

Shrink-fit Heater **HEAT ROBO**

■ Specifications

Shrink-fit Heater	DENJI 電磁5000S	DENJI 電磁1200S	Baby3000S	Baby1200S	Baby1000
Spec.					
CODE	HRD-02S	HRD-01S	HRB-03ST	HRB-02S	HRB-01
Heating method	Induction type		Hot air type		
Output power	5000 w	1200 w	3000 w	1200 w	1000 w
Cutter dia.	~φ32 [1"]	~φ12 [1/2"]	~φ32 [1"]	~φ12 [1/2"]	
Heating time	18 sec.		70 sec.	120 sec.	180 sec.

■ Compatibility table by holder type

Shrink-fit Heater	DENJI 電磁5000S	DENJI 電磁1200S	Baby3000S	Baby1200S	Baby1000
Holder type					
MONO series	○	△	○	△	×
2 PIECE type	○	○	○	○	○
UNO	○	○	○	○	×
HYPER VERSION	○	×	○	×	×
Z	○	×	○	×	×
STRAIGHT arbor	○	▲	○	△	×

[○]: Available [X]: Not available [△]: Refer to size chart. [▲]: Requires recombinations of adaptors and bases. *Please verify compatibility for specific holders.

HOT AIR HEATER

No over-heating.
Compact Affordable.

Baby3000S

CODE	Area	Size (W×D×H)	Power (Single phase)	Kg lbs
HRB-03ST	Japan	430 × 330 × 660mm	200V	9.5 (21)
-03ST-230NA	North America		230V	
-03ST-230EU	Europe			
-03ST-230AS	Asia			

■ Std. Access.

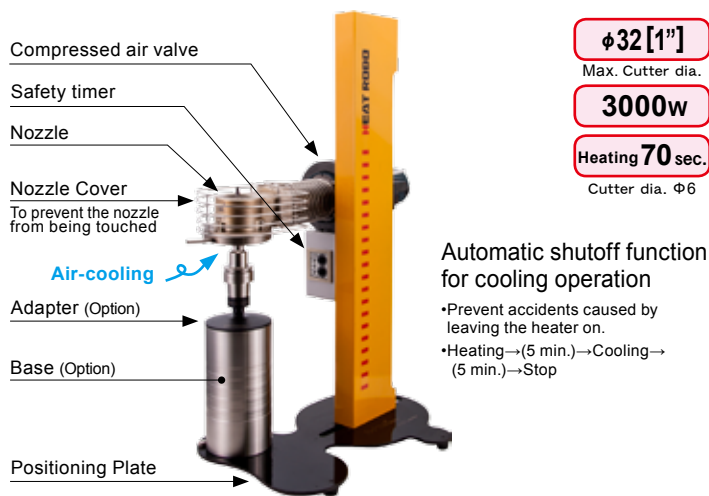
- Safety timer
- Heat-resistant gloves
- Tweezers

■ Option

- Please choose parts on P.12-15

■ Note

- Factory compressed air (5kgf/cm²) is required.(consumption air volume: 245 t/min)
- Prepare an air tube (O.D:8mm) and a connection coupling.
- A type without safety timer is also available. **Ex.** HRB-03S



Baby1200S



φ12 [1/2"]
Max. Cutter dia.
1200w
Heating 120 sec.
Cutter dia. φ6

CODE	Area	Size (W×D×H)	Power (Single phase)	Kg lbs
HRB-02S	Japan	370 × 260 × 590mm	100V	8.0 (18)
-02S-120NA	North America		120V	

■ Std. Access.

- Timer
- Heat-resistant gloves
- Tweezers

■ Option

- Please choose parts on P.12-15

■ Note

- Some holders cannot be used.

Baby1000



φ12 [1/2"]
Max. Cutter dia.
1000w
Heating 180 sec.
Cutter dia. φ6

CODE	Area	Size (W×D×H)	Power (Single phase)	Kg lbs
HRB-01	Japan	340 × 160 × 410mm	100V	3.5 (8)

■ Std. Access.

- Adapter (ADH-SLK)
- Timer
- Nozzles, 2 pieces (HNZ-17, HNZ-22)
- Heat-resistant gloves
- Tweezers

■ Option

- Please choose parts on P.12-15

■ Note

- A transformer is required in other voltage.
Please consult MST about the details of the transformer.

