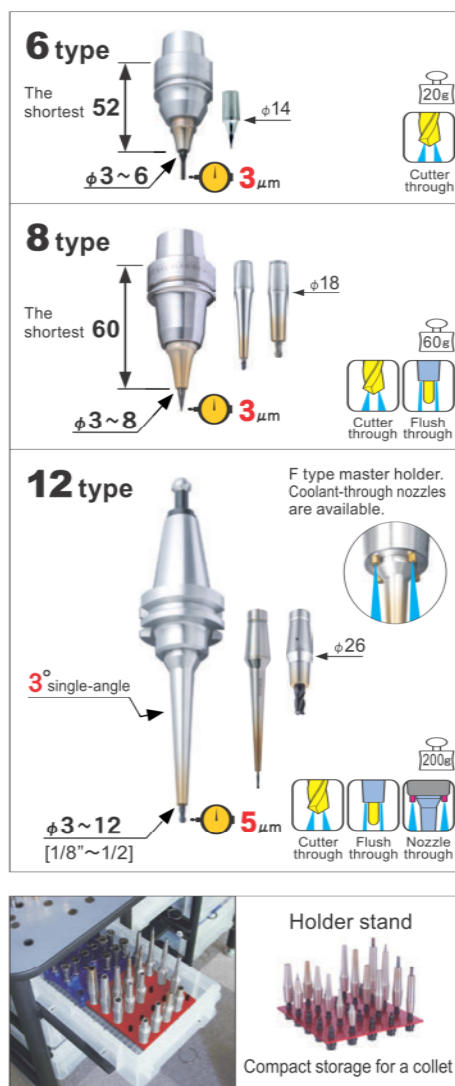
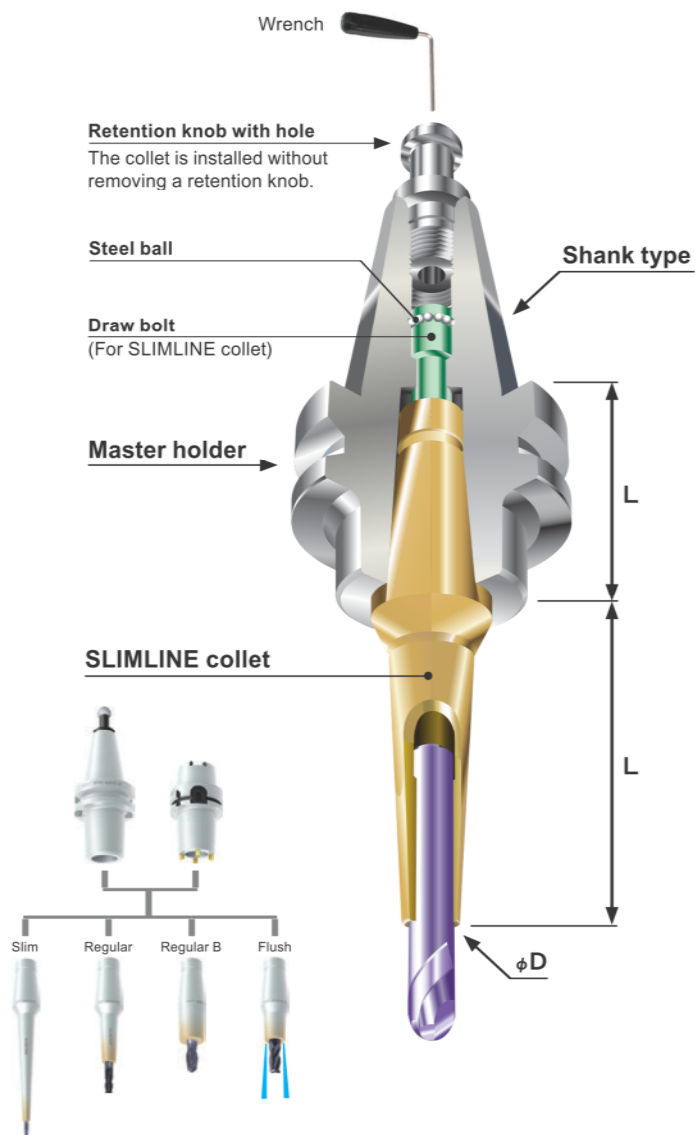


2 PIECE type

■ Versatile and economical modular type



Master holder

BT40 – SLK 12 – 45 F

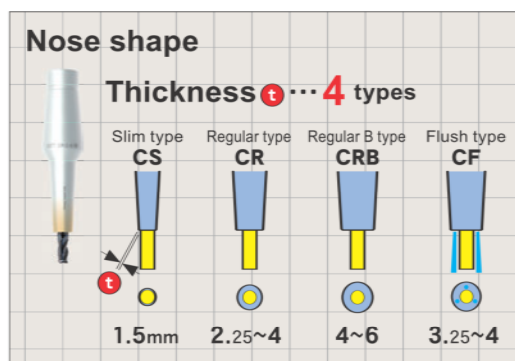
Shank type SLIMLINE type L Coolant-through

PAGE			Inch
190	6 type	BT30 HSK-A40, A50 HSK-E32, E40, E50	—
191	8 type	BT30, BT40 HSK-A40, A50, A63 HSK-E40, E50, F63	—
192	12 type	BT30, BT40, BT50 HSK-A50, A63, A100 HSK-E50, F63 DN40, DN50 CT40, CT50	○

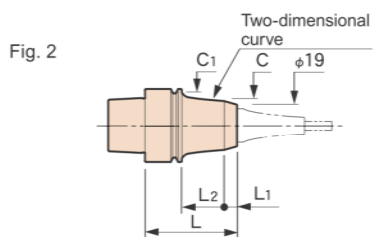
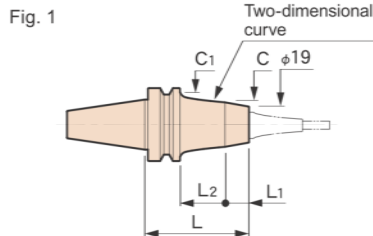
SLIMLINE collet

CR 12 – 4 – 80

Collet type φD L



Master holder 6 type



CODE	Fig.	L	L ₁	L ₂	φC	φC ₁	Kg	N
BT30-SLK 6-35-MAS1	1	35	13	—	—	34	0.5	1.4
-MAS2								
-65-MAS1		65	15	28	25.1		0.6	2.2
-MAS2								
A40 -SLK 6-37	2	37	17	—	—	34	0.2	3
-50		50	7	23	23.5		0.3	3.9
A50 -SLK 6-42	2	42	16	—	—	42	0.4	5.3
-55		55	7	22	24.6		0.5	6.4
E32 -SLK 6-37	2	37	7	10	26	—	0.2	1.3
-50		50		23				2.2
E40 -SLK 6-37	2	37	17	—	—	34	0.3	1.7
-50		50	7	23	23.5			2.6
E50 -SLK 6-42	2	42	16	—	—	42	0.5	3.4
-55		55	7	22	24.6		0.6	4.4

Option

- SLIMLINE collet 6 type
- Wrench.

