

Converging of Global Resources · Professional as Industry Leader

2023



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Website



Youtube

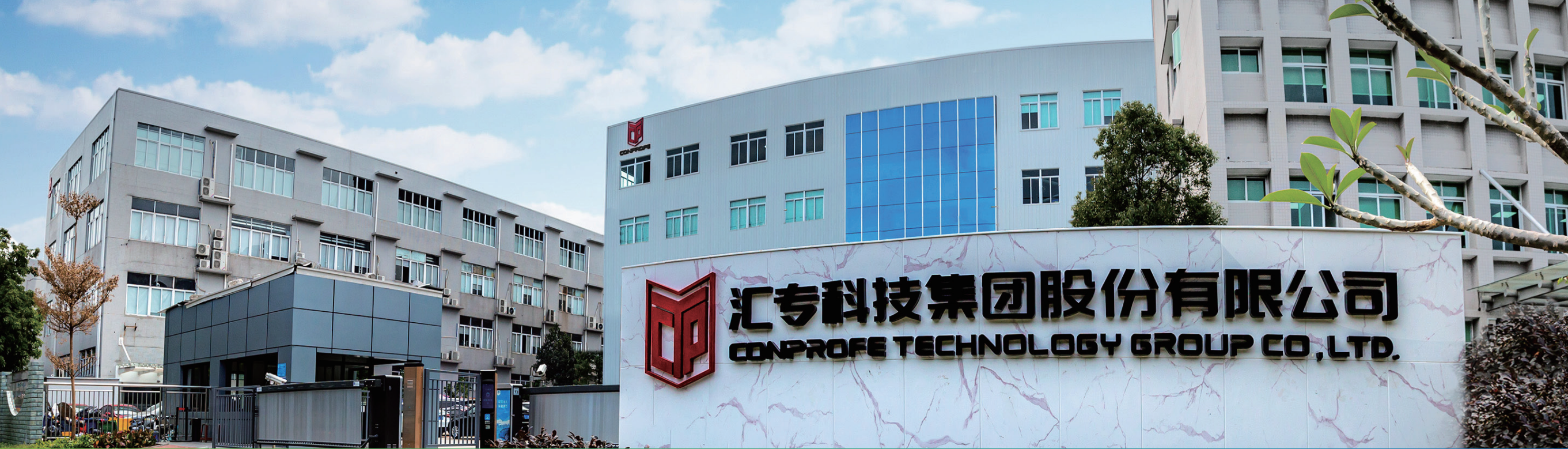


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## Shrink-Fit Tool Holder

Converging of Global Resources · Professional as Industry Leader





## “Conprofe” Connotation

Converging of Global Resources

Professional as Industry Leader

# CONPROFE

## About Conprofe

With its roots back to 2003, Conprofe is a Provider of Efficient, Green and Intelligent Manufacturing Solutions and Key Units. It has been holding on to the idea of “Converging of Global Resources, Professional as Industry Leader” in the past two decades. Revolving around “Efficient, Green and Intelligent Manufacturing”, the company has achieved a giant leap from parts, units to machines and developed a product portfolio with three major industries - Precision Tools, Key Units and CNC Machine Tools, which covers eight categories of products, including Super-hard Tools, Tapping Tools, Precision Tool Holders, Ultrasonic Technologies, Green Technologies, Precision Units, Ultrasonic-Green CNC Machine Tools and Automation. Its customers have spread across diverse sectors, such as consumable electronics, semiconductors, automotive, aviation & aerospace, medical, education and general precision manufacturing, etc.

Conprofe perseveres in laying a solid foundation in the domestic market while keeping its eyes open to the world. Headquartered in Guangzhou Science City, the company has established sales and service centers in seven domestic regions and forged a network of R&D, sales and service based

in Hong Kong, Taiwan, the United States, South Korea, India and Vietnam, etc. With its products being exported to over 70 countries and regions across six continents, Conprofe's integrated distribution of R&D, production, sales and service around the globe has gradually come into being.

Conprofe persists in innovation-driven developing strategy and owns two National High-tech Enterprises under the Group. The company's Frontier Technology Research Institute (FTRI) and Guangdong Province Engineering Technology Center (GPETC) has developed over 850 core technology patents. Its primary product technologies have reached an internationally advanced level, as assessed and acknowledged by experts led by members of the Chinese Academy of Engineering (CAE). Furthermore, Conprofe has successively been granted the Guangdong Scientific and Technological Progress Award (First Prize 2020, Second Prize 2021), Guangdong Patent Award (Silver), China Patent Award (Excellence) and has been honored as Enterprise with Significant Contribution to Guangdong's Supplies for COVID-19 Prevention and Control, Guangzhou Pioneering Private Enterprise, etc.

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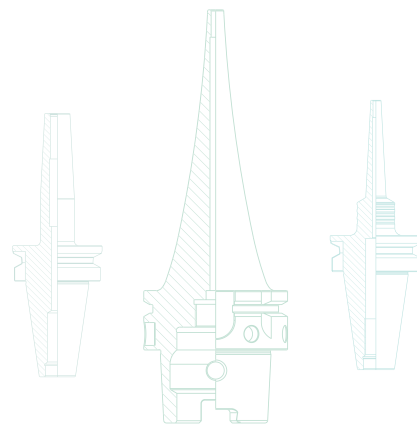
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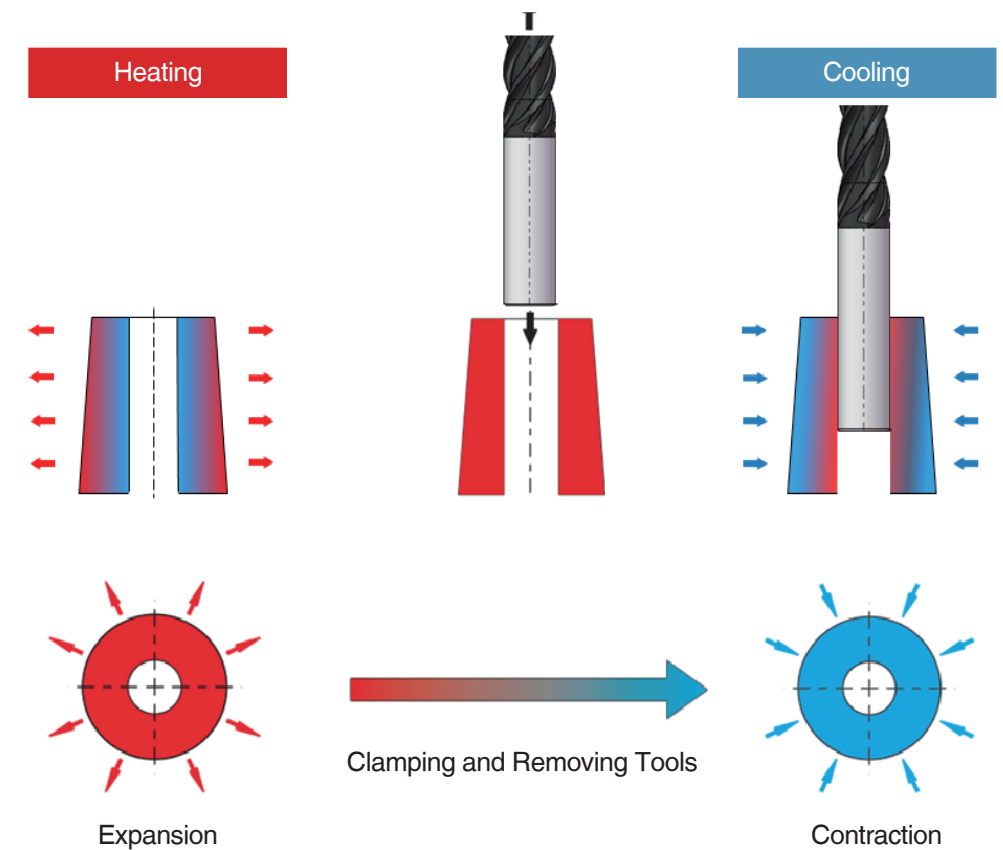
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# Shrink-Fit Tool Holder

