

Shrink-fit Heater **HEAT ROBO**

Long holder life

Shrink-fitting temperature is comparatively low, about 300°C[570°F], which is safer for the holders.

Affordable and compact design for simple shrink fitting.

Induction Heater

HEAT ROBO 電磁

- Rapid shrink-fitting
- Compact A4 size~
- Easy operation with touch panel!
- Automatic detection of coil No. in auto coil setting (DENJI 5000S)



Hot-air Heater

HEAT ROBO Baby

- Compact Affordable
- No risk of overheating



	DENJI 電磁 5000S	DENJI 電磁 2500	DENJI 電磁 1200S	Baby 3000S	Baby 1200S	Baby 1000
CODE	HRD-02SH	HRD-03	HRD-01S	HRB-03S	HRB-02S	HRB-01
Heating method	Induction type			Hot air type		
Rated power consumption	5000w	2500w	1200w	3000w	1200w	1000w
Rated voltage	3 phases 200~240v	Single phase 200~240v	100v	Single phase 200v	100v	
Cutter dia.	φ3~32 [1/8"~1]	φ3~16 [1/8"~5/8]	φ3~12 [1/8"~1/2]	φ3~32 [1/8"~1]	φ3~12 [1/8"~1/2]	
Heating time (dia.φ6)	18 sec. (Auto setting)	25 sec.	18 sec.	70 sec.	120 sec.	180 sec.
Cooling method [※]	○ (1min.)			○ (5min.)	▲	
Size (WxDxH) mm	340×470×750		230×540×550	430×330×600	370×260×590	320×160×410

※About cooling method [○]: Air cooling using factory air. [▲]: Cooling operation using air cooling capability of a hot air heater.

Compatibility table by holder type

MONO series	○	△	△	○	△	×
2 PIECE type	○	○	○	○	○	○
UNO	○	○	○	○	○	×
HYPER VERSION	○	×	×	○	×	×
STRAIGHT arbor	○	△	△	○	△	×

[○]: Available [×]: Not available [△]: Refer to size chart

*Please verify compatibility for specific holders.

INDUCTION HEATER

DENJI
電磁 5000S

CODE	Size (W×D×H)	Rated voltage	Kg
HRD-02SH	340×470×750mm	3 phases 200-240v	30

Option

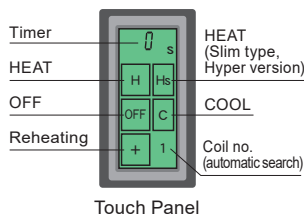
- Heating coil(HRD2-CL)
- Coil stand
- Please choose parts on P.15-17

Std. Access.

- Heat-resistant gloves
- Tweezers

Note

- Use type HSB/HSC for cutter stopper.
- Compressed air required: 0.5MPa (air-consumption volume: 245l/min)
- The customer should prepare the following items : auxiliary parts including the air tube (O.D. : 8mm.) an air filter and a coupler.



Max. Cutter dia.
φ3~32 [1/8~1"]

Rated power consumption

5000w

Cutter dia. φ6

Heating **18 sec.**

Air-cooling

1 min.

Heating coil (Option)

CODE	Heating coil No.	Holder I.D.	Heating time (Auto setting)	φ C	H
HRD2-CL1	1	φ3~ 6 [1/ 8" ~ 1/4]	18 sec.	25	33
-CL2	2	φ7~12※1 [5/16" ~ 1/2]	28 sec.	35	42
-CL3	3	φ16, 20※2※3 [5/ 8", 3/4"]	28 sec.	45	47
-CL4	4	φ25 [1"] MONO series •MONO 3°[A50M-SLRB20, F63-SLFB20]	40 sec.	55	57
-CL5	5	MONO series •MONO 3°[SLRB-SLFB8/10/12/16-M22]	35 sec.	Fig. 1	
-CL6	6	HYPER VERSION (•Short type(All sizes) •Heavy-duty type [φ 12, 16])	40 sec.	60	47
-CL7	7	φ32, HYPER VERSION (•Heavy-duty type [φ 20, 25])	60 sec.	70	67

Std. Access.