Std. Access.

- Coolant duct (HSK-A)
- Retention knob (BT30)

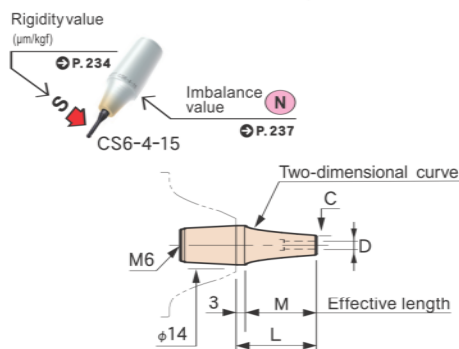
Note

- A dedicated retention knob is supplied with the BT30 as a standard accessory. When ordering, specify machine maker and model number. To replace the retention knob, please contact us.

Caution

- If the SLIMLINE collet can't be removed from a master holder, follow the procedure on P.232.
- HSK-E shank doesn't come with a coolant duct and cannot be attached. Consult us if you need it.

SLIMLINE collet 6 type

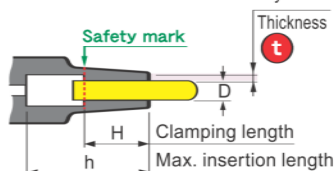


Note

- $\downarrow$ refers to the deflection value of an E32-SLK6-37 and the SLIMLINE collet 6 type combination. The values are comparable for any shank combination.

Caution

- Setting cutters...Be sure to insert the tool beyond the safety mark.

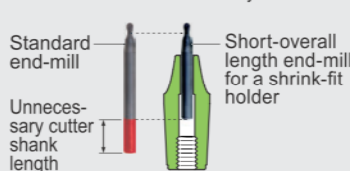
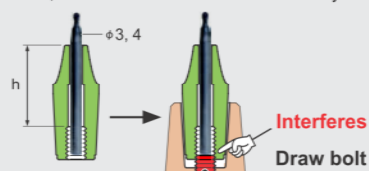


CODE	φD	φC	t	L	M	H	S	N	g	h
CS6-3-15	3	6	1.5	15	12	9	1.5	0.1	20	24
-30				30	27		3.2	0.2	30	39
-45				45	42		9	0.3	40	54
CR6-3-30	3	7.5	2.25	30	27	9	1.3	0.1	30	39
-45				45	42		6.2	0.3	40	54
CS6-4-15	4	7	1.5	15	12	12	1.2	0.1	30	24
-30				30	27		2.8	0.2		39
-45				45	42		7.9	0.4	40	54
CR6-4-30	4	10	3	30	27	12	1	0.1	30	39
-45				45	42		4.4	0.5	50	54
CS6-6-15	6	9	1.5	15	12	15	1	0.1	20	24
-30				30	27		2.4	0.3	30	35
-45				45	42		6.5	0.5	40	
CR6-6-30	6	12	3	30	27	15	0.8	0.2	20	35
-45				45	42		4	0.6		

⚠ Don't insert the cutter shank to the max. insertion length (h).

If the cutting tool shank face touches the bottom of the holder, the collet will not be installed properly and it may cause poor accuracy. Be sure to pay attention to this by using CS6 and CS8 with L = 15 and 25, because their "h" dimension is very short.

We recommend you use the short overall length tool for SLIMLINE (6 type・8 type) because its insertion length is short. When cutting off a tool shank, please remove any burrs on the cutting surface of the tool shank carefully.



Wrench (both for 6 and 8 type)

Used for clamping of master holders (type 6 & type 8) and SLIMLINE collet (type 6 & type 8).



CODE	Shank type
TW- 4	HSK-A, E, F, BT40
DW-14	BT30

Cleaning tool, STAR DUST

Ⓢ P.226



Holder stand

Ⓢ P.16



Master holder 8 type



Fig. 1

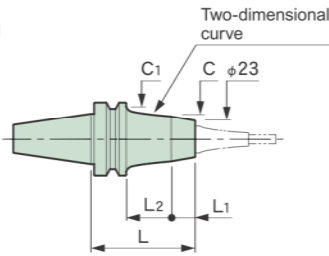
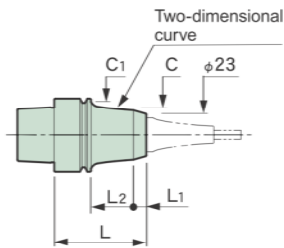


Fig. 2



CODE	Fig.	L	L ₁	L ₂	φC	φC ₁	K _g	(N)
BT30-SLK8-35-MAS1	1	35	13	—	—	34	0.4	1.5
-MAS2								
-65-MAS1		65	15	28	27.5		0.6	2.3
-MAS2								
BT40-SLK8-40	1	40	13	—	—	53	1	1.8
-70		70	15	28	31.2		1.2	2.5
A40-SLK8-50	2	50	7	23	27	34	0.3	2.5
-70		70	15	35	27.3		0.4	3.3
A50-SLK8-55	2	55	7	22	28.1	42	0.5	4
-75		75	15	34	28.7		0.6	4.8
A63-SLK8-55	2	55	7	22	29.5	53	0.8	5.7
-75		75	15	34	30.5		0.9	5.9
E40-SLK8-50	2	50	7	23	27	34	0.3	2.1
-70		70	15	35	27.3		0.4	2.9
E50-SLK8-55	2	55	7	22	28.1	42	0.6	2.7
-75		75	15	34	28.7		0.7	3.5
F63M-SLK8-55	2	55	7	22	29.5	53	0.8	4.4
-75		75	15	34	30.5		1	5.2

Option

- SLIMLINE collet 8 type
- Wrench
- Retention knob (BT40)→P.216

Std. Access.

