

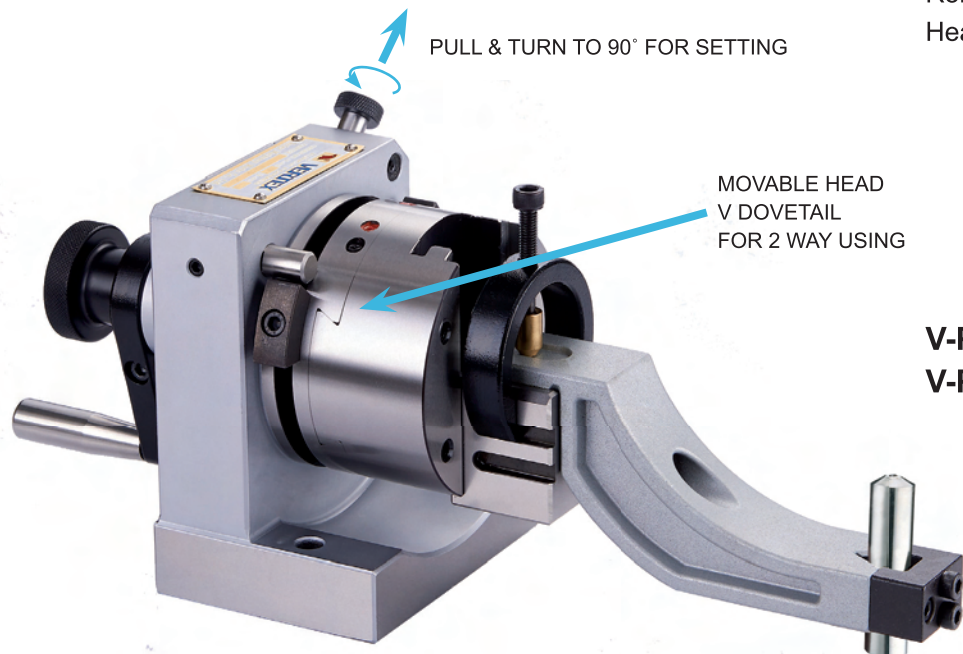


# Punch Former

ORDER NO. V-PB  
CODE NO. 2001-001

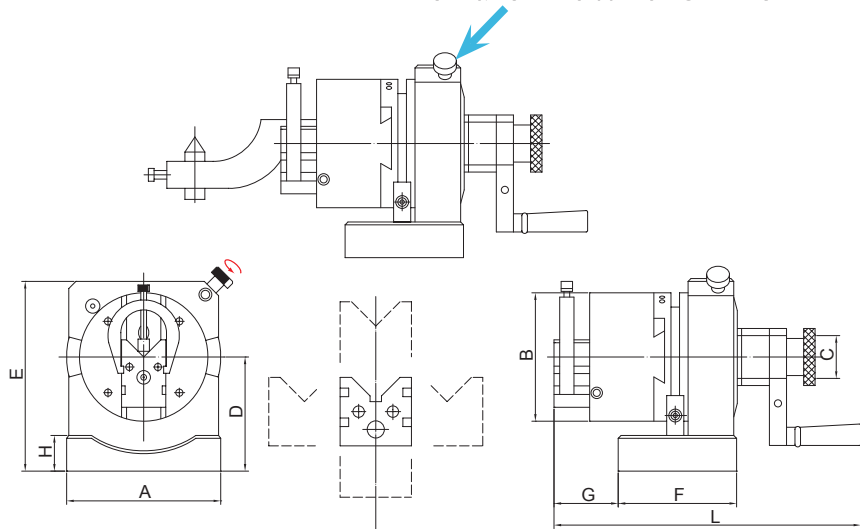


MAX. Wheel D. Ø200mm  
Roller Center H. 80mm WEIGHT:10KGS  
Head Slide Movement, 12.5mm



**V-PB 2WAY**  
**V-PS 1WAY, THROUGH HOLE**

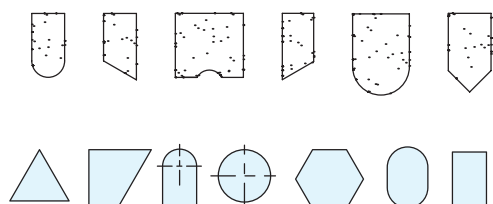
PULL & TURN TO 90° FOR SETTING



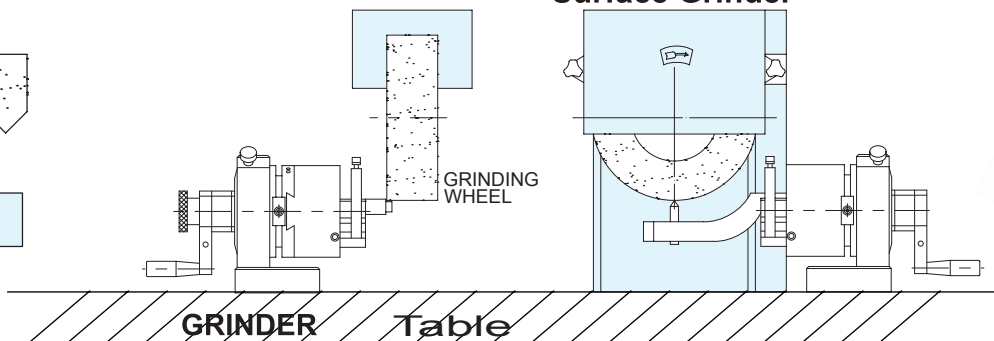
- Punch former is the fixture to grind the point of standard punches and E.D.M. electrodes for precise and fast operation.
- Besides the round, radius and multiangle punches, any special forms can be ground precisely .  
By V-PB, punch/ grinding wheel can be ground either concave or convex radius shape.
- The capacity is from 4mm to 30mm.
- Punch Former is a great dressing instrument. Precisely forming the grinding wheel can be done by assembling an ARM with the main body. Any combination of tangents or radial form of the grinding wheel may be dressed accurately by easy operation.
- Max. diameter of grinding wheel within 200mm can be dressed accurately and safely. The height from base to roller's center is 80mm. Movement of each side can reach 12.5mm while aiming at the center of V block.
- The main body is made of one piece steel construction.