- Protection sheet for heating coil

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 5, 6, or 7 cannot be heated by 2, 3, or 4.
- ※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, E50-SLRA16-60-M22, E50-SLRA20-65-M22, F63-SLFB20

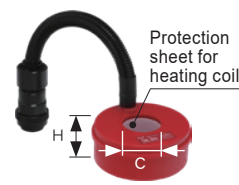
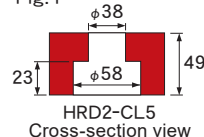


Fig. 1



HRD2-CL5 Cross-section view

Protection sheet for heating coil

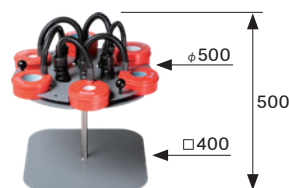
CODE	Coil
HRD2-DN1	HRD2-CL1
-DN2	-CL2
-DN3	-CL3
-DN4	-CL4
-DN5	-CL5
-DN6	-CL6
-DN7	-CL7

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.

Coil stand

CODE
CLSD01



※Heating coils are not included.

DENJI 電磁2500

One Heating Coil supports dia.3-16mm of shrink-fit holder SLIMLINE.
You can escape the inconvenience of changing heating coils.

CODE	AREA	Holder I.D.	Size (W×D×H)	Rated voltage	Kg
HRD-03-L	Japan, North America	φ3~16 [1/8" ~ 5/8"]	340	Single-phase	30
-S		φ3~8 [1/8" ~ 5/16"]	× 470	200-240V	
-LSE	Europe, Asia	φ3~16	× 750mm		
-SSE		φ3~8			

Option

- Please choose parts on P.15-17

Std. Access.

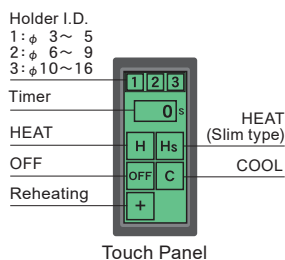
- Heat-resistant gloves
- Tweezers
- Protection sheet for heating coil

Note

- Use type HSB/HSC for cutter stopper.
- Compressed air required: 0.5MPa (air-consumption volume: 245l/min)
- The customer should prepare the following items : auxiliary parts including the air tube (O.D. : 8mm.) an air filter and a coupler.

Caution

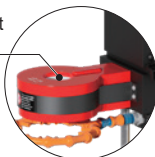
- The HEATROBO DENJI 2500 (HRD-03) is unable to shrink the HYPER version.



Protection sheet for heating coil

CODE	Shrink-fit Heater
HRD3-DN1	HRD-03-L / LSE
-DN2	-S / SSE

Protection sheet for heating coil



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.



DENJI 電磁1200S

CODE	AREA	Size (W×D×H)	Rated voltage	Kg
HRD-01S	Japan	230×410×550mm	100v	14
-01S-120NA	North America	230×540×550mm	120v	19
-230AS	Asia		Single phase 230v	

Option

- Please choose parts on P.15-17

Std. Access.

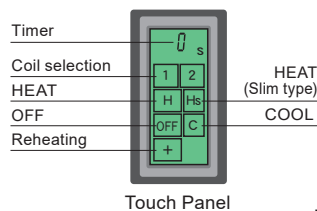
- Heating coil(HRD-CL)
- Heat-resistant gloves
- Tweezers

Note

- Use type HSB/HSC for cutter stopper.
- Compressed air required: 0.5MPa (air-consumption volume: 245l/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.

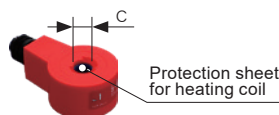
Caution

- The HEATROBO DENJI 1200S (HRD-01S) is unable to shrink certain holders. For details, refer to P.249.
- The HEATROBO DENJI 1200S (HRD-01S) is unable to shrink the HYPER version.



Heating coil

CODE	Heating Coil No.	Holder I.D.	Heating time	φC
HRD-CL1	1	φ3~6 [1/8" ~ 1/4"]	18 sec.	18
-CL2	2	φ7~12 [5/16" ~ 1/2"]	33 sec.	28



Std. Access.

- Protection sheet for heating coil

Caution

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

Protection sheet for heating coil

CODE	Coil
HRD-DN1	HRD-CL1
-DN2	-CL2

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.

HOT AIR HEATER

Baby 3000S

CODE	Area	Size (W×D×H)	Rated voltage	Kg
HRB-03S	Japan	430	Single phase 200 v	9.5
-03S-230NA	North America	× 330	Single phase 230 v	
-230EU	Europe	× 600mm		
-230AS	Asia			

Option

- φ70 Nozzle •Please choose parts on P.15-17.

Std. Access.

- Safety timer •Heat-resistant gloves •Tweezers

Note

- Compressed air required: 0.5MPa(air-consumption volume: 245 l/min)
- Prepare an air tube (O.D.: 8mm) and a connection coupling.