INDUCTION HEATER

Compact desktop type.
Easy operation with touch panel.

DENJI 電磁5000S

CODE	Size (W×D×H)	Power (3 phases)	Kg lbs
HRD-02SH	340×470×750mm	200-240V	30 (67)

■Std. Access.

- Heat-resistant gloves
- Tweezers

■Option

- Heating coil(HRD2-CL)
- Please choose parts on P.12-15

■Note

- Use type HSB/HSC for cutter stopper.
- Compressed air required: 5Kg/cm² (air-consumption volume: 245t/min)
- The customer should prepare the following items : auxiliary parts including the air tube (O.D: 8mm.) an air filter and a coupler.

Heating Coil (Option)

Air-cooling

Adapter (Option)

Base (Option)

Touch Panel

- Timer
- Coil selection
- Heating
- Cooling

Positioning Plate

A3 size

φ32 [1"]

Max. Cutter dia.

5000w

Heating 18 sec.

Cutter dia. Φ6

Heating coil (Option)

CODE	Holder I.D	Heating time	φC	H
HRD2-CL1	φ3~ 6 [1/8" ~ 1/4]	18 sec.	25	33
-CL2	φ7~12*1 [5/16" ~ 1/2]	28 sec.	35	42
-CL3	φ16, 20*2*3 [5/8", 3/4]		45	47
-CL4	φ25 [1"]	40 sec.	55	57
-CL5	MONO series (•MONO 3°[SLRB-SLFB8/10/12/16-M22])	35 sec.	fig. 1	
-CL6	HYPER VERSION (•Short type(All sizes) •Heavy-duty type [φ12, 16])	40 sec.	60	47
-CL7	φ32, HYPER VERSION (•Heavy-duty type [φ20, 25])	60 sec.	70	67

■Std. Access.

- Protection sheet for heating coil →P.15

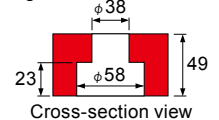
■Note

- The coil protection sheet is a consumable part. Replace the coil protection sheet(option) when you see that it is colored or distorted by the heat.

■Caution

- To protect the heating coil, don't heat a holder without using a coil protection sheet.
- When ordering, please note that holders for coil CL5, CL6, or CL7 cannot be heated by CL2, CL3, or CL4.
- *1 Use the coil, No.5 for SLRB-SLFB8/10/12-M22.
- *2 Use the coil, No.5 for SLRB-SLFB16-M22.
- *3 Use the coil, No.4 for A50M-SLRB20, F63-SLFB20

fig. 1



Cross-section view

DENJI 電磁1200S

CODE	Area	Size (W×D×H)	Power (Single phase)	Kg lbs
HRD-01S	Japan	230×410×550mm	100V	14 (31)
HRD-01S-120NA	North America	230×410×550mm	120V	19 (42)
-230AS	Asia		230V	

■Std. Access.

- Heating coil(HRD-CL1, CL2)
- Heat-resistant gloves
- Tweezers

■Option

- Please choose parts on P.12-15

■Note

- Use type HSB/HSC for cutter stopper.
- Compressed air required: 5Kg/cm² (air-consumption volume: 245t/min)
- The customer should prepare the following items : auxiliary parts including the air tube (O.D: 8mm.) an air filter and a coupler.
- A transformer is required in Europe.
- Please consult MST about the details of the transformer.

Heating Coil (Std.access)

Air-cooling

Adapter (Option)

Base (Option)

Touch Panel

- Timer
- Coil selection
- Heating
- Cooling

Positioning Plate

A4 size

φ12 [1/2"]

Max. Cutter dia.

1200w

Heating 18 sec.

Cutter dia. Φ6

Heating coil (Standard Accessories)

CODE	Holder I.D	Heating time	φC
HRD-CL1	φ3~ 6 [φ1/8" ~ 1/4]	18 sec.	18
-CL2	φ7~12 [φ5/16" ~ 1/2]	33 sec.	28

■Std. Access.

- Protection sheet for heating coil →P.15

■Caution

- To protect the heating coil, don't heat a holder without using a coil protection sheet.