ORDER NO.	A	B	C	D	E	F	G	H	L	WEIGHT (kgs)	CODE NO.
V-PB	108	Ø90	Ø30	80-81	133	83	45	25	215	10	2001-001

## Application grinding wheel style:



## Surface Grinder





# Punch Former

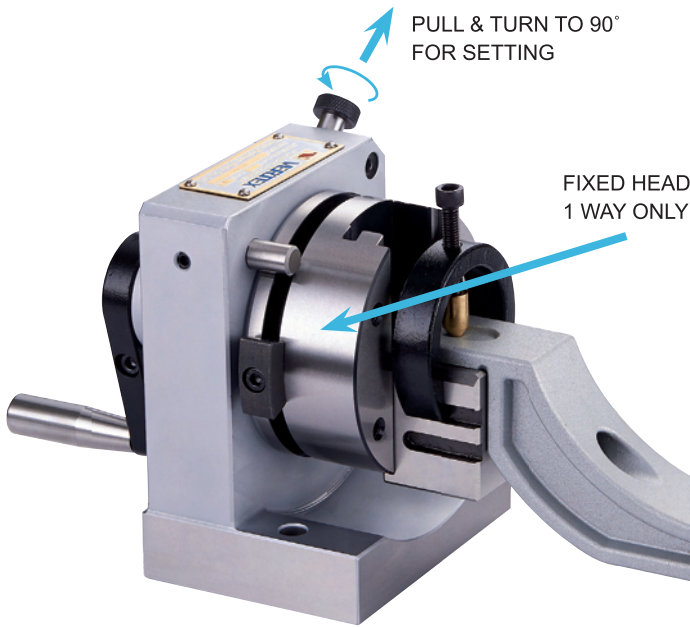


ORDER NO. V-PS  
CODE NO. 2001-010

1 WAY Ø30 THROUGH HOLE

## Specification

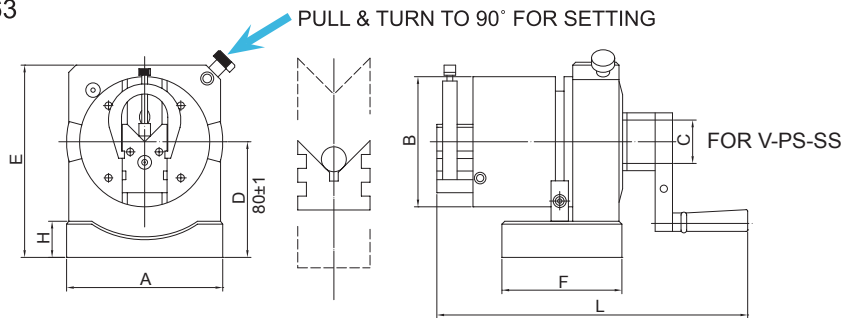
D(diameter)of the pressed part of the punch...4-30mm  
L(length)of the pressed part of the punch...above22mm  
Upper and lower movement span of V block.....25mm  
Horizontal movement span of V block(one side)..12.5mm  
(two side)...25mm  
Length of V block .....30mm  
Height of the rotary central axis.....15mm  
Cutting and dividing.....24 equal pieces(15")  
Sand forming of the forming lever  
(concave R).....100mmR  
(convex R).....48mmR  
Diamond sharpening knife : (small diameter)60x50(1/10carat)  
(large diameter)100x50(1/4carat)



PUNCH FORMER

\*Except for the handle and graduation scale all metal is special hard tool steel (SKS-2) heat treated at HRC 63  
\*V block can be disassembled for use separately.  
V-PS the center through hole is Ø30mm

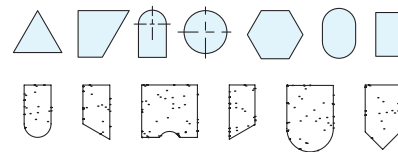
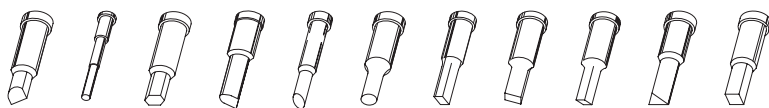
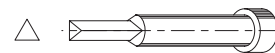
V-PS allows go through from the center of grip, to clamp a more longer punch ejector pin, it can go deep into of the grip position directly. To assemble an ARM with the main body, any combination of radial form of the grinding wheel may be dressed accurately by easy operation.



ORDER NO.	A	B	C	D	E	F	H	L	WEIGHT (kgs)	CODE NO.
V-PS	108	Ø90	Ø30	80-81	133	83	25	197	8.7	2001-010

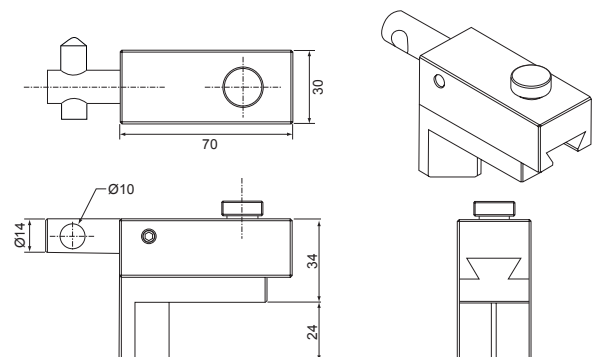
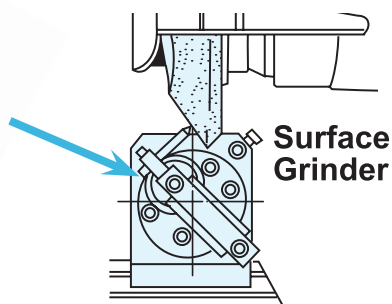
Application grinding wheel style:

