



Precision End Mill Grinder



PATENT



NEW

FAST EASY

**NO.2 FOR SECOND
RADIAL ANGLE 20°**

**ADJUST SCREW
FOR DULL OR SHARP**

**CHECKING STOCK
FOR CHECK END MILL
PARALLEL WITH
HOLDER UNIT**

**NO.3 FOR CUTTING
ANGLE 6° GRIND ALL
SURFACE OF END
MILL 6° TAIL**

**GRINDING STOCK
MADE OF CAST IRON**

**NO.1 FOR END MILL
FLAT SLOT ANGLE 30°**

**ORIGINAL
POINT**

VEG-13A

VEG-25A

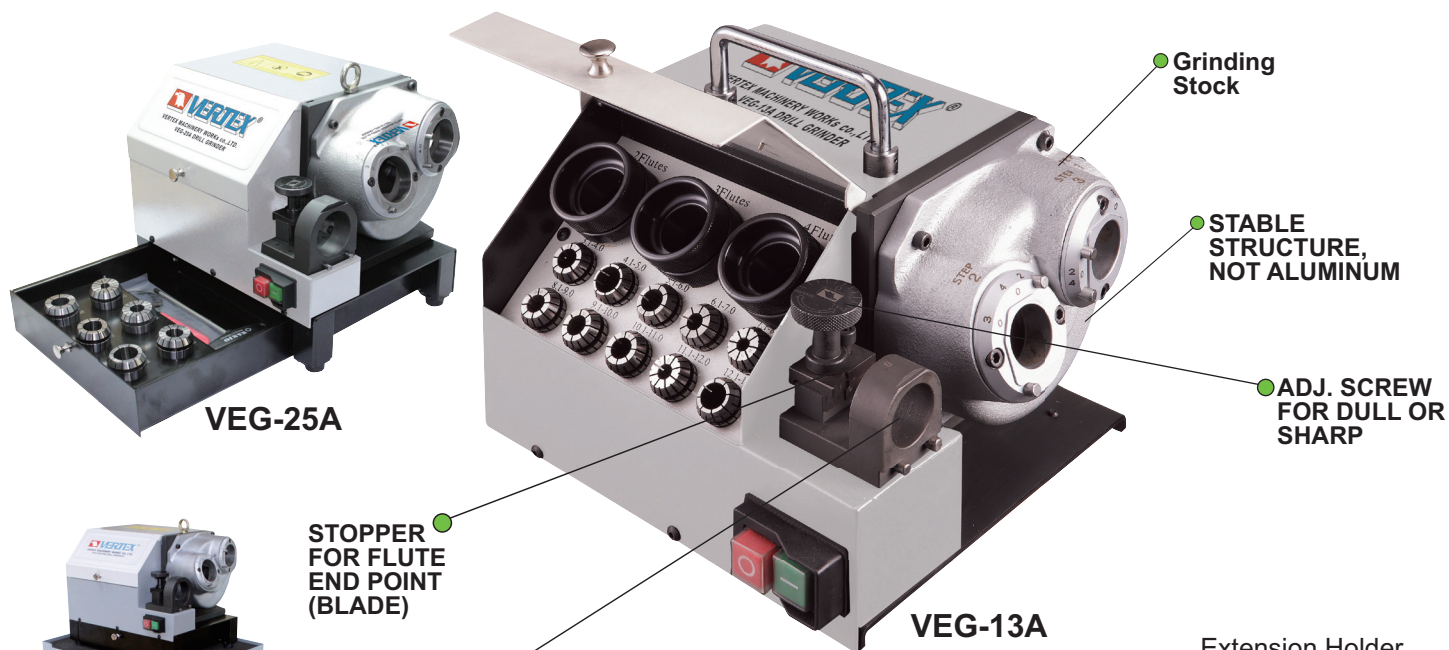
**For End Mill Re-sharpening, 2, 3, 4 Number Flute
Precision Efficient, Easy operation,
Short processing time, Grinding Diameter from 4-13 mm.
Reasonable Price, Fast, Rigid, Simplified Step**

