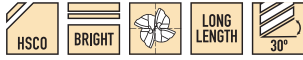


4-Flute Ball Nose Long Length HSCO

Longer flute length than regular length ball end mills and suitable for high efficiency copying process and deep cutting of die mold corner radius.



Speeds & Feeds > P. A44

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Code No.	Price \$
Inch					
1/4	3/8	1-1/4	3-1/16	104982	51.58
5/16	3/8	1-3/8	3-1/8	104984	51.58
3/8	3/8	1-1/2	3-1/4	104986	51.58
1/2	1/2	2	4	104988	63.97
5/8	5/8	2-1/2	4-5/8	104990	105.09
3/4	3/4	3	5-1/4	104992	135.68
7/8	7/8	3-1/2	5-3/4	104994	151.96
1	1	4	6-1/2	104996	197.87

Regular Length Roughing End Mills HSCO

Multiple-Flute: This general purpose rougher is designed for high production metal removal in a wide range of workpiece material. It is recommended for cutting steel grades and many non-ferrous materials. The end tooth of this tool has a centre hole design for many accurate resharpenings.



Speeds & Feeds > P. A45

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	O.A.L. (in.)	Fl.	Comb. Shank Code No.	Price \$	Bright Finish Code No.	Price \$	TiAlN Coated Code No.	Price \$
Inch										
1/4	3/8	5/8	2-7/16	3	103950	37.83	103900	38.15	104500	56.66
5/16	3/8	3/4	2-1/2	3	103951	39.32	103901	38.15	104501	56.65
3/8	3/8	3/4	2-1/2	4	-	-	103902	38.15	104502	56.65
1/2	1/2	1-1/4	3-1/4	4	103953	64.04	103903	53.19	104503	82.38
5/8	5/8	1-5/8	3-3/4	4	-	-	103904	64.89	104504	90.33
3/4	5/8	1-5/8	3-3/4	4	103955	77.32	103905	80.66	104505	113.56
3/4	3/4	1-5/8	3-3/4	4	-	-	103906	80.66	104506	119.34
7/8	3/4	1-7/8	4-1/8	5	103957	103.34	103907	99.83	104507	151.03
1	1	2	4-1/2	5	-	-	103908	116.68	104508	182.04
1-1/8	1	2	4-1/2	6	103959	140.75	103909	154.06	104509	226.19
1-1/4	1-1/4	2	4-1/2	6	-	-	103910	178.31	104510	259.16
1-1/2	1-1/4	2	4-1/2	6	-	-	103911	238.82	104511	352.51
1-3/4	1-1/4	2	4-1/2	6	-	-	103912	313.87	-	-
2	2	2	5-3/4	8	-	-	103913	440.03	-	-
2	2	3	6-3/4	8	-	-	103914	472.43	-	-
2	2	4	7-3/4	8	-	-	103915	573.13	-	-

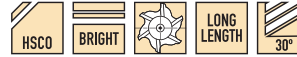
Medium Length Roughing End Mills HSCO



Speeds & Feeds > P. A45

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Flutes	Code No.	Price \$
Inch						
1	1	3	5-1/2	5	103916	144.12
1-1/4	1-1/4	3	5-1/2	6	103917	216.00
1-1/2	1-1/4	3	5-1/2	6	103918	249.21
2	2	6	9-3/4	8	103919	723.52

Long Length Roughing End Mills HSCO



Speeds & Feeds > P. A45

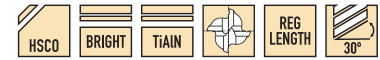
Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Flutes	Comb. Shank Code No.	Price \$	Weldon Flat Code No.	Price \$
Inch								
3/8	3/8	1-1/2	4	4	-	-	103932	62.88
1/2	1/2	2	4	4	103970	69.39	103920	68.45
5/8	5/8	2-1/2	4-5/8	4	103971	101.60	103921	93.62
3/4	5/8	3	5-1/8	4	-	-	103922	100.82
3/4	3/4	3	5-1/4	4	-	-	103923	100.82
7/8	3/4	3-1/2	5-3/4	5	-	-	103924	122.49
1	1	4	6-1/2	5	-	-	103925	167.44
1-1/4	1-1/4	4	6-1/2	6	-	-	103926	240.56
1-1/2	1-1/4	4	6-1/2	6	-	-	103927	285.61
1-3/4	1-1/4	4	6-1/2	6	-	-	103928	373.50
2	2	8	11-3/4	8	-	-	103929	933.01

Regular Length Centre Cut Roughing End Mills HSCO

This general purpose rougher is designed for high production metal removal in a wide range of workpiece material. It is recommended for cutting steel grades and many non-ferrous materials.



- Multiple helical flutes
- Single end with weldon shank
- Centre cutting
- Round profile
- Coarse pitch



Speeds & Feeds > P. A45

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Flutes	Bright Finish Code No.	Price \$	TiAlN Coated Code No.	Price \$
Inch								
1/2	1/2	1-1/4	3-1/4	4	103100	58.65	103585	56.07
5/8	5/8	1-5/8	3-3/4	4	103101	72.53	103591	118.05
3/4	3/4	1-5/8	3-7/8	4	103102	90.23	103587	100.84
1	1	2	4-1/2	5	103103	128.38	103593	119.47
1-1/4	1-1/4	2	4-1/2	6	103104	196.15	103589	145.87
1-1/2	1-1/4	2	4-1/2	6	103105	262.77	103595	261.02

Stub Length Centre Cutting Rougher HSCO

This general purpose rougher is designed for high production metal removal in a wide range of workpiece material. Suitable for a very broad spectrum of materials having high tensile strengths. Milled surfaces are of exceptional quality.



- 3 helical flutes
- Centre cutting
- Coarse pitch
- Round profile



Speeds & Feeds > P. A45

Cutting Dia. (in.)	Shank Dia. (in.)	Flute Length (in.)	Overall Length (in.)	Flutes	Bright Finish Code No.	Price \$	TiAlN Coated Code No.	Price \$
Inch								
1/4	3/8	1/4	2-1/16	3	104340	45.81	104360	68.17
3/8	3/8	3/8	2-5/32	3	104342	45.81	104362	60.26
1/2	1/2	1/2	2-1/2	3	104344	62.91	104364	85.75
5/8	5/8	5/8	2-3/4	3	104346	73.87	104366	103.84
3/4	3/4	3/4	2-7/8	3	104348	96.76	104368	153.38
1	1	1	3-1/2	3	104350	145.29	104370	204.87