DRILL GRINDER & END MILL RE-SHARPENER

EASY FAST PRECISION

DRILL GRINDER

EDG-213N
(ϕ2mm-ϕ13mm)

END MILL RE-SHARPENER

EMG-413
(ϕ4mm-ϕ13mm)

SG DRILL GRINDER

EDSG-313
(ϕ3mm-ϕ13mm)

DRILL GRINDER

EDG-1226N
(ϕ12mm-ϕ26mm)

END MILL RE-SHARPENER

EMG-1225
(ϕ12mm-ϕ25mm)

Easy to operate, no experience required for grind a precision drill.

ISO 9001:2000 SGS UKAS QUALITY MANAGEMENT 005

ECE EARTH-CHAIN

Power that works.

2009/02

DRILL GRINDER

(EASY FAST PRECISION)

10 Seconds for grind a precision drill in a experter

EDG-1226N

(φ12mm-φ26mm)

15pcs ER Collet

EDG-213N

(φ2mm-φ13mm)

12pcs ER Collet

CBN Wheel

Easy to operate, no experience required for grind a precision drill.

Model No.	EDG-213N
Capacity	φ2mm ~ φ13mm
Drill Angle	90° ~ 135°
Grinding Wheel	CBN#200 (For Hss Drill)
Motor	1/3HP 250W
Power Supply	AC110V / AC220V Single Phase
R.P.M	5500 R.P.M.
Weight	8.5kg

Standard Accessories

ER collets φ2mm ~ φ13mm(12pcs)
CBN Wheel #200×1pc(For Hss drill)
Hexagon Wrench 4mm×1pc 5mm×1pc

Option Accessories

Order No.	Description
EDG-213N-1D	SDC Wheel #400(For Carbide drill)
EDG-213N-1C	CBN Wheel #200(For HSS drill)
EDG-213N-2C	CBN Wheel #400 (For HSS drill under φ 5mm)

Model No.	EDG-1226N
Capacity	φ12mm ~ φ26mm
Drill Angle	90° ~ 135°
Grinding Wheel	CBN#150 (For Hss Drill)
Motor	1/2HP 450W
Power Supply	AC110V / AC220V Single Phase
R.P.M	4500 R.P.M.
Weight	26kg

Standard Accessories

ER collets φ12mm ~ φ26mm(15pcs)
CBN Wheel #150×1pc(For Hss drill)
Hexagon Wrench 4mm×1pc 6mm×1pc

Option Accessories

Order No.	Description
EDG-1226N-1D	SDC Wheel #200(For Carbide drill)
EDG-1226N-1C	CBN Wheel #150(For HSS drill)

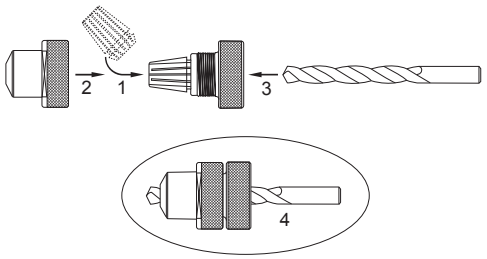
NEW Design

Collet Holder : bearing assembled
(More easy & convenient for tighting)

Grinding Base : bearing assembled
(More precision and stable for grinding)

OPERATIONS

1.



2.

3.

4.

5.

6.

1.Set up the drill to the collet holder.

Follow up the Steps I,2,3,4 for set up the drill to the collet holder . (without tighting) ***as shown on diagram #1

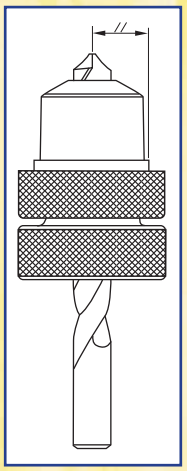
2.Set up the diameter of dril

①Turn right the scale annulus to be "0" position
②Adjust the scale to meet the diameter of the drill.
***as shown on diagram #2

3.Set up the drill to the grinding position

Insert the collet holder with drill and turn right, then tight the drill by collet holder for set up the grinding position. ***as shown on diagram #3

Attn : The scale annulus maybe not exact for the drill diameter, because of used drill or different model of drill any how, please always check the center edge of drill must be parallel with the gap of " Collet Holder" ***as shown on the right diagram.



4.Grind the drill tip

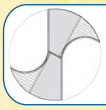
①Turn on the power of the grinder.
②Insert the collet holder with drill and push to the grinding wheel slowly, then move left and right repeatedly to sharpen the drill until the grinding sound disappeared.
③Take out the collet holder with drill and change to the other side to grind again in same way as above mentioned.
***as shown on diagram #4

5.Center Point Grinding Base adjusting

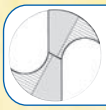
Adjust the center point grinding base to the suitable position. Turn right for bigger, turn left for smaller.
***as shown on diagram #5

6 . Grind the center point of drill

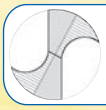
①Insert the collet holder with drill and push to the grinding wheel slowly, then move left and right repeatedly to grind the center point of drill until the grinding sound disappeared .
②Take out the collet holder with drill and change to the other side to grind again in same way as above mentioned.
***as shown on diagram #6



The center point suitable for hard steels . . .etc hard materials.



