

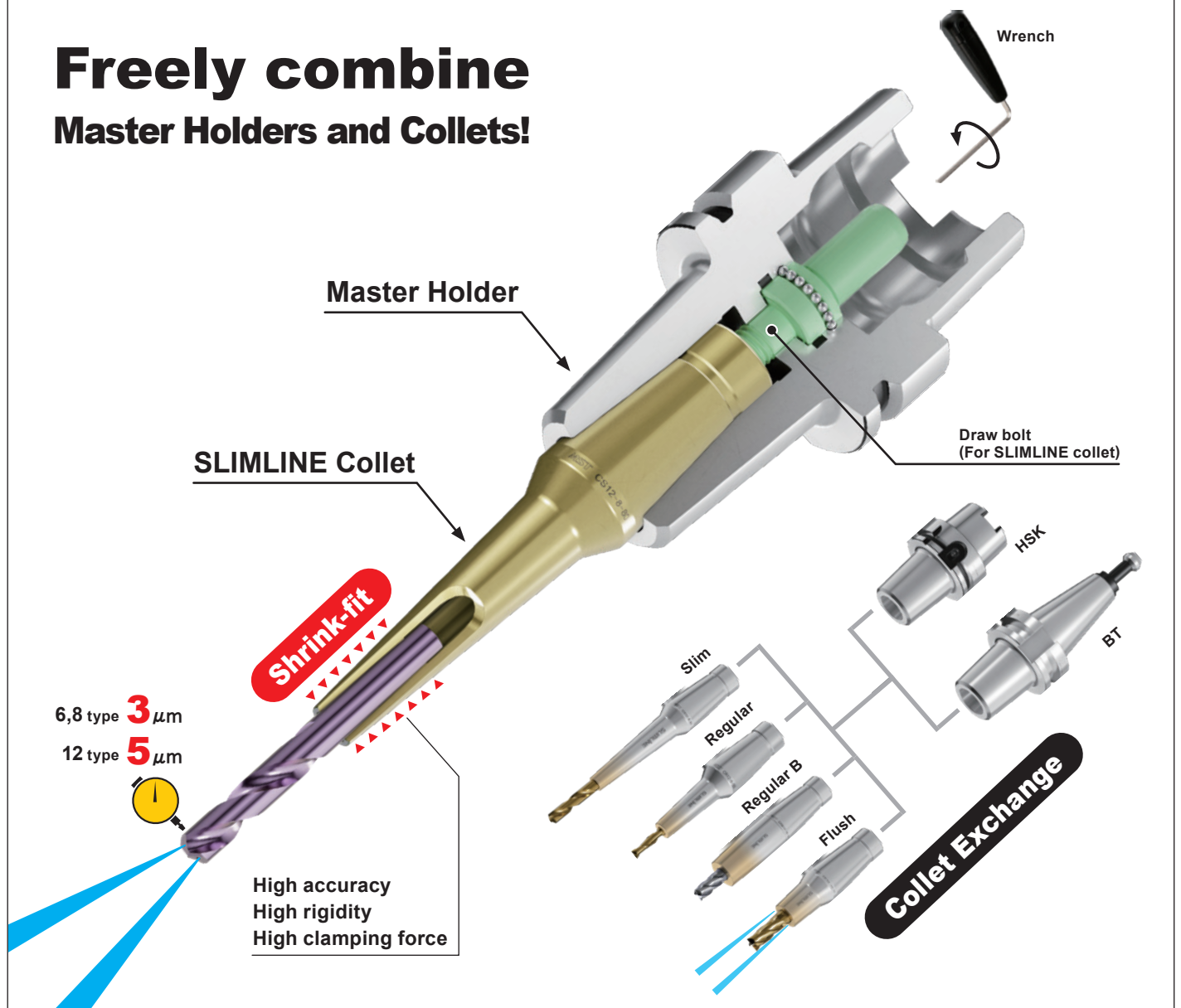


SHRINK-FIT HOLDER **SLIMLINE**

Modular system

2 PIECE type

**Freely combine
Master Holders and Collets!**



MST corporation

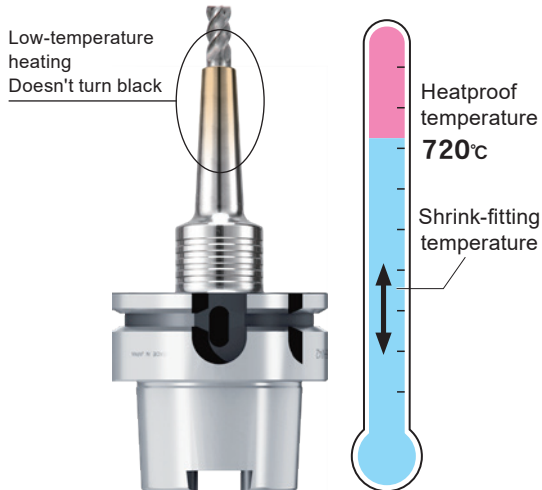
2609

Features of SLIMLINE

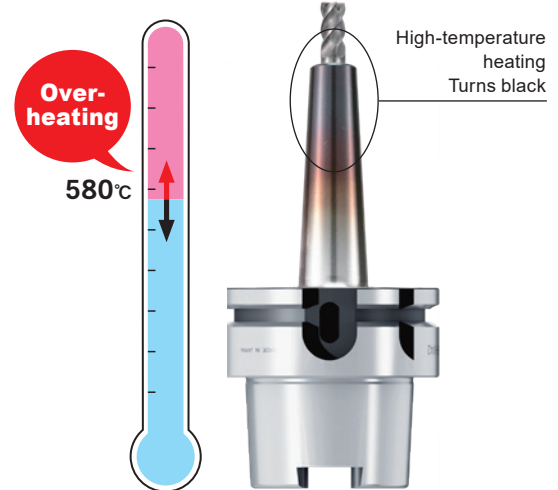
The shrink fit holder, SLIMLINE maintains stable, high accuracy through low-temperature shrink fitting. Its slim design allows minimal tool projection, providing high rigidity for stable machining.