FOR INJECTOR PIN



# Special Part Accessory For Angular Dressing

ORDER NO.V-PF CODE NO.2001-020  
Without Diamond WEIGHT: 0.7KG

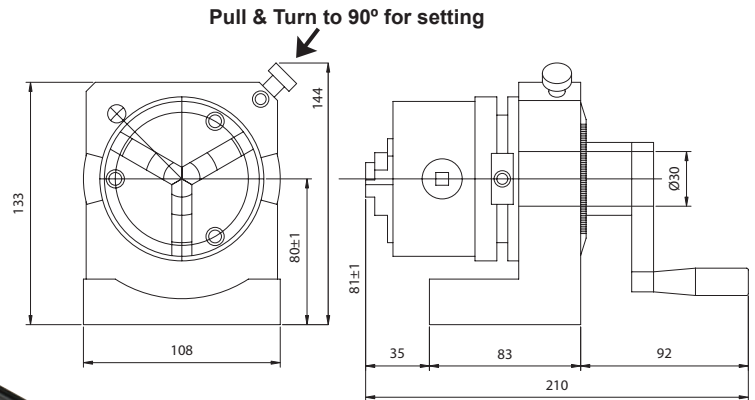
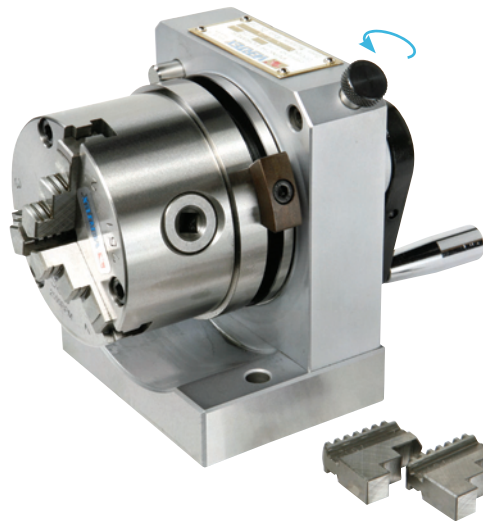


The Wheel angular dressing



# 3-Jaws Punch Former

ORDER NO.V-PS-80J CODE NO:2001-030



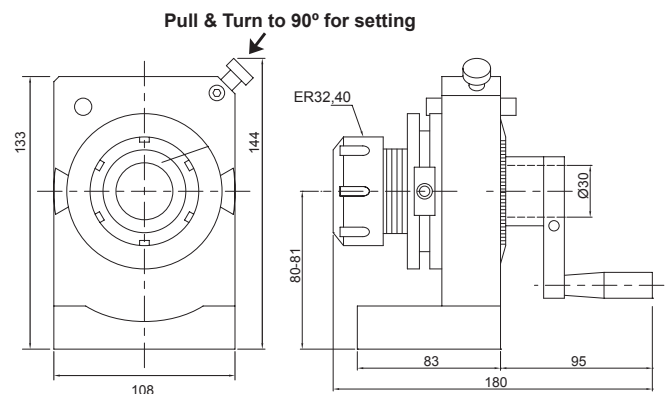
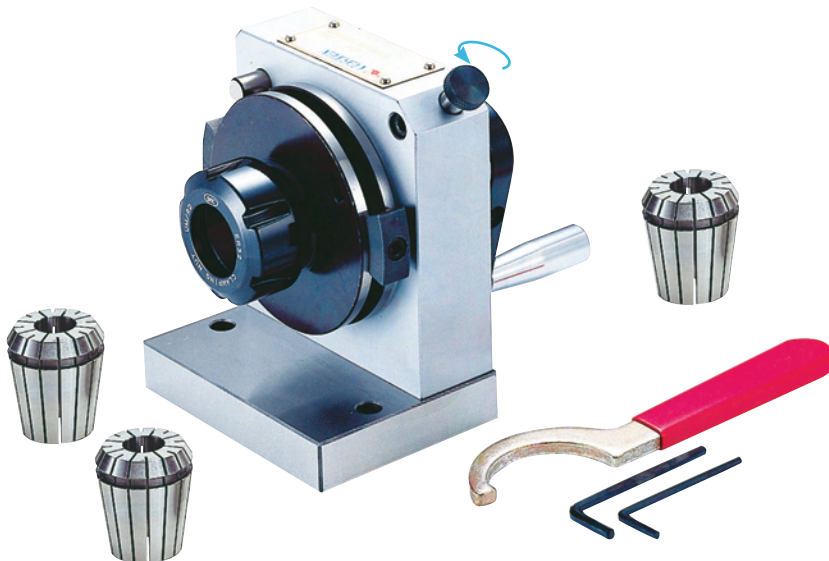
- VSC-3, 3 jaw chuck Clamping : Ø2-70 mm
- The center of 3 jaws punch grinder can move gently to fix and to help the concentricity more precision.
- This punch grinder can divide into 24 angles, each angle is 15 degrees at 10 seconds accuracy, the weight is 8.7kgs.
- This style base can be selected to set up with sine plate to make sine angles. The sine plate also can be used with other Machines.
- The base can be adjusted for sine angle.  
(ORDER NO.V-PS-80JS)



# ER Collet Dividing Punch Former

ORDER NO.V-PS-ER32 CODE NO.2001-040

ORDER NO.V-PS-ER40 CODE NO.2001-041



- ER Collet Dividing Punch Grinder put ER32 main body and with collet inner size 6, 8, 10, 12, 16, 20mm, total 6pcs. the weight is 11kgs. ER40 with collet inner size 6, 8, 10, 12, 16, 20, 25 mm total 7pcs.
- The center of collet can move gently to help the concentricity more precision.
- This punch grinder can divide into 24° angles, each angle is 15 degrees at ±10 seconds accuracy.
- ER16 connection, special accessory (v-601 20-ER16-50L WITH 10PCS COLLET) can use ER16 base can select sine vise base which is good for sine angle use  
(ORDER NO.V-PS-ER32S).