The center point suitable for general materials such as iron, general steel and brass. ..etc.



The center point suitable for soft materials such as copper, aluminum, plastic.. .etc.

***Please clean the grinding chip often for avoid the chip scrape to the grinding base and keep using life.

GR DRILL GRINDER

(EASY FAST PRECISION)

Setting(drill) base

11pcs ER collet

CBN Wheel

EDSG-313

(ϕ3mm-ϕ13mm)

Easy to operate, no experience required for grind a precision drill.

Model No.	EDSG-313	Motor	200W
Capacity	ϕ3mm ~ ϕ13mm	R.P.M.	4500 R.P.M.
Drill Angle	135°	Weight	12.8 kg
Power Supply	AC110V / AC220V Single Phase 50Hz/60Hz	Grinding Wheel	CBN#250
Standard Accessories			
ER collets ϕ3mm ~ ϕ13mm (11pcs)			
CBN Wheel#250×1pc and #400×1pc(For Hss drill)			
Hexagon Wrench 4mm×1 pc, 5mm×1 pc			

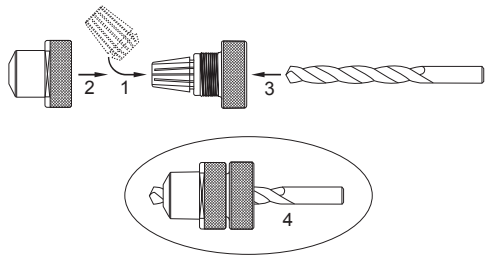
NEW Design

Collet Holder : bearing assembled
(More easy & convenient for tighting)

This machine is guaranteed for one year under normal operating
(expendable parts and wheels are exceptions)

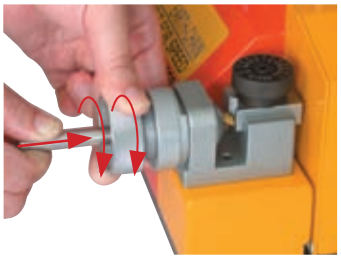
OPERATIONS

1.

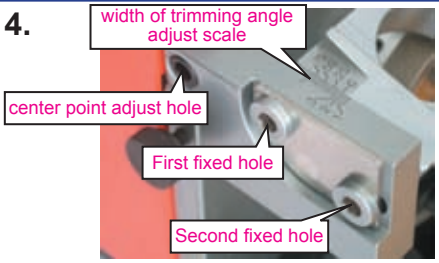


2.

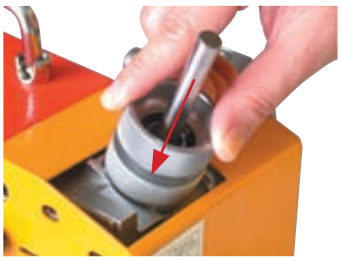
3.



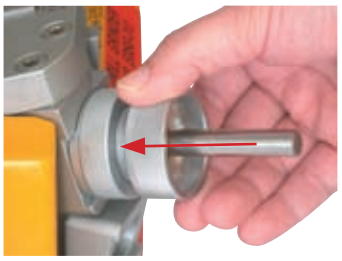
4.



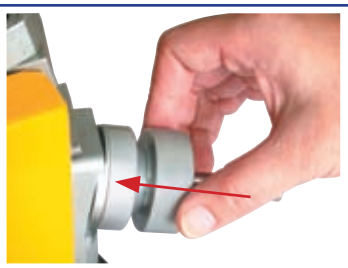
5.



6.



7.

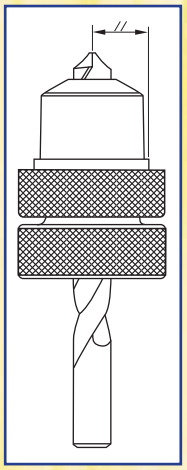


1. Set up the drill to the collet holder.

Follow up the steps 1,2,3,4 for set up the drill to the collet holder. (without tightening) ***as shown on diagram #1

2. Set up the diameter of drill

①Turn right the scale annulus to be "0" position
②Adjust the scale to meet the diameter of the drill.
***as shown on diagram #2



3. Set up the drill to the grinding position.

Insert the collet holder with drill and turn right, then tighten the drill by collet holder for set up the grinding position. ***as shown on diagram #3

Attn : The scale annulus maybe not exact for the drill diameter, because of used drill or different model of drill. Any how, please always make sure the center edge of drill must be parallel with the gap of "Collet Holder" ***as shown on the right diagram

4. Adjust the center point of drill and width of trimming angle.

①Confirm the drill diameter first and check the suggested trimming angle (See trimming angle table at right side). Loosen the second fixed hole, then loosen the first fixed hole. Set the scale to the required diameter (scale gauge measuring same as caliper's). Reverse steps to tighten the fixed holes to grind.
② Adjust the center point to the suitable position. Turn right for bigger, turn left for smaller. ***as shown on diagram #4

