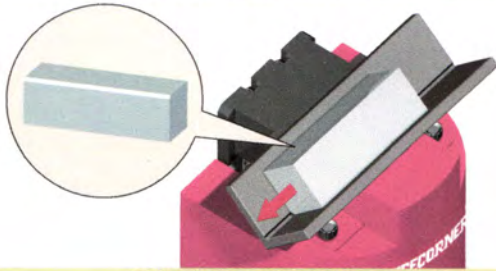




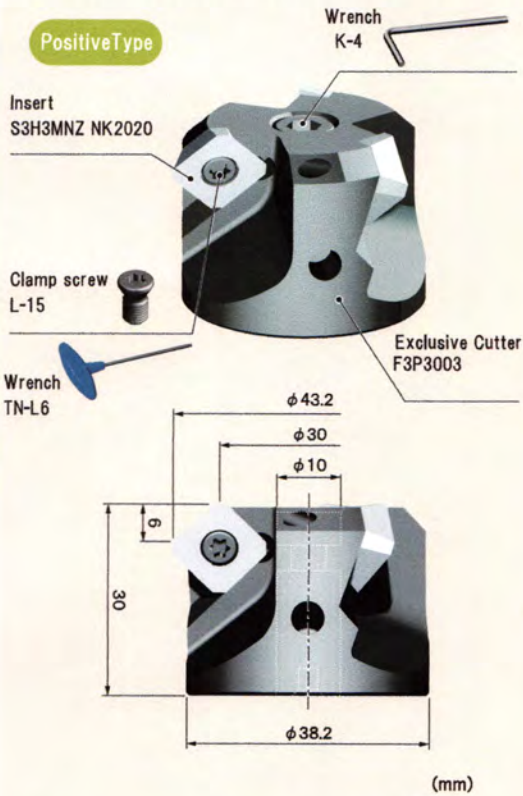
Corner Chamfering Process



Slight-chamfering to C3(3mm)
※ Depending on work material.

3-blades Exclusive Cutter built in(Standard)

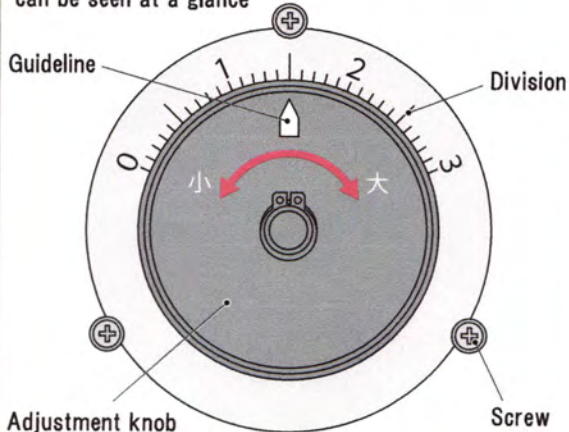
Positive Type



※ In case you need cutter only, please order insert separately

Adjustment knob

Easy adjustment by chamfering amount notation can be seen at a glance



- Realized high speed cutting with 8000 rpm
- You can find chamfering amount with a single glance and can adjust chamfering amount simply
- Chamfer processing without scratching materials can be realized by using linear slide guide (Option)



