

Shrink Fit Solutions



ShrinkSMART Features	2-3
ShrinkSMART Machine, Upgrade Options & Parts	4-5
Shrink Fit Holder Features	6-7
CAT40/CAT50 Shrink Fit Holders	8
BT30/BT40 Shrink Fit Holders	9
HSK63A/HSK100A Shrink Fit Holders	9
Bundle & SAVE!	10



Modular shrink fit technology designed to be feature-rich, fast and flexible with an unrivaled entry price point.

Sowa Tool's premium brand, GS Tooling, delivers top-tier quality and performance that rivals or exceeds the best in the world.

GS Tooling products offer exceptional features and dependability, at shockingly affordable prices, making them an ideal choice for applications where accuracy and speed matter most.

SMART Control Panel & Software

The easy to use SMART Control Panel has three optimized pre-preprogrammed cycles that save energy and prevent over-heating which can damage your holder. The software allows you to connect to a web interface through WiFi or an Ethernet connection for special programming needs and gives you a system status overview on demand.

MODE

BOOST

Cooling options to suit all needs – for now and the future.

Start your shrink fit journey with a powerful solution that gives you the flexibility to add solutions as your business needs evolve. 

UPGRADE OPTION



TOOLING

N

Air-Powered Cooling Unit Holders that can be cooled: 1 Average cooling time: from 50 seconds*

Shrink SMART

SMART Coil

Because toolholders can become

hardened / tempered from excessive heating from some shrink machines, the SMART Coil measures the unique resistance for **each** toolholder and ensures **only** the proper and appropriate amount of heat is utilized. This also supports a super fast 2-7 second shrinking cycle.



 Machines without SMART Coil

Shrink SMART Temperatures

ALTERNATE BASE UNIT

Rotary Table with Shrink Depth Settings

The Rotary Table stops the user from having any contact with hot holders, and allows them to safely switch from the heating position to a cooling position. The stop rods allow the user to set the depth of the cutting tool with a wheel that moves the stop rod and your tool into position. Stop rod also assists in removing broken tool.

(SMAD

Compatible with all popular tooling combinations

Tool types: HSS, Carbide, MST, Magnetic and Non-Magnetic

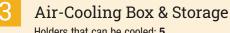
Diameters from: 0.118" to 1.259" (3mm to 32mm) 1.574" (40mm) possible with the same coil using optional stop disk.

 Tapers:
 CAT/BT/SK40 & 50, HSK63A & 100A, C6 & C10

 (with additional adapters available for CAT/BT/SK30, SK25
 & 35 & 45, HSK32 & 50 & 80, C3 & C5 & C8 CAPT0)



UPGRADE OPTION



Holders that can be cooled: **5** Extra storage for holder with air-cooling function.

UPGRADE OPTION



Water-Cooling Refrigeration Unit

Holders that can be cooled: 2 Average cooling time: from 45 seconds*

*depending on the tool holder shape



Shrink**SMART UPGRADE OPTIONS & PARTS**

Air-Powered Cooling Unit

Cooling time: from 50 seconds (Depending on the tool hold Weight: 11.5lbs (5.24kg) Height: 18.38" (467mm) Connection: L1, N+PE Voltage: 1 x 100Vac-277Vac Frequency: 50/60Hz Air Required: 3-6 Bars	ler shape)	
Description Air-Powered Cooling Unit	Code No. 541654	

Air-Cooling Box & Extra Storage for 5 Holders

Cooling time: from 4-5 minutes (Depending on the tool holder shape)

Weight: 23.15lbs (10.5kg) Height x Width x Depth: 12.48" x 19.68" x 35.8" (317mm x 500mm x 910mm)

Connection: L1, N+PE

Voltage: 1 x 100Vac-277Vac

Frequency: 50/60Hz



INCLUDED:

2 fans, 5 adapter rings for CAT40/BT40/HSK63A/C6, 5 adapter rings for CAT50/BT50/HSK100A/C10, 2 protecting cones

Description Air-Cooling Box for 5 Holders

Water-Cooling Refrigeration Unit

Cooling time: from 45 seconds (Depending on the tool holder shape)

