

#### 蒲菲科技有限公司 PERFECT TECHNOLOGY CO., LTD.

SKUIT



#### **ABOUT US**

Perfect technology Co.,Ltd is established in 1995 .We are original manufacturer and trade company. Our company had been 18 years experience in produce kinds of CNC Mechanical tool. For example Z Axis Setter, Clamping Force Gauge,Tool Holders, collet and Edge Finder etc. Famous of the best quality and competitive prices, package and rapid delivery. Therefore, we can fully satisfy your demand and have a numerous of customer. We have a good partnership with all over the world. Sweden, Portugal, Norway, Turkey, South Korea, Japan ,China, Vietnam, Malaysia and Thailand etc. Apart from our own Brand products, we also provide OEM service and accept customer's special orders. We will supply much better products with diversified design and professional service. We sincerely welcome the company from all over the world to cooperate with us of long-term.

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## **Patented Z-axis setter**



### NZH-50

#### Model:NZH-50A Model:NZH-50B

Height:50.00 +-0.005mm Weight:1.3kg Dimension:50x63x63mm Outer package size:100x94x81/mm

The patented Z-axis setter has been calibrated at the factory. The lower stroke is 1mm, which is more convenient for customers. Correction adjustment see page 4







NZH-50A Bottom has magnets

NZH-50B Bottom doesn't have magnets





## Patented Z-axis setter

## NZM-50

#### Model:NZM-50A Model:NZM-50B

Height:50.00 +-0.005mm Weight:0.7kg Dimension:50x48x48mm Outer package size:100x94x71/mm

The patented Z-axis setter has been calibrated at the factory. The lower stroke is 1mm, which is more convenient for customers. Correction adjustment see page 4



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NZH-50A Bottom has magnets



NZH-50B Bottom doesn't have magnets





# Patented Z-axis setter

### NZP-100

Model:NZP-100A Model:NZP-100B

Height:100.00 +-0.005mm Weight:1.7kg Dimension:100x48x48mm Outer package size:130x100x71/mm

The patented Z-axis setter has been calibrated at the factory. The lower stroke is 1mm, which is more convenient for customers. Correction adjustment see page 4





NZP-100A Bottom has magnets



NZP-100B Bottom doesn't have magnets





#### Instruction Manual of patented Z Axis Setter

#### NZH-50 NZM-50 NZP-100



1.Rotate the dial and make zero to the top.



2.Place the parallel bar on the Z-axis setter and press it.

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3.Fix the pointer to zero with 2.5mm hex wrench.



4.Flip to the bottom of device, adjust the pointer to zero with 4mm hex wrench.



#### The method of resetting and cleaning:

The device might be stuck due to damage caused during the shipping. Once the top of the device was stuck, please use the 4mm (or less) rods and have a nudge into the hole a few times.

## **Patented Z-axis setter**

## NZD-100



#### Model:NZD-100A

Height:100.00 +-0.005mm Weight:1.8kg Dimension:62x50x100mm Outer package size:130x100x71/mm





#### The patented Z-axis setter has been calibrated at the factory. The lower stroke is 1mm, which is more convenient for customers.

- Fig 1. If the pointer is not at zero, press the parallel block on the standard surface to check if the pointer is zeroed.
- Fig 2. Calibrate with a 2.5 hex wrench to zero the pointer
- Fig 3. Use a 4mm hex wrench to adjust the touch plate if the touch plate is not at zero or you want to adjust it's height.





### ZDE-50



#### Model:ZDE-50A Model:ZDE-50B

Height:50.00 +-0.005mm Weight:0.8kg Dimension:40x50x50mm Outer package size:100x94x71/mm











1.Place the parallel bar on the Z-axis setter and press it.



2.Rotate the dial and make zero to the pointer.



3 Take away parallel bar.



4.Put the z-axis setter on the workpieces, then push the cutter forward slowly until it reaches to 0, which is the right position.





## **ZDE-100B**



Height:100.00 +-0.005mm Weight:1.75kg Dimension:50x48x100mm Outer package size:130x100x71/mm Bottom doesn't have magnets







#### Model:ZOP-50

Machines need to be conductive before use.







Bottom have magnetic

Height:50.00 +-0.005mm Weight:0.7kg Dimension:50x54x54mm Outer package size:100x94x71/mm Batteries: LR44/A76/G13 x 2PCS

Internal conductor



Machines are not conductive can also be used.

