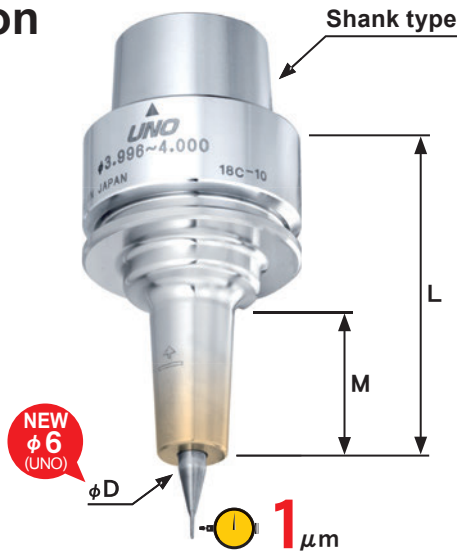


# UNO

■ Ideal for ultra-high-speed and high-precision machining centers.  
Especially suitable for small and micro cutting tools.

## Submicron holder

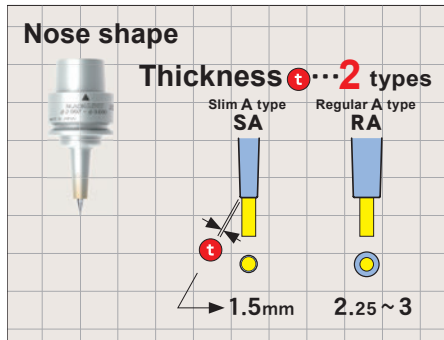


**E32 - SL RA 3 - 50 - M22 U**

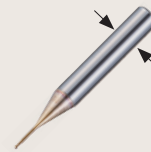
Shank type      SLIMLINE      φD      L      Effective length

U : UNO  
BU : BLACK UNO

UNO	E25
	E32
	E40
	E50
	F63
BLACK UNO	E25
	E32



### Required cutter shank tolerance



- φD = h4 tolerance
- Roundness = 0.3μm
- Cylindricity = 0.5μm

### Recommended cutting tools



IWATA TOOL

NS TOOL

SUMITOMO ELECTRIC  
Connect with Innovation

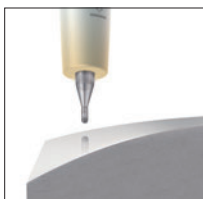
MOLDINO  
The Edge To Innovation

KYOWA

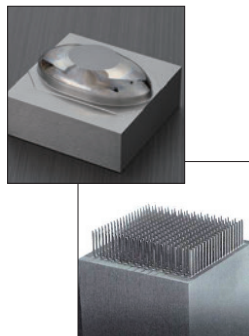


### Run-out accuracy

A tool run-out accuracy of 1/3 of the cutting feed rate is necessary.

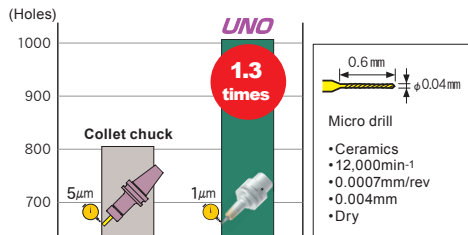


The tool run-out accuracy should be less than **1.5 micron** when you do finishing with a cutting feed rate of 5 microns.



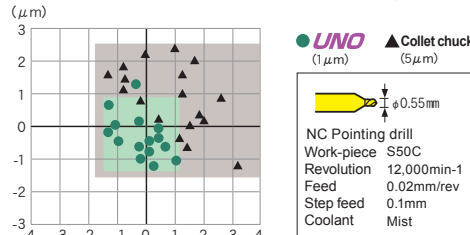
### Tool life

Number of machined small-diameter holes (Holes)



### Positioning accuracy

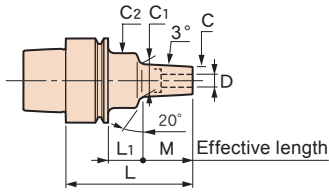
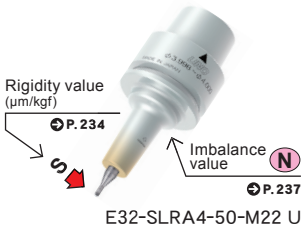
Dispersion of run-out of drill and hole positioning accuracy (μm)



### Eye-mark (▲) at the highest run-out direction.

Delivered with the accuracy inspection sheet.