Special material for Shrink-fitting

MST's SLIMLINE



Competitors' shrink-fit holder (DIE STEEL)



Coefficient of thermal expansion
1.6 times

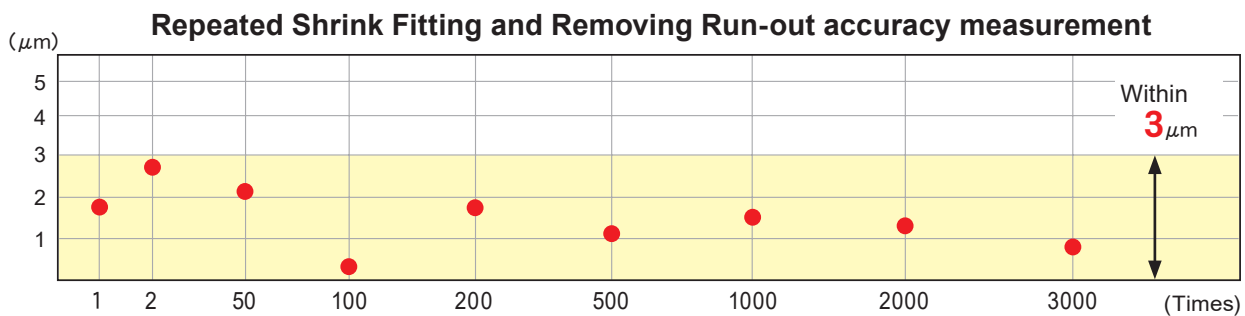
Heatproof Temperature
1.24 times



No damage even after repeated shrink-fits!

Safety
2 times

- Material degradation
- Shrinkage of bore diameter



Collet exchange system

Highly versatile



Master holder

Wide variety of shank and length sizes



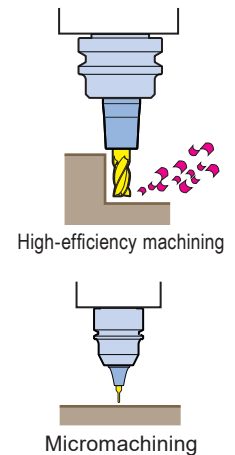
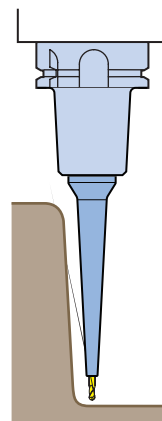
SLIMLINE COLLET

Wide variety of bore diameter, wall thickness, and length sizes



Approximately
5,800
variations

Versatile combinations for all kinds of applications



SYSTEM

6 type

BT30
HSK-A40,50
-E32,40,50

SLK6

L=35~65

Slim type

CS6

L=15,30,45

3 μ m

$\phi 14$

Curve design

ϕD

$\phi D = 3, 4, 6$
 $t = 1.5$

Regular type

CR6

L=30, 45

$\phi D = 3, 4, 6$
 $t = 2.25, 3$

8 type

BT30, 40
HSK-A40,50,63
-E40,50, -F63

SLK8

L=35~75

Slim type

CS8

L=25, 45, 65

3 μ m

$\phi 18$

Curve design

ϕD

$\phi D = 3, 4, 6, 8$
 $t = 1.5$

Regular type

CR8

L=45, 65

$\phi D = 3, 4, 6, 8$
 $t = 2.25, 3$

Flush type

CF8

L=45, 65

$\phi D = 3, 4, 6, 8$
 $t = 3.25, 4$

12 type

BT30,40,50
HSK-A50,63,100,
-E50, -F63
DN40,50
CT40,50

SLK12

L=35~315
[1.77"~12.40"]

Slim type

CS12

L=35, 55, 80, 110
[1.38", 2.17", 3.15", 4.33"]

5 μ m
[.00020"]

$\phi 26$ [1.02"]

3°

ϕD

$\phi D = 3, 3.175, 4, 5, 6, 7, 8, 9, 10, 11, 12$
[1/8", 3/16", 1/4", 5/16", 3/8", 1/2"]
 $t = 1.5$ [.06"]

Regular type

CR12

L=35, 55, 80
[1.38", 2.17", 3.15"]

$\phi D = 3, 4, 6, 8, 10, 12$
[1/8", 3/16", 1/4", 5/16", 3/8", 1/2"]
 $t = 2.25, 3, 4$ [.09", .12", .16"]

Regular B type

CRB12

L=35, 55, 80
[1.38", 2.17", 3.15"]

$\phi D = 6, 8, 10$
[1/4", 5/16", 3/8"]
 $t = 4, 5, 6$ [.16", .20", .24"]

Flush type

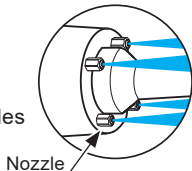
CF12

L=35, 55, 80
[1.38", 2.17", 3.15"]

$\phi D = 3, 4, 6, 8, 10, 12$
[1/8", 3/16", 1/4", 5/16", 3/8", 1/2"]
 $t = 3.25, 4$ [.12", .16"]

SLK12-F

Coolant-through nozzles are available.