## Working Principle

- » Clamp the tool according to the principle of thermal expansion and contraction.
- » Heat the tool holder with the Shrink-Fit machine and then insert the tool when the inner hole of the tool holder expands. After cooling down, the holder contracts and thus clamps the tool tightly.
- » Directly clamps the cutting tool without mechanical connecting components such as collets and nuts. Therefore, it is ideally suitable for high-speed machining with high accuracy, dynamic balance and clamping rigidity.



## Special Notes

### Materials of the Cutter

The Shrink-Fit Tool Holder can ONLY be used to clamp tungsten carbide cutters, not high-speed steel or other alloy steel cutters, because high-speed steel has a large expansion rate, which means the steel will expand when heated up, and thus the cutter cannot be taken out.



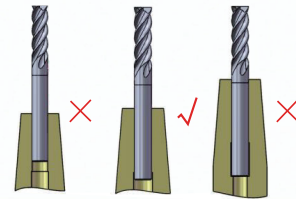
### Shank Tolerance of the Cutter

Shank tolerance of cutting tools needs to be less than h6, and for the tools with diameter less than 6mm, the tolerance should be even tighter (as indicated table on the right side). If the tolerance does not meet the requirement, the tool holder may fail to clamp the tools tightly or the tools cannot be taken out.

Shank Diameter	Tolerance Zone	Tolerance
4	h4	0. -0.004
5	h5	0. -0.005
6	h6	0. -0.008
8	h6	0. -0.009
10	h6	0. -0.009
12	h6	0. -0.011
16	h6	0. -0.011
20	h6	0. -0.013
25	h6	0. -0.013

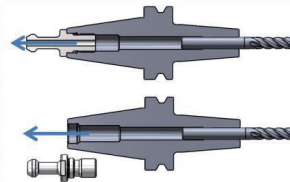
### Insert Length Requirement

The insert length of the cutter should reach or exceed the Min. Insert Length (as indicated in the Technical Information section). If the insert length fails to meet the requirement, the tool holder may be damaged. Additionally, please make sure the cutter does not touch the bottom of the shank to ensure its accuracy.



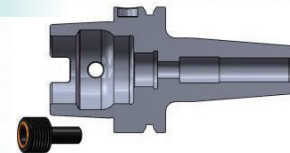
### Through-Hole Pull Stud

Please make sure to use a through-hole pull stud when inserting a cutter into the BT-Series Shrink-Fit Tool Holder. If blind-hole pull stud is used, please make sure to take it out so as to let out the air inside.



### Removing the Coolant Pipe When Heating the Tool Holder

Please make sure to remove the coolant pipe with seal ring before heating the HSK-Series Shrink-Fit Tool Holder, so as to avoid damage to the seal ring.



### Maintenance before and after Use

Clean inner hole before clamping in case of iron chips and dust affecting the precision of the tool holder. After water cooling, please dry the tool holder to prevent rust. After taking out the cutting tool, please clean and apply the tool holder with anti-rust oil when it is not used for long time.

## Features

### Alloy Steel Shrink-Fit Tool Holder

#### High Dynamic Balance

Balanced to G2.5 at 25,000rpm  
Balanced to G1.0 at 60,000rpm

#### High Precision

Extra-long design  
Tool holder runout  $\leq 0.001\text{mm}$   
Runout accuracy within  $0.003\text{mm}$  at 4xD