# ER Collet Dividing Punch Grinder With Sine Plate



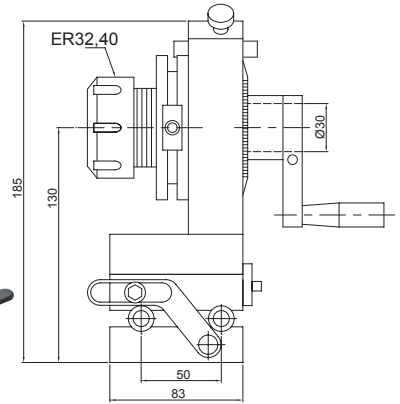
ORDER NO.V-PS-ER32S

CODE NO.2001-060

WEIGHT:11kgs



Example V-601  
Special Acces.



## Tilting Feature

- ER Collet Dividing Punch Grinder put ER32 main body and with collet inner size 6, 8, 10, 12, 16, 20mm, total 6pcs. the weight is 11kgs.
- The center of collet can move gently to help the concentricity more precision.
- This punch grinder can divide into 24° angles, each angle is 15 degrees at ±10 seconds accuracy.

**Special accessory:** ER16 connection, (V-601 20-ER16-50L WITH 10PCS COLLET) can use ER16 base can select sine vise base which is good for sine angle use (ORDER NO.V-PS-ER32S) please choose from page C16

SINE PLATE

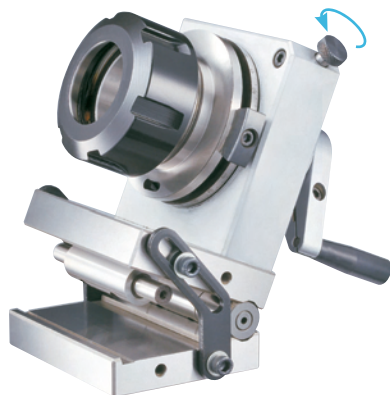


# ER Collet Dividing Punch Grinder With Sine Plate

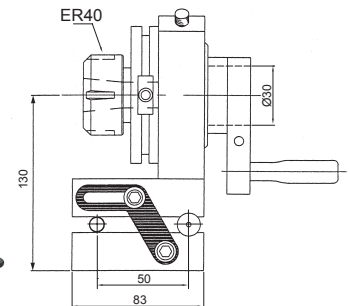
ORDER NO.V-PS-ER40S

CODE NO.2001-065

WEIGHT:10kgs



Example V-601  
Special Acces.



## Tilting Feature

- ER Collet Dividing Punch Grinder put main body and with collet inner. ER40 with 7pcs, Size 6,8,10,12,16,20,25 mm
- The center of collet can move gently to help the concentricity more precision.
- This punch grinder can divide into 24° angles, each angle is 15 degrees at ±10 seconds accuracy.

**Special accessory:** ER16 connection, (V-601 20-ER16-50L WITH 10PCS COLLET) can use ER16 base can select sine vise base which is good for sine angle use (ORDER NO.V-PS-ER32S) please choose from page C16

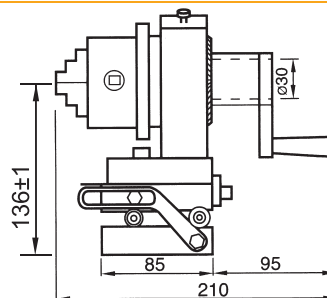


# 3-Jaws Punch Former With Sine Plate

ORDER NO.V-PS-80JS

CODE NO.2001-070

WEIGHT:11.7kgs



## Tilting Feature

- The center of 3 jaws punch grinder can move gently to fix and to help the concentricity more precision.
- This punch grinder can divide into 24 angles, each angle is 15 degrees at 10 seconds accuracy, the weight is 8.7kgs.
- This style base can be selected to set up with sine plate to make sine angles. The sine plate also can be used with other Machines.
- The base can be adjusted for sine angle. (ORDER NO.V-PS-80JS)

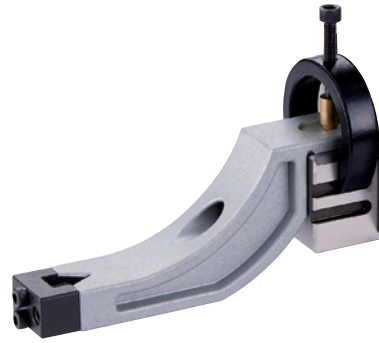




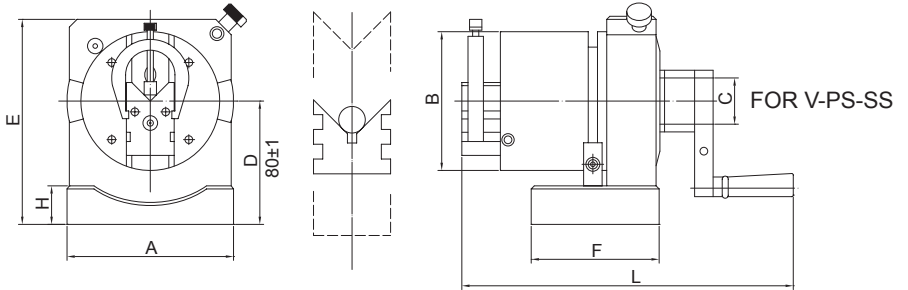
# Punch Former With Sine Plate



**NEW**



V-PB & V-PS Type With Sine Plate  
 V-PB-BS 2 Way  
 V-PS-SS 1 Way Ø30 Through Hole  
 The Feature Is Show On Page B1,B2