■Note

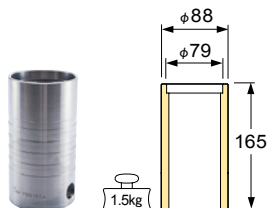
- The coil protection sheet is a consumable part. Replace the coil protection sheet(option) when you see that it is colored or distorted by the heat.

Option

Base

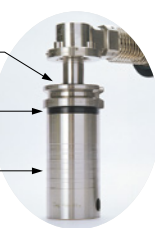
CODE

BAA-01

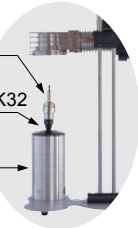


Examples of typical uses

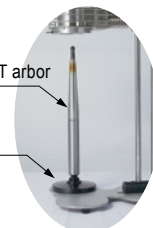
Holder
BT50
Adapter
ADH-50
Base
BAA-01



Holder
HSK-E32
Adapter
ADH-HSK32
Base
BAA-01



Long
STRAIGHT arbor
Adapter
BAS-01



Adapter

CODE	Dimensions		Holder		Shrink-Fit Heater model for Use				
			Type	Screw size	HRD-02S	HRD-01S	HRB-03S	HRB-02S	HRB-01
ADH-SLK		2 PIECE type SLIMLINE collet	6 type	M6	○	○	○	○	○
			8 type	M8					
			12 type	M10					
			ST10	M6					
		STRAIGHT arbor	ST12	M8					
			ST16/20/25	M10					
ADH-HSK25		MONO 3° MONO CURVE UNO HYPER VERSION Z	E25		○	△ ※ Some holders cannot be used. Please refer to the dimensional sheet.	○	△ ※ Some holders cannot be used.	×
-HSK32			E32						
-HSK40E			E40						
-HSK40A			A40						
-HSK50			A50 / E50 / F63						
-40			BT40 / A63 F63 / F80PD DN40 / CT40						
-50			BT50 / A100 DN50 / CT50						
-15TR			15TR3						
-S20TR			RS20 / S20TR						
-BT30			BT30						
BAS-01		STRAIGHT arbor	ST16/20/25	M10	○	△ ※ Some holders cannot be used. Please refer to the dimensional sheet.	○	△ ※ Some holders cannot be used.	×
			ST32	M16					
			ST42	M24					
-02			Carbide Shank ST○○C						

[○] : Available

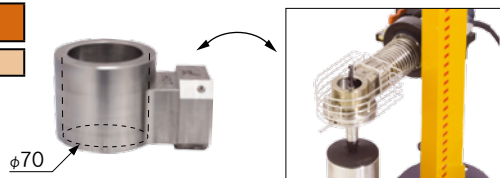
[×] : Not available

[△] : Restricted use

φ70 Nozzle (Baby3000S)

CODE

HRB-NZL70



Holder

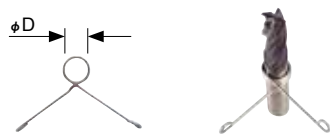
- MONO 3° SLRB32 φ32
- HYPER VERSION Heavy type (All sizes)

Option

■Cutter Stopper

Used as a stopper in the holder when shrink fitting or removing a cutting tool.

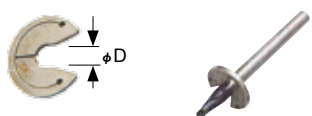
HSA type (Coil Spring type)



CODE	φ D	Set Contents (Q'ty)
HSA-D [Ex.: HSA-6]	3, 3.175[1/8], 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25, [3/16, 1/4, 5/16, 3/8, 1/2]	Each size 10 ea. /SET
HSA-E	3, 4, 6, 8, 10, 12	1 ea., 6 pieces in total
-F	3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1 ea., 10 pieces in total
-EF	3, 4, 5, 6, 8, 10, 12, 16, 20, 25	1 ea., 10 pieces in total

■Note • It cannot be used with HEAT ROBO DENJI.