Extension table: Allow storage of 5 contact bushings and 1 cooling bell

Weight: 88lbs (39.8kg)

Height x Width x Depth (Table Extension): 14.25" x 5.69" x 35.8" (362mm x 150mm x 910mm)

Height x Width x Depth (Refrigeration Unit): 18.5" x 11.42" x 22.83" (470mm x 290mm x 580mm)

INCLUDED: Refrigeration unit, tube support, 2 cooling bells, extension table



Water-cooling refrigeration unit, tube support, 2 cooling bells & extension table 541688

Rotary Table with Shrink Depth Settings

The Rotary Table stops the user from having any contact with hot holders, and allows them to safely switch from the heating position to a cooling position. The stop rods allow the user to set the depth of the cutting tool with a wheel that moves the stop rod and your tool into position. Stop Rods also assists in removing broken tools.

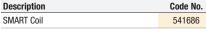


541652





consumption by automatically adjusting kW and heating time for each holder. This increases the life of your tool holders.



Parts

-

Code No.

541656

Code No.

Heat Focusing

Stop Disk

Finned Support

Cooling Adapter



Focusing Stop Disk

Adapter Rings



Pair of Gloves



Bushing

Tube for Adapter Rings

Tube for Adapter Rings with Stop Rod Depth Setter

Description		Code No.
Protecting Cone		541658
Tube for Adapter Ring	S	541660
Tube for Adapter Ring	s with Stop Rod Depth Setter	541661
Ctop Dodo	4 pc 4.2mm diameter	541714
Stop Rods	4 pc 2.5mm diameter	541715
Pair of Heat Resistant	Gloves (May not look exactly as shown)	541712
	CAT40/BT40/SK40/HSK63A/C6 CAPT0	541662
	CAT50/BT50/SK50/HSK100A/C10 CAPT0	541664
Adoptor Dingo	BT30/SK30/HSK40A/C4 CAPT0	541666
Adapter Rings	SK25/HSK32A/C3 CAPTO	541668
	SK35/HSK50A/C5 CAPT0	541670
	SK45/HSK80A/C8 CAPTO	541672
	0.118"-0.236" (3mm-6mm)	541674
	0.314"-0.551" (8mm-14mm)	541676
Heat Focusing Stop Disks	0.629"-0.708" (16mm-18mm)	541678
Stop DISKS	0.787"-0.984" (20mm-25mm)	541680
	1.259" (32mm)	541682
	0.118"-0.236" (3mm-6mm)	541675
	0.314"-0.551" (8mm-14mm)	541677
Split Heat Focusing Stop Disks	0.629"-0.708" (16mm-18mm)	541679
Stop DISKS	0.787"-0.984" (20mm-25mm)	541681
	1.259" (32mm)	541683
Fired Quered	CAT40/BT40	541690
Finned Support Cooling Adapters	CAT50/BT50	541692
(Additional sizes can	BT30	541694
be quoted on	HSK63A	541696
request.)	C6 CAPTO	541698
	1/8" & 3/16" (3/4/5mm)	541700
	1/4" & 5/16" (6/8mm)	541702
Cooling/Contact	3/8" & 7/16" & 1/2" (10/12mm)	541704
Bushings DIN4 5°	9/16" & 5/8" (14/16mm)	541706
	3/4" (18/20mm)	541708

1" & 1-1/4" (25/32mm)

Order online at www.SowaTool.com or call 1-800-265-8221.

541710





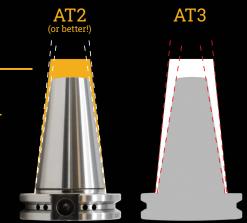
Cooling/Contact



Shrink Fit Tool Holders

Only the best material is used

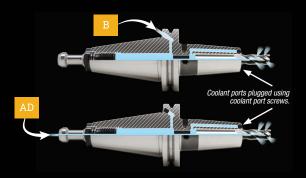
GS Tooling Shrink Fit Holders are made from **H13 Tool Steel**. This is a chromium-molybdenum steel with an exceptional combination of high toughness and resistance to thermal fatigue cracking (heat checking) as a result of cyclic heating and cooling cycles. It has better wear resistance than common alloy steels, and with proper use the life of our Shrink Fit Holders will exceed that of standard Shrink Fit Holders. Our taper accuracy is AT2 or better, for the life of the holder – guaranteed.



