MAINTENANCE TOOL

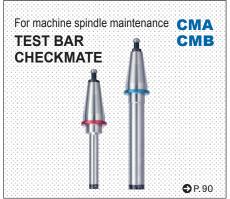
■ TOOL CLINIC

Our engineers are here to improve your productivity by demonstrating the correct usage and maintenance of tool holders.



















65 DESK

Ensures safe tool settings!
Improves the work environment in the factory!

CODE

6SD-01

Work table

- ▶ Helps in the rapid implementation of the five S's in your factory.
- **▷** Compact and space saving.
- Do-it-yourself style allows you to do the assembly.

White board and Punched board

Useful as a bulletin board or message board, and for attaching drawings. Freely mounting position on the left or right side.

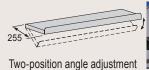


White board

Punched board

Shelf Board

Shelf is deep enough for a laptop computer, and the shelf can be attached at whatever height you desire.





Hook base panel



Arbitrary attachment and recombination



Effective utilization of a rear space

Tool insert stand (Option)

Insert and store frequently used hand tools, stationery, etc.



Tool insert stand 5
Movable model (5 pockets)



Tool insert stand 16 Fixed model (16 pockets)

Dust Shooter (Option)

Easy trash separation.



*This image includes the options. Tool is not included.

Container box







Can be removed and carried.



Organizing



The see-through box allows easy storage and organizing.

Optional dividers allow you to easily organize and systematize items.





Upper lighting

Safety light cover.

Lighting switch and socket

Upper lighting (32W) and under shelf lighting (20W) (max. capacity 1,500W)



Air gun

Can be mounted on either the right or left.

Lower lighting

Brightly lit, safe work space



Safety stopper

Prevents dropping of cutting tools and tool holders.



Tabletop

The tool setup stand (sold separately) can be installed anywhere using the tabletop holes. No need to put your own holes in the tabletop.

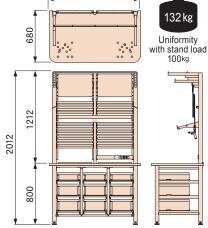


Tool set up stand

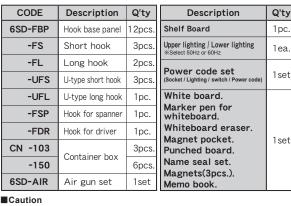
• P.94



Dimensions



Std. Access.



- Assembly by buyer.
- Customers pay the shipping cost.
- •100V electric power supply (transformer is required)

Option

Side table

	C	DD	E		
68	D-	·S	TE	3	

Uniformity with stand load: 40kg

Side Table for the 6S DESK

- ■Std. Access.
 - Container box (CN-103)(1pc.)
- Container box (CN-150)(2pcs.)
- Lid for Container Box (3pcs.)



Dust Shooter

CODE	
6SD-DST	

Comes with two kinds of sign seals.

**Trash cans are not provided. Please prepare it by yourself.



Tool insert stand 16 Tool insert stand 5

CODE	Attachment q'ty
6SD-IS5	5pcs.

5-pocket movable model



CODE	Attachment q'ty
6SD-IS16	16pcs.

16-pocket fixed model



Q'ty

9 pcs. (for 6 rooms)

(Container box 3 pcs. / set

Dividers for storage cabinet

-150

Required box

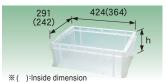
CN-103

Consumables / Replacement parts

Container box

Hook base panel CODE

CODE	h	Capacity	Q'ty
CN-103-3	103 (88)	8 €	3pcs.
-150-3	150 (135)	12ℓ	



Q'ty

2pcs

Lid for container box

CODE	Q'ty
CN-FT-3	3pcs.



%Lockable





CODE

CN-S 84-3

Hook

Short hook

6SD-FBP

CODE	Q'ty
6SD-FS	5pcs.



U-type short hook

CODE	Q'ty
6SD-UFS	5pcs.

Q'ty



Hook for spanner CODE Q'ty 6SD-FSP 1pc



Long hook

		. 91/
CODE	Q'ty	
6SD-FL	5pcs.	