BODY

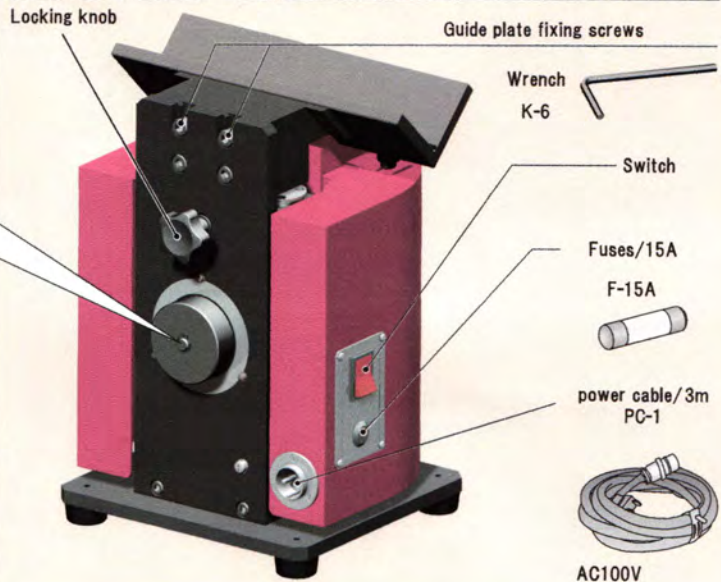
Model number	Fixed plate F3	Fixed plate (thin plate) F3-250T	Slide plate F3-400S	Slide plate (thin plate) F3-400ST
Power Supply	AV100Vor120V/240V	AV100Vor120V/240V	AV100Vor120V/240V	AV100Vor120V/240V
Rotation speed	8,000r.p.m.	8,000r.p.m.	8,000r.p.m.	8,000r.p.m.
Dimension	W230×D250×H327	W230×D250×H327	W230×D400×H362	W230×D400×H362
Weight	23(Except power cable)	23(Except power cable)	28(Except power cable)	28(Except power cable)
Guide plate	F3L-250	F3L-250T	F3S-400	F3S-400T
Insert	S3H3MNZ NK2020	S3H3MNZ NK2020	S3H3MNZ NK2020	S3H3MNZ NK2020



When mounting or replacing inserts, poor accuracy and breakage of inserts may occur due to reserve tightening and/or the eccentric locking system

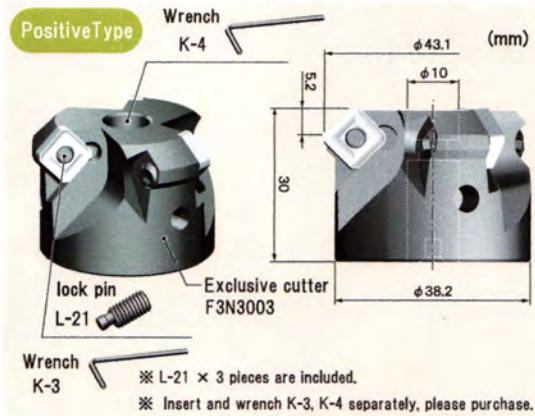
List of Standard Accessories

Product Name	Model number	Quantity
Exclusive cutter	F3P3003	1
Clamp screw	L-15	3
Wrench	K-4 / K-6 / N-6	One each
Fuses	F-15A	1 (one spare)
power cable	PC-1	1
Insert	S3H3MNZ NK2020	3



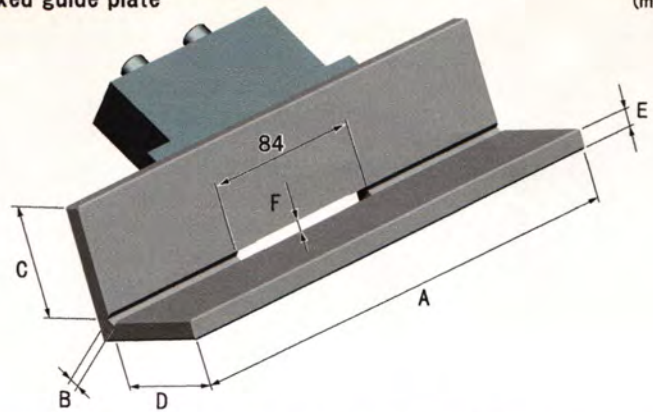
Exclusive Cutter (Options)

3Blade



Fixed guide plate

(mm)



Model number	A	B	C	D	E	F	Maximum possible plate length	Maximum possible thickness	Maximum C chamfer
F3L-250	250mm	5mm	55mm	55mm	10mm	5.5mm	—	6mm or more	MAX C3
F3L-250T	250mm	2mm	55mm	55mm	10mm	2mm	—	2.5mm or more	MAX C1