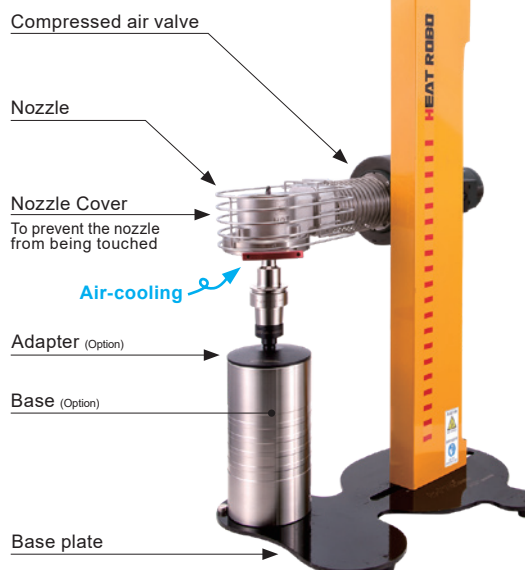
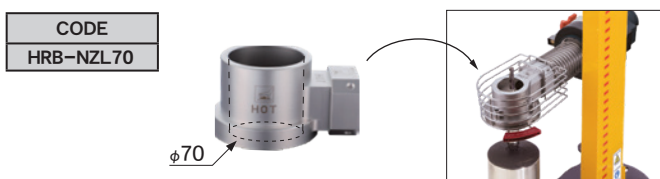
Shrink-fit heater with the safety timer.

Prevent accidents caused by leaving the heater on.

CODE	Area	Size (W×D×H)	Rated voltage	Kg
HRB-03ST	Japan	430	Single phase 200 v	9.7
-03ST-230NA	North America	× 330	Single phase 230 v	
-230EU	Europe	× 600mm		
-230AS	Asia			

φ70 Nozzle

For MONO 3° SLRB32 Hyper version (except BT30),
φ70 nozzle replacement is required



Max. Cutter dia.

φ3~32 [1/8~1"]

Rated power consumption

3000w

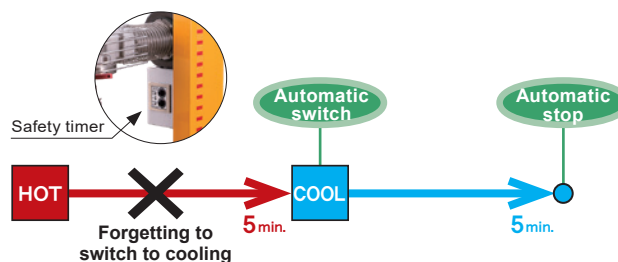
Cutter dia. φ6

Heating 70 sec.

Air-cooling

5 min.

It's an eco-friendly heater, preventing overheating and conserving energy!



Even if you forget to switch to cooling operation, this unit automatically switches to the cooling operation 5 minutes after the heating operation started to prevent overheating problems.

Baby 1200S



Max. Cutter dia.

φ3~12 [1/8~1/2"]

Rated power consumption

1200w

Cutter dia. φ6

Heating 120 sec.

CODE	Area	Size (W×D×H)	Rated voltage	Kg
HRB-02S	Japan	370×260×590mm	100 v	8.0
-02S-120NA	North America		120 v	

Option

- Please choose parts on P.15-17.

Std. Access.

- Timer •Heat-resistant gloves •Tweezers

Note

- Some holders cannot be used.(P.15)

Baby 1000



Max. Cutter dia.

φ3~12 [1/8~1/2"]

Rated power consumption

1000w

Cutter dia. φ6

Heating 180 sec.

CODE	Area	Size (W×D×H)	Rated voltage	Kg
HRB-01	Japan	340×160×410mm	100 v	3.5

Option

- Please choose parts on P.15-17.

Std. Access.

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

Note

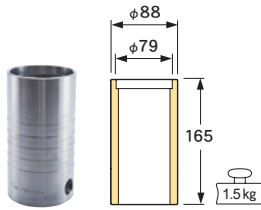
- A transformer is required in other voltage.
Please consult MST about the details of the transformer.