Hook for driver

CODE	Q'ty	*
6SD-FDR	1pc.	1





CLEAN BOX

Wash the tooling holders, collets, nuts, cutting tools, and small work-pieces thoroughly to maintain their accuracy!

CBX-01

Heavy dirt can be

CODE

- **> Wash tool holders, cutting tools and jig fixtures.**
- **▷** No plumbing required.
- **>** Safe cleaning system using water.
- **▷** Built-in water heater improves washing capability.

Compact built-in sink





Automatic washing space

Shoots cleaning fluid from 18 location nozzles.



Hand washing space

Heavy dirt can be washed off using the hand nozzle brush and hot water (40°C / 104°F)





Top cover

Top cover of washing unit can be opened and closed with one hand.

Comes with an automatic shutoff function for the washing cycle.

Automatic washing stops automatically when the top cover is lifted during operation.



Washing Unit

18 nozzles shoot hot water from every angle to wash off all the dirt.



Timer operating mode

Operation can be stopped automatically using the clock timer. (The time can be set arbitrarily, up to 12 min.)





Light dirt can be washed off using automatic washing

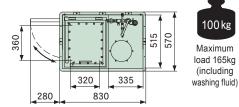
Tank

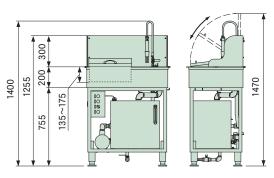
The use of heated cleaning fluid (40°C) increases the cleaning power and makes cleaning easy even in the winter.





Dimensions





Specification

Material	SU304 (Sink, Tank, Cleaning unit) SS 400 (Base frame)
Tank	Approx. 65L (Level gauge with thermometer is standard accessory.)
Pump	0.3~0.51kW (50/60Hz) (Produced by Grundfos)
Heater	3kW (with temperature control)
Weight	Approx. 100kg (165kg, including cleaning fluid)
Voltage	3-phase 200V (Rated 15A)

Std. Access.

	Q'ty
Hand nozzle	1pc.
Main filter	2pcs.
Sub-filter	2pcs.
Drain trap	1pc.
Rubber drain plug	1pc.
Washing basket	1pc.
Washing table	1pc.
Sink outer cover	
Hook	
Bamboo brush	
Primary power code (plug attached 15m)	
	Main filter Sub-filter Drain trap Rubber drain plug Washing basket Washing table

■Caution

- •Be sure to use water-soluble cleaning fluid.
- Customers pay the shipping cost.
- •200V electric power supply (transformer is required)

Outer sink cover

Prevents splashing of the washing cleaner.

Hand nozzle

Easy to attach and detach.





Attach

Remove

Draining basket

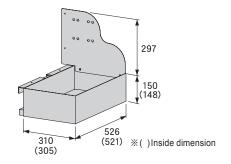
CODE CBX-SBX

Option

Uniformity with stand load 40kg ■Std. Access.

•Triple hook





Used for draining, air blowing, rust-proofing, etc. Can be attached to either the right or left side of the unit.

Filter

Can be changed easily when it becomes dirty.





Main filter

Sub-filter

Consumables / Replacement parts

Washing basket

_	
Γ	CODE
Г	CBX-WBSK

Collet and small parts can be washed



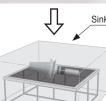


Washing table

_	
	CODE
	CBX-WTBL

Used in a sink as an auxiliary table when washing by hand.





Main filter

Maiii iiitei							
CODE	Q'ty						
CBX-MFIL	5pcs.						













Sub-filter

CODE

CBX-SFIL

Q'ty

3pcs.

Rubber drain plug CODE











Be sure to use water-soluble cleaning fluid.

The sink, washing unit and tank are made of stainless steel, resulting in easy maintenance and less staining.



TEST BAR CHECKMATE

For machine spindle maintenance

The maintaining machine spindle run-out accuracy allows superior machining quality. **Maximizes tool holder performance!**

Light-weight (20% lighter), hollow design makes it easy to use.

 ➤ The actual measurement values are marked on the body. Diameter Runout accuracy Phase of run-out

▶ Ideal for setting Z axis datum.

□ Reasonable price.