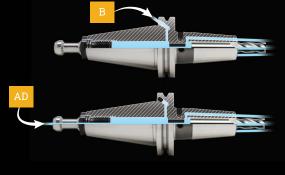
Ports in the Nose

Multiple coolant options are standard

Coolant through tool:



Coolant through coolant ports:



GS Tooling coolant-through Shrink Fit Holders require no special backup screws or seals.. The fit between the I.D. of the holder and cutting tool shank forms the seal, preventing the coolant from flowing anywhere else except through the coolant ports. Coolant ports can be closed with a 3mm set screw.

PREMIUM BALANCE

G2.5 at 30,000rpm

CERTIFICATE INCLUDED

CAT/BT 30, 40, HSK63A

GS Tooling shrink fit holders and components are ground to perfection

For an extra level of precision, we start with prebalanced holders and components. We then invest the time to grind all surfaces that will be in contact with the machine to a fine finish, giving our holder a **runout accuracy of 0.0001**" and our **taper and collet cavities an accuracy of AT2 or better** (Compare this with the runout accuracy of 0.0002" and taper accuracy AT3 of other brands). This offers a tighter connectivity and grip in all mated areas, increasing tolerances throughout.



CAT40 5/8-3.15°C

Coolant Port Screws 4 screws included with holders over 6mm I/D.

ED

Quality QC

All GS Tooling holders are inspected, one piece at a time. An individualized balance certificate of inspection is included with each holder.

	Ć		BALANO Certifi		TION		
	Machine:						
R	otor Name:						
	Date:		Correction I	Diam	eter:		
	Rotor No.:		Correcti	on M	ode:		
Measu	ring Speed:			Re	sult:		
	This H	older is Balanced Te) <i>(</i>		RPM		
		ervice inquiries please call S			at 1-800-285	-8221	

Explore all of our rotary tooling systems.

Sowa Tool offers a large SKU offering of a wide range of quality rotary tooling: End Mill Holders, Collet Chucks & Collets, Shell Mill & Face Mill Holders, Shrink Fit Holders, Tap Holders, Driven Tooling and Angle Heads.



Shrink SMART

CAT40/CAT50 Shrink Fit Holders With Coolant Ports

Simple and fast. The total time elapsed to remove one cutting tool and insert another is less than 10 seconds.

Four coolant ports come standard for through-spindle coolant capability, allowing for even faster cutting speeds!

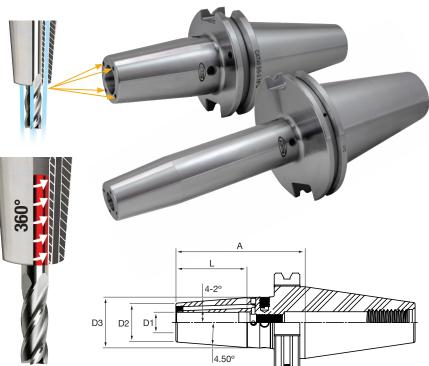
Balanced & Certified – the best out there! G2.5 at 30,000rpm (CAT/BT 30, 40, HSK63A) G2.5 at 25,000rpm (CAT50, HSK100A)

Tool is **gripped 360° along the entire length of the bore**. This results in maximum clamping force, greater rigidity, and an exceptional concentricity (0.0001"/0.003mm). You can run your machine at faster speeds and feeds with no danger of the tool slipping or bending.

Short projections are possible because no mechanical clamping devices are used. No moving parts and low centrifugal forces due to low holder mass allow for a long holder life with tighter tolerances.

Chip load is distributed evenly along the cutting edge of the tool which results in longer tool life.