CODE

Master holder

A63 - SLK12 - 75 F

Shank type

SLIMLINE

type

L

Coolant-through

SLIMLINE collet

CR12 - 4 - 80

Collet type

ϕD

L

6 type

Master holder



Fig. 1

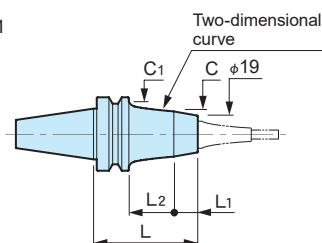
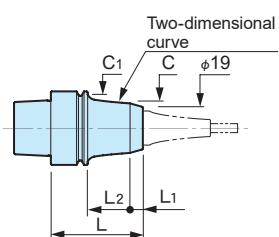


Fig. 2



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
- Cleaning tool STAR DUST

Std. Access.

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

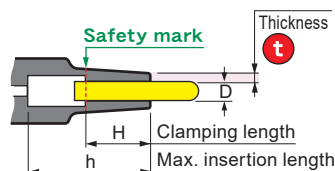
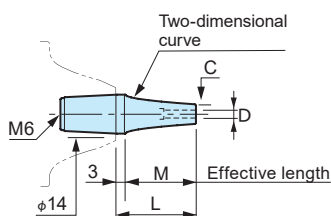
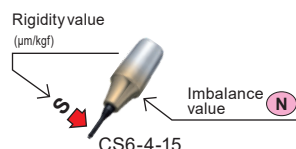
Note

- 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

- HSK-E shank doesn't come with a coolant duct and cannot be attached. Contact us if you need it.

SLIMLINE collet



Note

- S 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.
- Don't insert the cutter shank to the max. insertion length (h).→P.9

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

Wrench (both for 6 and 8 type)

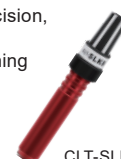
Used for clamping of master holders and SLIMLINE collet (6 type & 8 type).



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

Cleaning tool STAR DUST

Achieves high-precision, close-tolerance machining by cleaning the master holder.



CODE	Type
CLT-SLK6-G1	SLK6
CLT-SLK8-G1	SLK8

Note

- A tool for the machine spindle is also available. Please contact us.

8 type

Master holder



Fig. 1

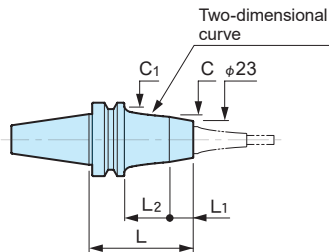
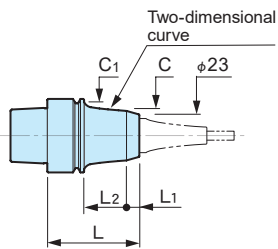


Fig. 2



CODE	Fig.	L	L ₁	L ₂	φC	φC ₁	Kg	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)
- Cleaning tool STAR DUST

Std. Access.

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

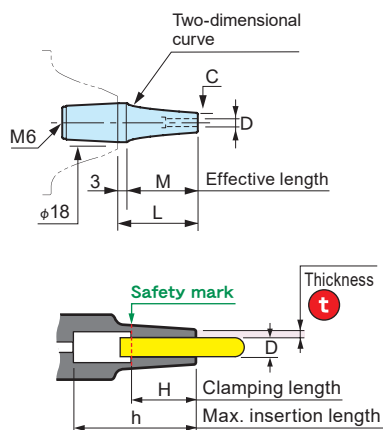
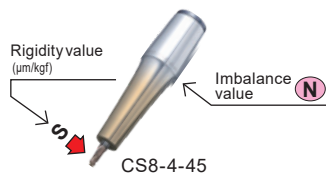
Note

- 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

- HSK-E and F shank don't come with a coolant duct and cannot be attached. Contact us if you need it.

SLIMLINE collet



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.
- Don't insert the cutter shank to the max. insertion length (h). → P.9

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



12 type

Master holder



※ Italic: Inch / lbs.

Imbalance value

(N)



BT40-SLK12-75



A63-SLK12-75F

Fig. 1

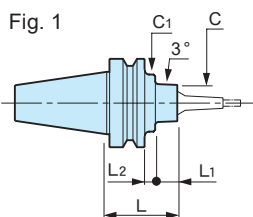


Fig. 2

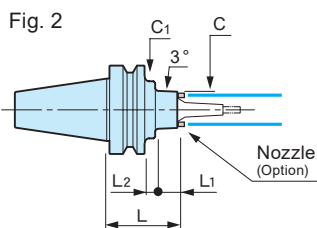


Fig. 3

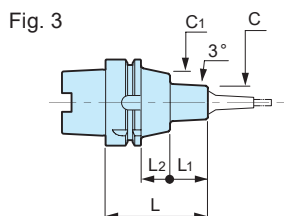


Fig. 4

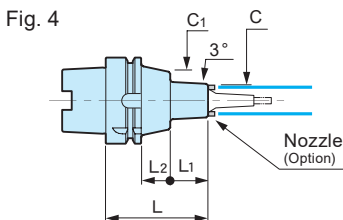
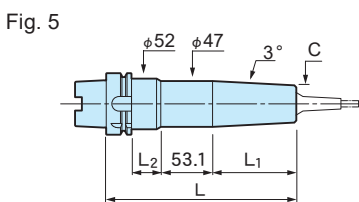


