Inch</b>					
2	2	2	5-3/4	103389	487.73
2	2	4	7-3/4	103390	504.18
2	2	5	8-3/4	103391	648.44
2	2	6	9-3/4	103392	689.40
2	2	8	11-3/4	103393	815.93

## 60° High Helix Regular Length HSCO



Faster feed and speed than normal HSS can be applied to even hardened steels over 35HRC.

- Centre cutting



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Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Flutes	Code No.	Price \$
<b>Inch</b>						
1/4	3/8	5/8	2-7/16	3	103538	38.05
5/16	3/8	3/4	2-1/2	3	103539	38.05
3/8	3/8	3/4	2-1/2	3	103540	38.05
7/16	3/8	1	2-11/16	3	103541	52.63
1/2	1/2	1-1/4	3-1/4	3	103542	55.39
5/8	5/8	1-5/8	3-3/4	3	103543	80.12
3/4	3/4	1-5/8	3-7/8	3	103544	112.60
1	1	2	4-1/2	4	103546	171.81
1-1/4	1-1/4	2	4-1/2	4	103547	234.96
1-1/2	1-1/4	2	4-1/2	4	103548	425.71
2	1-1/4	2	4-1/2	4	103549	659.76

## 3/4" Shank Regular Length HSCO



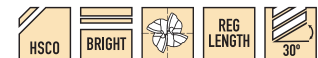
Speeds & Feeds > P. A44

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Flutes	Code No.	Price \$
<b>Inch</b>						
3/4	3/4	1-5/8	3-7/8	4	103336	57.95
7/8	3/4	1-7/8	4-1/8	4	103338	74.54
1	3/4	1-7/8	4-1/8	4	103340	92.65
1-1/8	3/4	2	4-1/4	6	103341	132.38
1-1/4	3/4	2	4-1/4	6	103342	145.37
1-1/2	3/4	1-1/2	4-1/4	6	103343	202.16
1-3/4	3/4	1-1/2	4-1/2	6	103344	263.10
2	3/4	1-1/2	4-1/2	8	103345	301.85

## 4-Flute Ball Nose Regular Length HSCO



The 4-Flute Ball End Mills are designed for milling of radius bottom slots, fillets and special contours. The end teeth are cut to centre allowing these end mills to drill into material at the beginning of a slotting cut.



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Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
<b>Inch</b>					
1/8	3/8	3/8	2-5/16	104950	39.96
3/16	3/8	1/2	2-3/8	104952	39.96
1/4	3/8	5/8	2-7/16	104954	39.96
5/16	3/8	3/4	2-1/2	104956	39.96
3/8	3/8	3/4	2-1/2	104958	39.96
7/16	3/8	1	2-11/16	104960	55.10
1/2	1/2	1-1/4	3-1/4	104962	55.10
5/8	5/8	1-5/8	3-3/4	104964	88.58
11/16	3/4	1-5/8	3-3/4	104966	112.65
3/4	3/4	1-5/8	3-7/8	104968	112.65
7/8	7/8	1-7/8	4-1/8	104970	140.02
1	1	2	4-1/2	104972	165.98
1-1/8	1	2	4-1/2	104974	218.59
1-1/4	1-1/4	2	4-1/2	104976	272.77
1-1/2	1-1/4	2	4-1/2	104978	306.61
2	1-1/4	2	4-1/2	104980	464.09