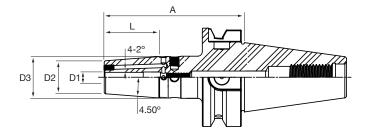
Taper	Hole Diameter (D1)	Gage Length (A)	D2	D3	L	Code No.
Inch						
	1/8"	3.15"	0.59"	0.787"	0.35"	541838*
	3/16"	3.15"	0.59"	0.787"	0.47"	541840*
	1/4"	3.15"	0.83"	1.06"	1.42"	541842
	1/4"	6.30"	0.83"	1.06"	1.42"	541844
	5/16"	3.15"	0.83"	1.06"	1.42"	541846
	5/16"	6.30"	0.83"	1.06"	1.42"	541848
	3/8"	3.15"	0.94"	1.26"	1.65"	541850
	3/8"	6.30"	0.94"	1.26"	1.65"	541852
CAT40	1/2"	3.15"	0.94"	1.26"	1.65"	541854
	1/2"	6.30"	0.94"	1.26"	1.65"	541856
	5/8"	3.15"	1.06"	1.34"	1.97"	541858
	3/4"	3.15"	1.30"	1.65"	2.05"	541862
	3/4"	6.30"	1.30"	1.65"	2.05"	541864
	1"	3.94"	1.73"	2.09"	2.28"	541866
	1"	6.30"	1.73"	2.09"	2.28"	541868
	1-1/4"	3.94"	1.73"	2.09"	2.28"	541870
	1-1/4"	6.30"	1.73"	2.09"	2.28"	541872
	1/4"	3.15"	0.83"	1.06"	1.42"	541932
	1/4"	6.30"	0.83"	1.06"	1.42"	541934
	5/16"	3.15"	0.83"	1.06"	1.42"	541936
	3/8"	3.15"	0.94"	1.26"	1.65"	541940
	3/8"	6.30"	0.94"	1.26"	1.65"	541942
	1/2"	3.15"	1.06"	1.34"	1.65"	541944
	1/2"	6.30"	0.94"	1.26"	1.65"	541946
CAT50	5/8"	3.15"	1.06"	1.34"	1.97"	541948
	5/8"	6.30"	1.06"	1.34"	1.97"	541950
	3/4"	3.15"	1.30"	1.65"	2.05"	541952
	3/4"	6.30"	1.30"	1.65"	2.05"	541954
	1"	3.94"	1.73"	2.09"	2.28"	541956
	1"	6.30"	1.73"	2.09"	2.28"	541958
	1-1/4"	3.94"	1.73"	2.09"	2.28"	541960
	1-1/4"	6.30"	1.73"	2.09"	2.28"	541962



Taper	Hole Diameter (D1)	Gage Length (A)	D2	D3	L	Code No.
Metric						
	4mm	80mm	15mm	20mm	12mm	541802*
	6mm	80mm	21mm	27mm	36mm	541806
	6mm	160mm	21mm	27mm	36mm	541808
	8mm	80mm	21mm	27mm	36mm	541810
	8mm	160mm	21mm	27mm	36mm	541812
	10mm	80mm	24mm	32mm	42mm	541814
CAT40	10mm	160mm	24mm	32mm	42mm	541816
GAI40	12mm	80mm	24mm	32mm	47mm	541818
	12mm	160mm	24mm	32mm	47mm	541820
	16mm	80mm	27mm	34mm	50mm	541822
	16mm	160m	27mm	34mm	50mm	541824
	20mm	80mm	33mm	42mm	52mm	541826
	25mm	100mm	44mm	53mm	58mm	541830
	32mm	100mm	44mm	53mm	58mm	541834
	6mm	80mm	21mm	27mm	36mm	541900
	6mm	160mm	21mm	27mm	36mm	541902
	8mm	80mm	21mm	27mm	36mm	541904
	8mm	160mm	21mm	27mm	36mm	541906
	10mm	80mm	24mm	32mm	42mm	541908
	10mm	160mm	24mm	32mm	42mm	541910
CAT50	12mm	80mm	24mm	32mm	47mm	541912
	12mm	160mm	24mm	32mm	47mm	541914
	16mm	80mm	27mm	34mm	50mm	541916
	16mm	160mm	27mm	34mm	50mm	541918
	20mm	80mm	33mm	42mm	52mm	541920
	25mm	100mm	44mm	53mm	58mm	541924
	32mm	100mm	44mm	53mm	58mm	541928