Fig. 5



CODE	Fig.	L	φC	L1	L2	φC1	Kg (lbs)	(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
-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
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	23.0
-315		12.40		8.86	2.79		17.6	28.0

Option

- SLIMLINE collet 12 type
- Wrench
- Nozzle (F type)
- Retention knob (BT40, 50/ CAT./ DIN)
- Cleaning tool STAR DUST

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

- HSK-E and F shank don't come with a coolant duct and cannot be attached. Contact us if you need it.

Wrench

Required for clamping the master holder and SLIMLINE collet.

CODE	Q'ty
W-135	1

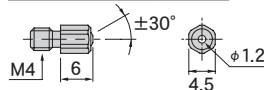


Note

- To fasten the BT30, use a commercially available 14mm 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 STAR DUST

Achieves high-precision, close-tolerance machining by cleaning the master holder.

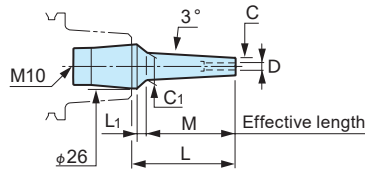
CODE	Q'ty
CLT-SLK12-G2	1



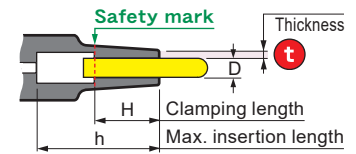
Note

- A tool for the machine spindle is also available. Please contact us.

SLIMLINE collet



- **Note** • $\downarrow S$ refers to the deflection value of a 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.



※ *Italic: Inch / lbs.*

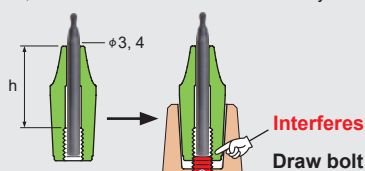
CODE	ϕD	ϕC	t	L	M	L ₁	ϕC_1	H	h	Kg lbs	N	S
CS12 -3 - 35	3	6	1.5	35	22	9.5	8.4	10	60	0.2	0.5	4.8
- 55				55	42		10.5		80			9.5
- 80				80	67		13.1		105		0.7	15
- 110				110	97		16.2		135		0.8	20.6
CR12 -3 - 35	3	7.5	2.25	35	22	9.5	9.9	10	60	0.2	0.5	2.9
- 55				55	42		12		80			5.5
- 80				80	67		14.6		105		0.7	8.9
CF12 -3 - 35	3	9.5	3.25	35	22	9.5	11.9	10	60	0.2	0.5	1.9
- 55				55	42		14		80		0.6	3.3
- 80				80	67		16.6		105		0.8	5.3
CS12 -3.175- 35	3.175	6.175	1.5	35	22	9.5	8.5	10	60	0.2	0.5	4.6
- 55				55	42		10.6		80			9
- 80				80	67		13.2		105		0.7	14.3
- 110				110	97		16.4		135		0.8	19.7
CS12 -1/8- 35	1/8	.24	.059	1.38	.87	.37	.33	.39	2.36	0.35	0.5	4.4
- 55				2.17	1.65		.42		3.15	0.37	0.6	8.7
- 80				3.15	2.64		.52		4.13	0.42	0.7	14
- 110				4.33	3.82		.64		5.31	0.49	0.9	19.3
CR12 -1/8- 35	1/8	.36	.118	1.38	.87	.37	.45	.39	2.36	0.37	0.5	2
- 55				2.17	1.65		.53		3.15	0.42	0.6	3.5
- 80				3.15	2.64		.64		4.13	0.49	0.8	5.7
CF12 -1/8- 35	1/8	.38	.128	1.38	.87	.37	.47	.39	2.36	0.40	0.6	1.8
- 55				2.17	1.65		.55		3.15	0.42	0.7	3.1
- 80				3.15	2.64		.66		4.13	0.49	0.9	5.1
CS12 -4 - 35	4	7	1.5	35	22	9.5	9.4	12	60	0.2	0.5	3.8
- 55				55	42		11.5		80			7.5
- 80				80	67		14.1		105		0.7	11.9
- 110				110	97		17.2		135		0.9	16.6
CR12 -4 - 35	4	10	3	35	22	9.5	12.4	12	60	0.2	0.5	1.7
- 55				55	42		14.5		80		0.6	3.1
- 80				80	67		17.1		105		0.8	5.1
CF12 -4 - 35	4	12	4	35	22	9.5	14.4	12	60	0.2	0.6	1.3
- 55				55	42		16.5		80		0.8	2.2
- 80				80	67		19.1		105		0.9	3.4
CS12 -3/16- 35	3/16	.31	.059	1.38	.87	.37	.40	.59	2.36	0.35	0.6	3.1
- 55				2.17	1.65		.48		3.15	0.37	0.7	6.2
- 80				3.15	2.64		.58		4.13	0.42	0.8	10.3
- 110				4.33	3.82		.71		5.31	0.53	1	14.2
CR12 -3/16- 35	3/16	.42	.118	1.38	.87	.37	.51	.59	2.36	0.37	0.6	1.5
- 55				2.17	1.65		.60		3.15	0.42	0.7	2.7
- 80				3.15	2.64		.70		4.13	0.51	0.9	4.5
CF12 -3/16- 35	3/16	.50	.157	1.38	.87	.37	.59	.59	2.36	0.40	0.7	1.2
- 55				2.17	1.65		.68		3.15	0.46	0.8	1.9
- 80				3.15	2.64		.78		4.13	0.55	1	3.1
CS12 -5 - 35	5	8	1.5	35	22	9.5	10.4	15	60	0.2	0.5	3
- 55				55	42		12.5		80		0.6	6
- 80				80	67		15.1		105		0.8	9.7
- 110				110	97		18.2		135		1	13.6