You can recognize the exact run-out accuracy and the highest run-out of the spindle.

You can check the spindle condition more precisely using the run-out value and position marked on the body.

Runout accuracy

Periodically checking the run-out

accuracy will result in superior machining.

Length (Actual measurement)

Handy CMA type

Allows you to check the dynamic accuracy thanks to optional balance adjustment.

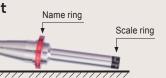
It can be installed into the spindle in every phase.

There is no drive-key groove, so measurements can be made without worrying about the phase.



The name ring and scale ring protect it from scratches and dents.

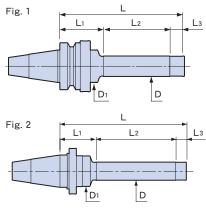
The taper area and straight area do not touch the table surface even if they are placed horizontally.

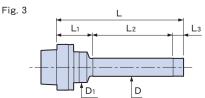


Full-fledged CMB type

Z-axis deflection and spindle travel accuracy can be measured.

	CODE	Fig.	φD	φ D 1	L	L ₁	L2	Lз	Kg
H	NT30 -CMA20-125	1	20	32	125	45	65	15	0.7
CAT.	NT40 -CMA25-175	2	25	42	175	50	110		1.3
=	NT50 -CMA30-225		30	53	225	65	145		3.5
DIN /	NT30 -CMB30-175	1	30	32	175	45	115	15	1.0
BT/	NT40 -CMB40-325	2	40	42	325		265		2.8
<u>'m</u>	NT50 -CMB50-325		50	53		60	250		5.7
	HSK32 -CMA20-125	3	20	26	125	35	75	15	0.4
	HSK40 -CMA20-125			32		45	65		0.5
	HSK50 -CMA25-175		25	42	175	50	110		1.0
	HSK63 -CMA25-175								1.2
	HSK80 -CMA30-225		30	53	225	65	145		2.2
뿌	HSK100-CMA30-225								3.0
🗀	HSK125-CMA30-225								4.1
нsк-А	HSK32 -CMB25-175	3	25	26	175	35	125	15	0.7
[모	HSK40 -CMB30-175		30	32		40	120		0.9
	HSK50 -CMB40-225		40	42	225	45	165		1.8
	HSK63 -CMB40-325				325		265		2.7
	HSK80 -CMB50-325		50	53		60	250		4.4
	HSK100-CMB50-325								5.2
	HSK125-CMB50-325								6.3
	HSK63F-CMA25-175	3	25	42	175	50	110	15	1.2
HSK-F	HSK80F-CMA30-225		30	53	225	65	145		2.3
ISE	HSK63F-CMB40-325	3	40	42	325	45	265	15	2.7
	HSK80F-CMB50-325		50	53		60	250		4.5





Exclusive retention knob

CODE	Shank
P-576	CAT.40
-575	CAT.50
-578	DIN40
-577	DIN50

- •Coolant duct(HSK-A) •Retention knob(BT)
- Exclusive retention knob(CAT. / DIN)
- Balance adjustment (only for CMA type) less than G2.5 /30000min⁻¹
 %Please order by adding "BL" to the end of the code.
 (Ex.: HSK63-CMA25-175 BL)

■Std. Access.

Accuracy inspection sheet

■Caution

- NT type is available for BT/CAT. and DIN spindle by changing the retention knob.
 HSK type is available for both HSK-A and HSK-E spindles.

 HSK-F type is available only for HSK-F spindle.
- A special design retention knob is required for CAT./DIN spindle. A market standard retention knob for ANSI/DIN/ISO is not available. Contact us for the details.
- Use a market standard retention knob for the BT spindle.
- •NT30 type can be installed into a spindle at 0°and 180°.

The sub-zero treatment prevents secular change.



• A.T.C is not available. (except for NT30)

ANGLE HEAD

See-through tool cover. You can take care of your tools safely and simply.

Prevent cutting tools from coming into contact with each other and being damaged or chipped.

Prevent getting injured when taking the tool holder in and out or when carrying.

- Minimize grinding costs for reconditioning and lead to reduced operating costs.
- Applicable for various shapes or brands.