#### High Clamping Force

Clamping force 2 times higher than DIN standard

#### Corrosion-Proof/Wear Resistant/Rust-Proof

Special surface treatment

High Accuracy with No Distortion  
Caused by Heat Treatment

Fine milling of key groove after heat treatment

Up to 3000 Times of Clamping

Special alloy steel with Conprofe Shrink-Fit Machine for better performance



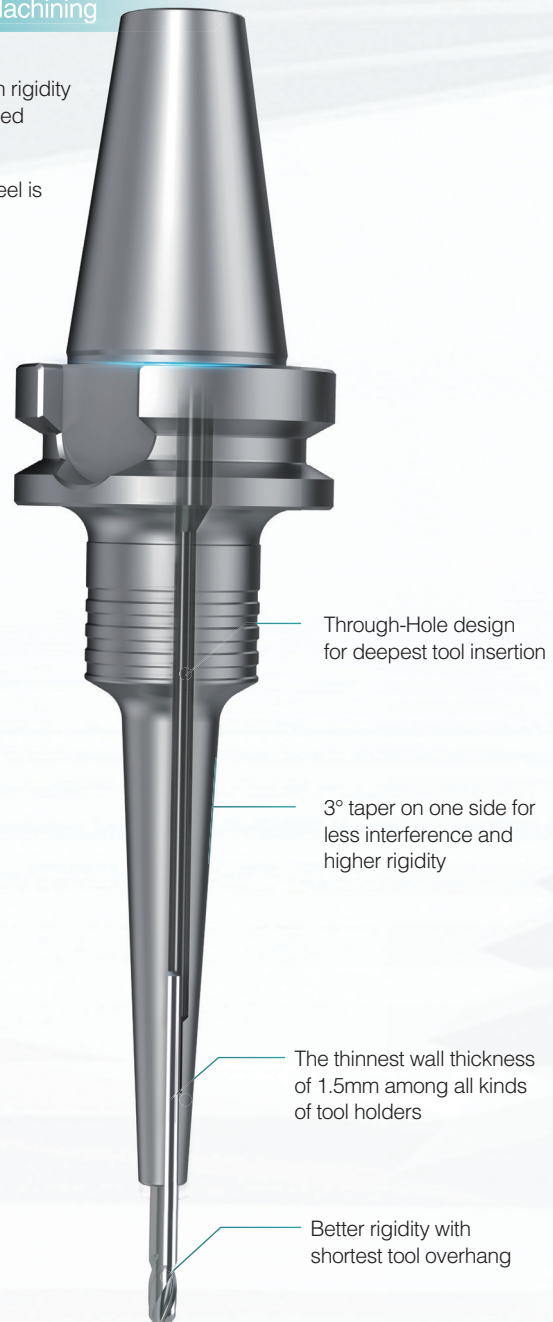
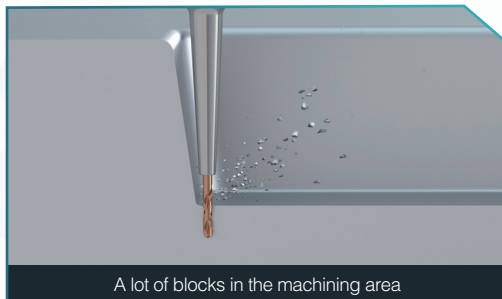
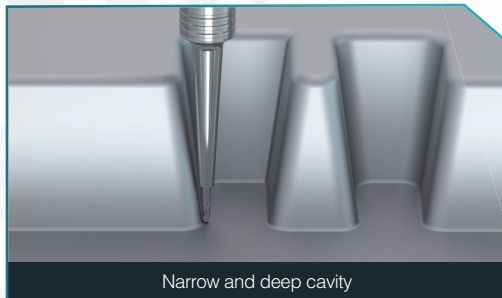
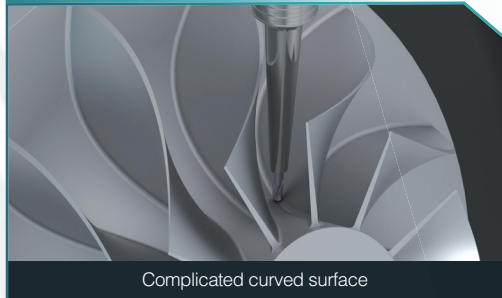
## Features

### Ultra Slim Stainless Steel Shrink-Fit Tool Holder

5-axis Simultaneous Machining // Deep-Hole Machining

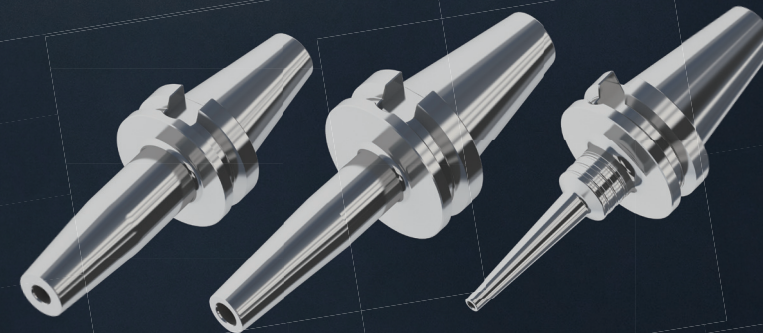
- >>> The tool holder with super slim and long design boasts, high rigidity and high accuracy for 5-axis machining of complicated curved surface.
- >>> The expansion coefficient of special customized stainless steel is 1.6 times larger than the one of alloy steel, with 5000-time clamping in 300 °C.

#### Machining Applications

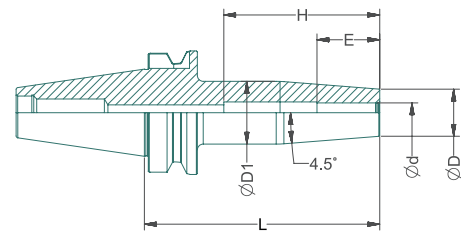


## BT Series

ISO7388-2 Standard  
BT30/BT40/BT50



## Standard Alloy Steel Shrink-Fit Tool Holder



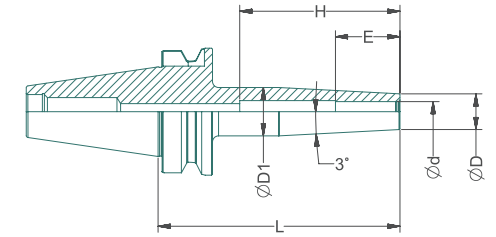
Ordering Number	Specification	Clamping Diameter d	D	D1	L	Min. Inserting Length E	Max. Inserting Length H
5011040	BT30-SHR4-80	4	15	20	80	15	100
5011060	BT30-SHR6-80	6	21	27	80	26	100
5011080	BT30-SHR8-80	8	21	27	80	26	100
5011100	BT30-SHR10-80	10	24	32	80	32	60
5011120	BT30-SHR12-80	12	24	32	80	37	65
5011160	BT30-SHR16-80	16	27	34	80	40	70
5011200	BT30-SHR20-80	20	33	42	80	42	80
5012040	BT40-SHR4-90	4	15	20	90	15	120
5012060	BT40-SHR6-90	6	21	27	90	26	120
5012061	BT40-SHR6-120	6	21	27	120	26	150
5012080	BT40-SHR8-90	8	21	27	90	26	120
5012081	BT40-SHR8-120	8	21	27	120	26	150
5012100	BT40-SHR10-90	10	24	32	90	32	120
5012101	BT40-SHR10-120	10	24	32	120	32	150
5012120	BT40-SHR12-90	12	24	32	90	37	120
5012121	BT40-SHR12-120	12	24	32	120	37	150
5012122	BT40-SHR12-160	12	24	34	160	37	190
5012160	BT40-SHR16-90	16	27	34	90	40	70
5012161	BT40-SHR16-120	16	27	34	120	40	70
5012162	BT40-SHR16-160	16	27	42	160	40	70
5012200	BT40-SHR20-90	20	33	42	90	42	80
5012201	BT40-SHR20-120	20	33	42	120	42	80
5012202	BT40-SHR20-160	20	33	51	160	42	80
5013060	BT50-SHR6-100	6	21	27	100	26	150
5013061	BT50-SHR6-160	6	21	27	160	26	210
5013080	BT50-SHR8-100	8	21	27	100	26	150
5013081	BT50-SHR8-160	8	21	27	160	26	210
5013100	BT50-SHR10-100	10	24	32	100	32	150
5013101	BT50-SHR10-160	10	24	32	160	32	210
5013120	BT50-SHR12-100	12	24	32	100	37	150
5013121	BT50-SHR12-160	12	24	32	160	37	210
5013160	BT50-SHR16-120	16	27	34	120	40	170
5013161	BT50-SHR16-160	16	27	42	160	40	210
5013200	BT50-SHR20-120	20	33	42	120	42	170
5013201	BT50-SHR20-160	20	33	51	160	42	210

- ① One through-hole pull stud is for free; other pull studs need to be ordered separately.
- ② It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.
- ③ Balanced to G2.5 or  $U_{max} < 1\text{gmm}$  at 25000rpm.
- ④ Technical parameters are subject to change without further notice.

