PERIPHERALS



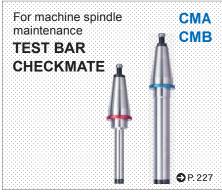
















TOOL SET UP STATION 65 DESK

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

- **▶** Helps in the rapid implementation of the five S's in your factory.
- **▷** Compact and space saving.

Punched board

Freely mounting position on the left or right side.

Tool insert stand (option)

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

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

Hook base panel Arbitrary attachment and recombination. Effective utilization of a rear space.

height you desire.

White board

Do-it-yourself style allows you to do assenbly.





Lower lighting

Brightly lit, safe work space.



Can be mounted on either

Safety stopper

Prevents dropping of cutting tools and tool holders.

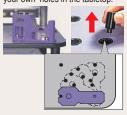


Lighting switch and socket

Upper lighting (32W) and under shelf lighting (20W) (max.capacity 1500W)



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 (option)

OP 225





MY CUBE

Petit Ball

Comes with two kinds of sign seals. %This image includes the options. Tool is not included

Side Table (option)

Side Table comes with:

Container box (CN-103)

Container box (CN-150)

Container box lid (CN-FT) 3 pcs.

Std. Access.

CODE

Usage example of

backside application

Trash cans are not provided.

Easy trash separation.

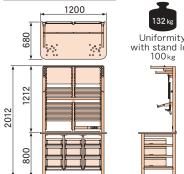
Dust Shooter (option)

6SD-01

For details please contact MST and ask for a catalog.



Dimensions



Container box

The see-through box allows

easy storage and organizing.



CODE Description Q'ty 6SD-FBP Hook base panel 12pcs. -FS Short hook 3pcs. -FI Long hook 2pcs. -UFS U-type short hook 3pcs. -UFL U-type slong hook 1pc. -FSP Hook fot spanner 1pc. -FDR Hook fot drive 1pc CN -103 3pcs. Container box -150 6pcs. 6SD-AIR Air gun set 1set

Description	Q'ty
Shelf board	1pc.
Upper lighting / Lower lighting **Select 50Hz or 60Hz	1ea.
Power code set (Socket / Lighting / switch / Powercode)	1set
White board. Marker pen for whiteboard. Whiteboard eraser. Magnet pocket. Punched board. Name seal set. Magnets(3pcs.). Memo book.	1set

■Caution

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

2 pcs.

Technical

TOOL SET UP STATION CLEAN BOX

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

Heavy dirt can be <u>washed off</u>

by hand.

Light dirt can be washed off using automatic washing.

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



Top cover

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
The time can be set arbitrarily,
up to 12min.



Tank



Comes with built-in

Comes with built-in heater (3kW) standard.

Outer sink cover

Prevents splashing of the washing cleaner.

Hand nozzle

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



Draining basket(option)

Can be attached to either the right or left side of the unit.



Filter

Can be changed easily when it becomes dirty.





Main Filter

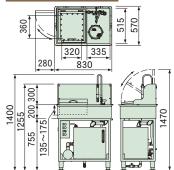
in Filter Sub Filter

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

CODE

CBX-01

Dimensions



Specifications

Material	SUS304 (Sink, Tank, Cleaning unit) SS400 (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.

٦	CODE	Description	Q'ty
-1	CBX-HNZ	Hand nozzle	1pc.
П	-MFIL	Main filter	2pcs.
4	-SFIL	Sub-filter	2pcs.
П	-TRP	Drain trap	1pc.
41	-GSTP	Rubber drain plug	1pc.
П	-WBSK	Washing basket	1pc.
4	-WTBL	Washing table	1pc.
П	Sink outer cov	er	1set.
4	Hook	2pcs.	
П	Bamboo brush	1pc.	
┚	Primary power cod	1pc.	

■Caution

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

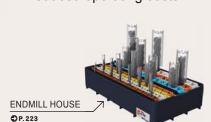
PERIPHERALS

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



Prevents chipping and damage to cutting tools

The cutting tool cover protects the user from injury at the time of work while protecting breakage of the cutting edge. Minimize grinding costs for reconditioning and lead to reduced operating costs.