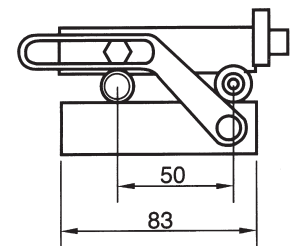
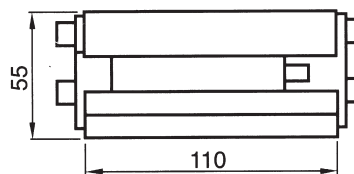
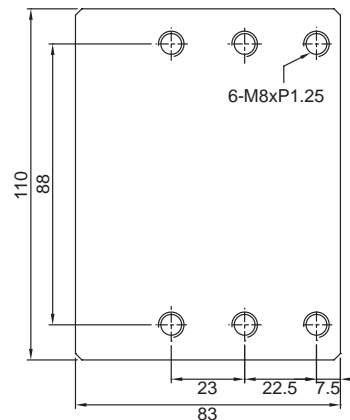
ORDER NO.	A	B	C	D	E	F	G	H	L	TOTAL HEIGHT	SINE BAR CENTER	N.W.	CODE NO.
V-PB-BS	108	Ø90	Ø30	80-81	133	83	45	25	215	136	50	13.6 kgs	2001-080
V-PS-SS	108	Ø90	Ø30	80-81	133	83		25	197	136	50	13.0 kgs	2001-081



## Sine Plate For All Type Punch Former

ORDER NO.V-PS-SP CODE NO.2001-050  
 WEIGHT:3.6kgs

OPTIONAL ACCESSORIES



IT'S FIT WITH VERTEX'S :  
 V-PB, V-PS, V-PS-ER-32,  
 V-PS-ER40, V-PS-80J



# Concentric Test Stand



**NEW**

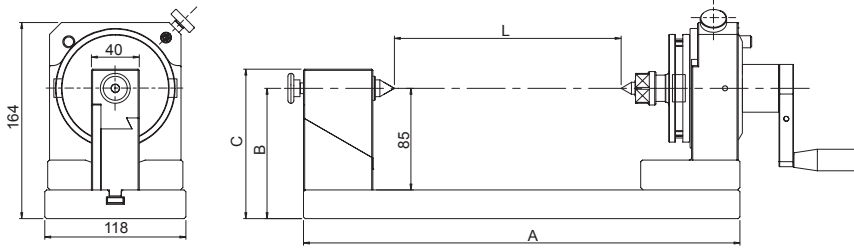


### Feature

- For Checking Roundness & True Running Accuracy
- For Grinding High Accuracy Outer Diameter & Round Bar On Surface Grinder By Accurated Center And Holder.

### Specification

- Body Center height : 85 mm
- Base to punch center : 109 mm
- Division & Accuracy : 24 & 15°±10"
- Workpiece length : 0~450mm
- Material : SKS-3, HRC 60~62°
- Roundness : 0.002 mm
- Parallelism : 0.002 / 100mm
- Squareness : 0.002 / 100mm



Unit:mm

ORDER NO.	A	B	C	L	Division	Graduation	N.W. (kgs)	CODE NO.
VCI-150P	375	109	125	0-150	24 (15°±10")	360°	20	2021-113
VCI-250P	475	109	125	0-250			23	2021-114
VCI-350P	575	109	125	0-350			26	2021-115

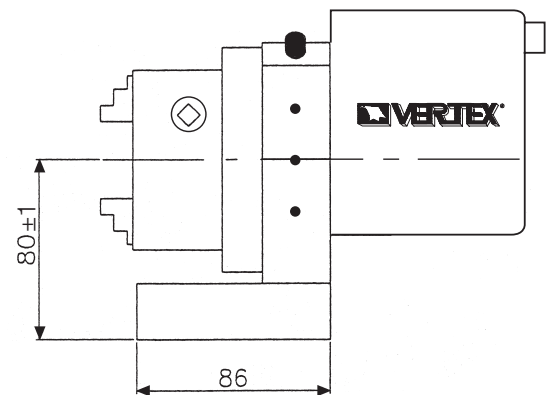
CONCENTRIC TEST STAND



# Fixed Speed Punch Former

**AUTO TYPE**

**NEW**



- The Punch Former with a motor attached can be applied to precisely grind a punch to round in a short time and saves the processing time.
- Chuck Type can clamp workpieces in a wide range.
- 3 inch 3 jaw chuck.

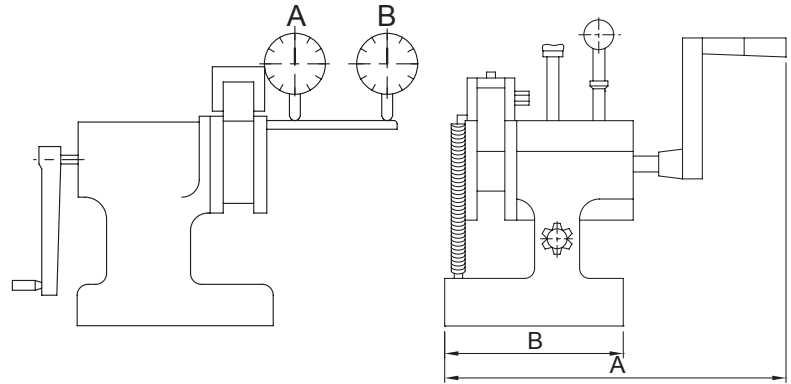
ORDER NO.	O.D.	I.D.	Max. Dia. of Workpiece	Center Height	Motor Output-W Input-V	Graduation	R.P.M.	N.W. (kgs)	CODE NO.
V-PS-80M	2-70	24-64	Ø50	80-81	15W 110/220V	360°	110	11.72	2021-130