### Model Specification



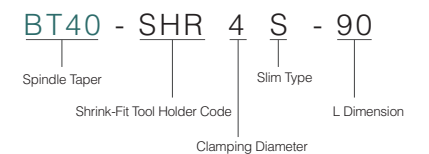
## Slim Alloy Steel Shrink-Fit Tool Holders



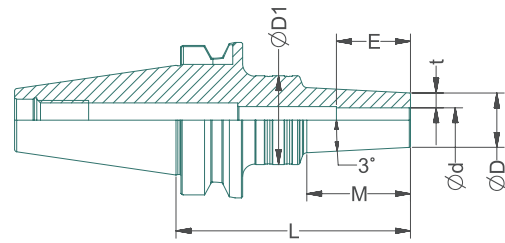
Ordering Number	Specification	Clamping Diameter d	D	D1	L	Min. Clamping Length E	Max. Clamping Length H
5111040	BT30-SHR4S-90	4	10	14	90	15	110
5111060	BT30-SHR6S-90	6	12	18	90	26	110
5111080	BT30-SHR8S-90	8	14	20	90	31	110
5111100	BT30-SHR10S-90	10	16	22	90	37	60
5111120	BT30-SHR12S-90	12	18	24	90	42	65
5111160	BT30-SHR16S-90	16	22	28	90	45	70
5111200	BT30-SHR20S-90	20	27	33	90	47	80
5112040	BT40-SHR4S-90	4	10	14	90	15	110
5112060	BT40-SHR6S-90	6	12	18	90	26	110
5112080	BT40-SHR8S-90	8	14	20	90	31	110
5112100	BT40-SHR10S-90	10	16	22	90	37	110
5112120	BT40-SHR12S-90	12	18	24	90	42	110
5112160	BT40-SHR16S-90	16	22	28	90	45	70
5112200	BT40-SHR20S-90	20	27	33	90	47	80

- ① One through-hole pull stud is for free; other pull studs need to be ordered separately.
- ② It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.
- ③ Balanced to G2.5 or  $U_{max} < 1\text{gmm}$  at 25000rpm.
- ④ Technical parameters are subject to change without further notice.

### Model Specification



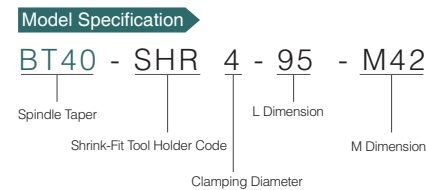
## Standard Stainless Steel Shrink-Fit Tool Holder



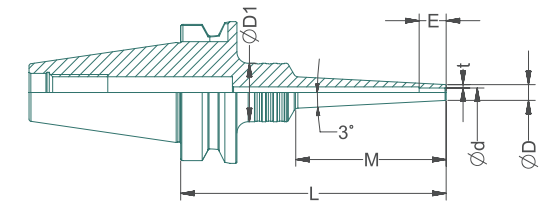
»» Low-Temperature clamping of special material with large coefficient of thermal expansion

Ordering Number	Specification	Clamping Diameter d	D	D1	L	M	Min. Clamping Length E	Wall Thickness t
5411040	BT30-SHR4-75-M22	4	10	25	75	22	12	3
5411060	BT30-SHR6-75-M22	6	12	25	75	22	18	3
5411080	BT30-SHR8-75-M22	8	14	25	75	22	24	3
5411100	BT30-SHR10-75-M22	10	16	25	75	22	30	3
5412040	BT40-SHR4-95-M42	4	10	25	95	42	12	3
5412041	BT40-SHR4-120-M67	4	10	25	120	67	12	3
5412060	BT40-SHR6-95-M42	6	14	32	95	42	18	4
5412061	BT40-SHR6-120-M67	6	14	32	120	67	18	4
5412080	BT40-SHR8-95-M42	8	18	36	95	42	24	5
5412081	BT40-SHR8-120-M67	8	18	36	120	67	24	5
5412100	BT40-SHR10-95-M42	10	22	32	95	42	30	6
5412101	BT40-SHR10-120-M67	10	22	36	120	67	30	6

- ① One through-hole pull stud is for free; other pull studs need to be ordered separately.
- ② It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.
- ③ Balanced to G2.5 or  $U_{max} < 1\text{gmm}$  at 25000rpm.
- ④ Technical parameters are subject to change without further notice.



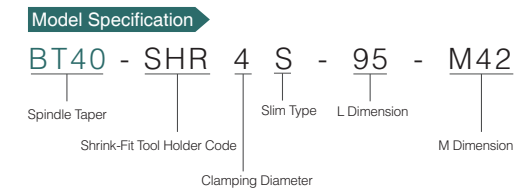
## Ultra Slim Special Stainless Steel Shrink-Fit Tool Holder



»» Ultra-Slim design for deep cavity machining  
Low-Temperature clamping of special material with large coefficient of thermal expansion