CODE	φD	φC	t	L	M	L ₁	φC ₁	H	h		N	S
CS12 - 6 - 35	6	9	1.5	35	22	9.5	11.4	18	60	0.2	0.5	2.4
- 55				55	42		13.5		80		0.7	4.9
- 80				80	67		16.1		105		0.8	8
-110				110	97		19.2		135		1	11.4
CR12 - 6 - 35	6	12	3	35	22	9.5	14.4	18	60	0.2	0.6	1.3
- 55				55	42		16.5		80		0.7	2.4
- 80				80	67		19.1		105		0.9	3.9
CRB12-6 - 35	6	14	4	35	22	9.5	16.3	18	60	0.2	0.7	1
- 55				55	42		18.4		80		0.8	1.7
- 80				80	67		21.0		105	0.3	1	2.7
CF12 - 6 - 35		6	14	35	22	9.5	16.4	18	60	0.2	0.7	1
- 55				55	42		18.5		80		0.9	1.7
- 80				80	67		21.1		105	0.3	1	2.7
CS12 - 1/4- 35	1/4	.37	.059	1.38	.87	.37	.46	.71	2.36	0.35	0.6	2.2
- 55				2.17	1.65		.54		3.15	0.40	0.7	4.5
- 80				3.15	2.64		.64		4.13	0.46	0.9	7.4
-110				4.33	3.82		.77		5.31	0.57	1.1	10.5
CR12 - 1/4- 35	1/4	.49	.118	1.38	.87	.37	.58	.71	2.36	0.40	0.6	1.2
- 55				2.17	1.65		.66		3.15	0.44	0.8	2.2
- 80				3.15	2.64		.76		4.13	0.55	1.0	3.7
CRB12-1/4- 35	1/4	.56	.157	1.38	.87	.37	.66	.71	2.36	0.40	0.7	1
- 55				2.17	1.65		.74		3.15	0.47	0.8	1.6
- 80				3.15	2.64		.84		4.13	0.59	1.0	2.6
CF12 - 1/4- 35		1/4	.56	1.38	.87	.37	.66	.71	2.36	0.42	0.8	1
- 55				2.17	1.65		.74		3.15	0.49	0.9	1.9
- 80				3.15	2.64		.84		4.13	0.60	1.1	2.6
CS12 - 7- 35	7	10	1.5	35	22	9.5	12.4	20	60	0.2	0.6	2
- 55				55	42		14.5		80		0.7	4.1
- 80				80	67		17.1		105		0.9	6.8
-110				110	97		20.2		135	0.3	1.2	9.7
CS12 - 5/16- 35	5/16	.43	.059	1.38	.87	.37	.52	.98	2.36	0.37	0.6	1.6
- 55				2.17	1.65		.60		3.15	0.40	0.8	3.3
- 80				3.15	2.64		.71		4.13	0.49	1	5.6
-110				4.33	3.82		.83		5.31	0.62	1.2	8.1
CR12 - 5/16- 35	5/16	.55	.118	1.38	.87	.37	.64	.98	2.36	0.40	0.7	1
- 55				2.17	1.65		.72		3.15	0.46	0.8	1.9
- 80				3.15	2.64		.83		4.13	0.57	1	3.1
CRB12-5/16- 35	5/16	.71	.197	1.38	.87	.37	.80	.98	2.36	0.43	0.7	0.7
- 55				2.17	1.65		.88		3.15	0.54	0.9	1.2
- 80				3.15	—		1.00		4.13	0.72	1	1.8
CF12 - 5/16- 35		5/16	.55	1.38	.87	.37	.64	.98	2.36	0.40	0.7	1
- 55				2.17	1.65		.72		3.15	0.46	0.8	1.9
- 80				3.15	2.64		.83		4.13	0.57	1	3.1
CS12 - 8- 35	8	11	1.5	35	22	9.5	13.4	25	60	0.2	0.6	1.6
- 55				55	42		15.5		80		0.7	3.4
- 80				80	67		18.1		105		0.9	5.6
-110				110	97		21.2		135	0.3	1.2	8.2
CR12 - 8- 35	8	14	3	35	22	9.5	16.4	25	60	0.2	0.6	1.1
- 55				55	42		18.5		80		0.8	1.9
- 80				80	67		21.1		105	0.3	1	3.1
CRB12- 8- 35	8	18	5	35	22	9.5	20.3	25	60	0.2	0.7	0.7
- 55				55	42	6.5	22.4		80		0.9	1.1
- 80				80	—	—	—		105	0.3	1	1.8
CF12 - 8- 35		8	16	35	22	9.5	18.4	25	60	0.2	0.8	0.9
- 55				55	42		20.5		80		1	1.4
- 80				80	67		23.1		105	0.3	1.2	2.3
CS12 - 9- 35	9	12	1.5	35	22	9.5	14.4	30	60	0.2	0.7	1.4
- 55				55	42		16.5				0.9	2.9
- 80				80	67		19.1				1.1	4.8
-110				110	97		22.2			0.3	1.3	7.1

