

H700 Solid Carbide End mills ***Face milling for high hardened steel, HRC 55~65***

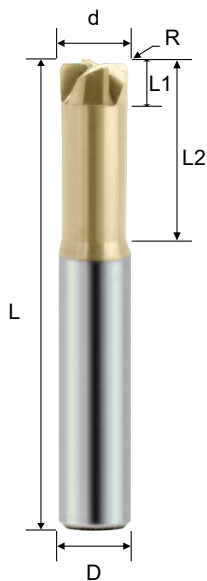
- ***For mold and die industry***
- ***High speed face milling***
- ***Low helix and high rigidity geometry***
- ***Special coating with wear-resistance***



H700 - High Feed · Short · Corner Radius · 4F

- SICO Nano coating provides a superior wear and heat resistance.
- Suitable for HRC 50 Hardened Steel, maximum up to HRC 65.
- Cutting edges are very strong and wear resistant.
- For High speed and high feed cutting.
- The coating can change to Naco Blue is optional.

EHCUK

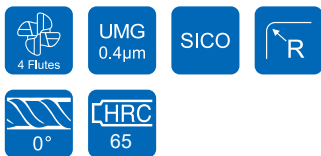
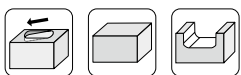


Order No.	Dia. (d)	Radius. (R)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (F)
EHCUK40200506S	2	0.5R	1.0	6	50	6	4
EHCUK40300508S	3	0.5R	1.5	8	50	6	4
EHCUK40400512S	4	0.5R	2.0	12	60	6	4
EHCUK40400516S	4	0.5R	2.0	16	60	6	4
EHCUK40401012S	4	1.0R	2.0	12	60	6	4
EHCUK40401016S	4	1.0R	2.0	16	60	6	4
EHCUK40600512S	6	0.5R	3.0	12	60	6	4
EHCUK40600515S	6	0.5R	3.0	15	60	6	4
EHCUK40601015S	6	1.0R	3.0	15	60	6	4
EHCUK40601515S	6	1.5R	3.0	15	60	6	4
EHCUK40800520S	8	0.5R	4.0	20	60	8	4
EHCUK40801020S	8	1.0R	4.0	20	60	8	4
EHCUK41000525S	10	0.5R	5.0	25	75	10	4
EHCUK41001025S	10	1.0R	5.0	25	75	10	4
EHCUK41201030S	12	1.0R	6.0	30	75	12	4
EHCUK41202030S	12	2.0R	6.0	30	75	12	4

* is SICO Coating
 is Naco Blue Coating

Recommended Cutting Conditions

Working Material	Hardened steel		Hardened steel		Hardened steel	
	HRC 40~50		HRC 50~55		HRC 55~60	
Vc	90 ~ 130 m/min		55 ~ 78 m/min		36 ~ 52 m/min	
Diameter (d)	R.P.M	FEED (mm/min)	R.P.M	FEED (mm/min)	R.P.M	FEED (mm/min)
2 mm	20,700	5,750	12,420	3,450	8,280	2,310
3 mm	13,800	6,050	8,280	3,640	5,520	2,420
4 mm	10,350	7,030	6,210	4,220	4,140	2,810
6 mm	6,900	6,900	4,140	4,140	2,760	2,760
8 mm	5,200	6,850	3,105	4,090	2,070	2,730
10 mm	4,150	6,600	2,500	3,970	1,650	2,640
12 mm	3,450	6,900	2,070	4,140	1,380	2,760
Milling Amount (mm)	$\frac{a_e}{R \leq 1} \quad \frac{a_p}{0.2 \times R \quad 0.025D}$ $\frac{a_e}{R > 1} \quad \frac{a_p}{0.4mm \quad 0.025D}$		$\frac{a_e}{R \leq 1} \quad \frac{a_p}{0.1 \times R \quad 0.025D}$ $\frac{a_e}{R > 1} \quad \frac{a_p}{0.2mm \quad 0.025D}$			

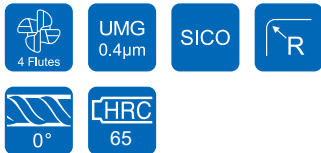
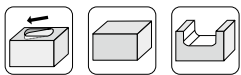
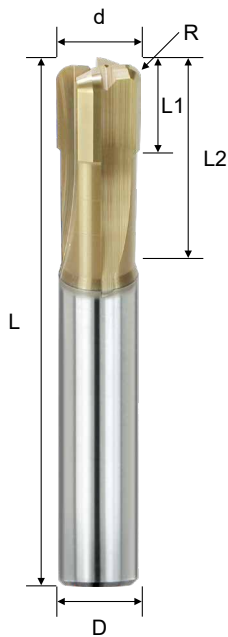


Ød	Tolerance
Ød ≤ 12	0 ~ -0.02
Ød > 12	0 ~ -0.03
R	± 0.015

H700 - High Feed · Corner Radius · 4F

- SICO Nano coating provides a superior wear and heat resistance.
- Suitable for HRC 50 Hardened Steel, maximum up to HRC 65.
- Cutting edges are very strong and wear resistant.
- For High speed and high feed cutting.
- The coating can change to Naco Blue is optional.