TYPE	Trimming angle(mm)
3mm	0.50
4mm	0.50
5mm	0.75
6mm	1.00
7mm	1.25
8mm	1.50
9mm	2.00
10mm	2.00
11mm	2.25
12mm	2.50
13mm	2.50

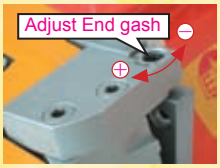
Trimming angle table

5. Grind the center point of drill

①Insert the collet holder with drill and push to the grinding wheel slightly to grind the center point of drill until the grinding sound disappeared.
②Take out the collet holder with drill and change to the other side to grind again in same way as above mentioned.
***as shown on diagram #5

6. Grind the secondary clearance angle of drill

①Insert the collet holder with drill to the secondary clearance angle grinding port and push to the grinding wheel slowly to grind the secondary clearance angle of drill until the grinding sound disappeared.
②Take out the collet holder with drill and change to the other side to grind again in same way as above mentioned.
③Adjust the end gash to the suitable position. Turn right for smaller, turn left for bigger.
***as shown on diagram #6



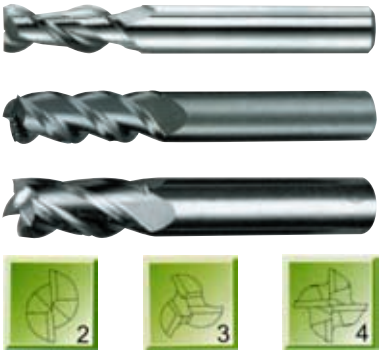
7. Grind the end gash of drill

①Insert the collet holder with drill to the end gash grinding port and push to the grinding wheel slowly to grind the end gash until the grinding sound disappeared.
②Take out the collet holder with drill and change to the other side to grind again in same way as above mentioned.
***as shown on diagram #7

Note: ①Please always clean the grinding dust after grinding and do maintenance to avoid the dust scrape the grinding base, and to extend the usage life.
②Do not keep the motor run continuously over 1 hour.

END MILL RE-SHARPENER

(EASY FAST PRECISION)



For 2,3, and 4 flutes END MILL

EMG-1225

(ϕ12mm-ϕ25mm)

6 pcs ER collets
2 pcs collet holders

SDC Wheel forψ4mm-ψ5mm
2 pcs SDC Wheels included

EMG-413

(ϕ4mm-ϕ13mm)

10 pcs ER collets
2 pcs collet holders

SDC Wheel for ϕ4mm-ϕ5mm

SDC Wheel for ϕ6mm-ϕ13mm

2 pcs SDC Wheels included (For carbide End Mill only)

END MILL RE-SHARPENER

(EASY FAST PRECISION)

Model NO.	EMG-413	EMG-1225
Capacity	ϕ4mm - ϕ13mm	ϕ12mm - ϕ25mm
Drill Angle	6° 20° 30°	
Grinding Wheel	SDC Wheel #300 for ϕ4mm-ϕ5mm	CBN #150x1PC
	SDC Wheel #300/#120 for ϕ6mm-ϕ13mm	SDC #150x1PC
Motor	3/4 HP 450W	1000W
R.P.M.	6000 R.P.M.	4300 R.P.M.
Power Supply	AC110V or AC220V Single Phase	
Weight	17 KGS	31 KGS

Order No. EMG-413ER

Order No. EMG-1225ER

ER collets

Standard Accessories

Model NO.	EMG-413	EMG-1225
ER collets	ϕ4mm - ϕ13mm × 10pcs	ϕ12mm - ϕ25mm × 6pcs
SDC Wheel	#300 × 1pcs (ϕ4mm--ϕ5mm)	CBN #150x1PC
SDC Wheel	#300 #120 × 1pcs (ϕ6mm--ϕ13mm)	SDC #150x1PC
Collet Holder	1pc(for 2 and 4 flutes End Mill)	1pc(for 2 and 4 flutes End Mill)
Collet Holder	1pc(for 3 flutes End Mill)	1pc(for 3 flutes End Mill)
Hexagon Wrench	4mm × 1pc	4mm × 1pc

for 3 flutes End Mill — for 2 and 4 flutes End Mill

Order No.

EMG-413-H1 EMG-413-H2

for 3 flutes End Mill — for 2 and 4 flutes End Mill

Order No.

EMG-1225-H1 EMG-1225-H2

collets Holder

Option Accessories

Model NO.	Description
EMG-413-1D	SDC Wheel #300 (for ϕ4mm-ϕ5mm)
EMG-413-2D	SDC Wheel #300/#120 (for ϕ6mm-ϕ13mm)
EMG-413-1C	SBN Wheel #300 (for ϕ4mm-ϕ5mm)
EMG-413-2C	SBN Wheel #300/#120 (for ϕ6mm-ϕ13mm)
EMG-1225-1D	SDC Wheel #150
EMG-1225-1C	SBN Wheel #150

***SDC Wheel for carbide End Mill.
***CBN Wheel for HSS End Mill.

EMG-413-1D **or** ***EMG-413-1C*** — ***EMG-413-2D*** **or** ***EMG-413-2C***

EMG-1225-1C EMG-1225-1D

SDC and CBN Wheel