BT30/BT40 Shrink Fit Holders With Coolant Ports





Taper	Hole Diameter (D1)	Gage Length (A)	D2	D3	L	Code No.
Inch						
	1/8"	3.15"	0.39"	-	0.35"	542414*
-	3/16"	3.15"	0.39"	-	0.47"	542416*
BT30	1/4"	3.15"	0.83"	1.06"	1.42"	542418
-	3/8"	3.15"	0.94"	1.26"	1.65"	542422
	1/2"	3.15"	0.94"	1.26"	1.65"	542424
	3/16"	3.54"	0.39"	-	0.47"	542466*
-	1/4"	3.54"	0.83"	1.06"	1.42"	542468
-	1/4"	6.30"	0.83"	1.06"	1.42"	542470
-	3/8"	3.54"	0.94"	1.26"	1.65"	542476
DT40	1/2"	3.54"	1.06"	1.34"	1.65"	542480
BT40	1/2"	6.30"	1.06"	1.34"	1.65"	542482
-	3/4"	3.54"	1.30"	1.65"	2.05"	542488
-	3/4"	6.30"	1.30"	1.65"	2.05"	542490
	1"	3.94"	1.73"	2.09"	2.28"	542492
-	1-1/4"	3.94"	1.73"	2.09"	2.28"	542496
Metric						
BT30	4mm	80mm	10mm	-	12mm	542402*
DT 40	6mm	90mm	21mm	27mm	36mm	542432
BT40	8mm	90mm	21mm	27mm	36mm	542436

Coolant Port Screws



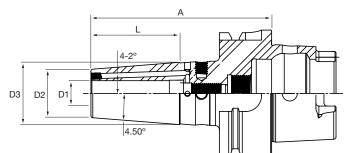
Set screws that allow you to close coolant ports. 4 screws per package. No coolant ports on holders under 6mm I/D.



Description	Overall Length	Code No.
Coolant port screws	3mm	541801

HSK63A/HSK100A Shrink Fit Holders With Coolant Ports





Taper	Hole Diameter (D1)	Gage Length (A)	D2	D3	L	Code No.
Inch						
	1/8"	3.15"	0.59"	0.787"	0.35"	546338*
	3/16"	3.15"	0.59"	0.787"	0.47"	546340*
	1/4"	3.15"	0.826"	1.06"	1.42"	546342
	1/4"	6.30"	0.83"	1.06"	1.42"	546344
	5/16"	3.15"	0.826"	1.06"	1.42"	546346
	3/8"	3.35"	0.94"	1.26"	1.65"	546350
	3/8"	6.30"	0.94"	1.26"	1.65"	546352
	1/2"	3.54"	1.06"	1.34"	1.65"	546354
HSK63A	1/2"	6.30"	1.06"	1.34"	1.65"	546356
	5/8"	3.74"	1.06"	1.34"	1.97"	546358
	5/8"	6.30"	1.06"	1.34"	1.97"	546360
	3/4"	3.94"	1.30"	1.65"	2.05"	546362
	3/4"	6.30"	1.30"	1.65"	2.05"	546364
	1"	4.53"	1.73"	2.09"	2.28"	546366
	1"	6.30"	1.73"	2.09"	2.28"	546368
	1-1/4"	4.72"	1.73"	2.09"	2.28"	546370
	1-1/4"	6.30"	1.73"	2.09"	2.28"	546372
	1/4"	3.35"	0.826"	1.06"	1.42"	546432
	5/16"	3.35"	0.826"	1.06"	1.42"	546436
	3/8"	3.54"	0.94"	1.26"	1.65"	546440
	3/8"	6.30"	0.94"	1.26"	1.65"	546442
	1/2"	3.74"	1.06"	1.34"	1.65"	546444
	1/2"	6.30"	1.06"	1.34"	1.65"	546446
HSK100A	5/8"	3.94"	1.06"	1.34"	1.97"	546448
nontroom	5/8"	6.30"	1.06"	1.34"	1.97"	546450
	3/4"	4.13"	1.30"	1.65"	2.05"	546452
	3/4"	6.30"	1.30"	1.65"	2.05"	546454
	1"	4.53"	1.73"	2.09"	2.28"	546456
	1"	6.30"	1.73"	2.09"	2.28"	546458
	1-1/4"	4.72"	1.73"	2.09"	2.28"	546460
	1-1/4"	6.30"	1.73"	2.09"	2.28"	546462
Metric						= 10000+
	3mm	80mm	15mm	20mm	-	546300*
	4mm	80mm	15mm	20mm	12mm	546302*
	5mm	80mm	15mm	20mm	15mm	546304*
	6mm	80mm	21mm	27mm	36mm	546306
	6mm	160mm	21mm	27mm	36mm	546308
HSK63A	8mm	80mm	21mm	27mm	36mm	546310
	10mm	85mm	24mm	32mm	42mm	546314
	12mm	90mm	24mm	32mm	47mm	546318
	16mm	95mm	27mm	34mm	50mm	546322
	20mm 25mm	100mm 115mm	33mm 44mm	42mm 53mm	52mm 58mm	546326 546330