Ordering Number	Specification	Clamping Diameter d	D	D1	L	M	Min. Clamping Length E	Wall Thickness t
5511040	BT30-SHR4S-95-M42	4	7	25	95	42	12	1.5
5511041	BT30-SHR4S-120-M67	4	7	25	120	67	12	1.5
5511060	BT30-SHR6S-95-M42	6	9	25	95	42	18	1.5
5511061	BT30-SHR6S-120-M67	6	9	25	120	67	18	1.5
5512040	BT40-SHR4S-95-M42	4	7	25	95	42	12	1.5
5512041	BT40-SHR4S-120-M67	4	7	25	120	67	12	1.5
5512042	BT40-SHR4S-150-M97	4	7	25	150	97	12	1.5
5512043	BT40-SHR4S-180-M97	4	7	25	180	97	12	1.5
5512060	BT40-SHR6S-95-M42	6	9	25	95	42	18	1.5
5512061	BT40-SHR6S-120-M67	6	9	25	120	67	18	1.5
5512062	BT40-SHR6S-150-M97	6	9	36	150	97	18	1.5
5512063	BT40-SHR6S-180-M97	6	9	36	180	97	18	1.5
5512080	BT40-SHR8S-95-M42	8	11	25	95	42	24	1.5
5512081	BT40-SHR8S-120-M67	8	11	25	120	67	24	1.5
5512082	BT40-SHR8S-150-M97	8	11	36	150	97	24	1.5
5512083	BT40-SHR8S-180-M97	8	11	36	180	97	24	1.5
5512100	BT40-SHR10S-95-M42	10	13	25	95	42	30	1.5
5512101	BT40-SHR10S-120-M67	10	13	36	120	67	30	1.5
5512102	BT40-SHR10S-150-M97	10	13	36	150	97	30	1.5
5512103	BT40-SHR10S-180-M97	10	13	36	180	97	30	1.5

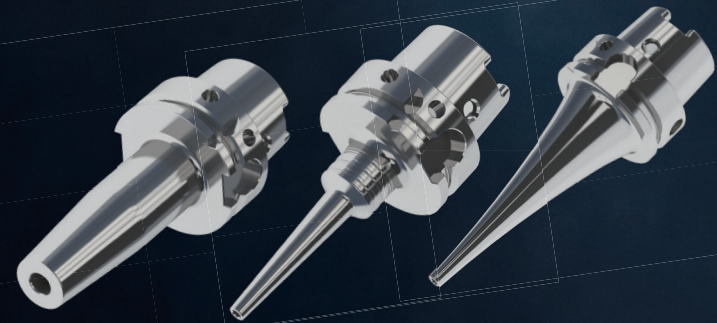
- ① One through-hole pull stud is for free; other pull studs need to be ordered separately.
- ② It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.
- ③ Balanced to G2.5 or  $U_{max} < 1\text{gmm}$  at 25000rpm.
- ④ Technical parameters are subject to change without further notice.



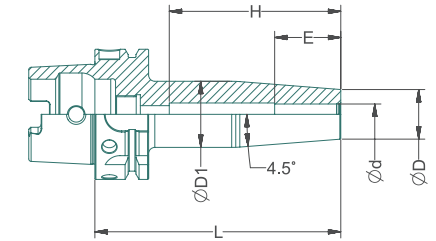
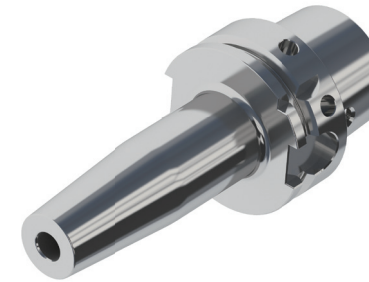
# HSK Series

DIN69893 Standard

A/E/F Type



## Standard Alloy Steel Shrink-Fit Tool Holder



Ordering Number	Specification	Clamping Diameter d	D	D1	L	Min. Clamping Length E	Max. Clamping Length H
5050040	HSK32E-SHR4-60	4	15	20	60	15	40
5050060	HSK32E-SHR6-70	6	21	27	70	26	40
5050080	HSK32E-SHR8-70	8	21	27	70	26	50
5050100	HSK32E-SHR10-70	10	24	32	70	32	50
5050120	HSK32E-SHR12-70	12	24	32	70	37	50
5051040	HSK40E-SHR4-60	4	15	20	60	15	40
5051060	HSK40E-SHR6-80	6	21	27	80	26	40
5051080	HSK40E-SHR8-80	8	21	27	80	26	50
5051100	HSK40E-SHR10-80	10	24	32	80	32	60
5051120	HSK40E-SHR12-80	12	24	32	80	37	60
5051160	HSK40E-SHR16-90	16	27	34	90	40	70
5033040	HSK50A-SHR4-80	4	15	20	80	15	55
5033060	HSK50A-SHR6-80	6	21	27	80	26	40
5033080	HSK50A-SHR8-80	8	21	27	80	26	50
5033100	HSK50A-SHR10-85	10	24	32	85	32	60
5033120	HSK50A-SHR12-90	12	24	32	90	37	65
5033160	HSK50A-SHR16-95	16	27	34	95	40	70
5034040	HSK63A-SHR4-80	4	15	20	80	15	55
5034060	HSK63A-SHR6-80	6	21	27	80	26	55
5034061	HSK63A-SHR6-120	6	21	27	120	26	95
5034080	HSK63A-SHR8-80	8	21	27	80	26	55
5034081	HSK63A-SHR8-120	8	21	27	120	26	95
5034100	HSK63A-SHR10-85	10	24	32	85	32	60
5034101	HSK63A-SHR10-120	10	24	32	120	32	60
5034120	HSK63A-SHR12-90	12	24	32	90	37	65
5034121	HSK63A-SHR12-120	12	24	32	120	37	65
5034160	HSK63A-SHR16-95	16	27	34	95	40	70
5034161	HSK63A-SHR16-120	16	27	34	120	40	70
5034200	HSK63A-SHR20-100	20	33	42	100	42	80
5034201	HSK63A-SHR20-120	20	33	42	120	42	80
5036120	HSK100A-SHR12-120	12	24	32	120	37	65
5036160	HSK100A-SHR16-120	16	27	34	120	40	70
5036200	HSK100A-SHR20-120	20	33	42	120	42	80
5036250	HSK100A-SHR25-120	25	44	53	120	48	90

- ① The coolant-through tube isn't for free and it needs to be purchased in person because the standard product has a coolant-through hole.
- ② HSK-50A, HSK-63A and HSK-100A are designed with chip holes but not include chips.
- ③ It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.
- ④ Balanced to G2.5 or  $U_{max} < 1\text{gmm}$  at 25000rpm.
- ⑤ Technical parameters are subject to change without further notice.