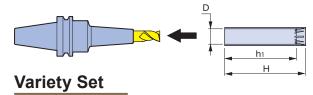


Not slip off





CODE	φD	hı	Н	Q'ty
TCD03-50	3		25	50
TCD04-50	4	_	32	50
TCC0607- 50	5.4~ 6.7	35	40	50
-100				100
-500				500
TCC0709- 50	6.8~ 8.9	35	40	50
-100				100
-500				500
TCC0911- 50	8.9~10.9	65	70	50
-100				100
-500				500
TCC1113- 50	10.9~13.4	65	70	50
-100				100
-500				500
TCC1418- 25	13.8~17.8	100	110	25
- 50				50
-250				250
TCC1822- 25	17.8~22.4	100	110	25
- 50				50
-250				250
TCC2228- 25	22.3~28	135	150	25
- 50				50
-250				250
TCC2836- 10	28 ~36	130	150	10
- 20				20
- 50				50
-200				200
TCC3646- 10	36.2~47	165	190	10
- 20				20
- 50				50
-200				200
TCC4760- 10	46 ~60	160	190	10
- 20				20
- 50				50
-200				200



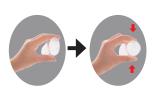
Each size comes in a set of two.

CODE	Q'ty
TCC-F	2 pieces per cutting tool over size for TCC0607 to 4760(total of 20 pieces per set)

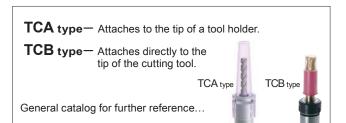
Usage

1 Hold the mouth of the tool cap vertically, and then press it so that its oval shape becomes round.

2 Once the mouth of the tool cap becomes round, push it into the cutting tool or tool holder.











Cutting tool expenses increase due to cutting edge chipping.

The required cutting tool cannot be found easily.

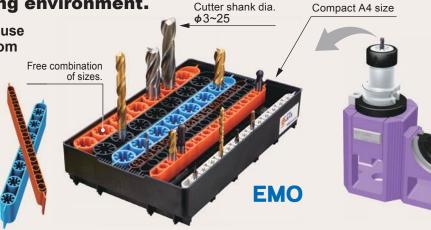
Save cutting tool expenses and time with the optimum working environment.

Cutting tool life is extended because the cutting edge is not dulled from striking other cutters.

>You can find the required cutting tool immediately.

ENDMILL HOUSE

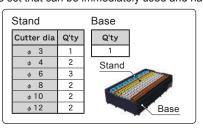


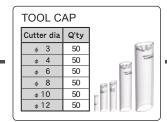


Value set

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)









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

Stand

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			Black	2		
-5				DIACK	5		
-STD 4-2	4]		Brown	2
-5				DIOWII	5		
-STD 6-2	6			Gray	2		
-5		15 mm (1 W)	13 pcs./cutting	Gray	5		
-STD 8-2	8		(1W)	(1W)	tools/stand	Yellow	2
-5				renow	5		
-STD10-2	10			Orange	2		
-5	12		-		Orange	5	
-STD12-2				2		Black	2
-5				Diack	5		
-STD16-2	16			Blue	2		
-5			7 pcs./cutting	Diue	5		
-STD20-2	20	30 mm (2W)	30 mm	tools/stand	Orange	2	
-5			tooisistand	Oralige	5		
-STD25-2	25			Gray	2		
-5				Gray	5		

Base

Container for holding the stands.

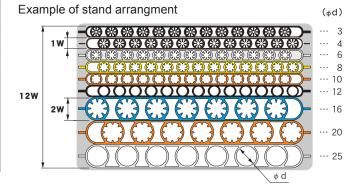
Stands can be arranged by changing the combination of stands freely.