Exclusive use Electrodeposition grindstone (Options)



Subject cuttings	Model number
Ceramics General	F3T DIA
Glasses General	
Carbide material	
HSS Hardness	F3T CBN
HRC45 or more of steel	

Applicable Insert

Workpiece material	Recommended Insert	
	P-Type	N-Type
General steel	S3H3MNZ NK2020	S32MOZ NK2001
Alloy steel,SKD,SCM	S3H3MNZ NK2020	S32MOZ NK2001
Aluminum,resin,brass	S3H3GNZ NK1010	S32GUR NK1010
Cast steel,FC,FCD	S3H3GNZ NK1010	S32MOZ NK1010

※ In case of Stainless Steel materials,blade retention time may become Short

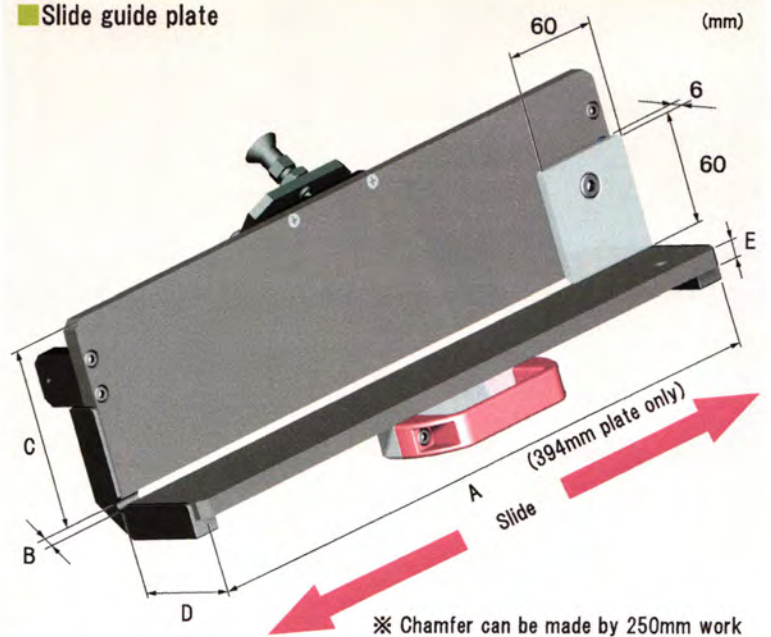
Insert

Figure	Model number	Material	Blade shape	Coating	Usable corners	Quantity per box
<p>PositiveType</p> <p>(S3H3MNZ)(S3H3GNZ)</p> <p>25°</p> <p>8.2</p> <p>11.906</p> <p>4.4</p> <p>15°</p> <p>R</p> <p>(Except nose R)</p>	S3H3MNZ NK2001	Cermet	Honing edge	None	4	12
	S3H3GNZ NK1010	Carbide K10	Sharp edge	None	4	12
	S3H3MNZ NK2020	Carbide M20	Honing edge	None	4	12
	S3H3MNZ NK6060	Carbide M20	Honing edge	TiAlN	4	12
	S3H3GNZ NK9090	Carbide K10	Sharp edge	None	4	12
	S3H3MNZ AC15D	Fine particles Carbide	Honing edge	AlCrN	4	12

⚠ Insert details for N-type F3N3003, please refer to P.86.

Slide guide plate

(mm)



Model number	A	B	C	D	E	F	Maximum possible plate length	Maximum possible thickness	Maximum C chamfer
F3S-400	400mm	5mm	100mm	60mm	10mm	5mm	250mm	6mm or more	MAX C3
F3S-400T	400mm	2mm	100mm	60mm	10mm	2mm	250mm	2.5mm or more	MAX C1



Corner Rounding Process



R1 to R=3(mm)
※ Depending on work material.