■ **Option**

- 3S Balloon (BLG)

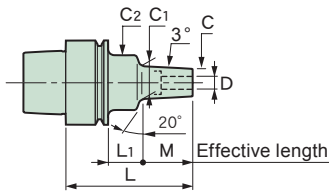
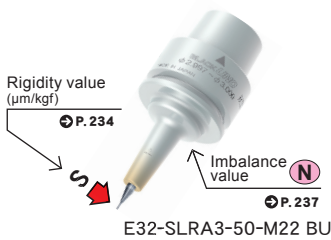
■ **Note**

- SLIMLINE UNO is available for other shank designs and internal bore sizes not listed in this chart. For more information, please contact us.

■ **Caution**

- HSK-E and F shank don't come with a coolant duct and cannot be attached. Consult us if you need it.
- Setting cutters... Be sure to insert the tool beyond the Safety mark.

CODE	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S			
<b>E25-SLRA3-35 U</b>	3	7.5	2.25	35	17	8	9.3	18	9	29	0.05	0.37	2.3			
-SLRA4-35 U	4	10	3				11.8		12					0.06	0.38	1.4
<b>NEW</b> -SLRA6-35 U	6	12					13.8		18					0.07	0.39	1.1
-SLSA3.175-35 U	3.175	6.175	1.5				8		9					0.05	0.37	3.5
<b>E32-SLRA3-50-M22 U</b>	3	7.5	2.25	50	22	8	9.8	20	9	42	0.14	0.4	2.8			
-SLRA4-50-M22 U	4	10	3				12.3		12					0.15		1.7
<b>NEW</b> -SLRA6-50-M22 U	6	12					14.3		26					0.2	0.5	1.2
-SLSA3.175-50-M22 U	3.175	6.175	1.5				8.5		20					0.14	0.4	4.4
<b>E40-SLRA3-50-M22 U</b>	3	7.5	2.25	50	22	8	9.8	20	9	42	0.2	0.7	2.8			
-SLRA4-50-M22 U	4	10	3				12.3		12							1.6
<b>NEW</b> -SLRA6-50-M22 U	6	12					14.3		26							1.2
-SLSA3.175-50-M22 U	3.175	6.175	1.5				8.5		20							4.4
<b>E50-SLRA3-75-M22 U</b>	3	7.5	2.25	75	22	27	9.8	25	9	65	0.5	1.7	2.8			
-SLRA4-75-M22 U	4	10	3				12.3		12							1.7
<b>F63-SLRA3-75-M22 U</b>	3	7.5	2.25	75	22	27	9.8	25	9	54	0.7	1.8	2.8			
-SLRA4-75-M22 U	4	10	3				12.3		12					58		1.7



■ **Std. Access.**

- 3S Balloon (BLB)

■ **Caution**

- HSK-E shank doesn't come with a coolant duct and cannot be attached. Consult us if you need it.
- Setting cutters... Be sure to insert the tool beyond the Safety mark.

CODE	φD	φC	t	L	M	L1	φC1	φC2	H	h	Kg	N	S			
<b>E25-SLRA3-35 BU</b>	3	7.5	2.25	35	17	8	9.3	18	9	29	0.05	0.37	2.3			
-SLRA4-35 BU	4	10	3				11.8		12					0.06	0.38	1.4
-SLSA3.175-35 BU	3.175	6.175	1.5				8		9					0.05	0.37	3.5
<b>E32-SLRA3-50-M22 BU</b>	3	7.5	2.25				50		22					8	9.8	20
-SLRA4-50-M22 BU	4	10	3	12.3	12	0.15				1.7						
-SLSA3.175-50-M22 BU	3.175	6.175	1.5	8.5	20	0.14				4.4						

■ **3S Balloon**

Prevents dirt from getting into the Heat shrink internal bore.

BLACK UNO (Black)

CODE	φd
BLB3	3
3.175	3.175
4	4
6	6

UNO (Gray)

CODE	φd
BLG3	3
3.175	3.175
4	4
6	6

It comes with the BLACK UNO as a standard accessory.



■ **Cleaning tool for a spindle taper hole, STAR DUST**

P.226



■ **Holder stand**

P.16