1. High Efficiency, High Quality Grinding Slip, Good Grinding Results
2. Quality Assurance: $\pm 0.02\text{mm}$, Strong, Reliable, Grinding Stock Won't Bend.
3. Easy Operation, For Urgent Need, Low cost, Save Money

ORDER NO.	VEG-13A	VEG-25A
CAPACITY END MILL DIA.	$\varnothing 4 \sim \varnothing 13\text{mm}$	$\varnothing 12 \sim \varnothing 25\text{mm}$
MOTOR	300W	500W
SPEED	4300rpm	4300rpm
POWER	AC-110 or 220 1PH 50/60HZ	AC-110 or 220 1PH 50/60HZ
AXIAL-ANGLE	NO.1 END MILL FLAT SLOT ANGLE 30° NO.2 SECOND RADIAL ANGLE 20° NO.3 CUTTING ANGLE 6°	NO.1 END MILL FLAT SLOT ANGLE 30° NO.2 SECOND RADIAL ANGLE 20° NO.3 CUTTING ANGLE 6°
STANDARD ACCESSORIES	ALLOY STEEL COLLET ER-20 COLLET: $\varnothing 4, 5, 6, 7, 8, 9, 10, 11, 12, 13\text{mm}$ 10 pcs/set WRENCH:1PC SDC 300 x1 For $\varnothing 4 \sim \varnothing 6\text{mm}$ SDC 270 x1 For $\varnothing 7 \sim \varnothing 13\text{mm}$ Square Type For 4 Flutes End Mill x 1 Set Hex. Type For 3 Flutes End Mill x 1 Set Parallel Type For 2 Flutes End Mill x 1 Set $\varnothing 4 \sim \varnothing 5, \varnothing 6 \sim \varnothing 8, \varnothing 10 \sim \varnothing 12\text{mm}$ EXTENSION HOLDER FOR EACH ONE.	ALLOY STEEL COLLET ER-40 COLLET: $\varnothing 12, 16, 18, 20, 22, 25\text{mm}$ 6 pcs/set WRENCH:1PC SDC 150 x1 For $\varnothing 12 \sim \varnothing 25\text{mm}$ CBN 150 x1 For $\varnothing 12 \sim \varnothing 25\text{mm}$ Square Type For 4 Flutes End Mill x 1 Set Hex. Type For 3 Flutes End Mill x 1 Set Parallel Type For 2 Flutes End Mill x 1 Set
PACKING SIZE	320x260x300mm	365x293x345mm
WEIGHT (kg)	17	31
CODE NO.	8001-510A	8001-520A