Corner Chamfering Process



Slight-chamfering to C3(3mm)
※ Depending on work material.

- Realized high speed cutting with 8000 rpm
- You can find chamfering amount with a single glance and can adjust chamfering amount simply
- Chamfer processing without scratching materials can be realized by using linear slide guide (Option)



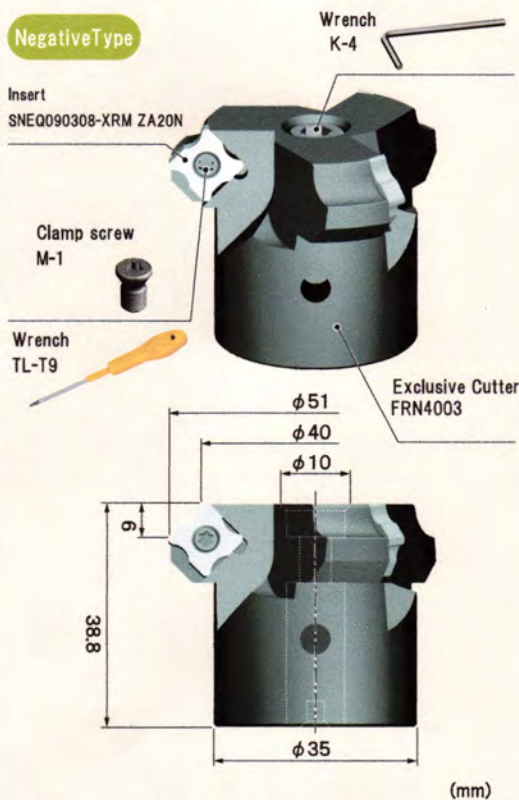
Guide plate

Shooter

Exhaust port newly designed eliminates Chip(powders) from machine(Body)

3-blades Exclusive Cutter built in(Standard)

Negative Type



BODY

Model number	Fixed plate	Slide plate
	FR	FR-400S
Power Supply	AV100V or 120V/240V	AV100V or 120V/240V
Rotation speed	8,000r.p.m.	8,000r.p.m.
Dimension	W240 × D250 × H360	W290 × D400 × H400
Weight	27kg(Except power cable)	32kg(Except power cable)
Guide plate	FRL-250	FRS-400
Insert	SNEQ090308-XRM ZA20N	SNEQ090308-XRM ZA20N



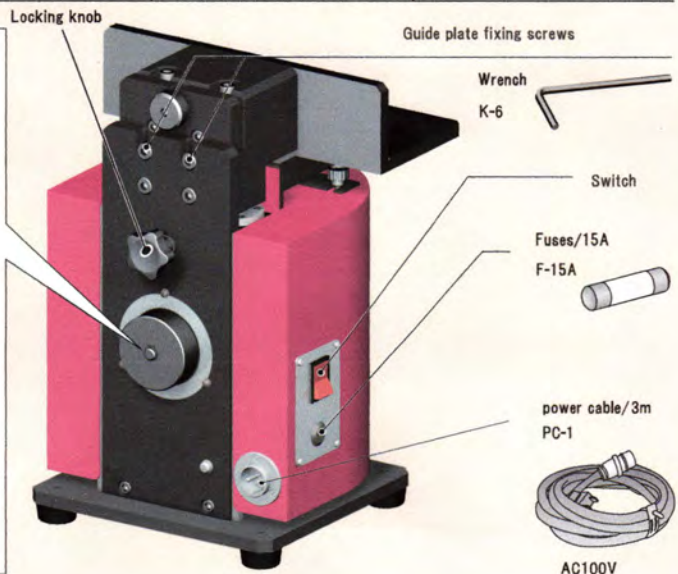
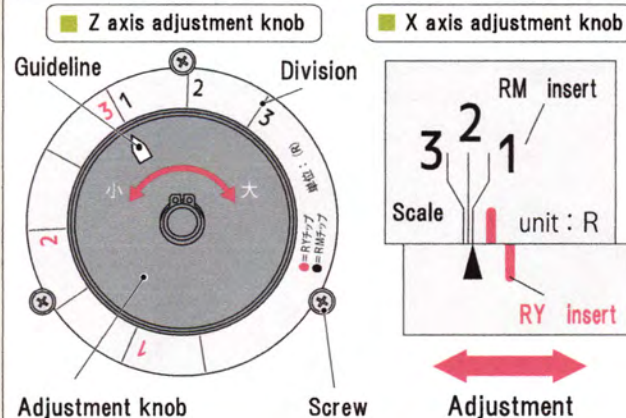
When mounting or replacing inserts, poor accuracy and breakage of inserts may occur due to reserve tightening and/or the eccentric locking system