- Coolant duct (HSK-A)
- Retention knob (BT30)

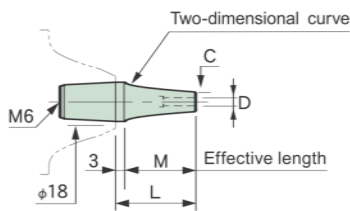
Note

- A dedicated retention knob is supplied with the BT30 as a standard accessory. When ordering, specify machine maker and model number. To replace the retention knob, please contact us.

Caution

- If the SLIMLINE collet can't be removed from a master holder, follow the procedure on p.232.
- HSK-E and F shank don't come with a coolant duct and cannot be attached. Consult us if you need it.

SLIMLINE collet 8 type

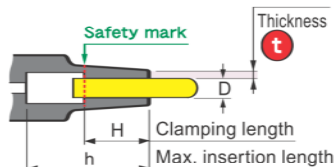


Note

- S refers to the deflection value of an E40-SLK8-50 and SLIMLINE collet type 8 combination. The values are comparable for any shank combination.

Caution

- Setting cutters...Be sure to insert the tool beyond the safety mark.



CODE	φD	φC	t	L	M	H	S	(N)	K _g	h
CS8-3-25	3	6	1.5	25	22	9	2.1	0.2	60	37.5
-45				45	42		4.8	0.4	70	57.5
-65				65	62		10.3	0.6	80	77.5
CR8-3-45	3	7.5	2.25	45	42	9	3.6	0.5	70	57.5
-65				65	62		7.4	0.7	90	77.5
CF8-3-45	3	9.5	3.25	45	42	9	2.8	0.5	80	57.5
-65				65	62		5.3	0.8	100	77.5
CS8-4-25	4	7	1.5	25	22	12	1.8	0.3	60	37.5
-45				45	42		4.4	0.5	70	57.5
-65				65	62		9.2	0.6	80	77.5
CR8-4-45	4	10	3	45	42	12	2.7	0.6	80	57.5
-65				65	62		5.3	0.8	100	77.5
CF8-4-45	4	12	4	45	42	12	2.3	0.7	90	57.5
-65				65	62		4.2	0.9	110	77.5
CS8-6-25	6	9	1.5	25	22	15	1.5	0.3	60	35
-45				45	42		3.7	0.6	80	
-65				65	62		7.6	0.8	90	
CR8-6-45	6	12	3	45	42	15	2.5	0.7	90	35
-65				65	62		4.8	1	110	
CF8-6-45	6	14	4	45	42	15	2.1	0.8	100	35
-65				65	62		3.9	1.1	120	
CS8-8-25	8	11	1.5	25	22	20	1.4	0.4	60	37
-45				45	42		3.3	0.7	70	49
CR8-8-45	8	14	3	45	42	20	2.4	0.8	90	49
-65				65	62					
CF8-8-45	8	16	4	45	42	20	2.1	1.1	110	49



Master holder 12 type



Fig. 1

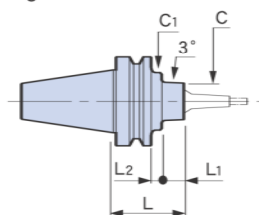


Fig. 2

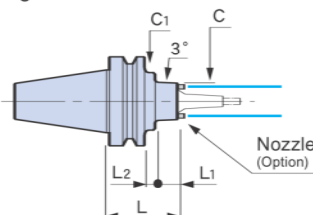


Fig. 3

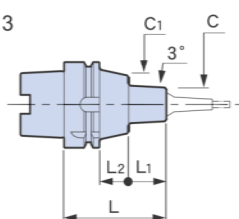


Fig. 4

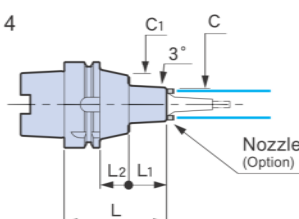
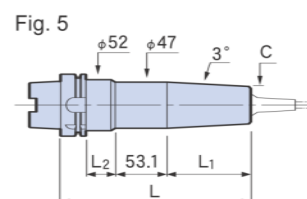


Fig. 5



CODE	Fig.	L	φC	L ₁	L ₂	φC ₁	Kg	N
BT30-SLK12- 35-MAS1	1	35	38	13	—	—	0.4	1
-MAS2								
BT40-SLK12- 45	1	45	38	18	—	—	1.1	1.4
- 45F	2		41					1.6
- 75	1	75	38	48			1.4	
- 75F	2		41					1.8
-135F		135		108			2.2	3.2
BT50-SLK12- 75	1	75	38	25	12	65	4	4.7
- 75F	2		41					4.9
-105F		105		55			4.4	5.3
-135F		135		85			4.7	5.7
-225	1	225	38	175			6.4	14.8
-315		315		225	52		11	31.3
A50 -SLK12- 75	3	75	38	49	—	—	0.8	4.8
A63 -SLK12- 75	3	75	38	49	—	—	1	5
- 75F	4		41				1.1	5.5
-135	3	135	38	109			1.7	8.5
-135F	4		41				1.9	8.6
-165	5	165	38	86			2.2	16.7
-195		195			30		2.7	21.0
-225		225			60		3.2	25.3
A100-SLK12-105	3	105	38	43	33	65	3.5	22.6
-105F	4		41				3.5	23.4
-135F		135		73			3.9	25.4
-225	3	225	38	163			5.2	35.7
-315		315		253			6.9	47.6
E50 -SLK12- 75	3	75	38	49	—	—	0.8	2.9
F63M-SLK12- 75	3	75	38	49	—	—	1	3.4
DN40AD-SLK12- 45	1	45	38	13.8	12.1	45	1	4.6
- 45F	2		41	7.9	18			4.3
- 75	1	75	38	43.8	12.1		1.3	5.8
- 75F	2		41	55.9	—			5.5
DN50AD-SLK12- 75	1	75	38	40	15.9	70	3.4	12.6
- 75F	2						3.5	12.3
-135F		135	41	100			4.3	19



CODE	Fig.	L	ϕC	L ₁	L ₂	ϕC_1	lbs	N
CT40-SLK12- 45	1	1.77	1.61	1.02	—	1.75	2.4	2.4
- 45F	2						2.2	2.8
- 75	1	2.95	1.50	2.20			2.9	3.5
- 75F	2		1.61				3.1	3.9
-135F		5.31		4.56			4.6	6.8
CT50-SLK12- 75	1	2.95	1.50	1.57	.63	2.75	7.5	7.9
- 75F	2		1.61				7.7	8.3
-105F		4.13		2.76			8.6	11.3
-135F		5.31		3.94			9.5	14.4
-225	1	8.86	1.50	7.48			12.6	23
-315		12.40		8.86	2.79		17.6	28



Option

- SLIMLINE collet 12type
- Wrench (W-135)
- Nozzles (nozzle model: NOZ)
- Retention knob (BT40, 50/ CAT./ DIN)→P.216

Std. Access.