# Punch Grinder



ORDER NO.V-PG CODE NO.2002-010  
STANDARD- TYPE Ø1.5-Ø25 WEIGHT: 6.6kgs



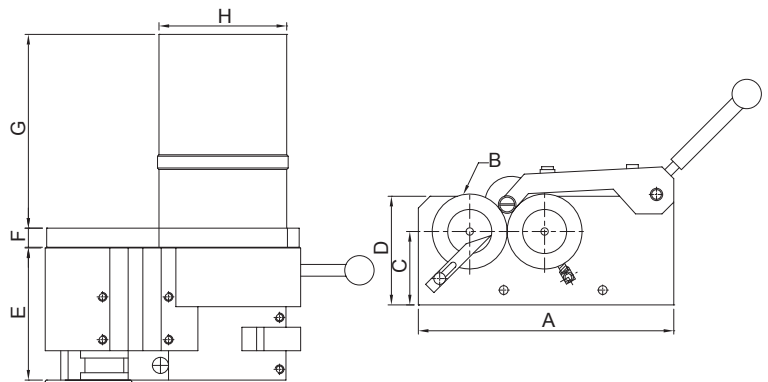
Punch grinder is a tool which can be put on the surface plate of grinding machine for round punches(1.5mm-25mm). It can be ground by putting among three rollers of punch grinder. without checking the center. Accuracy of roller within 0.005mm while turning right or left. It can allow length 5-35mm Accuracy of point A within 0.005mm and point B Within 0.008mm while turning.

ORDER NO.	A	B	WEIGHT (kgs)	CODE NO.
V-PG	172	90	6.6	2002-010



# Punch Grinder

ORDER NO.V-PGM CODE NO.2002-020  
WITH MOTOR TYPE Ø1.5 - Ø25  
WEIGHT: 11.8 kgs



## Features

- 1.High accuracy cylindrical grinding work is possible, just putting this economical unit on surface grinder.
- 2.No center alignment necessary. just put work piece on rollers.
- 3.Portable with single hand, thus easily set up.
- 4.With rollers motor -driven, attention can be concentrated on table/wheel feeds.
- 5.Work can be formed in radius taper as well
- 6.Double roller unit available for long pin or punch grinding.

## FEATURES

Mounting surface(RLxFB).....175 X 218 X 90 mm  
50Hz/220v.....108 rpm  
Roller speed 60Hz/110v.....129 rpm  
Accuracy(Roundness and concentricity).....0.005 mm  
Roller driving motor 110v, Single phase, 25W  
(Specifications are subject to change without notice.)

ORDER NO.	A	B	C	D	E	F	G	H	WEIGHT (kgs)	CODE NO.
V-PGM	174	Ø51	50	74	90	13	132	87	11.8	2002-020



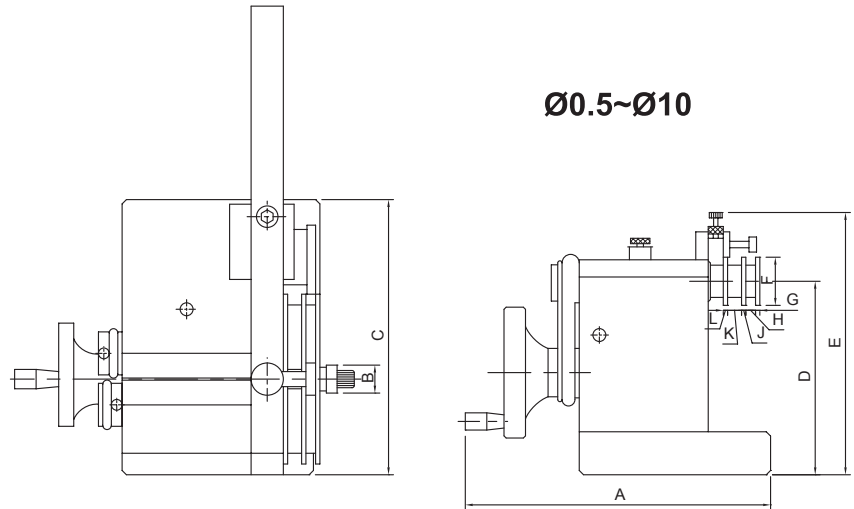


# Punch Grinder

ORDER NO:V-PGA CODE NO.2002-030 WEIGHT:3.1kgs



- Grinding Max. Length 30 mm
- Grinding Max. Length 9 mm



1. The small punch grinder can process from dia  $\varnothing 0.5$  mm to 10 mm. Smallest workpiece length : 10 mm  
This punch grinder can work with surface grinding machine and to grinding any sizes.
2. Easy operation and high precision make it to be the best grinding tool for small workpiece.