Option

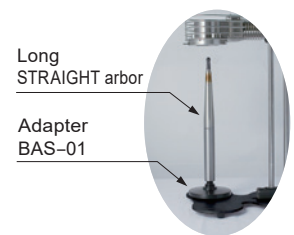
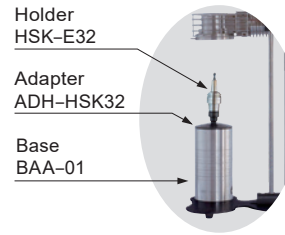
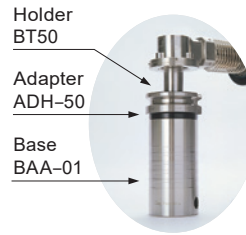
Base

CODE

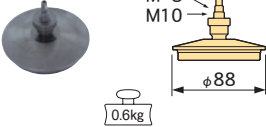
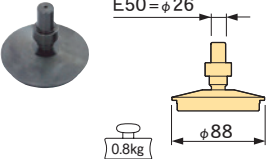
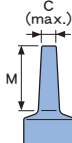
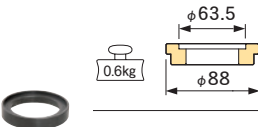
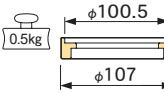
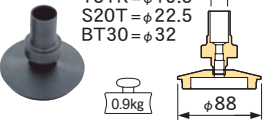
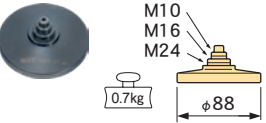
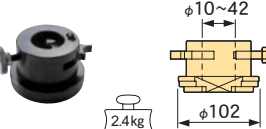
BAA-01



Examples of typical uses



Adapter

CODE	Dimensions	Holder	Shrink-Fit Heater model for Use								
			Type	Screw size	HRD-02SH	HRD-03	HRD-01S	HRB-03S	HRB-02S	HRB-01	
ADH-SLK		2 PIECE type SLIMLINE collet	6 type	M6	○	○	○	○	○	○	※Adapter (ADH-SLK) is included. No need to purchase base (BAA-01) for 2piece collet type 12.
			8 type	M6							
			12 type	M10							
		STRAIGHT arbor	ST10	M6							
			ST12	M8							
			ST16/20/25	M10							
ADH-HSK25 -HSK32 -HSK40E -HSK40A -HSK50		MONO 3° MONO CURVE UNO HYPER VERSION	E25		○	△	△	○	△	×	※Some holders cannot be used. ※Some holders cannot be used.  Available dimension C=Max. φ32 ※M=22 has a max. diameter of 24 at C.
			E32								
			E40								
			A40								
			A50 / E50 / F63								
			BT40 / A63 F63 / F80 / F80PD DN40 / CT40								
-40			BT50 / A100 DN50 / CT50								
-50			15TR3								
-15TR			RS20 / S20TR								
-S20TR			BT30								
-BT30											
BAS-01		STRAIGHT arbor	ST16/20/25	M10	○	△	△	○	○	×	※Some holders cannot be used. Please refer to the dimensional sheet.
			ST32	M16							
			ST42	M24							
-02			Carbide Shank ST○○C								

[○]: Available

[×]: Not available

[△]: Restricted use

Cutter Stopper

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

HSA type (Coil Spring Type)

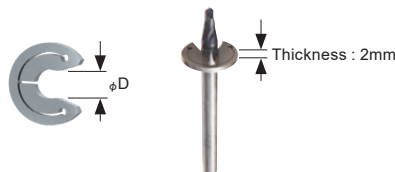


CODE	φD	Set Contents(Q'ty)
HSA-D [Ex : HSA-6]	3, 3.175 [1/8"], 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25, [3/16", 1/4", 5/16", 3/8", 1/2"]	Each size 10 ea. /SET
-E	3, 4, 6, 8, 10, 12	1 ea., 6 pieces in total
-F	3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1 ea., 10 pieces in total
-EF	3, 4, 5, 6, 8, 10, 12, 16, 20,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

Caution

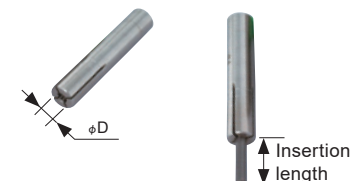
•HSA type cannot be used with HEAT ROBO DENJI.