*No coolant ports or threaded balance holes on holders under 6mm I.D.

Don't just shrink fit, Shrink SMART with a GS Tooling Shrink SMART bundle.

Solid Carbide End Mills

Solid sub-micron micrograin carbide end mills, ground to a tolerance of h6 in a variety of finishes, flutes and types. Ideal for shrink fit technologies providing unrivaled value for your money!

ShrinkSMART Machine

Easy enough for anyone to use, ShrinkSMART does all the work. This ensures the holder does not overheat, giving you optimized tool performance.



Shrink Fit Holders

Made from H13 Tool Steel, ground to perfection and certified G2.5 at 30,000rpm (CAT/BT 30, 40, HSK63A), G2.5 at 25,000rpm (CAT50, HSK100A)... with four coolant ports standard!

> Special bundle and bulk pricing available, contact us for a quote.



Shrink SMART

Software V.1.1.

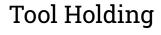


Superior performance tooling solutions when speed and accuracy matter most.

GS Tooling is an industry leader in precision tooling where high-performance and stringent quality standards are essential. Tool Your World with GS Tooling End Mill Holders, Collet Chucks & Collets, Shrink Fit Solutions, Retention Knobs, Vises & Workholding, Live Centers, Angle Heads, Carbide End Mills and more!



Shop GS Tooling



Shrink Fit Solutions

Shrink SMART



Angle Heads & Driven Tooling

Cutting Tools



's complete line of metalworking solutions



Sowa Tool's premium brand delivers top-tier quality and performance that rivals or exceeds the best in the world. These products offer premium features and dependability, at shockingly affordable prices, making them an ideal choice for applications where accuracy and speed matter most.

SKODA

Sowa Tool's exclusive line of generalpurpose live centres with its roots in European quality that deliver excellent accuracy, rigidity, and durability at a price point that suits most budgets. Sowa carries a wide range of in-stock standard models to suit most common turning applications.

ASIMETO

Sowa's family of metrology solutions deliver absolute confidence born from its European engineering, and each tool beginning its journey in our ISO 17025 accredited labs. This premium heritage product priced at a non-premium price, delivers significant value for your money.



With our Sowa branded tools, we bring to our customers high performance cutting tools engineered to deliver superior tool life, machining efficiency & quality while still offering maximum value for your money.



Sowa Tool's exclusive line of European universal boring and facing heads offer superior accuracy and precision for all your facing and boring applications. They feature an easy-to-adjust design, durable castings, and precision spindle bearings for a consistently accurate finish.



Our approach to this brand ensures that our customers receive the best value for their investment by delivering a broad assortment of metalworking tools at an exceptional price. These tools typically apply to less demanding applications seen on the standard shop floor where the cost of the tool has the greatest influence on the selection process.



At Sowa Tool & Machine

we understand the needs of machining processes, and our extensive product lines offer a comprehensive solution. Our goal is to provide customers with the cost benefits of a single-source supplier, while remaining committed to delivering the highest quality products.



Sowa Tool & Machine Co. Ltd.

Canadian Headquarters 500 Manitou Drive, Kitchener, ON, N2C 1L3 US Headquarters 101-137 Overhill Drive, Mooresville, NC 28117

Ask for them by name!

Shop Online:

www.SowaTool.com

sales@sowatool.com TF: 1-800-265-8221