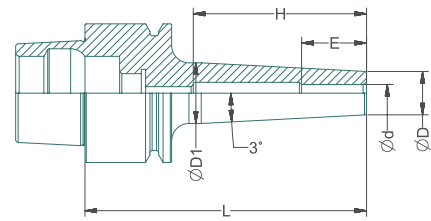
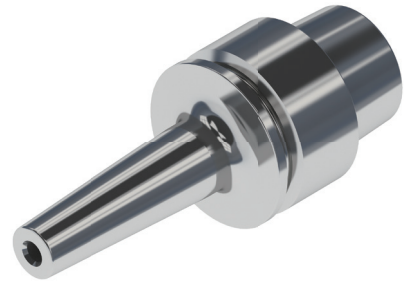
### Model Specification

**HSK63A - SHR 8 - 80**

Spindle Taper | Clamping Diameter | L Dimension  
Shrink-Fit Tool Holder Code

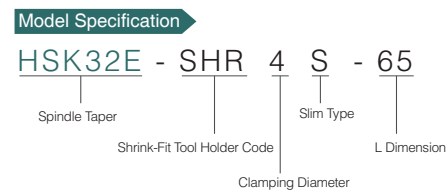


## Slim Alloy Stainless Steel Shrink-Fit Tool Holder

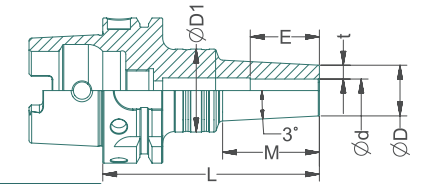


Ordering Number	Specification	Clamping Diameter d	D	D1	L	Min. Clamping Length E	Max. Clamping Length H
5150040	HSK32E-SHR4S-65	4	10	14	65	15	45
5150060	HSK32E-SHR6S-80	6	12	20	80	26	40
5150080	HSK32E-SHR8S-80	8	14	22	80	31	50
5150100	HSK32E-SHR10S-80	10	16	22	80	37	60
5151040	HSK40E-SHR4S-95	4	10	17	95	15	40
5151060	HSK40E-SHR6S-115	6	12	24	115	26	40
5151080	HSK40E-SHR8S-115	8	14	26	115	31	50
5151100	HSK40E-SHR10S-115	10	16	28	115	37	60
5151120	HSK40E-SHR12S-115	12	18	30	115	42	65
5152040	HSK50E-SHR4S-100	4	10	17	100	15	75
5152060	HSK50E-SHR6S-120	6	12	21	120	26	95
5152080	HSK50E-SHR8S-120	8	14	23	120	31	50
5152100	HSK50E-SHR10S-120	10	16	25	120	37	60
5152120	HSK50E-SHR12S-120	12	18	27	120	42	65

- The coolant-through tube isn't for free and it needs to be purchased in person because the standard product has a coolant-through hole.
- It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.
- Balanced to G2.5 or  $U_{max} < 1\text{gmm}$  at 25000rpm.
- Technical parameters are subject to change without further notice.



## Standard Special Stainless Steel Shrink-Fit Tool Holder



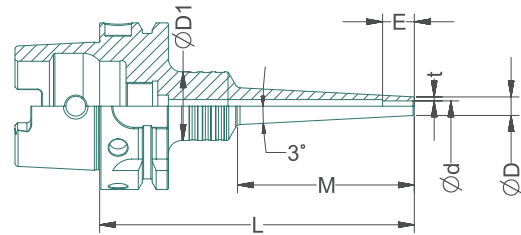
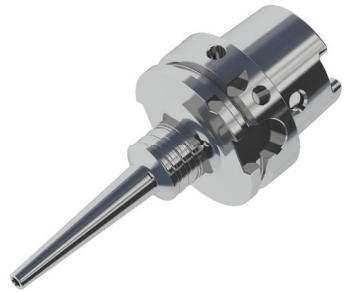
»» Low-Temperature clamping of special material with large coefficient of thermal expansion

Ordering Number	Specification	Clamping Diameter d	D	D1	L	M	Min. Clamping Length E	Wall Thickness t
5450040	HSK32E-SHR4-85-M42	4	10	25	85	42	12	3
5450060	HSK32E-SHR6-85-M42	6	12	25	85	42	18	3
5450080	HSK32E-SHR8-85-M42	8	14	25	85	42	24	3
5451040	HSK40E-SHR4-85-M42	4	10	25	85	42	12	3
5451041	HSK40E-SHR4-110-M67	4	10	25	110	67	12	3
5451060	HSK40E-SHR6-85-M42	6	12	25	85	42	18	3
5451061	HSK40E-SHR6-110-M67	6	12	25	110	67	18	3
5451080	HSK40E-SHR8-85-M42	8	14	25	85	42	24	3
5451081	HSK40E-SHR8-100-M42	8	14	25	100	42	24	3
5451100	HSK40E-SHR10-85-M42	10	16	25	85	42	30	3
5451101	HSK40E-SHR10-100-M42	10	16	25	100	42	30	3
5433040	HSK50A-SHR4-95-M42	4	10	25	95	42	12	3
5433041	HSK50A-SHR4-125-M42	4	10	25	125	42	12	3
5433060	HSK50A-SHR6-95-M42	6	14	32	95	42	18	4
5433061	HSK50A-SHR6-125-M42	6	14	32	125	42	18	4
5433080	HSK50A-SHR8-95-M42	8	18	36	95	42	24	5
5433081	HSK50A-SHR8-125-M42	8	18	32	125	42	24	5
5433100	HSK50A-SHR10-95-M42	10	18	32	95	42	24	6
5433101	HSK50A-SHR10-125-M42	10	18	32	125	42	24	6
5434040	HSK63A-SHR4-95-M42	4	10	25	95	42	12	3
5434041	HSK63A-SHR4-120-M67	4	10	25	120	67	12	3
5434060	HSK63A-SHR6-95-M42	6	14	32	95	42	18	4
5434061	HSK63A-SHR6-120-M67	6	14	36	120	67	18	4
5434062	HSK63A-SHR6-150-M67	6	14	32	150	67	18	4
5434063	HSK63A-SHR6-180-M67	6	14	32	180	67	18	4
5434080	HSK63A-SHR8-95-M42	8	18	32	95	42	24	5
5434081	HSK63A-SHR8-120-M67	8	18	32	120	67	24	5
5434082	HSK63A-SHR8-150-M67	8	18	36	150	67	24	5
5434083	HSK63A-SHR8-180-M67	8	18	32	180	67	24	5
5434100	HSK63A-SHR10-95-M42	10	22	32	95	42	30	6
5434101	HSK63A-SHR10-120-M67	10	22	32	120	67	30	6
5434102	HSK63A-SHR10-150-M67	10	22	36	150	67	30	6
5434103	HSK63A-SHR10-180-M67	10	22	42	180	67	30	6
5455040	HSK63F-SHR4-95-M42	4	10	25	95	42	12	3
5455060	HSK63F-SHR6-95-M42	6	12	25	95	42	18	3
5455080	HSK63F-SHR8-95-M42	8	14	25	95	42	24	3
5455100	HSK63F-SHR10-95-M42	10	22	32	95	42	30	3

- The coolant-through tube isn't for free and it needs to be purchased in person because the standard product has a coolant-through hole.
- HSK-50A, HSK-63A are designed with chip holes but not include chips.