HSB type (Plate Spring Type)

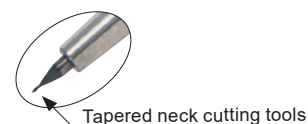


CODE	φD	Set Contents(Q'ty)
HSB-D [Ex : HSB-6]	3, 3.175 [1/8"], 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25, 32, [3/16", 1/4", 5/16", 3/8", 1/2", 5/8", 3/4", 1"]	1 ea.
-E	3, 4, 6, 8, 10, 12	1 ea., 6 pieces in total
-F	3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1 ea., 10 pieces in total
-EF	3, 4, 5, 6, 8, 10, 12, 16,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

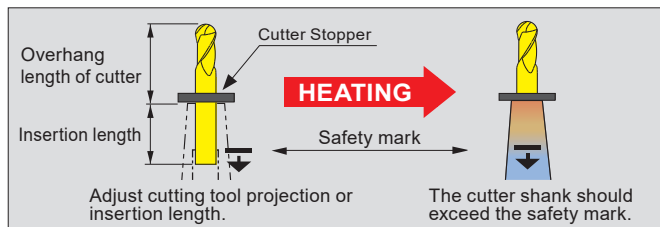
HSC type (Slit Collet Type)



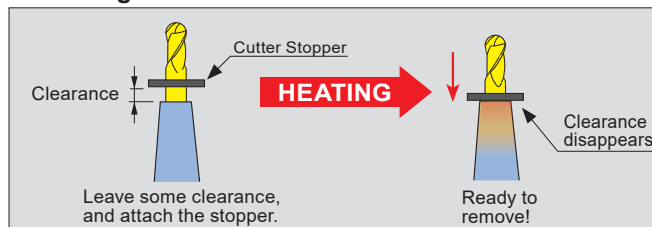
CODE	φD
HSC-D [Ex : HSC-6]	3, 3.175 [1/8"], 4, 6



Insertion



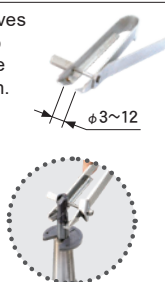
Removing



Cutter Pliers

Heat-resistant gloves are not required to perform the simple shrink-fit operation.

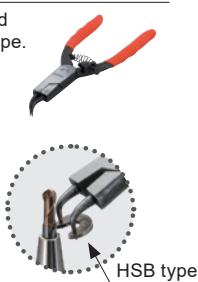
CODE
HPY-01



Stopper Pliers

Easy to attach and detach for HSB type.

CODE
SPY-01



Cutter Tray

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

CODE
SDH-01

Size:170×170 (mm)



Heat-resistant gloves

For additional order

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

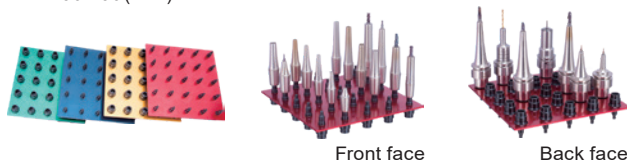


Holder Stand

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			
-BL	BLUE	SLIMLINE collet	Small shank holders (HSK-E25 / E32)	25 pieces each
-GR	GREEN	STRAIGHT arbor		
-GD	GOLD			

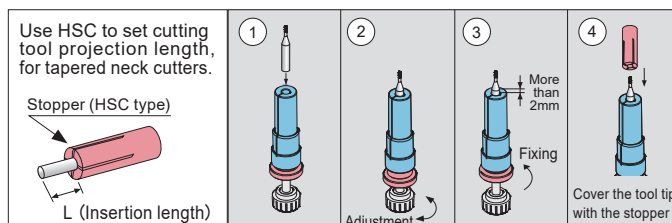
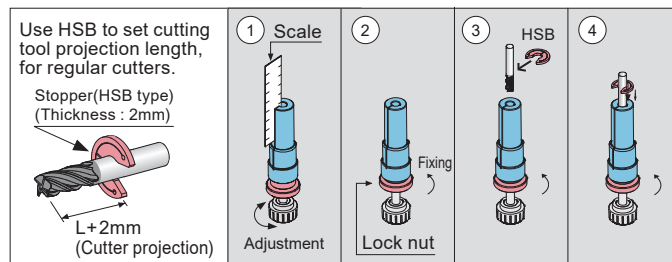
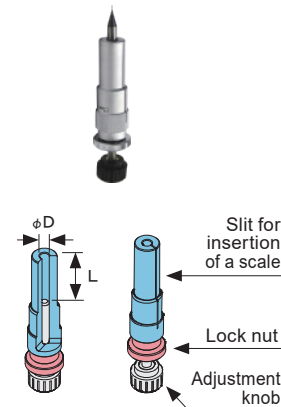
Size:190×190 (mm)



Cutter Adjuster

Simply adjustment for cutting tool projection and insertion length.

CODE	φD	L
HAI-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"]	



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 of each. 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.



For removing dirt before shrinking.