- Coolant duct (HSK-A)
- Retention knob (BT30)

Note

- A dedicated retention knob is supplied with the BT30 as a standard accessory. When ordering, specify machine maker and model number. To replace the retention knob, please contact us.

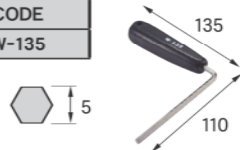
Caution

- If the SLIMLINE collet can't be removed from a master holder, follow the procedure on p.232.
- HSK-E and F shank don't come with a coolant duct and cannot be attached. Consult us if you need it.

Wrench

Required for clamping the master holder and SLIMLINE collet.

CODE
W-135

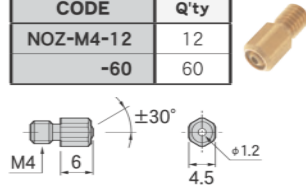


Note

- To fasten the BT30, use a commercially available 14 mm single-ended wrench.

Nozzle (For F-type)

CODE	Q'ty
NOZ-M4-12	12
-60	60



Std. Access.

- Tightening wrench

Note

- Four nozzles are required on the flush type master holder.

Cleaning tool for a spindle taper hole, STAR DUST

☞ P.226



Retention knob with hole

There is no need to remove a retention knob with 6mm coolant-through hole when tightening or loosening SLIMLINE collet.



Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
version

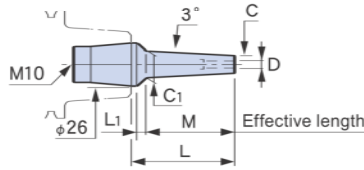
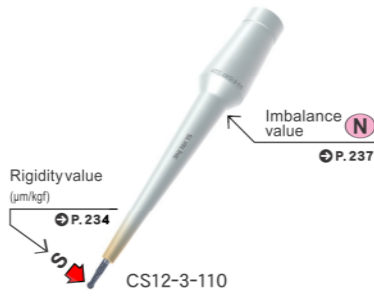
STRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information

SLIMLINE collet 12 type

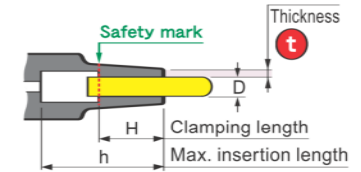


Note

- S** refers to the deflection value of an BT40-SLK12-45 and the SLIMLINE collet 12 type combination. The values below are comparable for any shank combination.

Caution

- Setting cutters...Be sure to insert the tool beyond the safety mark.



CODE	φD	φC	t	L	M	L1	φC1	H	S	N	Kg lbs	h
CS12 -3 - 35	3	6	1.5	35	22	9.5	8.4	10	4.8	0.5	0.2	60
- 55				55	42		10.5		9.5			80
- 80				80	67		13.1		15	0.7		105
- 110				110	97		16.2		20.6	0.8		135
CR12 -3 - 35	3	7.5	2.25	35	22	9.5	9.9	10	2.9	0.5	0.2	60
- 55				55	42		12		5.5			80
- 80				80	67		14.6		8.9	0.7		105
CF12 -3 - 35	3	9.5	3.25	35	22	9.5	11.9	10	1.9	0.5	0.2	60
- 55				55	42		14		3.3	0.6		80
- 80				80	67		16.6		5.3	0.8		105
CS12 -3.175- 35	3.175	6.175	1.5	35	22	9.5	8.5	10	4.6	0.5	0.2	60
- 55				55	42		10.6		9			80
- 80				80	67		13.2		14.3	0.7		105
- 110				110	97		16.4		19.7	0.8		135
CS12 -1/8 - 35	1/8	.24	.059	1.38	.87	.37	.33	.39	4.4	0.5	0.35	2.36
- 55				2.17	1.65		.42		8.7	0.6	0.37	3.15
- 80				3.15	2.64		.52		14	0.7	0.42	4.13
- 110				4.33	3.82		.64		19.3	0.9	0.49	5.31
CR12 -1/8 - 35	1/8	.36	.118	1.38	.87	.37	.45	.39	2	0.5	0.37	2.36
- 55				2.17	1.65		.53		3.5	0.6	0.42	3.15
- 80				3.15	2.64		.64		5.7	0.8	0.49	4.13
CF12 -1/8 - 35	1/8	.38	.128	1.38	.87	.37	.47	.39	1.8	0.6	0.40	2.36
- 55				2.17	1.65		.55		3.1	0.7	0.42	3.15
- 80				3.15	2.64		.66		5.1	0.9	0.49	4.13
CS12 -4 - 35	4	7	1.5	35	22	9.5	9.4	12	3.8	0.5	0.2	60
- 55				55	42		11.5		7.5			80
- 80				80	67		14.1		11.9	0.7		105
- 110				110	97		17.2		16.6	0.9		135
CR12 -4 - 35	4	10	3	35	22	9.5	12.4	12	1.7	0.5	0.2	60
- 55				55	42		14.5		3.1	0.6		80
- 80				80	67		17.1		5.1	0.8		105
CF12 -4 - 35	4	12	4	35	22	9.5	14.4	12	1.3	0.6	0.2	60
- 55				55	42		16.5		2.2	0.8		80
- 80				80	67		19.1		3.4	0.9		105
CS12 -3/16 - 35	3/16	.31	.059	1.38	.87	.37	.40	.59	3.1	0.6	0.35	2.36
- 55				2.17	1.65		.48		6.2	0.7	0.37	3.15
- 80				3.15	2.64		.58		10.3	0.8	0.42	4.13
- 110				4.33	3.82		.71		14.2	1	0.53	5.31
CR12 -3/16 - 35	3/16	.42	.118	1.38	.87	.37	.51	.59	1.5	0.6	0.37	2.36
- 55				2.17	1.65		.60		2.7	0.7	0.42	3.15
- 80				3.15	2.64		.70		4.5	0.9	0.51	4.13
CF12 -3/16 - 35	3/16	.50	.157	1.38	.87	.37	.59	.59	1.2	0.7	0.40	2.36
- 55				2.17	1.65		.68		1.9	0.8	0.46	3.15
- 80				3.15	2.64		.78		3.1	1	0.55	4.13