HSB type (Plate Spring type)



CODE	φ D	Set Contents (Q'ty)
HSB-D [Ex.: HSB-3]	3, 3.175[1/8], 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25, 32 [3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"]	1 piece
-E	3, 4, 6, 8, 10, 12	1 ea., 6 pieces in total
-F	3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1 ea., 10 pieces in total
-EF	3, 4, 5, 6, 8, 10, 12, 16, 20, 25	1 ea., 10 pieces in total

HSC type (Slit Collet type)

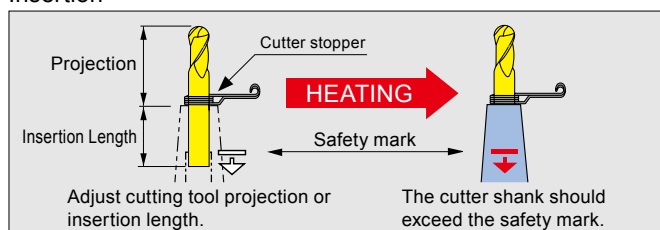


CODE	φ D
HSC-D [Ex.: HSC-3]	3, 3.175[1/8], 4, 6

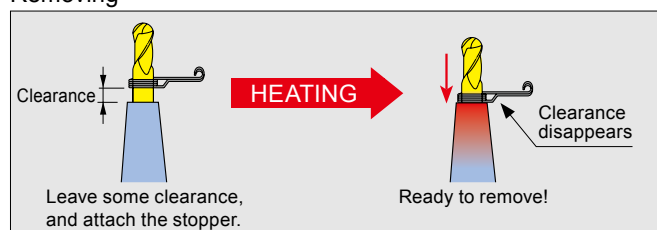


Tapered neck cutting tools

Insertion



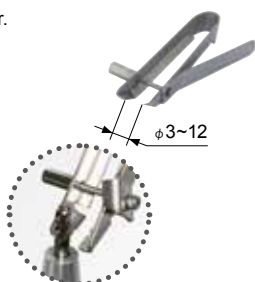
Removing



Cutter Pliers

Easy to hold a cutter.

CODE
HPY-01



Stopper Pliers

Easy to attach and detach for HSB type.

CODE
SPY-01



Heat-Resistant Gloves

For additional order

CODE	NOTE
HTB-01	—
-01-R	Right Hand
-01-L	Left Hand



Cutter Tray

Cooling Tray for heated cutting tools after removal from a holder.

CODE
SDH-01

Size:170×170(mm)

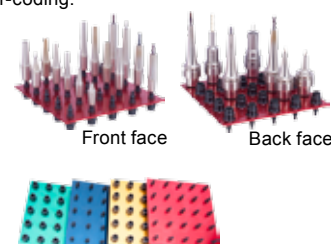


Holder Stand

The stand for the SLIMLINE collet, straight arbor and small shank holders (HSK-E25 and E32) is available in four colors, enabling simple color-coding.

CODE	Color	Front face	Back face	max. Q'ty
SDKT-RE	Red	SLIMLINE collet Straight arbor	Small shank holders (HSK-E25 / E32)	25 pieces each
-BL	Blue			
-GR	Green			
-GD	Gold			

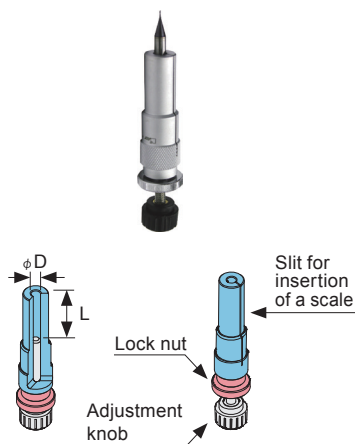
Size:190×190(mm)



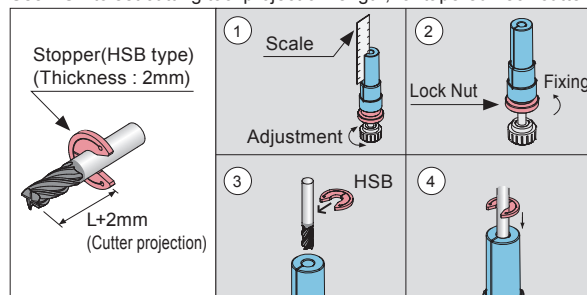
Cutter Adjuster

Simply adjustment for cutting tool projection and insertion length.