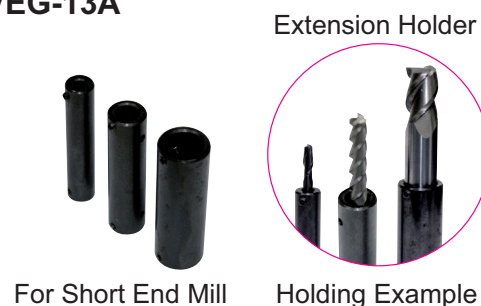


Precision End Mill Grinder



Stand Example

VTC-20
3405-221
PAGE C140

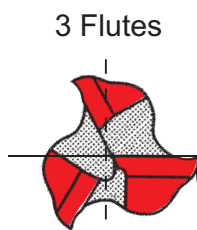


For Short End Mill

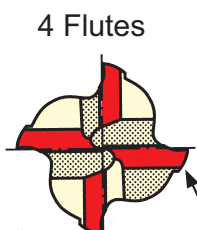
Holding Example



2 Flutes



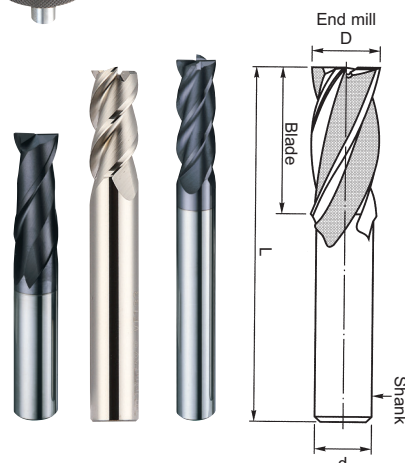
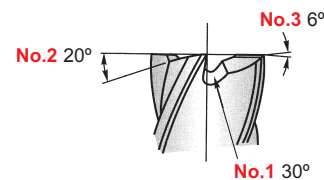
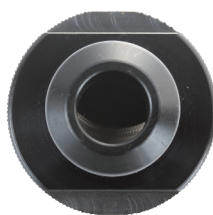
3 Flutes