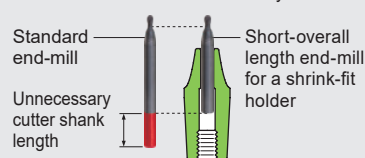
CODE	φD	φC	t	L	M	L ₁	φC ₁	H	h	Kg lbs	N	S
CS12 - 3/8 - 35	3/8	.49	.059	1.38	.87	.37	.58	1.18	2.36	0.35	0.7	1.3
- 55				2.17	1.65		.67			0.42	0.8	2.6
- 80				3.15	2.64		.77			0.51	1	4.4
- 110				4.33	3.82		.89			0.66	1.3	6.4
CR12 - 3/8 - 35	3/8	.61	.118	1.38	.87	.37	.70	1.18	2.36	0.40	0.7	0.9
- 55				2.17	1.65		.78			0.49	0.9	1.6
- 80				3.15	2.64		.89			0.62	1.1	2.6
CRB12 - 3/8 - 35	3/8	.85	.236	1.38	.87	.37	.94	1.18	2.36	0.47	0.9	0.6
- 55				2.17	—		1.00			0.62	0.8	0.9
- 80				3.15	—		—			0.82	1.1	1.5
CF12 - 3/8 - 35	3/8	.69	.157	1.38	.87	.37	.78	1.18	2.36	0.42	0.9	0.8
- 55				2.17	1.65		.86			0.53	1.1	1.3
- 80				3.15	2.64		.97			0.68	1.3	2
CS12 - 10 - 35	10	13	1.5	35	22	9.5	15.4	30	60	0.2	0.8	1.3
- 55				55	42		17.5			—	0.9	2.5
- 80				80	67		20.1			—	1.1	4.3
- 110				110	97		23.2			0.3	1.4	6.2
CR12 - 10 - 35	10	16	3	35	22	9.5	18.4	30	60	0.2	0.7	0.9
- 55				55	42		20.5			—	0.9	1.6
- 80				80	67		23.1			0.3	1.1	2.6
CRB12 - 10 - 35	10	22	6	35	22	9.5	24.3	30	60	0.2	0.9	0.6
- 55				55	—		25.5			0.3	—	0.9
- 80				80	—		—			0.4	1.1	1.5
CF12 - 10 - 35	10	18	4	35	22	9.5	20.4	30	60	0.2	0.9	0.7
- 55				55	42		22.5			—	1.1	1.1
- 80				80	—		—			0.3	1	1.9
CS12 - 11 - 35	11	14	1.5	35	22	9.5	16.4	30	60	0.2	0.9	1.1
- 55				55	42		18.5			—	1	2.3
- 80				80	67		21.1			—	1.3	3.8
- 110				110	97		24.2			0.3	1.5	5.6
CS12 - 12 - 35	12	15	1.5	35	22	9.5	17.4	30	60	0.2	1	1
- 55				55	42		19.5			—	1.1	2.1
- 80				80	67		22.1			—	1.4	3.5
- 110				110	—		—			0.3	1.3	5
CR12 - 12 - 35	12	20	4	35	22	9.5	22.4	30	60	0.2	0.9	0.7
- 55				55	42		24.5			—	1.1	1.1
- 80				80	—		25.5			0.3	1	1.9
CF12 - 12 - 35	12	20	4	35	22	9.5	22.4	30	60	0.2	1	0.7
- 55				55	42		24.5			—	1.2	1.1
- 80				80	—		25.5			0.3	1.1	1.9
CS12 - 1/2 - 35	1/2	.62	.059	1.38	.87	.37	.71	1.18	2.36	0.33	0.9	0.9
- 55				2.17	1.65		.79			0.42	1.1	1.9
- 80				3.15	2.64		.89			0.55	1.3	3.1
- 110				4.33	3.68		1.00			0.77	1.7	4.8
CR12 - 1/2 - 35	1/2	.81	.157	1.38	.87	.37	.91	1.18	2.36	0.42	1.0	0.6
- 55				2.17	1.99		—			0.55	0.9	1.1
- 80				3.15	1.80		1.20			0.75	2.2	1.8
CF12 - 1/2 - 35	1/2	.81	.157	1.38	.87	.37	.91	1.18	2.36	0.40	1.1	0.6
- 55				2.17	1.99		—			0.55	1.0	1.1
- 80				3.15	1.80		1.20			0.75	2.3	1.8

⚠ 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.



Retention knob with hole

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



Shrink-fit heater

Induction heater

Denji 2500

HRD-03L/ -03LSE

Heating
25 sec. (φ6)

Air cooling
1 min

φ3 ~ 16
[1/8~5/8"]

HRD-03S/ -03SSE

Heating
17 sec. (φ6)

Air cooling
1 min

φ3 ~ 8
[1/8~5/16"]



UK
CA
CE

Denji 1200S

Heating
18 sec. (φ6)

Air cooling
1 min

φ3 ~ 12
[1/8~1/2"]



UK
CA
CE

CODE	AREA	SIZE (W×D×H)	Voltage (Single phase)	Weight (Kg)
HRD-03L / -03S	Japan, North America	340 × 470	200-240V	30
-03LSE / -03SSE	Europe, Asia	× 750 mm		

- Std. Access.
 - Heat-resistant gloves
 - Tweezers
 - Protection sheet for heating coil
- Note
 - 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
 - Use type HSB/HSC for cutter stopper.