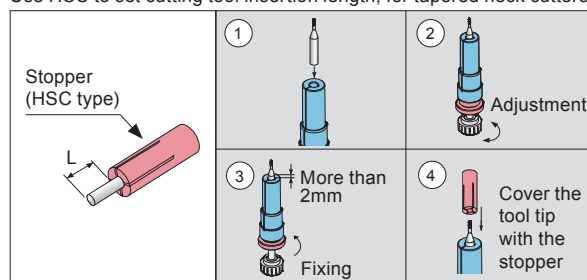
CODE	φ D	L
HAJ-3	3	10~ 30
-3.175	3.175 [1/8]	
-4	4	13~ 30
-3/16	[3/16]	
-6	6	19~ 45
-1/4	[1/4]	
-8	8 [5/16]	21~ 55
-10	10 [3/8]	22~ 70
-12	12	23~ 85
-1/2	[1/2]	
-16	16 [5/8]	26~ 90
-20	20 [3/4]	37~ 100
-25	25	40~ 100
-1"	[1"]	



Use HSB to set cutting tool projection length, for tapered neck cutters.



Use HSC to set cutting tool insertion length, for tapered neck cutters.



■Cleaning tools

Brush type

Nylon brushes for internal bores cleaning.

CODE	I.D
AQC-BR-SET	3 [1/8], 4 [3/16], 6 [1/4], 8 [5/16], 10 [3/8], 12 [1/2], 1 ea. 6 pieces in total
BR 3-5	3 [1/8], 5 pcs.
BR 4-5	4 [3/16], 5 pcs.
BR 6-5	6 [1/4], 5 pcs.
BR 8-5	8 [5/16], 5 pcs.
BR10-5	10 [3/8], 5 pcs.
BR12-5	12 [1/2], 5 pcs.

■Caution

- Do not use when holder is hot.



Rubber grinding stone type

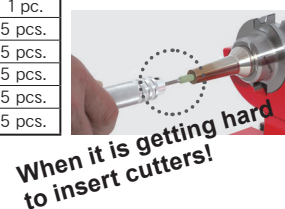
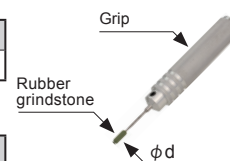
To eliminate strong oxidized film, burned-in dust and oil that have been generated in the internal bores.

Standard set

CODE	Note
CLT-GTA-01	1 ea. of below model

Parts

CODE	NAME	φd	Q'ty
CLT-GTA-GP	Grip	-	1 pc.
CLT-GTA 3-5	Rubber grind stone	3	5 pcs.
-GTA 4-5		4	5 pcs.
-GTA 6-5		6	5 pcs.
-GTA 8-5		8	5 pcs.
-GTA10-5		10	5 pcs.



■Aqua Cool

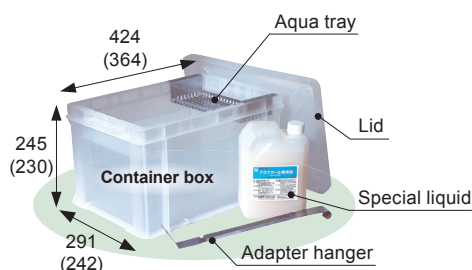
Aqua cool kit

Cooling kit for cooling SLIMLINE holders after shrink fitting or removing

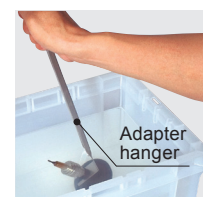
CODE	Note
AQC-KIT-01	1 ea. for below model

Parts

CODE	Name	Note
AQC-EK-01-2	Special Liquid	2 ℓ of undiluted Solution, Use at a dilution ratio of 3%.
-AT-01	Aqua Tray	Drainer plate
-AH-01	Adapter Hanger	Hanger for lowering holders into liquid.
CN -245	Container Box	-
-FT	Lid for Container Box	-



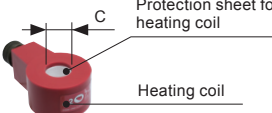
() Inside dimension



Protection sheet for heating coil (For Induction Heater)

Don't heat holders without using a coil protection sheet.

CODE	Heater model
HRD -DN  Coil No.	HEAT ROBO DENJI 1200S
HRD2-DN  Coil No.	HEAT ROBO DENJI 5000S



Ex. **HRD-DN2**