The tool is visible

The cutting tools can be stored with the caps on. By placing the cap on the tip of the tool holder, the cutter doesn't receive any stress, alleviating any worries over the cutters breaking.



Will not slip off

Can be put on with one touch, and won't fall off when turned upside down.





Prevents chipping and damage to cutting tools

Storing cutters with caps will prevent them from hitting each other and being chipped. This will minimize grinding costs for reconditioning and lead to reduced operating costs.





It can be used with every configuration and brand.





TCA type

TCA2022

TCA2830

Attaches to the tip of a tool holder. h(MAX) d(MAX) h1 h₂ Code system 2030 50 **TCA**

TCA2022 TCA2830 TCA3436 TCA4043 TCA4650									D dimension
CODE	φD	φС	φd	н	h	hı	h2	Туре	Note
TCA2022	20~22	29	8	100	70	30	70	DTA7/DTB7	
TCA2830	28~30	34	14	130	90	40	90	DTA12/DTB12/DTE7	10pcs. 50pcs. 100pcs.300pcs. 500pcs.
TCA3436	34~36	41		135		45		CTA10/CTH10	Please order by adding Q'ty to the end of the code.
TCA4043	40~43	47	20	152	105	47	105	DTE12	Ex. TCA2022-10
TCA4650	46~50	54		167	120		120	CTA20/CTH20	

TCA4650

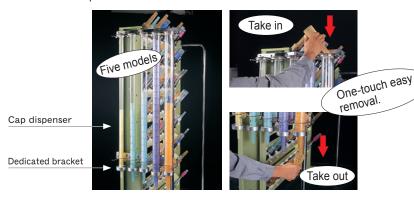
Cap dispenser

Tool caps can be easily removed from the dispenser.

Dispenser exclusively for storing TCA-type tool caps. Made of transparent acrylic resin, allowing you to confirm which caps are still in the dispenser.

TCA3436

TCA4043



Cap dispenser

Five models available for different sizes.

(Min.~MAX.)

②

(pc)

Q'ty

CODE	Туре	Q'ty
CAP2022	TCA2022	31pcs.
CAP2830	TCA2830	20pcs.
CAP3436	TCA3436	
CAP4043	TCA4043	22pcs.
CAP4650	TCA4650	

Dedicated bracket

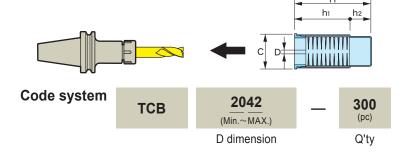
Five cap servers can be attached. Attach the bracket to a wall using bolts.

CODE SRV-01

TCB type

Attaches directly to the tip of the cutting tool. Handles a broad range of sizes.





CODE	φD	φC	Н	hı	h2	Note
TCB0820	8~20	33	82	52	30	10pcs. 50pcs. 100pcs. 300pcs. 500pcs. Please order by adding
TCB2042	20~42	54	102	62	40	Q'ty to the end of the code. Ex. TCB0820-10

[•]The bristles of the brush may become deformed during use. If such deformation occurs, remove the brush and immerse it in hot water (60° C to 80° C). This should restore the deformed bristles to their original state.

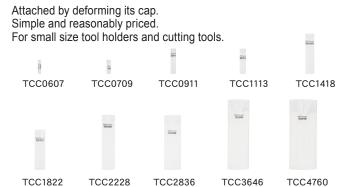
100

(pc)