4 Flutes

LONG BLADE FOR ORIGINAL POINT CHECKING

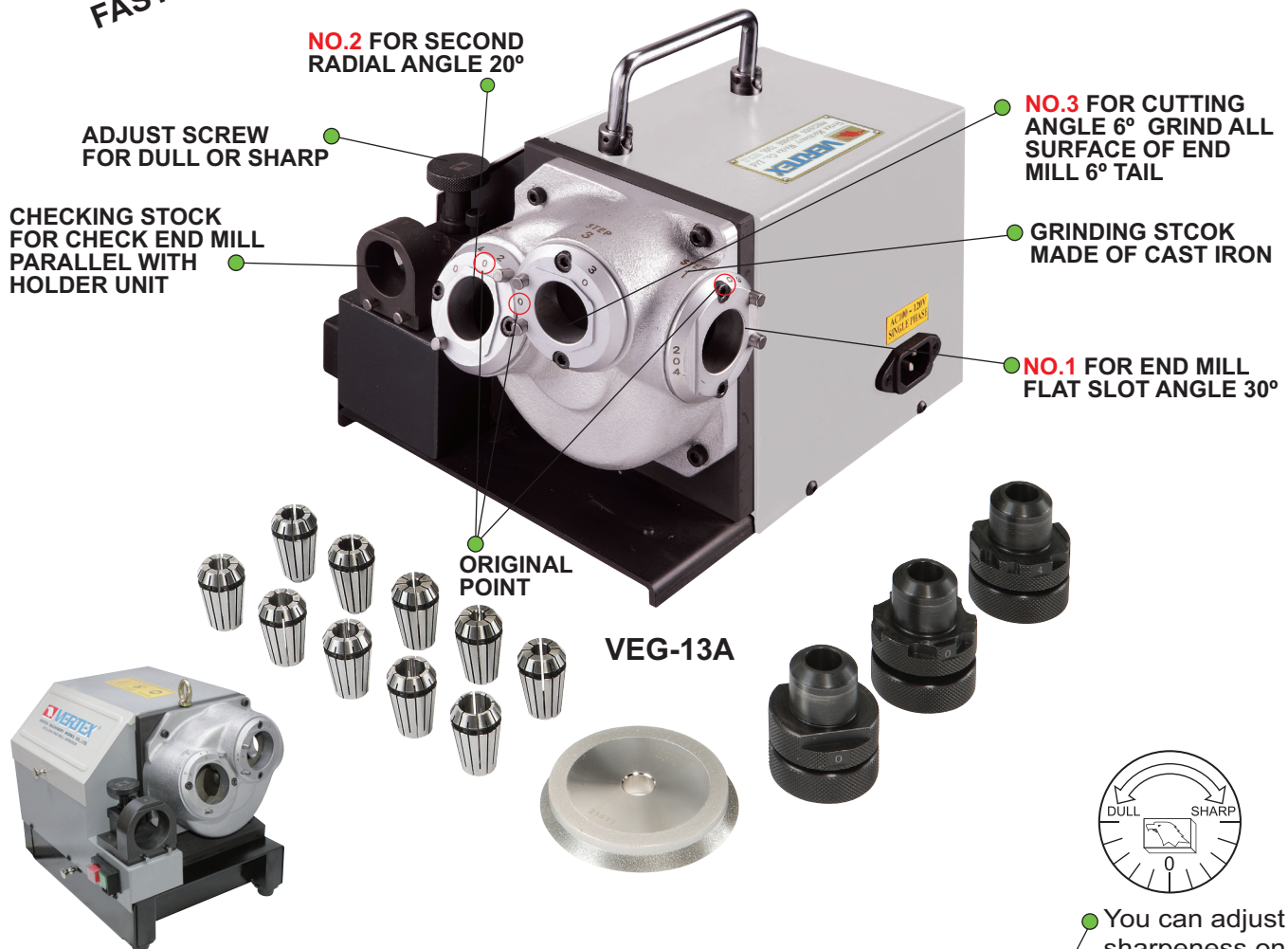
LONG BLADE FOR ORIGINAL POINT CHECKING



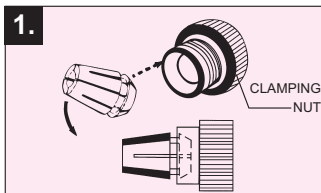
Optional Accessories

※ Each holder unit has mark 2, 3 and 4 on it.

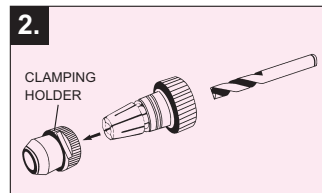
ORDER NO.	Grind Wheel	FOR END MILL MATERIAL	Weight (kg)	CODE NO.
VEG-13BS	CBN 300 x1 For $\phi 4 \sim \phi 6$ mm	H.S.S.	0.35	8001-511A
VEG-13BL	CBN 270 x1 For $\phi 7 \sim \phi 13$ mm	H.S.S.	0.35	8001-512A
VEG-13DS	SDC 300 x1 For $\phi 4 \sim \phi 6$ mm	CARBIDE	0.35	8001-514A
VEG-13DL	SDC 270 x1 For $\phi 7 \sim \phi 13$ mm	CARBIDE	0.35	8001-515A
VEG-25BSV	CBN 150 x1 For $\phi 12 \sim \phi 25$ mm	H.S.S.		8001-516V
VEG-25DSV	SDC 150 x1 For $\phi 12 \sim \phi 25$ mm	CARBIDE		8001-517V


NEW
FAST EASY

VEG-25A

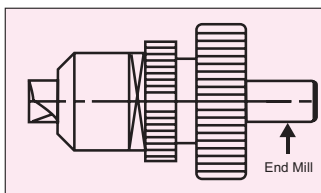
A. HOW TO INSTALL HOLDER UNIT FOR END MILL



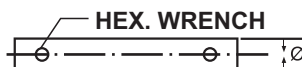
Please confirm the end mill size and pick up proper collet. Assemble collet into clamping nut by 45 degree. (Before insert the end mill into the clamping holder.)



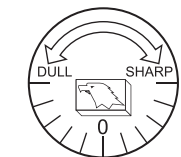
Insert the end mill, lock the clamping holder but not tightened, allow the end mill can still move. Insert the end mill, let the end mill blade length 35mm out, (don't tightened the clamping Holder)


HOLDER UNIT

Extension: To attach on the end mill allow you to rotate it when it's length is too short for setting.



● Stopper for flute end point (blade)



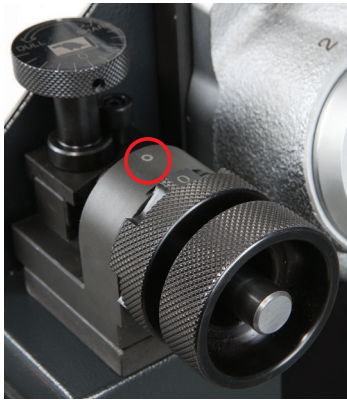
You can adjust the sharpness on the round plate, move toward dull and sharp mark.