Model:NZOP-50



This photoelectric Z-axis setter is a high-precision product, and the accuracy of the vernier caliper detection is not applicable.









Turn the handwheel ( in µm ) forward to the device and contact it slowly.Slowly contact the device ( light up) ( Fig:1 )
Move backward ( light out ) ( Fig:2 ) The point of light-out is the correct position, you need to repeat above two steps several times in order to get the accuracy.
Side detection: use the top of milling cutter to contact the buttom.
Make sure the batteries have power before using.

# **Electronic - Edge Finder**

#### Probe accuracy: 10mm / +-0.005mm

OP-20 weight:0.20kg OP-32 weight:0.43kg



Usage:

FIG1. Use photoelectric edge finder handwheel please tune into the  $\mu m$  advance processing object

FIG2. Touching object illuminated flip rotation return,

FIG3. Not bright point is to be sought in the reference position.



# CERAMIC EDGE FINDER

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Zirconia Features:

WH-1010

Non-magnetic, toughness good and wear-resistant, not rust, long life, It is equivalent to diamonds

#### Probe accuracy: +-0.005mm









WH-1020 weight:0.052ka

Our company use the great zirconia for ceramic raw materials. It's totally different from the other poor quality ceramic. Although it looks similar, but the life is a big difference.

You have to wisely to choose !

"A" is Perfect Technology's zirconia ceramic features:pure white,hight hardness and toughness. "B" is poor quality ceramic easily crack and color close to yellow





### A hydraulic spindle Rally



#### XXR-BT30

Model	d1	d2	Measuring range	weight kg
BT30-45°	7	11	0~60ka	
BT30-60°	7	11	toloranco	
BT30-90°	7	11		
JIS6339-30	8	12	±0.1KG	ARKC
ISO30	9	13	0~150ka	4.5KG
ISO30-R3	8	12	toloranco	
DIN30	9	13		
SK30	9	13	±2.5KG	

30 dynamometer meter can be selected 0~60kg or 0~150kg, the larger the gauge number, the larger the tolerance In order to provide better service, the 30 rally meter has two options to

install.

-	70mm	/		
	→6 <sup>9</sup>	 9mm+	42	
	) \ \		36	
	5	5		



XXR-BT40						
Model	d1	d2	Measuring range	weight kg		
BT40-45°	10	15				
BT40-60°	10	15		[		
BT40-90°	10	15				
CAT40*45°	10	15	0~150kg			
CAT40*60°	10	15				
CAT40*90°	10	15		AAKG		
ISO40-A	14	19		4.4KG		
ISO40-B	13	19	±2.5KG	ľ		
MAZAK-40	12	19		ľ		
JIS6339-40	14	19				
DIN40	14	19		ľ		
SK40	10	15				



Model	d1	d2	Measuring range	weight kg
BT50-45°	17	23		
BT50-60°	17	23		
BT50-90°	17	23	-	
CAT50*45°	17	23		
CAT50*60°	17	23	0~350kg	
CAT50*90°	17	23	tolerance	6.8KG
ISO50	21	28	±5.5KG	
MAZAK-50	21	29		
JIS6339-50	21	28		
DIN50	21	28		
SK50	17	23		





### **Digital Spindle Force Dynamometer**

#### XXRG-BT30

Model	d1	d2	Measuring range	weight kg	
BT30-45°	7	11	0∼70bar		
BT30-60°	7	11	toloranco		
BT30-90°	7	11			
JIS6339-30	8	12	±0.5KG	1240	
ISO30	9	13	0~100bar	4.5KG	
ISO30-R3	8	12	toloranco		
DIN30	9	13			
SK30	9	13	±1.0KG		

#### XXRG-BT40

Model	d1	d2	Measuring range	weiaht ka	
BT40-45°	10	15	inious annig rainge	in engine ng	
BT40-60°	10	15			
BT40-90°	10	15			
CAT40*45°	10	15	0~250bar tolerance ±2.0KG		
CAT40*60°	10	15		5 0~250bar	
CAT40*90°	10	15 tolerance		A AKG	
ISO40-A	14	19		4.410	
ISO40-B	13	19			
MAZAK-40	12	19			
JIS6339-40	14	19		)	
DIN40	14	19			
SK40	10	15			