- It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.
- Balanced to G2.5 or  $U_{max} < 1\text{gmm}$  at 25000rpm.
- Technical parameters are subject to change without further notice.

## Ultra Slim Special Stainless Steel Shrink-Fit Tool Holder



Model Specification

**HSK63A - SHR 4 S - 95 - M42**

Spindle Taper      Shrink-Fit Tool Holder Code      Slim Type      L Dimension      M Dimension

Clamping Diameter

» Ultra-Slim design for deep cavity machining

Low-Temperature clamping special material with large coefficient of thermal expansion

Ordering Number	Specification	Clamping Diameter d	D	D1	L	M	Min. Clamping Length E	Wall Thickness t
5550040	HSK32E-SHR4S-85-M42	4	7	25	85	42	12	1.5
5550060	HSK32E-SHR6S-85-M42	6	9	25	85	42	18	1.5
5551040	HSK40E-SHR4S-85-M42	4	7	25	85	42	12	1.5
5551041	HSK40E-SHR4S-110-M67	4	7	25	110	67	12	1.5
5551060	HSK40E-SHR6S-85-M42	6	9	25	85	42	18	1.5
5551061	HSK40E-SHR6S-110-M67	6	9	25	110	67	18	1.5
5551080	HSK40E-SHR8S-80-M42	8	11	25	80	42	24	1.5
5551081	HSK40E-SHR8S-100-M67	8	11	25	100	67	24	1.5
5534040	HSK63A-SHR4S-95-M42	4	7	25	95	42	12	1.5
5534041	HSK63A-SHR4S-120-M67	4	7	25	120	67	12	1.5
5534042	HSK63A-SHR4S-150-M97	4	7	25	150	97	12	1.5
5534043	HSK63A-SHR4S-180-M97	4	7	25	180	97	12	1.5
5534060	HSK63A-SHR6S-95-M42	6	9	25	95	42	18	1.5
5534061	HSK63A-SHR6S-120-M67	6	9	25	120	67	18	1.5
5534062	HSK63A-SHR6S-150-M97	6	9	32	150	97	18	1.5
5534063	HSK63A-SHR6S-180-M97	6	9	36	180	97	18	1.5
5534080	HSK63A-SHR8S-95-M42	8	11	36	95	42	24	1.5
5534081	HSK63A-SHR8S-120-M67	8	11	36	120	67	24	1.5
5534082	HSK63A-SHR8S-150-M97	8	11	36	150	97	24	1.5
5534083	HSK63A-SHR8S-180-M97	8	11	36	180	97	24	1.5
5534100	HSK63A-SHR10S-95-M42	10	13	36	95	42	30	1.5
5534101	HSK63A-SHR10S-120-M67	10	13	36	120	67	30	1.5
5534102	HSK63A-SHR10S-150-M97	10	13	36	150	97	30	1.5
5534103	HSK63A-SHR10S-180-M97	10	13	36	180	97	30	1.5
5555040	HSK63F-SHR4S-95-M42	4	7	25	95	42	12	1.5
5555060	HSK63F-SHR6S-95-M42	6	9	25	95	42	18	1.5
5555080	HSK63F-SHR8S-95-M42	8	11	25	95	42	24	1.5
5555100	HSK63F-SHR10S-95-M42	10	13	25	95	42	30	1.5

① The coolant-through tube isn't for free and it needs to be purchased in person because the standard product has a coolant-through hole.

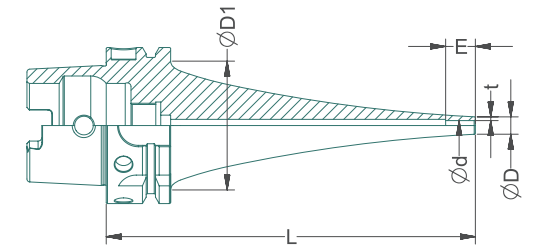
② HSK-50A, HSK-63A are designed with chip holes but not include chips.

③ It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.

④ Balanced to G2.5 or Umax < 1gmm at 25000rpm.

⑤ Technical parameters are subject to change without further notice.

## Curved Special Stainless Steel Shrink-Fit Tool Holders



Model Specification

**HSK63A - SHR 4 S - 95 - C**

Spindle Taper      Shrink-Fit Tool Holder Code      Slim Type      L Dimension      Curved Type

Clamping Diameter

» Two-Dimensional curved design with slim front end for zero interference and robust rear end for high rigidity

Low-Temperature clamping special material with large coefficient of thermal expansion

» Standard Type»

Ordering Number	Specification	Clamping Diameter d	D	D1	L	Min. Clamping Length E	Wall Thickness t
6134040	HSK63A-SHR4-120C	4	10	53	120	12	3
6134041	HSK63A-SHR4-150C	4	10	53	150	12	3
6134042	HSK63A-SHR4-180C	4	10	53	180	12	3
6134060	HSK63A-SHR6-120C	6	13	53	120	18	3.5
6134061	HSK63A-SHR6-150C	6	13	53	150	18	3.5
6134062	HSK63A-SHR6-180C	6	13	53	180	18	3.5
6134080	HSK63A-SHR8-120C	8	16	53	120	24	4
6134081	HSK63A-SHR8-150C	8	16	53	150	24	4
6134082	HSK63A-SHR8-180C	8	16	53	180	24	4
6134100	HSK63A-SHR10-120C	10	19	53	120	30	4.5
6134101	HSK63A-SHR10-150C	10	19	53	150	30	4.5
6134102	HSK63A-SHR10-180C	10	19	53	180	30	4.5

» Ultra Slim Type»

Ordering Number	Specification	Clamping Diameter d	D	D1	L	Min. Clamping Length E	Wall Thickness t
6134040	HSK63A-SHR4S-120C	4	7	53	120	12	1.5
6134041	HSK63A-SHR4S-150C	4	7	53	150	12	1.5
6134042	HSK63A-SHR4S-180C	4	7	53	180	12	1.5
6134060	HSK63A-SHR6S-120C	6	9	53	120	18	1.5
6134061	HSK63A-SHR6S-150C	6	9	53	150	18	1.5
6134062	HSK63A-SHR6S-180C	6	9	53	180	18	1.5
6134080	HSK63A-SHR8S-120C	8	11	53	120	24	1.5
6134081	HSK63A-SHR8S-150C	8	11	53	150	24	1.5
6134082	HSK63A-SHR8S-180C	8	11	53	180	24	1.5
6134100	HSK63A-SHR10S-120C	10	13	53	120	30	1.5
6134101	HSK63A-SHR10S-150C	10	13	53	150	30	1.5
6134102	HSK63A-SHR10S-180C	10	13	53	180	30	1.5

① The coolant-through tube isn't for free and it needs to be purchased in person because the standard product has a coolant-through hole.