CODE	AREA	SIZE (W×D×H)	Voltage	Weight (Kg)
HRD-01S	Japan	230 × 410 × 550 mm	100V	14
-01S-120NA	North America	230 × 540 × 550 mm	120V	19
-230AS	Asia		230V	

- Std. Access.
 - Heating Coil
 - Heat-resistant gloves
 - Tweezers
- Note
 - 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
 - Use type HSB/HSC for cutter stopper.
 - A transformer is required in Europe. Please consult MST about the details of the transformer.

Hot air heater

Baby 3000P NEW

Lasts 10 times longer with a brushless motor.
Cooling time reduced to 1/5 with cooling device.
(Compared to conventional model)

Heating
95 sec. (φ6)

Air cooling
1 min

φ3 ~ 32
[1/8~1"]



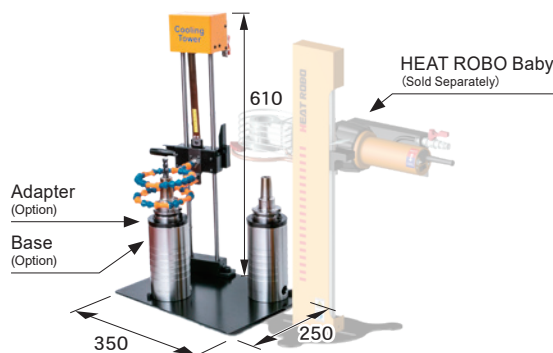
UK
CA
CE

	CODE	AREA	SIZE (W×D×H)	Voltage (Single phase)	Weight (Kg)
Standard type	HRB-03PC AE	Europe, Asia	470	230V	9.8
	-03PCNA	North America	× 280		
Timer type	HRB-03PTC AE	Europe, Asia	× 610 mm	230V	11.4
	-03PTCNA	North America			

- Std. Access.
 - Heat-resistant gloves
 - Tweezers
 - Standard nozzle
- Note
 - 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 shrink-fitting work efficiency kit, Shrink-fit holder Chiller C type (For HEAT ROBO Baby 3000P / 1200S)

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



CODE	Weight (Kg)
CWBC01	7.2

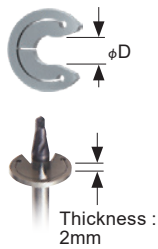
- Note
 - Compressed air required : 0.5MPa (air-consumption volume : 245ℓ/min)
 - Prepare an air tube (O.D. : 8mm) and a connection coupling.

Options

Cutter Stopper HSB type (Plate Spring Type)

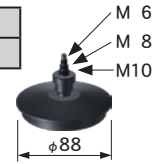
Used as a stopper in the holder when shrink fitting or removing a cutting tool.

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 [3/16", 1/4", 5/16", 3/8", 1/2"]	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



Adapter

CODE
ADH-SLK



Base

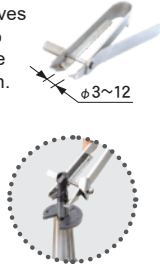
CODE
BAA-01



Cutter Pliers

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

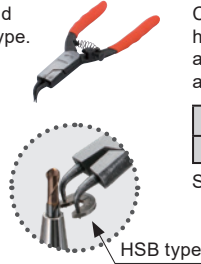
CODE
HPY-01



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



Size : 190×190 (mm)



Front face



Back face

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.



■ 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	Each 1 pc for φ3,4,6,8,10

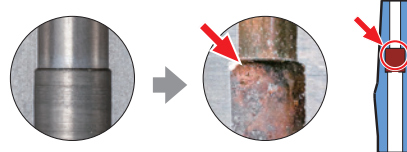


Why does rust form?

- Water in air adheres to SLIMLINE holders. This water reacts with the metal and then rust forms. Since the SLIMLINE is heated, the oil on its surface is liable to evaporate and this makes rusting more likely to occur.
- Rust formed on the metal surface gradually corrodes deeper over time.

Coolant-through-spindle

In particular, when coolant is passed through a holder or a collet in the spindle-through system, it remains deep inside the holder and induces rusting.



Flush type

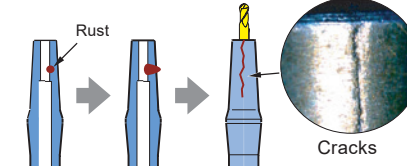
Special care must be taken for the flush type SLIMLINE, because coolant is more likely to remain in its small holes.



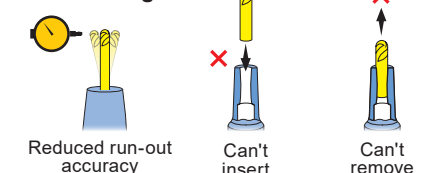
What happens after rusting?

- If a tool is chucked in this state, the tool cannot be inserted into the holder. If the tool is forced, then the stress resulting from the shrink-fit will focus on the corroded part and it causes the holder to crack.
- The clamping force is reduced, resulting in cutter slippage and loss of accuracy.