Q'ty

Maintenance Tool

TCC type



1001822 10022		28 1002836	5 10	C3646	1004760
CODE		φD	h1	н	Q'ty
TCD03-50		3	_	25	50 pcs.
TCD04-50		4	_	32	50 pcs.
TCC0607- 5	0	5.4~ 6.7	35	40	50 pcs.
-10	0				100 pcs.
-50	0				500 pcs.
TCC0709- 5	0	6.8~ 8.9	35	40	50 pcs.
-10	0				100 pcs.
-50	0				500 pcs.
TCC0911- 5	0	8.9~10.9	65	70	50 pcs.
-10	0				100 pcs.
-50	0				500 pcs.
TCC1113- 5	0	10.9~13.4	65	70	50 pcs.
-10	0				100 pcs.
-50	0				500 pcs.
TCC1418- 2	5	13.8~17.8	100	110	25 pcs.
- 5	0				50 pcs.
-25	0				250 pcs.
TCC1822- 2	5	17.8~22.4	100	110	25 pcs.
- 5	0				50 pcs.
-25	0				250 pcs.
TCC2228- 2	5	22.3~28	135	150	25 pcs.
- 5	- 50				50 pcs.
-25	0				250 pcs.
TCC2836- 1	0	28 ~36	130	150	10 pcs.
- 2	0				20 pcs.
- 5	0				50 pcs.
-20	0				200 pcs.
TCC3646- 1	0	36.2~47	165	190	10 pcs.
- 2	0				20 pcs.
- 5	0				50 pcs.
-20	0				200 pcs.
TCC4760- 1	0	46 ~60	160	190	10 pcs.
- 2	0				20 pcs.
- 5	0				50 pcs.
-20	0				200 pcs.

Variety set

Usage

TCC

Code

system



D

2228

(Min.~MAX.)

D dimension

1. Hold the mouth of the tool cap vertically, and then press it so that its oval 2. Once the mouth of the tool cap becomes round, push it into the cutting tool or tool holder.

You can cut it to any desired length.





Tool set up stand

Tool tightening stand

The setup time can be shortened! Not only can you mount cutting tools simply and quickly without using other tools, but also clamping collets and retention knobs!



Usable either vertically or horizontally (Petit Ball, MY CUBE)

The tool can be placed either vertically or horizontally, whatever angle is most convenient for you.







Clamping DETa-1 Collet(DTB)



Retention knob tightening



Clamping SLIMLINE collet

Multi-purpose usage

By using adapters, various tool holder shank types, including straight arbor DTB holders, can be used.



Accuracy assured

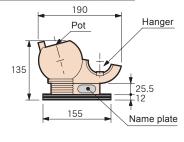
The taper is the most crucial part for maintaining the accuracy of a tool holder. A special resin is applied to the taper contact area to prevent scratches on the tool holder.

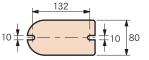


Petit Ball

CODE	Shank type	Kg
Petit Ball40	BT40/DIN40/CAT.40	6.1

- **■**Option
- Adapter
- ■Std. Access.
- •Name plate
- ■Caution
- No mounting bolts are provided. Use two M8 bolts for mounting.





Name plate

A specially finished name plate is provided, on which your company name is inscribed. Up to 12 characters (upper-case alphabetic characters, numeric characters, and/or hyphens).



Adapter (Petit Ball)



Adapter for pot

	<u>-</u>
CODE	Shank type
AP40-T30V	BT30

Adapter for hanger

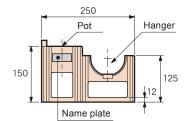
CODE	Shank type
AP40-T30H	BT30
-S25H	ST25T-DTB7
-S32H	ST32T-DTB7, 12

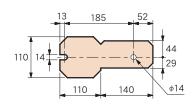
MY CUBE

CODE	Shank type	Kg
MY CUBE 50	BT50 / DIN50 / CAT.50	9.7
MY CUBE100	HSK-A100, T100	9.6

- **■**Option
- Adapter
- ■Std. Access.
- •Name plate ■Caution

No mounting bolts are provided.
 Use two M12 bolts for mounting.





Name plate

A specially finished name plate is provided, on which your company name is inscribed. Up to 12 characters (upper-case alphabetic characters, numeric characters, and/or hyphens).