CODE	φD	φC	t	L	M	L ₁	φC ₁	H	S	N	 Kg lbs	h
CS12 -5 - 35	5	8	1.5	35	22	9.5	10.4	15	3	0.5	0.2	60
				55	42		12.5		6	0.6		80
				80	67		15.1		9.7	0.8		105
				110	97		18.2		13.6	1		135
CS12 -6 - 35	6	9	1.5	35	22	9.5	11.4	18	2.4	0.5	0.2	60
				55	42		13.5		4.9	0.7		80
				80	67		16.1		8	0.8		105
				110	97		19.2		11.4	1		135
CR12 -6 - 35	6	12	3	35	22	9.5	14.4	18	1.3	0.6	0.2	60
				55	42		16.5		2.4	0.7		80
				80	67		19.1		3.9	0.9		105
CRB12-6 - 35	6	14	4	35	22	9.5	16.3	18	1	0.7	0.2	60
				55	42		18.0		1.7	0.8		80
				80	67		21.0		2.7	1		105
CF12 -6 - 35	6	14	4	35	22	9.5	16.4	18	1	0.7	0.2	60
				55	42		18.5		1.7	0.9		80
				80	67		21.1		2.7			105
CS12 -1/4 - 35	1/4	.37	.059	1.38	.87	.37	.46	.71	2.2	0.6	0.35	2.36
				2.17	1.65		.54		4.5	0.7	0.40	3.15
				3.15	2.64		.64		7.4	0.9	0.46	4.13
				4.33	3.82		.77		10.5	1.1	0.57	5.31
CR12 -1/4 - 35	1/4	.49	.118	1.38	.87	.37	.58	.71	1.2	0.6	0.40	2.36
				2.17	1.65		.66		2.2	0.8	0.44	3.15
				3.15	2.64		.76		3.7	1	0.55	4.13
CRB12-1/4 - 35	1/4	.56	.157	1.38	.87	.37	.66	.71	1	0.7	0.40	2.36
				2.17	1.65		.74		1.6	0.8	0.47	3.15
				3.15	2.64		.84		2.6	1.0	0.59	4.13
CF12 -1/4 - 35	1/4	.56	.157	1.38	.87	.37	.66	.71	1	0.8	0.42	2.36
				2.17	1.65		.74		1.9	0.9	0.49	3.15
				3.15	2.64		.84		2.6	1.1	0.60	4.13
CS12 - 7 - 35	7	10	1.5	35	22	9.5	12.4	20	2	0.6	0.2	60
				55	42		14.5		4.1	0.7		80
				80	67		17.1		6.8	0.9		105
				110	97		20.2		9.7	1.2		135
CS12 -5/16 - 35	5/16	.43	.059	1.38	.87	.37	.52	.98	1.6	0.6	0.37	2.36
				2.17	1.65		.60		3.3	0.8	0.40	3.15
				3.15	2.64		.71		5.6	1	0.49	4.13
				4.33	3.82		.83		8.1	1.2	0.62	5.31
CR12 -5/16 - 35	5/16	.55	.118	1.38	.87	.37	.64	.98	1	0.7	0.40	2.36
				2.17	1.65		.72		1.9	0.8	0.46	3.15
				3.15	2.64		.83		3.1	1	0.57	4.13
CRB12-5/16 - 35	5/16	.71	.197	1.38	.87	.37	.80	.98	0.7	0.7	0.43	2.36
				2.17	1.65		.88		1.2	0.9	0.54	3.15
				3.15	—		1.00		1.8		0.72	4.13
CF12 -5/16 - 35	5/16	.55	.118	1.38	.87	.37	.64	.98	1	0.7	0.40	2.36
				2.17	1.65		.72		1.9	0.8	0.46	3.15
				3.15	2.64		.83		3.1	1	0.57	4.13
CR12 - 8 - 35	8	14	3	35	22	9.5	16.4	25	1.1	0.6	0.2	60
				55	42		18.5		1.9	0.8		80
				80	67		21.1		3.1	1		105
CRB12- 8 - 35	8	18	5	35	22	9.5	20.3	25	0.7	0.7	0.2	60
				55	42		22.4		1.1	0.9		80
				80	—		—		1.8			105
CF12 - 8 - 35	8	16	4	35	22	9.5	18.4	25	0.9	0.8	0.2	60
				55	42		20.5		1.4	1		80
				80	67		23.1		2.3	1.2		105
CS12 - 9 - 35	9	12	1.5	35	22	9.5	14.4	30	1.4	0.7	0.2	60
				55	42		16.5		2.9	0.9		
				80	67		19.1		4.8	1.1		
				110	97		22.2		7.1	1.3		0.3

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
versionSTRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information