ORDER NO.	A	B	C	D	E	F	G	H	J	K	L	WEIGHT (kgs)	CODE NO.
V-PGA	142	$\varnothing 13$	128	90	122	22.4	2	4.5	2	6.5	2	3.1	2002-030

PUNCH GRINDER

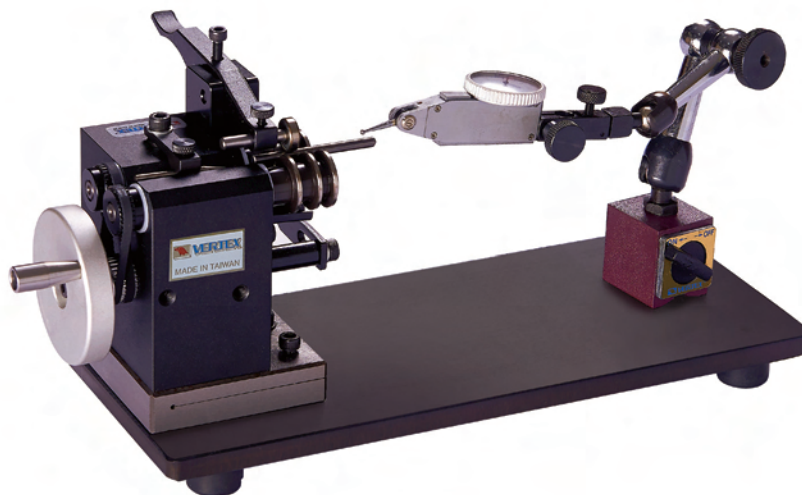


# Runout Tester

ORDER NO:VRT-25 CODE NO.2002-040



- Not included magnetic tool and dial gauge



ORDER NO.	Range	Length	Accuracy	Size	CODE NO.
VRT-25	$\varnothing 0.5$ mm - $\varnothing 10.0$ mm	within 100 mm	0.002 mm	295x145x130 mm	2002-040

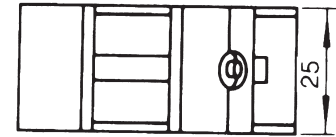
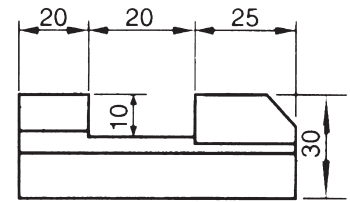
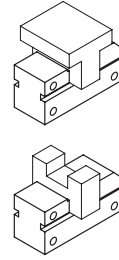
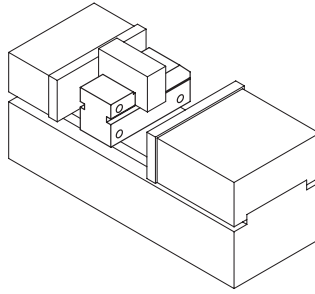
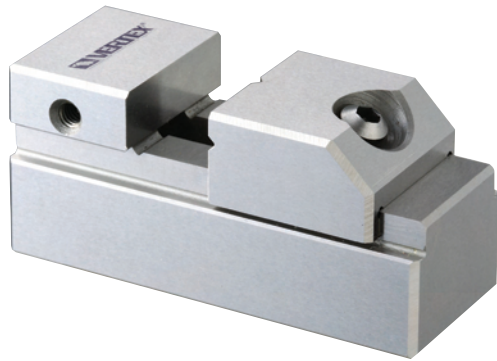


# Mini Tool Maker Vise



ORDER NO.VMV-10 CODE NO.2003-001

WEIGHT:0.3kg



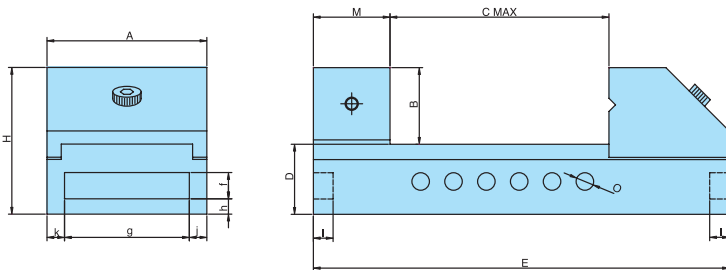
Tool makers vise of mini type which can be put in a bigger vise to process the small and precise workpiece. Also it can be used in an E.D.M. machine and grinding machine.

Squareness and parallelism : within  $\pm 0.005$  mm / 100 mm.