CODE	Q'ty
EMO-BAS-1	1
-3	3

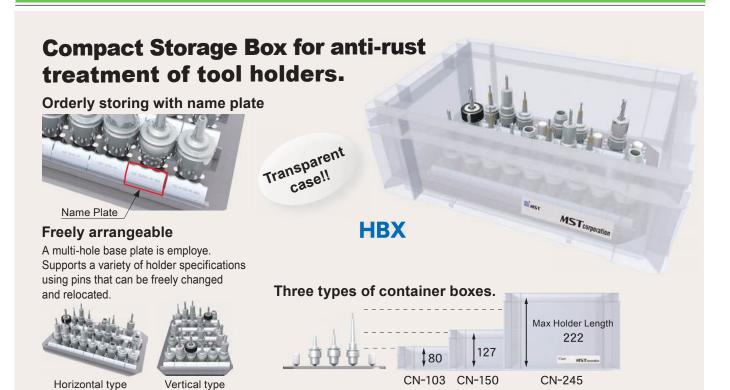
■Note

- •12 rows for the stands of 3mm to 12mm diameter or 6 rows for the stands of 16mm to 25mm
- •The left-right orientation of the stands can be set

300



TOOL HOLDER STORING CABINET



Standard Set

CODE	max. Q'ty	Container box	Pin	Q' ty	Shank type
				Q 17	
HBX-A40	24	CN-150	HBX-PNE40	18	HSK-A40
-A50	15	-245	-PNE50	15	-A50
-E25	40	-150	-PNE25	32	-E25
-E32			-PNE32		-E32
-E40	24		-PNE40	18	-E40
-E50	15	-245	-PNE50	15	-E50
-F63	10				-F63
-15T	40	-150	-PN15T	16	15T(BROTHER)
-20T			-PN20T		RS20/20T(sugino)

Base plate

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



CODE

Eyenut

CODE

HBX-ENM6

■Std. Access. Mounting bolt (M6)

Container box

F	1	Shank type	
Outside dimension	Inside dimension		
103	88	_	
150	135	E25, 32, 40/15T/20T	
245	230	A50, E50, F63	
	Outside dimension 103 150 245	dimension dimension 103 88 150 135	



■Contents of set

- ●Base plate ●Container box ●Pin
- Option
 - ●Eyenut ●Rail ●Name Plate ●Lid for Container Box
- - •Knock-down type. A wrench (5mm) is required.

Pin

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



■Std. Access.

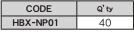
Mounting bolt (M6)



CODE

CN-FT

Name plate



Attaches easily to the rail.





Freely cut to required overall length

Rail (for name plate)

CODE	Q' ty	L	NOTE
HBX-R210	6	210	Vertical type
-R330	4	330	Horizontal type

■Std. Access. •Mounting bolt (M5)

Required for attaching name plate



MST

Q'ty

Feature

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!



HFSERIES HSK-A40 / A50 / A63 / A100







Petit Ball / MY CUBE

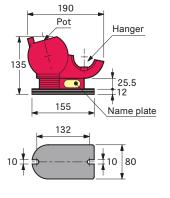
CODE	Shank type	Kg
PETIT BALL 40	BT40 / CAT. 40 / DIN40	6.1
MY CUBE 50	BT50 / CAT. 50 / DIN50	9.7
MY CUBE 100	HSK-A100、T100	9.6

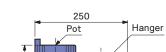
■Option

•Adapter (Petit Ball40, MY CUBE 50)

■Std.Access.

Name plate

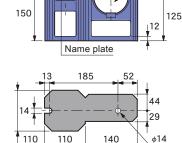




•Prepare 2 bolts for installation.

(Petit Ball: M8, MY CUBE: M12)

■Caution



HF series

CODE	Fig.	Shank type	н	W	t	Kg
HF-BT30	1	BT30	77	70	30	8.0
-BT40		BT40	90	90	37	1.2
-BT50	2	BT50	_	_	_	2.2
HF-A40	1	HSK-A40, T40	72	60	30	8.0
-A50		-A50、T50	77	70	37	1
-A63		-A63、T63	87	90		1.2
-A100	2	-A100、T100	_	_	_	2.1
HF-E32	3	HSK-E32	98	64	_	1
-E40		-E40	100	70		1.1
-E50		-E50	106	80		1.3
HF-F63	3	HSK-F63	120	90	_	1.6