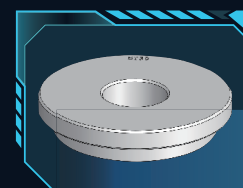
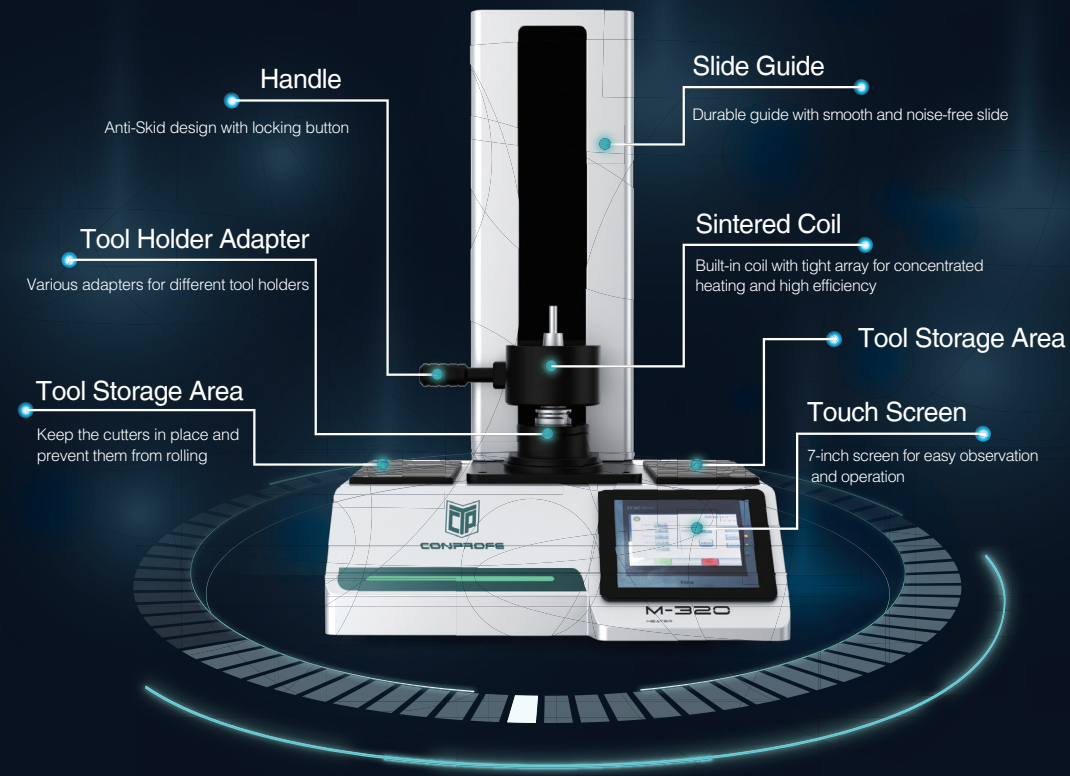
② HSK-50A, HSK-63A are designed with chip holes but not include chips.

③ It is recommended to avoid the mismatch with Conprofe's special Shrink-Fit Machine.

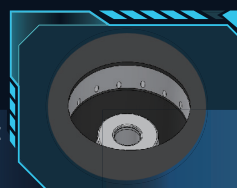
④ Balanced to G2.5 or Umax < 1gmm at 25000rpm.

⑤ Technical parameters are subject to change without further notice.

# Air-Cooling Shrink-Fit Machine



**Tool Holder Positioning Ring:**  
Suitable for accurate positioning of various tool holders



**Air-Cooling Outlet:**  
Facing the heated tool holder position with strong airflow and high cooling speed

# Air-Cooling Shrink-Fit Machine

## Technical Data

Item	1	2	3	4	5	6	7	8	9
Model	A-312	S-312	M-312	A-320	S-320	M-320	A-1232	S-1232	M-1232
Material	Alloy Steel	Stainless Steel	Alloy Steel & Stainless Steel	Alloy Steel	Stainless Steel	Alloy Steel & Stainless Steel	Alloy Steel	Stainless Steel	Alloy Steel & Stainless Steel
Tool Range	D3-D12			D3-D20			D12-D32		
Cooling Method	Air-cooling			Air-cooling			Air-cooling		
Coil Inner Diameter	φ45			φ55			φ68		
Tool Holder Diameter	Max. φ24 at small end			Max. φ34 at small end			Max. φ46 at small end		
Heating Time	6-16S	12-30S	6-30S	7-27S	20-38S	7-38S	8-38S	28-48S	8-48S
Cooling Time	150-180S	120-150S	120-180S	180-270S	150-240S	150-270S	270-720S	240-690S	220-720S
Weight	38KG			40KG			45KG		
Power Rate	3.5KW			6KW			8KW		
Dimension	540x450x810 (LengthxWidthxHeight)			540x450x810 (LengthxWidthxHeight)			540x450x950 (LengthxWidthxHeight)		

»» According to the applicable range of the cutting tools, air-cooling heating machines can be divided into three main categories, which can be further divided into nine subcategories based on the tool holder materials (alloy steel, stainless steel, alloy steel & stainless steel) to meet the clamping and unclamping of tools ranging from D3 to D32.

## Working Principle

### Air-Cooling Shrink-Fit Machine

- Manual heating and air-cooling in 150-720 seconds



After applying the electric current to the coil to generate a magnetic field, the tool holder is heated and later its inner diameter expands. Insert the tool holder and it will clamp the tool tightly because of the cooling and contracting effect.

## Features

- » High Accuracy  
Runout  $\leq 0.03\text{mm}$  before and after clamping
- » Accurate Positioning  
Accurate pinpointing of heating position
- » Multi-Function  
Manual or automatic heating and air-cooling with parameters adjustable
- » Reasonable Design  
Compact body for easy operation
- » Easy Operation  
Ergonomical structure of 7 inch screen with flexible response, simple operation of interface and reasonable layout of functional area
- » High Compatibility  
Compatible with standard tool holder, enhanced-type tool holder and light-type tool holder
- » Customization  
Tool holder materials and types according to customers' machining needs
- » Data Visualization  
Display and record including types, heating cycle count, heating time and cooling time