ORDER NO.	Weight (kgs)	CODE NO.
VMV-10	0.3	2003-001

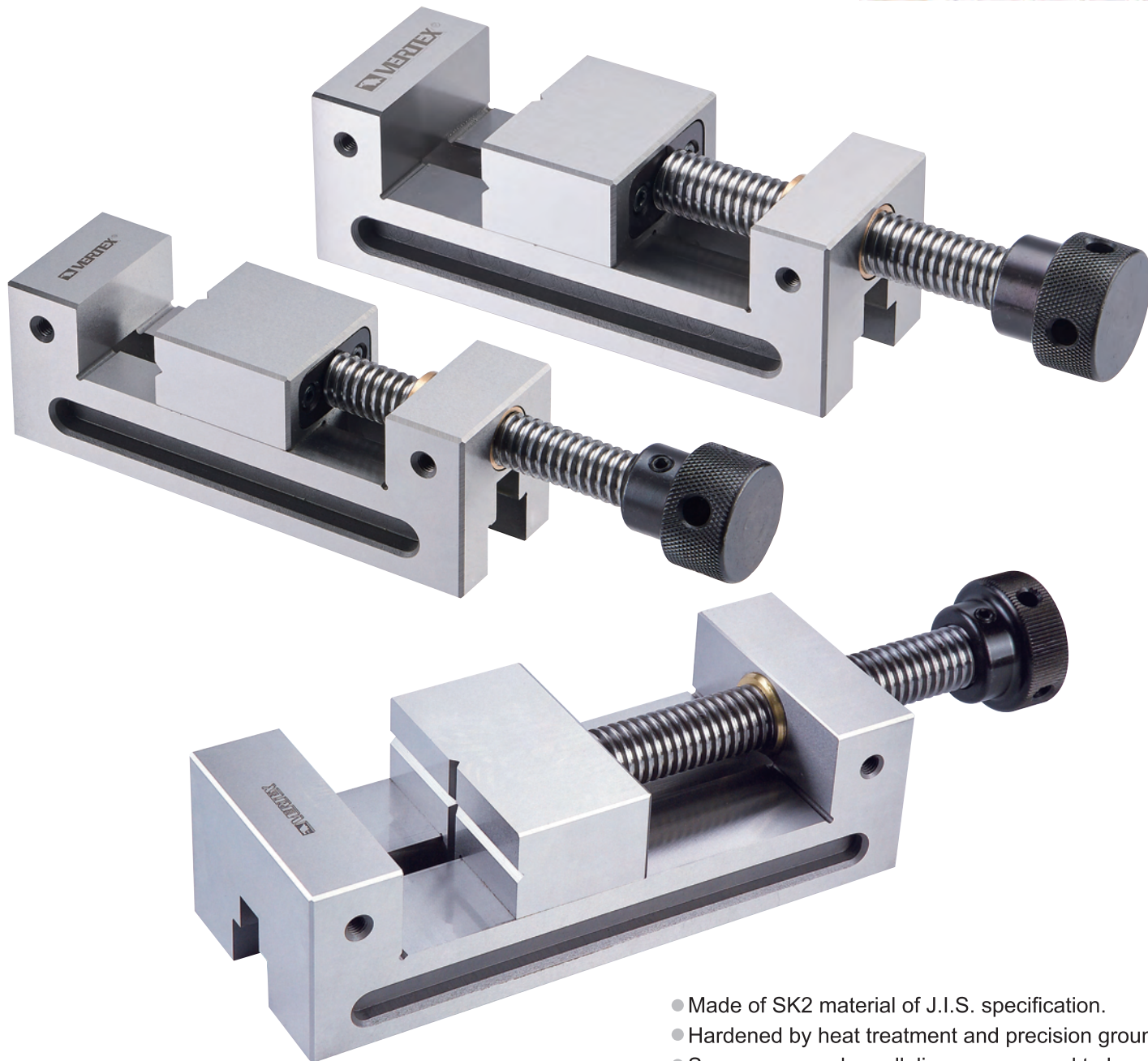


# Tool Maker Vise



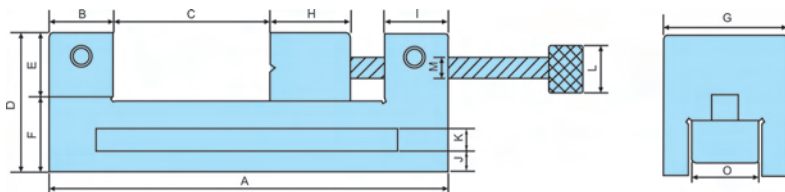
- Made of SK2 material of J.I.S. specification.
- Hardened by heat treatment and precision ground.
- Squareness and parallelism are ensured to be within  $\pm 0.005$  mm / 100 mm.
- It can be used and kept its high precision while standing on its base, sides or extremity, for inspection use in stead of squares due to its extremely accuracy.
- Hardness: HRC 54 $\pm$ 2°

ORDER NO.	MATERIAL	A	B	C max	D	E	I	f	g	h	j	k	H	M	O	N.W (KGS)	CODE NO
VMV-15	SK2	36	20	40	20	100	5	8	24	5	6	6	40	20	6	0.9	2003-010
VMV-20	SK2	47	29	74	28	150	5	10	37	6	5	5	57	30	8	2	2003-011
VMV-25	SK2	62	34	89	28	170	7	10	52	6	5	5	62	30	8	3.3	2003-012
VMV-30	SK2	72	34	99	32	190	9	12	56	7	8	8	66	35	8	4.5	2003-013
VMV-35	SK2	88	45	120	40	225	12	12	64	11	12	12	85	40	10	7	2003-014
VMV-40	SK2	98	45	125	40	230	12	12	64	11	17	17	85	40	10	8.9	2003-015
VMV-50	SK2	125	50	157	50	287	12	13	73	14	26	26	100	50	14	15.5	2003-016
VMV-60	S50C	150	50	200	50	330	12	14	76	14	37	37	100	50	14	21.4	2003-017

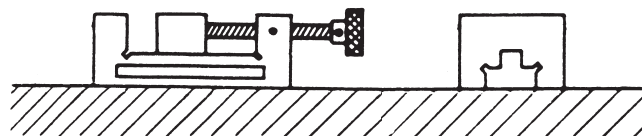


TOOL MAKER VISE

- Made of SK2 material of J.I.S. specification.
- Hardened by heat treatment and precision ground.
- Squareness and parallelism are ensured to be within  $\pm 0.005 \text{ mm} / 100 \text{ mm}$ .
- It can be used and kept its high precision while standing on its base, sides or extremity, for inspection use in stead of squares due to its extremely accuracy.
- Hardness: HRC  $54^{\circ} \pm 2^{\circ}$



**TOLERANCE**  $\pm 0.005 \text{ mm} / 100 \text{ mm}$



Unit:mm

ORDER NO.	MATERIAL	A LENGTH	B	JAW C OPENING	D	E	F	G	H	I	J	K	L	M	O	HEIGHT (mm)	HARDEN	WEIGHT (KGS)	CODE NO.
VDV-20	SK2	154	25	55	54	24	29	47	45	25	9.50	10.15	34.70	15.80	18.7	54	HRC54°±2°	2.5	2003-020
VDV-25	SK2	175	25	75	60	29	30	62	44.80	25	10	10.90	39.60	18.95	26	60	HRC54°±2°	3.9	2003-021
VDV-30	SK2	180	30	71	70	29	40	72	51.85	25	14	12.35	50.35	18.95	26	70	HRC54°±2°	5.7	2003-022
VDV-35	SK2	250	35	121	73	38	35	88	55.40	35.55	10.80	11.60	54.85	25.35	30.20	73	HRC54°±2°	9.2	2003-023
VDV-40	SK2	250	35	121	73	38	35	98	55	34.75	11.80	11.55	54.65	25.35	29.60	73	HRC54°±2°	10.1	2003-024