Feature	CODE	φD	φC	t	L	M	L ₁	φC ₁	H	S	N	Kg lbs	h
Shrink-fit Heater	CS12 - 3/8 - 35	3/8	.49	.059	1.38	.87	.37	.58	1.18	1.3	0.7	0.35	2.36
	- 55				2.17	1.65		.67		2.6	0.8	0.42	
	- 80				3.15	2.64		.77		4.4	1	0.51	
	-110				4.33	3.82		.89		.98	6.4	1.3	0.66
Shrink-fit Heater	CR12 - 3/8 - 35	3/8	.61	.118	1.38	.87	.37	.70	1.18	0.9	0.7	0.40	2.36
	- 55				2.17	1.65		.78		1.6	0.9	0.49	
	- 80				3.15	2.64		.89		2.6	1.1	0.62	
MONO 3° MONO CURVE	CRB12 - 3/8 - 35	3/8	.85	.236	1.38	.87	.37	.94	1.18	0.6	0.9	0.47	2.36
	- 55				2.17	—		1.00		0.9	0.8	0.62	
	- 80				3.15	—		—		1.5	1.1	0.82	
MONO 3° MONO CURVE	CF12 - 3/8 - 35	3/8	.69	.157	1.38	.87	.37	.78	1.18	0.8	0.9	0.42	2.36
	- 55				2.17	1.65		.86		1.3	1.1	0.53	
	- 80				3.15	2.64		.97		2	1.3	0.68	
MONO Series	CS12 - 10 - 35	10	13	1.5	35	22	9.5	15.4	30	1.3	0.8	0.2	60
	- 55				55	42		17.5		2.5	0.9	—	
	- 80				80	67		20.1		4.3	1.1	—	
	-110				110	97		23.2		6.2	1.4	0.3	
MONO Series	CR12 - 10 - 35	10	16	3	35	22	9.5	18.4	30	0.9	0.7	0.2	60
	- 55				55	42		20.5		1.6	0.9	—	
	- 80				80	67		23.1		2.6	1.1	0.3	
MONO Series	CRB12 - 10 - 35	10	22	6	35	22	9.5	24.3	30	0.6	0.9	0.2	60
	- 55				55	—		25.5		0.9	—	0.3	
	- 80				80	—		—		1.5	1.1	0.4	
2PIECE type	CF12 - 10 - 35	10	18	4	35	22	9.5	20.4	30	0.7	0.9	0.2	60
	- 55				55	42		22.5		1.1	1.1	—	
	- 80				80	—		—		1.9	1	0.3	
UNO	CS12 - 11 - 35	11	14	1.5	35	22	9.5	16.4	30	1.1	0.9	0.2	60
	- 55				55	42		18.5		2.3	1	—	
	- 80				80	67		21.1		3.8	1.3	—	
	-110				110	97		24.2		5.6	1.5	0.3	
UNO	CS12 - 12 - 35	12	15	1.5	35	22	9.5	17.4	30	1	1	0.2	60
	- 55				55	42		19.5		2.1	1.1	—	
	- 80				80	67		22.1		3.5	1.4	—	
	-110				110	—		—		5	1.3	0.3	
HYPER version	CR12 - 12 - 35	12	20	4	35	22	9.5	22.4	30	0.7	0.9	0.2	60
	- 55				55	42		24.5		1.1	1.1	—	
	- 80				80	—		25.5		1.9	1	0.3	
HYPER version	CF12 - 12 - 35	12	20	4	35	22	9.5	22.4	30	0.7	1	0.2	60
	- 55				55	42		24.5		1.1	1.2	—	
	- 80				80	—		—		1.9	1.1	0.3	
STRAIGHT arbor	CS12 - 1/2 - 35	1/2	.62	.059	1.38	.87	.37	.71	1.18	0.9	0.9	0.33	2.36
	- 55				2.17	1.65		.79		1.9	1.1	0.42	
	- 80				3.15	2.64		.89		3.1	1.3	0.55	
	-110				4.33	3.68		.50		1	4.8	1.7	0.77
OTHERS	CR12 - 1/2 - 35	1/2	.81	.157	1.38	.87	.37	.91	1.18	0.6	1	0.42	2.36
	- 55				2.17	1.99		—		1.1	0.9	0.55	
	- 80				3.15	1.80		1.20		1	1.8	2.2	0.75
OTHERS	CF12 - 1/2 - 35	1/2	.81	.157	1.38	.87	.37	.91	1.18	0.6	1.1	0.40	2.36
	- 55				2.17	1.99		—		1.1	1	0.55	
	- 80				3.15	1.80		1.20		1	1.8	2.3	0.75

Holder stand

Stands for SLIMLINE collets, STRAIGHT arbor and compact holders (HSK-E25, E32).
Selectable from four colors. Convenient to make arrangements by color-coding, etc.

CODE	Colors	Front face	Back face	Storage capacity
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]



Front face



Back face

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 DENJI

- Rapid shrink-fitting
- Compact A4 size~
- Easy operation with touch panel!



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.6)	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	430×330×660	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 [▲]: Requires recombinations of adapters and bases.

*Please verify compatibility for specific holders.

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
VERSION

STRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information

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

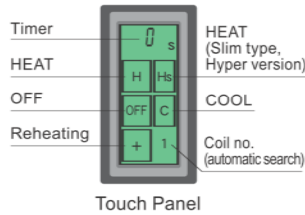
- Heating coil(HRD2-CL)
- Coil stand
- Please choose parts on P.15-17

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)	φC	H	Protection sheet for heating coil
HRD2-CL1	1	φ3~ 6 [1/8" ~ 1/4"]	18 sec.	25	33	HRD2-DN1
-CL2	2	φ7~12※1 [5/16" ~ 1/2"]	28 sec.	35	42	-DN2
-CL3	3	φ16, 20※2※3 [5/8", 3/4"]	28 sec.	45	47	-DN3
-CL4	4	φ25 [1"] MONO series •MONO 3°[A50M-SLRB20, F63-SLFB20]	40 sec.	55	57	-DN4
-CL5	5	MONO series •MONO 3°[SLRB-SLFB8/10/12/16-M22]	35 sec.	Fig. 1		-DN5
-CL6	6	HYPER VERSION •Short type(All sizes) •Heavy-duty type [φ12, 25]	40 sec.	60	47	-DN6
-CL7	7	φ32, HYPER VERSION •Heavy-duty type [φ20, 25]	60 sec.	70	67	-DN7

Std. Access.

- 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.

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

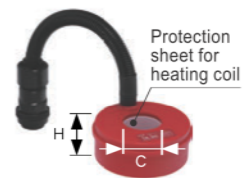


Fig. 1



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"]	340×470×750mm	Single-phase 200-240v	30
-S		φ3~ 8 [1/8" ~ 5/16"]			
-LSE	Europe, Asia	φ3~16			
-SSE		φ3~ 8			

Option

- Please choose parts on P.15-17

Std. Access.

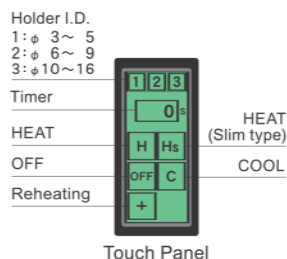
- Heat-resistant gloves
- Tweezers
- Protection sheet for heating coil

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.



Max. Cutter dia.

φ3~16 [1/8~5/8"]

Rated power consumption

2500w

Cutter dia. φ6

Heating 25* sec.

Air-cooling

1 min.

*HRD-03-S/SSE is designed for dia.3 to 8mm, you can shrink-in and out in a short time.

Protection sheet for heating coil

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

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	
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.233.

Heating coil

CODE	Heating Coil No.	Holder I.D.	Heating time	φC	Protection sheet for heating coil
HRD-CL1	1	φ3~ 6 [1/ 8" ~ 1/4]	18 sec.	18	HRD-DN1
-CL2	2	φ7~12 [5/16" ~ 1/2]	33 sec.	28	-DN2

Std. Access.

- Protection sheet for heating coil

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.