List of Standard Accessories

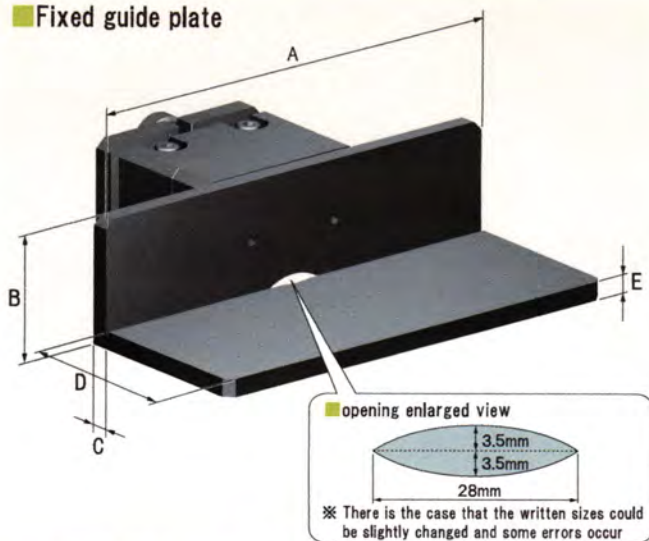
Product Name	Model number	Quantity
Exclusive cutter	FRN4003	1
Clamp screw	M-1	3
Wrench	K-4 / K-6 / TL-T9	One each
Fuses	F-15A	1 (one spare)
Power cable	PC-1	1
Insert	SNEQ090308-XRM ZA20N	3

※ In case you need cutter only, please order insert separately

Adjustment of R (C) chamfering amount in two division has been simplified.



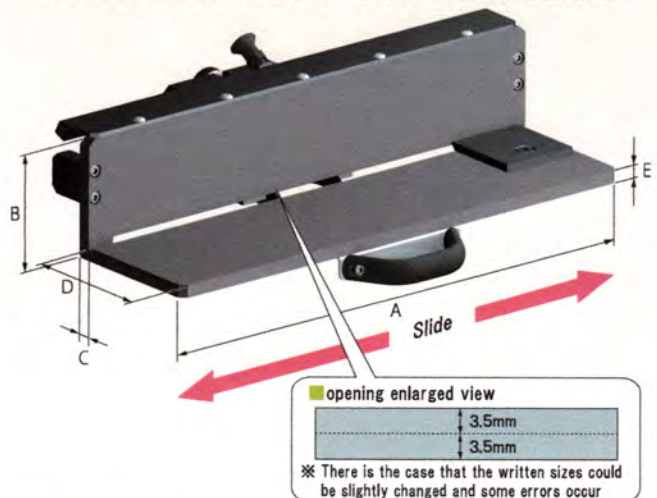
Fixed guide plate



Model number	A	B	C	D	E	Maximum C chamfer	Maximum R chamfer
FRL-250	250mm	70mm	10mm	100mm	10mm	MAX C3	MAX R3

※ workable thickness will be more than 4mm.