Adapter



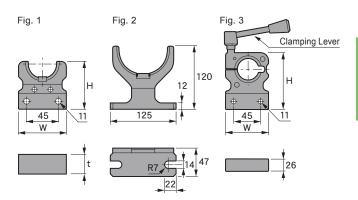
CODE	Model	Adapter	Shank type
AP40-T30V	PETIT BALL 40	For pot	BT30
-T30H		For hanger	BT30
-S25H			ST25T-DTB7
-S32H			ST32T-DTB7、12
AP50-T30V	MY CUBE 50	For pot	BT30
-T40V			BT40/CAT.40/DIN40
-A63V			HSK-A63、T63
-F63V			HSK-F63
AP50-T30H		For hanger	BT30
-T40H			BT40
-A63H			HSK-A63、T63
-F 63H			HSK-F63
-S 25H			ST25T-DTB7
-S 32H			ST32T-DTB7 12



At your request, your company name will be engraved.

Up to 12 characters (upper-case alphabetic characters, numeric characters, and/or hyphens).





Plug

CLT-NT30

CLT-A40

-A50

-A63

-A100

CLT-E25 -F63

-E40 -F80

-NT40 -NT50

STAR DUST

PAT. Cleaning Tool for a spindle taper hole

Achieves high-precision machining by cleaning the machine spindle tapered hole.

Replaceable wiper

Dirt doesn't re-adhere thanks to the use of replaceable wipers. When wipers get dirty, please change their position, and when the entire wiper gets dirty, please replace it. This will allow your operations to always take place under clean conditions. It is very economical compared to disposable cleaners.

Excellent dirt adsorption

We use a spongy resin for the wiper. Micron-size air bubbles catch and hold on to oil and powdery cutting chips.

For Spindle



Small- and Medium-size Enterprises Award for Excellence in New Inno-vative Technologies and Products

The Resona Foundation for Small and Medium Enterprise Promotion and The Daily Industrial News







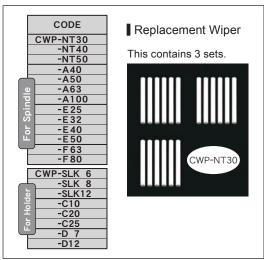
If 1µm chip adhering on the spindle, it causes 10µm

run-out of the cutting

edge.

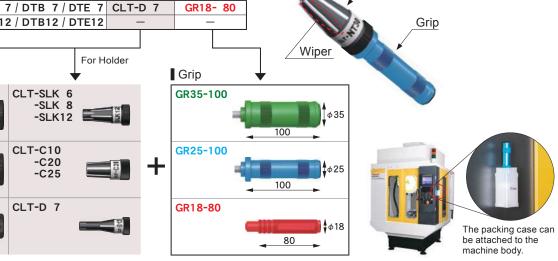


	SET CODE	Enabled spindles and holders	Plug code	Grip code
	CLT-NT30-G2	BT30 / DIN30 / CAT.30	CLT-NT30	GR25-100
	-NT40-G3	BT40 / DIN40 / CAT.40	-NT40	GR35-100
	-NT50-G3	BT50 / DIN50 / CAT.50	-NT50	
	-A40 -G2	HSK-A40 / T40	CLT-A40	GR25-100
_	-A50 -G2	-A50 /T50	-A50	
₩ W	-A63 -G3	-A63 / T63	-A63	GR35-100
spindle	-A100-G3	-A100 / T100	-A100	
	-E 25 -G1	HSK-E25	CLT-E25	GR18- 80
For	-E32 -G4	-E32	_	_
_	-E40 -G2	-E40	-E40	GR25-100
	-E50 -G2	-E50	-E50	
	-F63 -G2	HSK-F63	CLT-F63	GR25-100
	-F80 -G3	-F80	-F80	GR35-100
	CLT-SLK 6-G1	SLK 6	CLT-SLK 6	GR18- 80
	-SLK 8-G1	SLK 8	-SLK 8	
<u>e</u>	-SLK12-G2	SLK12	-SLK12	GR25-100
holder	-C10 -G1	CTH10 / CTA10	CLT-C10	GR18- 80
orh	-C20 -G2	CTH20 / CTA20	-C20	GR25-100
윤	С -C25 -G3 CTH25 / CTA25		-C25	GR35-100
\neg	-D 7 -G1 DTA 7 / DTB 7		CLT-D 7	GR18- 80
	-D12 -G4 DTA12 / DTB12 / DTE12			_
			I	I



- ※ Plugs and grips can be purchased separately.
- % 3 sets of wipers are included with each set.