Max. Cutter dia.

φ3~12 [1/8~1/2"]

Rated power consumption

1200w

Cutter dia. φ6

Heating 18 sec.

Air-cooling

1 min.

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
VERSION

STRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information

Coil stand

For the heating coil of HRD-02SH

CODE
CLSD01



※Heating coils are not included.

HOT AIR HEATER

Baby 3000S

CODE	Area	Size (W×D×H)	Rated voltage	Kg
HRB-03S	Japan	430×330×660mm	Single phase 200 v	9.5
-03S-230NA	North America		Single phase 230 v	
-230EU	Europe			
-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.

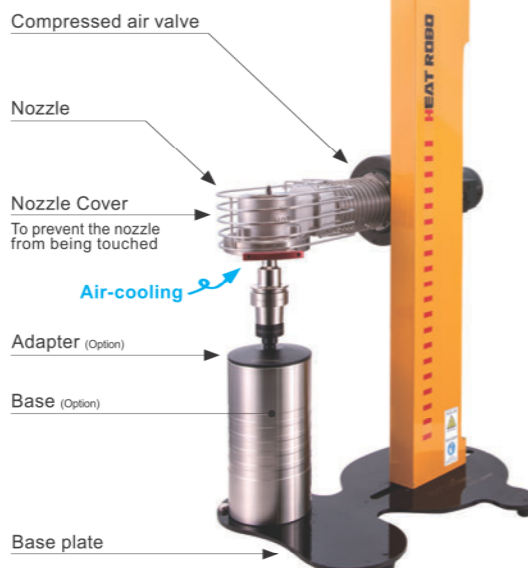
Shrink-fit heater with the safety timer.

Prevent accidents caused by leaving the heater on.

CODE	Area	Size (W×D×H)	Rated voltage	Kg
HRB-03ST	Japan	430×330×660mm	Single phase 200 v	9.7
-03ST-230NA	North America		Single phase 230 v	
-230EU	Europe			
-230AS	Asia			

φ70 Nozzle

When heating the SLIMLINE MONO 3°, SLRB32, and the heavy-duty type Hyper Version, the 70mm dia. nozzle HRB-NZL70 is required.



Max. Cutter dia.

φ3~32 [1/8~1"]

Rated power consumption

3000w

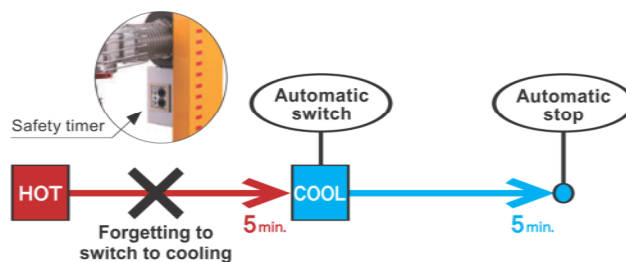
Cutter dia. φ6

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

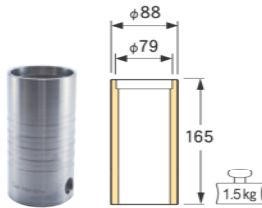
- A transformer is required in other voltage. Please consult MST about the details of the transformer.

Option

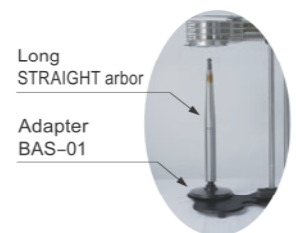
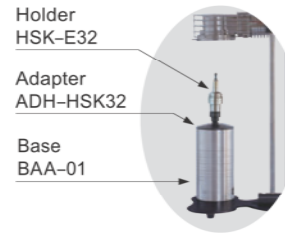
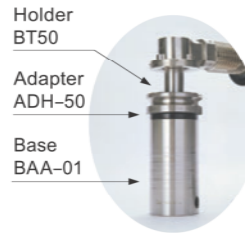
■ Base

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 2 piece collet type 12.
			8 type	M6						
			12 type	M10						
		STRAIGHT arbor	ST10	M6						
			ST12	M8						
			ST16/20/25	M10						
ADH-HSK25		MONO 3° MONO CURVE UNO HYPER VERSION	E25		○	△	△	○	△	×
E32						※Some holders cannot be used. Please refer to the dimensional sheet.		※Some holders cannot be used. C (max.) M Available dimension C=Max. φ32 ※M=22 has a max. diameter of 24 at C.		
E40										
A40										
A50 / E50 / F63										
-40			BT40 / A63 F63 / F80 / F80PD DN40 / CT40							
			-50		BT50 / A100 DN50 / CT50					
-15TR					15TR3					
			RS20 / S20TR							
			BT30							
BAS-01		STRAIGHT arbor	ST16/20/25	M10	○	△	△	○	○	×
			ST32	M16		※Some holders cannot be used. Please refer to the dimensional sheet.				
			ST42	M24						
-02			Carbide Shank ST○○C							

[○]: Available

[×]: Not available

[△]: Restricted use

Feature

Shrink-fit Heater

MONO 3°
MONO CURVE

MONO Series

2PIECE type

UNO

HYPER
VERSION

STRAIGHT
arbor

OTHERS

PERIPHERALS

Technical
Information

Cutter Stopper

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

HSA type (Coil Spring Type)

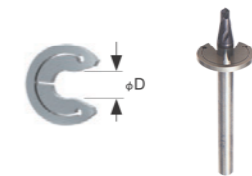


CODE	φD	Set Contents(Q'ty)
HSA-D [Ex : HSA-6]	3, 3.175 [1/8"], 4, 5, 6, 7, 8, 9, 10, 11, 12, 16, 20, 25, [3/16", 1/4", 5/16", 3/8", 1/2"]	Each size 10 ea. /SET
-E	3, 4, 6, 8, 10, 12	1 ea., 6 pieces in total
-F	3, 4, 5, 6, 7, 8, 9, 10, 11, 12	1 ea., 10 pieces in total
-EF	3, 4, 5, 6, 8, 10, 12, 16, 20,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

Caution

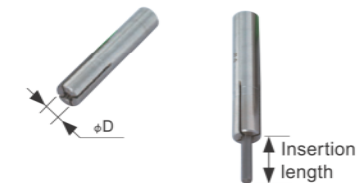
•HSA type cannot be used with HEAT ROBO DENJI.