EHCUS



Ød	Tolerance
Ød ≤ 12	0 ~ -0.02
Ød > 12	0 ~ -0.03
R	± 0.015

Order No.	Dia. (d)	Radius. (R)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (F)
EHCUS441002S	1	0.20R	1	2.5	50	4	4
EHCUS442002S	2	0.25R	2	6.5	50	4	4
EHCUS403005S	3	0.50R	3	7.5	50	6	4
EHCUS404005S	4	0.50R	4	10.0	50	6	4
EHCUS404010S	4	1.00R	4	10.0	50	6	4
EHCUS405010S	5	1.00R	5	12.5	50	6	4
EHCUS406010S	6	1.00R	6	15.0	50	6	4
EHCUS406015S	6	1.50R	6	15.0	50	6	4
EHCUS408010S	8	1.00R	8	20.0	60	8	4
EHCUS408015S	8	1.50R	8	20.0	60	8	4
EHCUS408020S	8	2.00R	8	20.0	60	8	4
EHCUS410010S	10	1.00R	10	25.0	75	10	4
EHCUS410020S	10	2.00R	10	25.0	75	10	4
EHCUS412010S	12	1.00R	12	30.0	75	12	4
EHCUS412020S	12	2.00R	12	30.0	75	12	4
EHCUS412030S	12	3.00R	12	30.0	75	12	4

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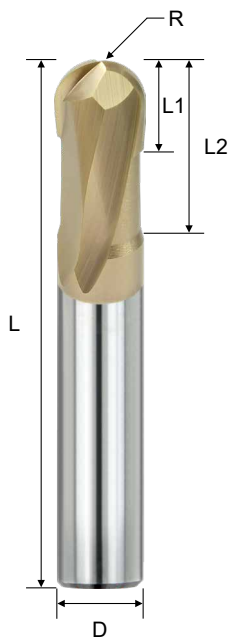
Recommended Cutting Conditions

Working Material	Hardened steel		Hardened steel		Hardened steel	
Code	SKT, SKD		SKT, SKD		SKT, SKD	
Hardness	HRC 45~55		HRC 55~60		HRC 60~70	
Vc	65 ~ 98 m/min		39 ~ 59 m/min		26 ~ 39 m/min	
Diameter (d)	R.P.M	FEED (mm/min)	R.P.M	FEED (mm/min)	R.P.M	FEED (mm/min)
1 mm	20,670	2,150	12,350	980	8,281	500
2 mm	10,335	2,145	6,175	980	4,134	500
3 mm	6,890	2,150	4,160	990	2,756	500
4 mm	5,200	2,160	3,120	990	2,067	500
6 mm	4,350	2,150	2,600	990	1,750	500
8 mm	3,260	2,160	1,950	990	1,310	500
10 mm	2,600	2,160	1,560	980	1,050	500
12 mm	2,175	2,190	1,300	980	875	500
Milling Amount (mm)	$R \leq 2$ $\frac{ae}{0.2 \times R}$ $\frac{ap}{0.05D}$ $R > 2$ $0.4mm$ $0.05D$		$R \leq 2$ $\frac{ae}{0.1 \times R}$ $\frac{ap}{0.05D}$ $R > 2$ $0.2mm$ $0.05D$			

H700 - Low Helix · Ball Nose · 2F

- SICO Nano coating provides a superior wear and heat resistance.
- Suitable for HRC 50 Hardened Steel, maximum up to HRC 65.
- Due to short cutting length it provides an excellent surface roughness of the work pieces.
- Low helix design is suitable for hardened steel cutting.
- The coating can change to Naco Blue is optional.

EHBUS

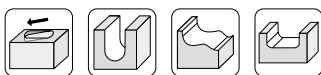


Order No.	Radius. (R)	Dia. (d)	CL (L1)	EFF-L (L2)	OAL (L)	Shank (D)	Flutes (F)
EHBUS241000S	0.50R	1.0	1.0	2	50	4	2
EHBUS241500S	0.75R	1.5	1.5	3	50	4	2
EHBUS202000S	1.00R	2.0	2.0	4	50	6	2
EHBUS203000S	1.50R	3.0	3.0	6	50	6	2
EHBUS204000S	2.00R	4.0	4.0	8	50	6	2
EHBUS205000S	2.50R	5.0	5.0	10	50	6	2
EHBUS206000S	3.00R	6.0	6.0	12	50	6	2
EHBUS208000S	4.00R	8.0	8.0	16	60	8	2
EHBUS210000S	5.00R	10.0	10.0	20	75	10	2
EHBUS212000S	6.00R	12.0	12.0	24	75	12	2
EHBUS216000S	8.00R	16.0	16.0	32	100	16	2

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Recommended Cutting Conditions

Working Material	Hardened steel		Hardened steel		Hardened steel					
Code	SKT, SKD		SKT, SKD		SKT, SKD					
Hardness	HRC 45~55		HRC 55~60		HRC 60~70					
Vc	86 ~ 129 m/min		77 ~ 116 m/min		42 ~ 63 m/min					
Radius (R)	R.P.M	FEED (mm/min)	R.P.M	FEED (mm/min)	R.P.M	FEED (mm/min)				
0.5R	41,600	960	39,000	850	33,150	500				
1.0R	40,950	1,900	37,050	1,880	20,150	600				
1.5R	27,300	2,080	24,700	1,880	13,650	625				
2.0R	20,150	2,050	18,200	1,850	10,335	630				
2.5R	16,250	2,060	14,300	1,815	8,255	630				
3.0R	13,650	2,080	12,350	1,880	6,890	630				
4.0R	10,335	1,550	9,295	1,400	5,135	470				
5.0R	8,255	1,250	7,410	1,100	4,095	375				
6.0R	6,890	1,050	6,175	950	3,445	315				
8.0R	5,135	790	4,745	710	2,535	230				
Milling Amount (mm)	<table border="1"> <tr><td>ap</td><td>Pf</td></tr> <tr><td>0.02D</td><td>0.1D</td></tr> </table>		ap	Pf	0.02D	0.1D				
ap	Pf									
0.02D	0.1D									



Ød	R Tolerance
Ød ≤ 12	± 0.01
Ød > 12	± 0.015

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