PLEASE CHOOSE CORRECT WHEEL FOR GRINDING.
SDC300 MARK 4-6 mm
SDC270 MARK 7-13mm



B. HOW TO SET THE HOLDER UNIT AT THE CHECKING STOCK

(For length and angle setting)



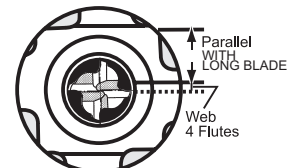
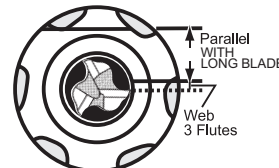
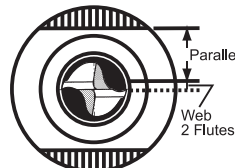
Original Point

- 1) Please make sure the blade of the end mill set in the position like we show below. Hold the end mill but not tight up. Always use 0 to check!
※ You can adjust the sharpness on the round plate, move toward dull and sharp mark.
- 2) Aim at 0 mark and insert holder unit into checking stock. Turn clockwise a little bit, make sure the blade is touching the stock, lock the holder now.
※ When take out the holder unit, please turn the round plate counter clockwise so you can take out smoothly.

CAUTION: 1 Make sure the web blade of drill is parallel to the slot of clamping holder.

2 When the end mill blade is broken, the first grind job please turn to the dull side. And grind 2 times in order to get perfect result.

3. While setting, please align the end mill long blade to be parallelized with holder unit slot.



C. HOW TO GRIND NO1. END MILL FLUTE SLOT ANGLE 30°



- 1) Aim the original point at hole on No1. to grind end mill Flute Slot Angle 30°
- 2) Insert the holder and touch against the No1. surface, until the grind noise is off.

※ Always begin with 0.

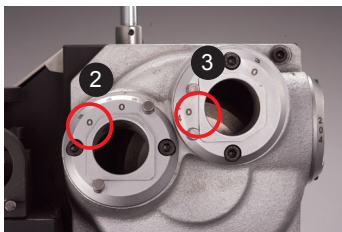
※ While grinding, please turn holder unit right and left a little, against pins.

- 3) (2 Flutes) Please insert and take out turn 180° and repeat step 1~2;
- (3 Flutes) Please insert and take out turn 120° and repeat step 1~2, two times;
- (4 Flutes) Please insert and take out turn 90° and repeat step 1~2, three times.

※ While grinding, holder unit shall touch / match most of the grinding stock and move smoothly.

※ Each holder will match each hole's pin, smart design.

D. HOW TO GRIND END MILL'S NO2. SECOND RIDIAL ANGLE 20° BACK ANGLE



- 1) Insert the Holder unit and aim the original point, touch the No2's surface until the grinding noise is off.

※ Always begin with 0.

※ While grinding, please turn holder unit right and left a little, against pins.

- 2) (2 Flutes) Please insert and take out turn 180° and repeat step 1~2;
- (3 Flutes) Please insert and take out turn 120° and repeat step 1~2, two times;
- (4 Flutes) Please insert and take out turn 90° and repeat step 1~2, three times.

E. HOW TO GRIND END MILL NO3. CUTTING ANGLE 6°



- 1) Place holder unit and aim at hole NO.3, touch the NO.3's surface until the grinding noise is off.

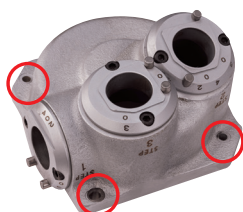
※ Always begin with 0.

※ While grinding, please turn holder unit right and left a little, against pins.

- 2) (2 Flutes) Please insert and take out turn 180° and repeat step 1~2;
- (3 Flutes) Please insert and take out turn 120° and repeat step 1~2, two times;

(4 Flutes) Please insert and take out turn 90° and repeat step 1~2, three times.

F. HOW TO CHANGE GRIND WHEEL



1 Use 4mm Hex. Wrench, take out 4 screws of grinding stock, remove the grinding stock.

2 Take out the locking screw of the grind wheel and remove the grind wheel.

3 Replace the old one with a new grind wheel.

4 Lock back the screw, install the grinding stock and lock 3 screws.

※ When grind $\varnothing 4 \sim 6\text{mm}$ please use correct diamond wheel.
 $\varnothing 7 \sim 13\text{mm}$

CAUTION: When open, please **un-plug** the power core.