MYCUBE USER'S NAME

Adapter (MY CUBE50)



Adapter for pot

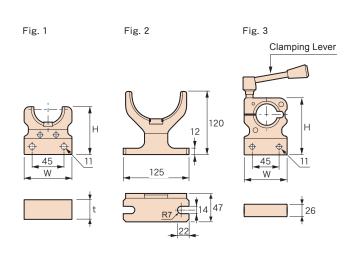
CODE	Shank type
AP50-T30V	BT30
-T40V	BT40/DIN40/CAT.40
-A63V	HSK-A63, T63
-F63V	HSK-F63

Adapter for hanger

CODE	Shank type	
AP50-T30H	BT30	
-T40H	BT40	
-A63H	HSK-A63, T63	
-F63H	HSK-F63	
-S25H	ST25T-DTB7	
-S32H	ST32T-DTB7, 12	

HF series

CODE	Fig.	Shank type	Н	W	t	Kg
HF-BT30	1	BT30	77	70	30	0.8
-BT40		BT40	90	90	37	1.2
-BT50	2	BT50	_	_	_	2.2
HF-A40	1	HSK-A40, T40	72	60	30	0.8
-A50		-A50, T50	77	70	37	1.0
-A63		-A63, T63	87	90		1.2
-A100	2	-A100, T100	_	_	_	2.1
HF-E32	3	HSK-E32	98	64	_	1.0
-E40		-E40	100	70		1.1
-E50		-E50	106	80		1.3
-F63		-F63	120	90		1.6



PALETTE

This pallet neatly houses collets.

Uniquely designed by an industrial designer.

- Protects the collets from damage to maintain their accuracy.
- **▷** Both top side and back side are usable.
- > Affixing labels allows easy storage by size.
- > Applicable regardless of manufacturer.



PA-B

Neatly arranged by size

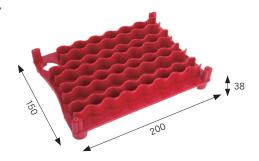
Collet stand

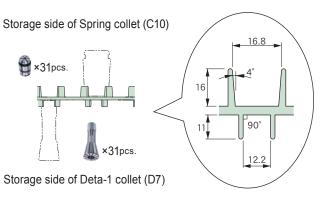


A stand for the SLIMLINE 2PIECE type collets is also available.



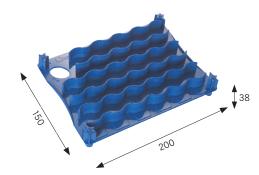


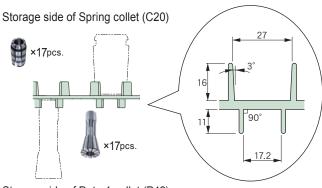




CODE	Q'ty
PA-R- 1	1pc.
- 5	5pcs.
-10	10pcs.

PA-B





Storage side of Deta-1 collet (D12)

CODE	Q'ty
PA-B- 1	1pc.
- 5	5pcs.
-10	10pcs.

TOOL CAP storage box

φ3····13pcs. φ4····26pcs. φ6····39pcs. φ8····26pcs. φ10···26pcs. φ12····26pcs.

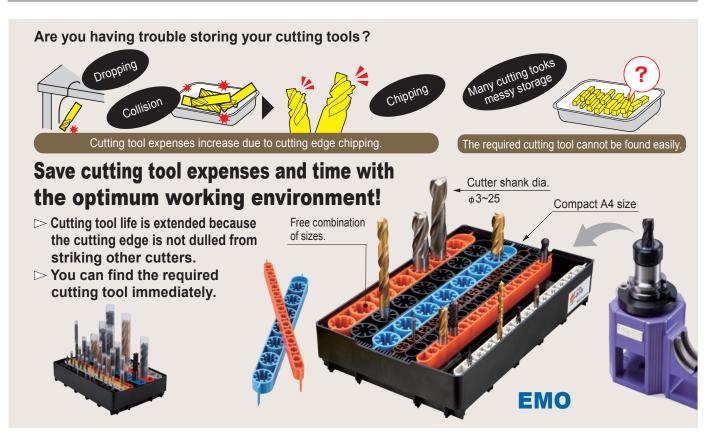
Q'ty

1рс

57

ENDMILL HOUSE



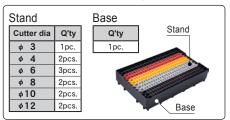


Value set

Stand

This is a convenient value set that can be immediately used and handles tool shank diameters of 3 mm to 12 mm. (Stores 156 cutting tools)





Raso

can be set.

TOOL CAP

Cutter dia

φ 3

φ 6

φ 8

φ10

φ12

φ 4

Container for holding the stands.

Q'ty

50pcs.

50pcs.