Plug



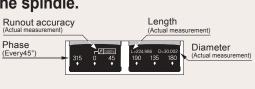
TEST BAR CHECKMATE

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

- > 20% lighter hollow design makes it easy to use.
- > The actual measurement values are marked on the body.
- □ Ideal for setting Z axis datum.

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.



Periodically checking the run-out accuracy

will result in superior

machining.

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

For machine spindle maintenance

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

	CODE	Fig.	φD	φ D 1	φ D 2	L	Lı	L2	Kg
	NT30 -CMA20-125	1	20	32	50	125	45	65	0.7
A T.	NT40 -CMA25-175	2	25	42	63	175	50	110	1.3
C	NT50 -CMA30-225	-	30	53	80	225	65	145	3.5
BT/DIN/CA	NT30 -CMB30-175	1	30	32	50	175	45	115	1.0
	NT40 -CMB40-325	2	40	42	63	325	73	265	2.8
BT	NT50 -CMB50-325	-	50	53	80	023	60	250	5.7
	HSK32 -CMA20-125	3	20	26	37	125	35	75	0.4
	HSK40 -CMA20-125	Ĭ		32	50	120	45	65	0.5
	HSK50 -CMA25-175		25	42	63	175	50	110	1.0
	HSK63 -CMA25-175	4							1.2
Ψ	HSK80 -CMA30-225		30	53	80	225	65	145	2.2
HSK-E	HSK100-CMA30-225	i			100				3.0
ľΫ́	HSK125-CMA30-225				125				4.1
4	HSK32 -CMB25-175	3	25	26	37	175	35	125	0.7
HSK-A	HSK40 -CMB30-175		30	32	50		40	120	0.9
Y	HSK50 -CMB40-225	1	40	42	63	225	45	165	1.8
	HSK63 -CMB40-325	4				325		265	2.7
	HSK80 -CMB50-325		50	53	80		60	250	4.4
	HSK100-CMB50-325				100				5.2
	HSK125-CMB50-325				125				6.3
	HSK63F-CMA25-175	4	25	42	63	175	50	110	1.2
HSK-F	HSK80F-CMA30-225		30	53	80	225	65	145	2.3
호	HSK63F-CMB40-325	4	40	42	63	325	45	265	2.7
	HSK80F-CMB50-325		50	53	80		60	250	4.5

Fig. 1 D₂ D₁ Fig. 2 D Fig. 3 D Fig. 4 D₂ D₁ 15

The sub-zero treatment prevents secular change.

- Coolant duct(HSK-A) ●Retention knob(BT)
 Exclusive retension 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

- 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 detail.
- Use a market standard retention knob for the BT spindle. NT30 type can be installed into a spindle at 0°and 180°

■Caution

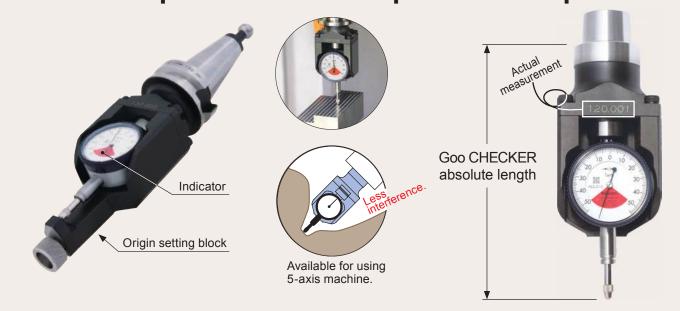
A.T.C is not available. (except for NT30)



Exclusive retention knob

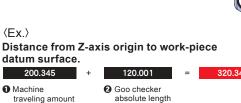
CODE	Shank	
P-576	CAT. 40	
- 575	CAT. 50	
-578	DIN40	
-577	DIN50	

Shareable Z-axis origin for multiple machining centers. Easy work-piece origin setting. Precise work-piece flatness and step measurement possible!