### XXRG-BT50

Model	d1	d2	Measuring range	weight kg
BT50-45°	17	23		
BT50-60°	17	23		
BT50-90°	17	23		
CAT50*45°	17	23		
CAT50*60°	17	23	0~400bar	
CAT50*90°	17	23	tolerance	6.8KG
ISO50	21	28	±3.5KG	
MAZAK-50	21	29		
JIS6339-50	21	28		
DIN50	21	28		
SK50	17	23		



1 bar=1.02kg/cm2

### Spindle Force Dynamometer





XXR-HSK63A

Model	Measuring range	weight kg
XXR-HSK63A	0~150kg tolerance±2.5KG	5.3KG
XXRG-HSK63A	0~250bar tolerance±2.0KG	5.3KG

1 bar=1.02kg/cm2





#### Instruction Manual **Spindle Force Dynamometer**

Instruction Manual **Digital Spindle Force Dynamometer** 

- **a**: Check if the pre-pressure is in the available condition before using. Inspection methods:
- 1. Pointer is not at zero, and there is left pre-pressure
- 2. Manually check the pressure gauge and if the
- body turns if so, it means there is left pre-pressure. Otherwise, means there is no if don't, that pre-pressure

b: Method of reloading pre-presssure of dynamometer

- 1. Remove the screw B.
- 2. Loosen the pull stud A and loosen it again.
- 3. Push the pull stud A inwards (so that the oil level is reduced).
- 4. Fill R68 hydraulic fluid from hole B and then tighten the screw B.
- 5. Tighten the pull stud A. In the same time, Pointer C will be moving upward. As the pull stud A is fully tightened, the proper pressure indication will be between 10 to 30ka.

If it is over 30kg, loosen Screw B and let the indication be 10 to 30kg

- C: Method of dynamometer dial indicator reading
  - 1. The inner area of the dynamometer 10.00875 mm<sup>2</sup>, so when the indication times 10 is the correct pulling force.
  - 2. An unit of dynamometer equals to 10kg

Will be automatically set to zero,

4. Press (ON/OFF) again to select the unit.

3. The digital dynamometer uses the Newton as 1 unit. (1kg = 9.8 N)

5. Tighten the A-pull rod again. At this time, the pressure value will

a: Pull force count explicit return to zero setting method 1. Turn the A rod to a loose turn so that it has no pressure. 2. Turn on (ON/OFF button) and press and hold (Light/P-H button) 3. Enter the mode setting, there will be a flashing number, press (REST button) Set to "9", press (Light/P-H) to enter standby time Press (REST) to set to "5", then press (Light/P-H) twice.

go up. Please stay at the most appropriate pre-pressure

d: Method of pull stud replacement

- 1. Use the adjustable wrench to clamp the seat of "D" Turn the A lever ("D" to hold )
  Replace the new lever A and lock it again.
- 4. Check the preload again, if the preload is normal, you can continue to use it.

Conversion:  $1 \text{ kg/cm}^2 = 10 \text{ kg} = 100 \text{ N}$ E.g:25kg/cm\*10=250kg=25000N = 25KN



Method of pull stud replacement



- 1. First remove the plug from the B
- 2. Turn the "A" Pull studs to loose

Screw thread 1/4PT

- 3. Push the A rod inward again (to make the oil chamber oil level retract)
- 4. Fill the R68 hydraulic oil from the B hole and lock the rear plug.
- 5."A" Pull studs can be pressurized to about 5KG.

C:Method of pull stud replacement

- 1. Use the adjustable wrench to clamp the seat of "D"
- 2. Turn the "A" Pull studs ("D" to hold ) 3. Replace the new Pull studs "A" and lock it again.
- 4."A" Pull studs can be pressurized to about 5KG.



1 bar=1.02kg/cm2

The digital spindle tensioner has been corrected to zero before leaving the factory. Do not press REST again. If you want to press REST, you need to turn Pull studs "A" studs to loose.

The above value is based on the PMC spindle dynamometer specification of Taiwan Precision Machinery R&D Center.





### **Test Bar**



Test arbor is used to measure the runout of machine spindle. Taper Contant > 85%

Order no	D	L	Roundness	Concentricity	Package weight
55HG-BT30	30	250			3.5
55HG-BT40	40	300	< 0.003	< 0.005	4.7
55HG-BT50	50	300			6.5

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