Rods Cutting-Off Unit

MACHINE FOR END MILL AND DRILL CUTTING



VERTEX®

NEW

Simple !

Fast !

Efficient!

Safely & Efficiently Cutting

Speed Reference: For

Carbide End Mill

10 ϕ → 58 sec

16 ϕ → 103 sec

For H.S.S. End Mill

10 ϕ → 63 sec

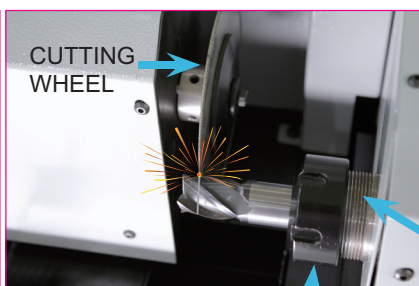
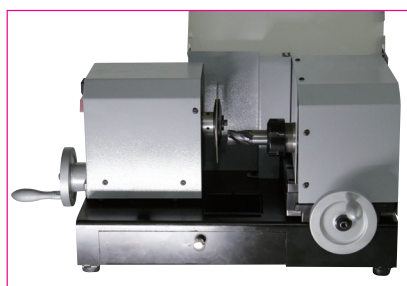
16 ϕ → 113 sec

ADJUSTABLE X-AXIS
FOR MAKE SURE
CUTTING LENGTH

ADJUSTABLE Y-AXIS FOR
CUTTING OFF DIAMETER

FOR END MILL OR RODS CUT

THROUGH
HOLE ϕ 11



CUTTING
WHEEL

TURNING
SPINDLE

ER-32
CLAMPING HOLDER
11 PCS/SET COLLET
CUTTING CAPACITY ϕ 2- ϕ 20
THROUGH HOLE ϕ 11

1. Turning cutting wheel.
2. Turning workholding spindle.
3. After power is ON cutting wheel & workholding spindle are both turning.
4. Save time & reduce the 50% of the process, wheel & workpiece are turning at the same time while power is on.
5. Reduce the heating while cutting prevent material deformation.
6. Suit for Pin & Rod cutting.
7. Cutting Capacity: ϕ 2 to ϕ 20 diameter inside ϕ 11 mm trough hole. Max. cutting off length : 45 mm.
8. For end mill, drill, enjector pin, rods, round bar, etc.
9. Suit for material: CARBIDE, H.S.S., STEEL, BRASS, ALUMINIUM, IROM, etc. Please choose suitable wheel.
10. Turn off power to take out cuted-off workpiece after work is finished.
11. This rod cutting-off unit is not for massive production.
If you need a cutting machine, please choose VEC-300G~600G series.
12. Rod cutting-off unit cannot be used for long period of time.
Please wait 30 minutes for rod cutting-off unit to cool down.
13. After continue cutting for 30 minutes, please do take A 10 minutes rest.
14. When turning handle, cutting with slow motion only.
15. For example, it takes 58 sec. To cut A 10 mm carbide rod & 63 sec. For 10 mm hss rod.
16. This is not a lathe machine for heavy duty.

Standard accessories:

1. ER-32 collet \times 11 pcs
(ϕ 4, 5, 6, 8, 10, 12, 13, 15, 16, 18, 20 mm)
2. ER-32 wrench \times 1 pc
3. SDC # 100 diamond wheel ϕ 110 \times ϕ d16 \times 1.36t \times 1 pcs
4. Cutting-Off wheel E60WA ϕ 105 \times ϕ d16 \times 1t \times 5 pcs
5. 4 mm HEX. Wrench \times 1 pcs
6. ER-32 Collet ϕ 2, 3, 7, 9, 11, 14, 17, 19 mm are optional.

ORDER NO.	VOLTAGE	PACKING CARTON L \times W \times H	WEIGHT (KGS)	CODE NO.
VEC-20	AC110V, 220V / 50 HZ / 60HZ	530 x 352 x 260 mm	45.5	8001-540