Easy Z-axis origin setting

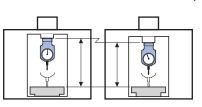
Easy measurement for Z-axis origin to work-piece datum surface.

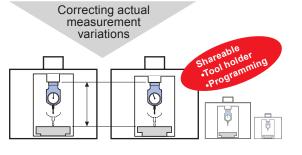


Machine traveling amount Actual 120.001 measurement Fiducial surface Work-piece

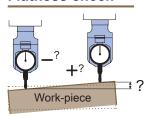
Sharable Z-axis origin for several machining centers

After measuring the distance from the Z-axis origin to the table surface of each machining center and correcting any variations, mulitple machining centers can share the tool holders and programming.

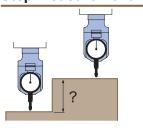




Flatness check



Step measurement





CODE	L	Kg
BT30 -ZPM-130	130	1
-165	165	1.2
BT40 -ZPM-150	150	1.3
-210	210	1.5
BT50 -ZPM-180	180	2.9
-240	240	4.1
A63 -ZPM-150	150	1.2
-210	210	1.5
A100 -ZPM-180	180	2.5
-240	240	3.8
E32 -ZPM-120	120	0.7
-165	165	1
E40 -ZPM-120	120	0.8
-180	180	1.1
E50 -ZPM-150	150	1
-195	195	1.3
F63 -ZPM-150	150	1.1
-210	210	1.3
F80PD -ZPM-180	150	1.1
-240	210	1.3
DN40 -ZPM-150	150	1.3
DN50 -ZPM-180	180	2.9
CT40 -ZPM-150	150	1.3
CT50 -ZPM-240	240	4.1

- ■Option
- •Retention knob(BT/ CAT./ DIN) → P.216
- ■Std. Access.
- Master block ●Indicator, 1/1000 reading
- •A.T.C is not available. (except for BT30)

Watch the video and you'll be ready to carry out maintenance immediately!



MAINTENANCE VIDEO

Removing dents and scratches restores the high accuracy.

Contents

- 1. The negative influence of dents, scratches and rust.
- 2. Practical ways to remove dents, scratches and rust - Tool holder edition.
- 3. Practical ways to remove dents, scratches and rust Machine table, Fixture edition.
- 4. Introduction of tools.







Machine table Work-piece

Basic Kit





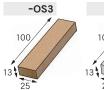


Tool holder



Fixture

-OS2





■ Contents of kit

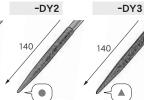
- Contents of kit				
Tools	Specification	Q'ty		
Maintenance DVD	DVD	1		
Oilstone-Both ends tapered type	#500	2		
-Triangular type		2		
-Square type		1		
-White type	#3000	1		
Rubber grinding stone-Square type	#320	1		
Diamond file-Flat type	#120	1		
-Round type		1		
-Triangular type		1		
Wire brush	Hardened steel wire	1		
Water-resistant Sandpaper	#1000	10		
Cotton-tipped stick-Long type	_	10		
-Short type		10		
Scraper for clearance gap		1		
Light	AA battery×2	1		
Mat for work	Rubber mat	2		
Kit case	_	1		

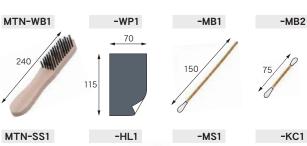


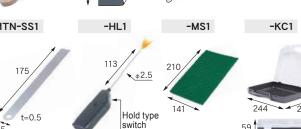
CODE	Q'ty
MTN-MV1	1
MTN-OS1	1
-OS2	1
-083	1
- 0\$4	1
-RS1	1
-DY1	1
-DY2	1
-DY3	1
-WB1	2
-WP1	20
-MB1	100
-MB2	100
-SS1	1
-HL1	1
-MS1	2
-KC1	1





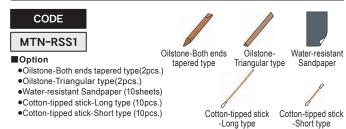






•Can be sold individually.

Replacement tool set



Anti-rust oil set







Can be sold individually.





Anti-rust oil (Refill)