Create cracks



Internal bore distortion of the cutting tool

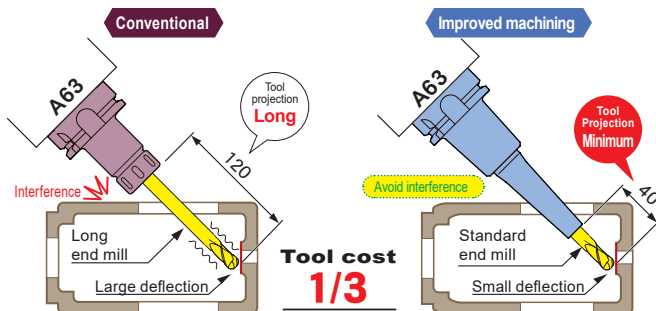


Case studies

1 Deep milling

FC250

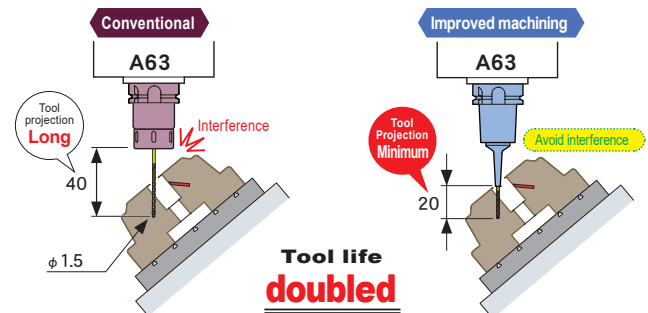
- Switching from a long ball nose end mill to a standard ball nose end mill.
- Holder rigidity has improved and achieved chattering-free machining.



2 $\phi 1.5$ diagonal oil hole drilling

FC300

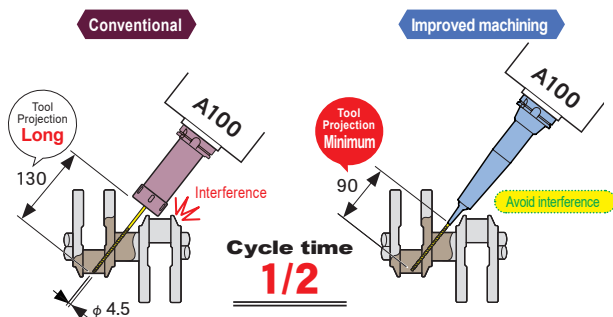
- Switching from collet holders.
- Doubled the tool life by minimizing drill projection length.



3 $\phi 4.5$ diagonal oil hole drilling

SCM440

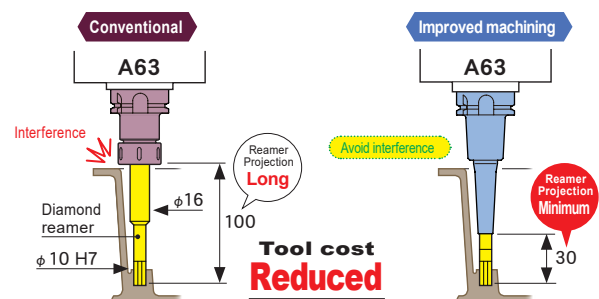
- Switching from a combination of collet holders and special long drills to SLIMLINE and standard drills.



4 $\phi 10$ H7 Reamer (Dowel pin hole)

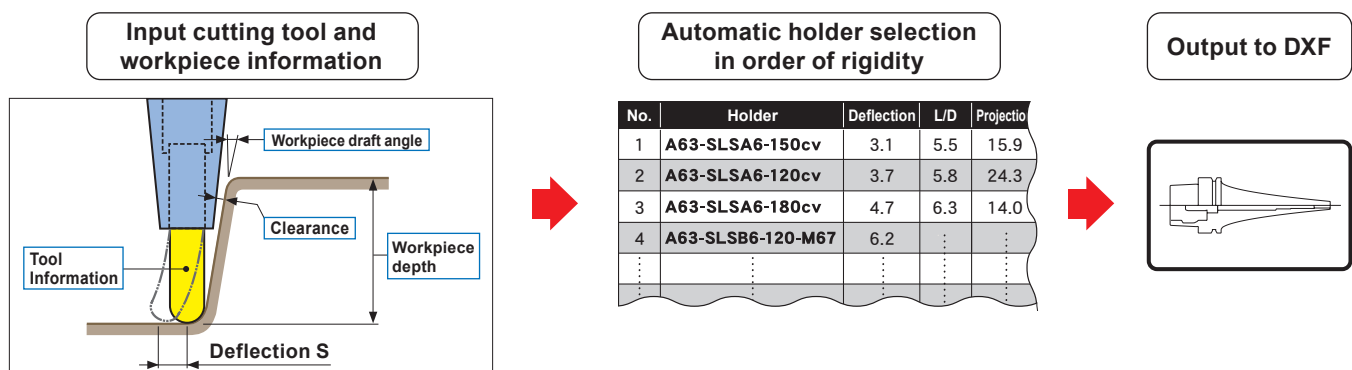
ADC12

- Switching from a combination of collet holders and long reamers to SLIMLINE and short reamers.



Rigidity calculation software

Free download available on our website



USER Customization

Modifying outer-dimension

When you have interference using a standard holder, you can customize it yourself.

- MST can customize upon your request.
- There is a dimensional limitation for customizing. Please refer to the operation manual.



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