50pcs

50pcs.

50pcs

50pcs

Stands can be arranged by changing the combination of stands freely.

CODE	Q'ty	
EMO-BAS-1	1pc.	A4 size
-3	3pcs.	
■ Note •12 rows for the stand to 12mm diameter of the stands of 16mm diameter	6 rows	for

Parts for storing and securing cutting tools. It is possible to identify

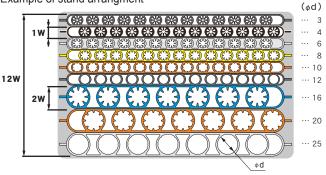
the cutting tool size by color, and the cutting tool you need can be

found at a glance. Use this stand inserting it into the base.

CODE	φd	W	max. Q'ty	Color	Q'ty
EMO-STD 3-2	3	15mm	13 pcs./cutting	Black	2pcs.
-5		(1W)	tools/stand	Віаск	5pcs.
-STD 4-2	4			Brown	2pcs.
-5				DIOMII	5pcs.
-STD 6-2	6			Crov	2pcs.
-5				Gray	5pcs.
-STD 8-2	8			Yellow	2pcs.
-5				renow	5pcs.
-STD10-2	10			Orange	2pcs.
-5				Orange	5pcs.
-STD12-2	12			Black	2pcs.
-5				DIACK	5pcs.
-STD16-2	16	30mm	7 pcs./cutting	Blue	2pcs.
-5		(2W)	tools/stand	Dide	5pcs.
-STD20-2	20			Orange	2pcs.
-5				Oralige	5pcs.
-STD25-2	25			Gray	2pcs.
-5				Gray	5pcs.

Example of stand arrangment

•The left-right orientation of the stands



TOOL HOLDER STORING CABINET



Standard Set

Horizontal type

CODE	max. Q'ty	Container box	Pin Q'ty		Shank type
HBX-A40	24	CN-150	HBX-PNE40	18pcs.	HSK-A40
-A50	15	-245	-PNE50	15pcs.	-A50
-E25	40	-150	-PNE25	32pcs.	-E25
-E32			-PNE32		-E32
-E40	24		-PNE40	18pcs.	-E40
-E50	15	-245	-PNE50	15pcs.	-E50
-F63	10				-F63
-15T	40	-150	-PN15T	16pcs.	15T(BROTHER)
-20T			-PN20T		RS20/20T(SUGINO)

Vertical type

■Contents of set

●Base plate ●Container box ●Pin

■Option

•Rail •Name plate

127

CN-150

180

CN-103

●Lid for container box ●Eyenut

■Note

•Knock-down type. A wrench (5mm) is required.

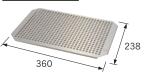
Max holder length 222

CN-245

Base plate

A multi-hole base plate is employed. Supports a variety of holder specifications using pins that can be freely changed and relocated.





Container box

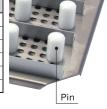
	H	1	
CODE	Outside diameter	Inside diameter	Shank type
CN-103	103	88	_
-150	150	135	E25, 32, 40/15T/20T
-245	245	230	A50, E50, F63



※(): Inside diameter

Pin

CODE	Q'ty	Size
HBX-PNE25	10 pcs.	φ13.5 × H20
-PNE32		φ16.5 × H25
-PNE40	5 pcs.	φ20.5 × H29
-PNE50		φ25.5 × H36
-PN15T		φ26.5 × H54
-PN20T		φ30.5 × H62



■Std. Access.

•Mounting bolt (M6)

Eyenut Rail (for name plate)

CODE	Q'ty
HBX-ENM6	2pcs.

■Std. Access.
•Mounting bolt (M6)





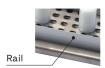
 CODE
 Q'ty
 L
 Note

 HBX-R210
 6pcs.
 210
 Vertical type

 -R330
 4pcs.
 330
 Horizontal type

■Std. Access.
•Mounting bolt (M5)

Required for attaching name plate.



Name plate

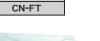
CODE	Q'ty
HBX-NP01	40pcs.

Useful for organizing tools. Attaches easily to the rail.





Freely cut to required overall length



CODE

Lid for container box