Caution

- Do not use when holder is hot.

Rubber grinding stone type

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

Standard set

CODE	NOTE
CLT-GTA-01	1 ea. of right model

Parts

CODE	NAME	φd	Q'ty
CLT-GTA-GP	Grip	—	1
-GTA 3-5	Rubber grindstone	3	5
-GTA 4-5		4	5
-GTA 6-5		6	5
-GTA 8-5		8	5
-GTA10-5		10	5



Aqua Cool

Aqua cool kit

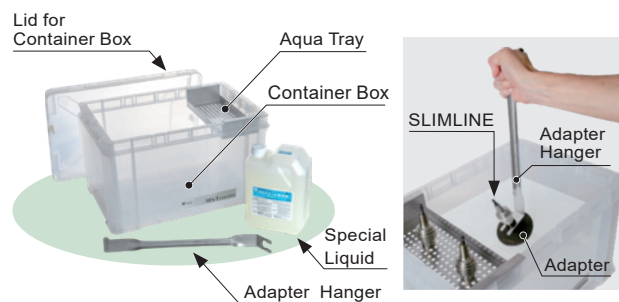
Cooling kit for cooling SLIMLINE holders after shrink fitting or removing.

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

Parts

CODE	NAME	NOTE
AQC-EK-01-2	Special Liquid	2l 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	Size:424×291×245 (364×242×230) mm
-FT	Lid for Container Box	Size:421×288×35 mm

() inside dimension



A shrink-fitting work efficiency kit, Shrink-fit holder Chiller

Shrink fitting operation can be shortened. Installation is easy as no power supply is required. All MST's heating devices are available.

A type

CODE	Cooling tower	Kg
CWBA01	1 pc.	18
CWBA02	2 pcs.	25

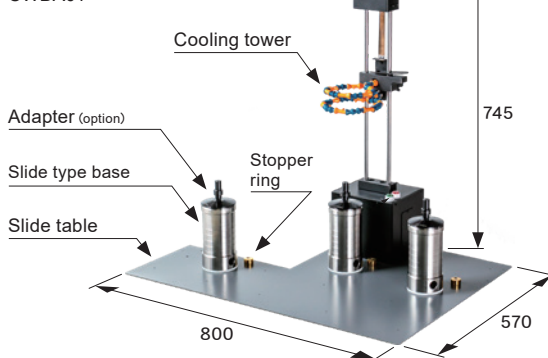
Std. Access.

- Slide table
- Slide type base(3 pcs.)
- Stopper ring(6 pcs.)
- Thermo seal(7 pcs.)
- Connecting air tube (dia.8mm, length 2m)

Note

- Compressed air required: 0.5MPa (air-consumption volume: 245 t/min)
- Please connect the air line that came with the unit. (Supply air pressure: 0.5~0.7MPa)

CWBA01



CWBA02 (Installed 2 cooling towers)



REPLACEMENT PARTS

Cooling tower (For additional orders ※)

CODE
CTW01

※ You can change CWBA01 or CWBA02.



Slide table

CODE
SLT01



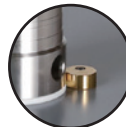
Slide type base

CODE
BAA-01SL



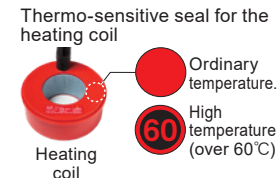
Stopper ring

CODE	Q'ty
SRG01	2



Thermo seal

CODE	Q'ty
THR60	7



B type

Compact type that can be installed in tight spots.

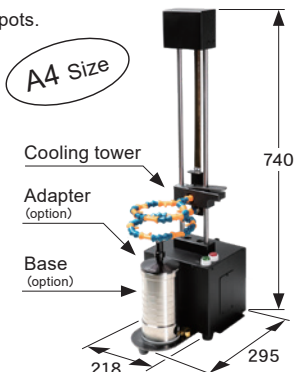
CODE	Kg
CWBB01	7.3

Std. Access.

- Thermo seal(7 pcs.)
- Connecting air tube (dia.8mm, length 2m)

Note

- Compressed air required : 0.5MPa (air-consumption volume : 245t/min)
- Please connect the air line that came with the unit. (Supply air pressure : 0.5~0.7MPa)



C type (For HEAT ROBO Baby 3000S/1200S)

CODE	Kg
CWBC01	7.2

Note

- Compressed air required : 0.5MPa (air-consumption volume : 245 t/min)
- Prepare an air tube (O.D. : 8mm) and a connection coupling.