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)

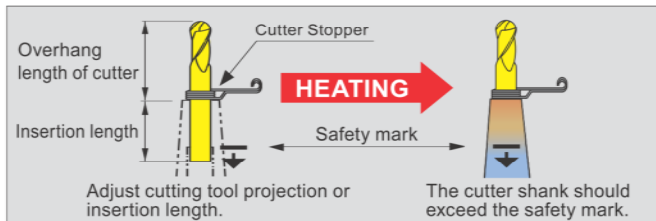


CODE	φD
HSC-D [Ex : HSC-6]	3, 3.175 [1/8"], 4, 6



Tapered neck cutting tools

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

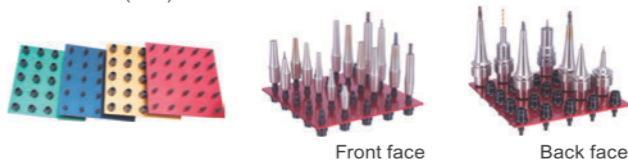


Holder Stand

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

Size:190×190 (mm)



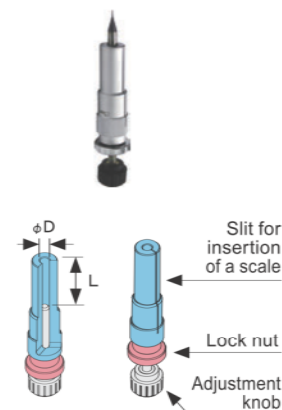
Front face

Back face

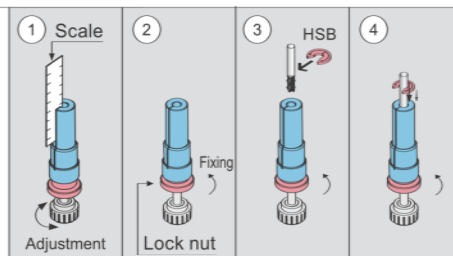
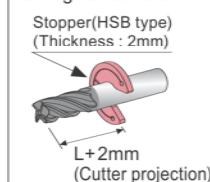
Cutter Adjuster

Simply adjustment for cutting tool projection and insertion length.

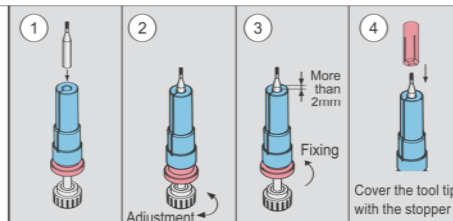
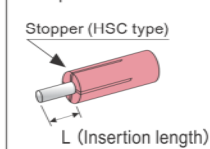
CODE	φD	L
HAI-3	3	10~ 30
-3.175	3.175 [1/8"]	
-4	4	13~ 30
-3/16	[3/16"]	
-6	6	19~ 45
-1/4	[1/4"]	
-8	8 [5/16"]	21~ 55
-10	10 [3/8"]	22~ 70
-12	12	23~ 85
-1/2	[1/2"]	
-16	16 [5/8"]	26~ 90
-20	20 [3/4"]	37~100
-25	25	40~100
-1"	[1"]	



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



Use HSC to set cutting tool projection 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 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

When it is getting hard to insert cutters!



Aqua Cool

Aqua cool kit

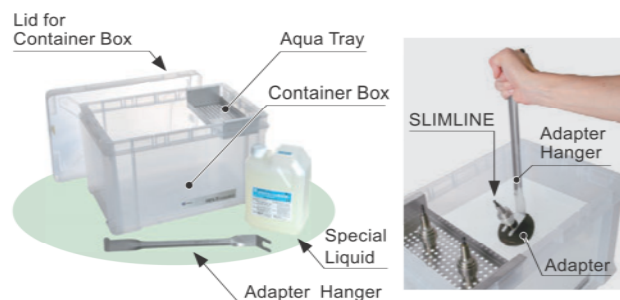
Cooling kit for cooling SLIMLINE holders after shrink fitting or removing.

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:421×288×35mm

() 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.

Shrink-fit holder Chiller A type For Induction Heaters and Hot Air Heaters

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

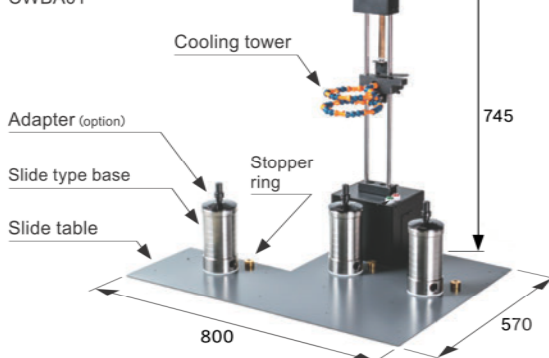
Std. Access.

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

Note

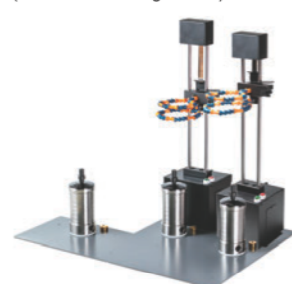
- Compressed air required: 0.5MPa (air-consumption volume: 245 ℓ/min)
- Please connect the air line that came with the unit. (Supply air pressure: 0.5~0.7MPa)

CWBA01



CWBA02

(Installed 2 cooling towers)



REPLACEMENT PARTS

Cooling tower (For additional orders)

CODE
CTW01



Slide table

CODE
SLT01



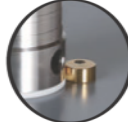
Slide type base

CODE
BAA-01SL



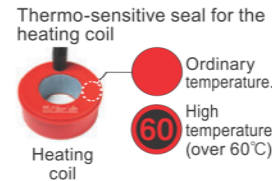
Stopper ring

CODE	Q'ty
SRG01	2



Thermo seal

CODE	Q'ty
THR60	7



Shrink-fit holder Chiller B type

Compact type that can be installed in tight spots.

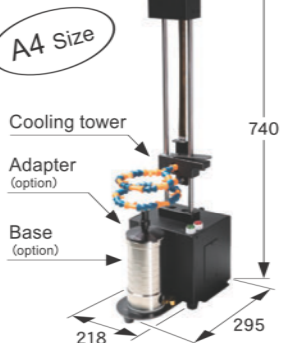
CODE	kg
CWBB01	7.3

Std. Access.

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

Note

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



Shrink-fit holder Chiller C type For Hot Air Heaters

For HEAT ROBO Baby 3000S/1200S.

CODE	kg
CWBC01	7.2

Note

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