Slide guide plate ※ Chamfer can be made by 250mm work



Model number	A	B	C	D	E	Maximum C chamfer	Maximum R chamfer
FRS-400	400mm	90mm	10mm	105mm	10mm	MAX C3	MAX R3

※ workable thickness will be more than 4mm.

Applicable Insert

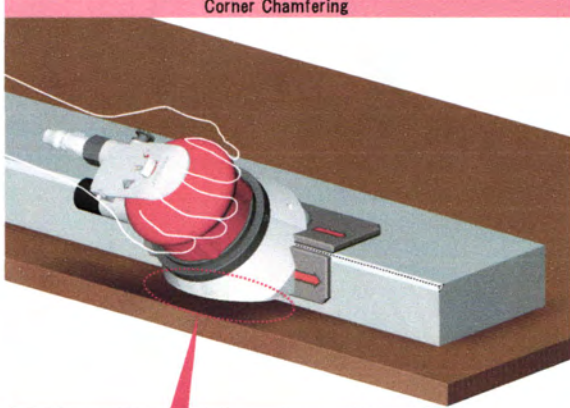
Workpiece material	Recommended Insert	
	For R chamfering	For C chamfering
General steel	SNEQ090308	S32MOZ NK2001
Alloy steel,SKD,SCM	SNEQ090308	S32MOZ NK2001
Aluminum,resin,brass	SNEQ090308	S32GUR NK1010
Castings,FC,FCD	SNEQ090308	S32MOZ NK1010

※ In case of Stainless Steel materials,blade retention time may become Short

Insert

Figure	Model number	Material	Blade shape	Coating	Usable corners	Quantity per box
	SNEQ090308-1RY ZA20N	Carbide M20	R1·2·3·4	None	4	12
	SNEQ090308-2RY ZA20N	Carbide M20	The Same R Each corner	None	4	12
	SNEQ090308-3RY ZA20N	Carbide M20	The Same R Each corner	None	4	12
	SNEQ090308-XRY ZA20N	Carbide M20	The Same R Each corner	None	4	12
	SNEQ090308-1RM ZA20N	Carbide M20	The Same R Each corner	None	8	12
	SNEQ090308-2RM ZA20N	Carbide M20	The Same R Each corner	None	8	12
	SNEQ090308-3RM ZA20N	Carbide M20	The Same R Each corner	None	8	12
	SNEQ090308-XRM ZA20N	Carbide M20	R1·2·3·4	None	8	12
	S32MOZ NK2001	Cermet	Honing edge	None	8	12
	S32MOZ NK2050	Cermet	Honing edge	None	8	12
	NEW S32MOZ AB01F	Cermet	Honing edge	AICrN	8	12
	S32MOZ NK1010	Carbide K10	Sharp edge	None	8	12
	S32MOZ NK2020	Carbide M20	Honing edge	None	8	12
	S32MOZ NK3030	Carbide M20	Honing edge	TiN	8	12
	S32MOZ NK6060	Carbide M20	Honing edge	TiAlN	8	12
S32MOZ AC15T	Fine particles Carbide	Honing edge	AICrN	8	12	
	S32GUR NK2001	Cermet	Honing edge	None	8	12
	S32GUR NK1010	Carbide K10	Sharp edge	None	8	12
	S32GUR NK2020	Carbide M20	Honing edge	None	8	12
	S32GUR NK3030	Carbide M20	Honing edge	TiN	8	12
	S32GUR NK5050	Carbide K10	Sharp edge	TiN	8	12
	S32GUR NK6060	Carbide M20	Honing edge	TiAlN	8	12
S32GUR NK8080	Carbide K10	Sharp edge	TiAlN	8	12	

Corner Chamfering



This corner designed do not touch the bottom

Specification

Air Pressure	0.49~0.68MPa(5~7kg/cm ²)
Non-Load Rotational	10,000r.p.m.
Air Consumption	0.19m ³ /min
Capacity	~C4
Work Thickness	more than 6mm
Weight	2kg

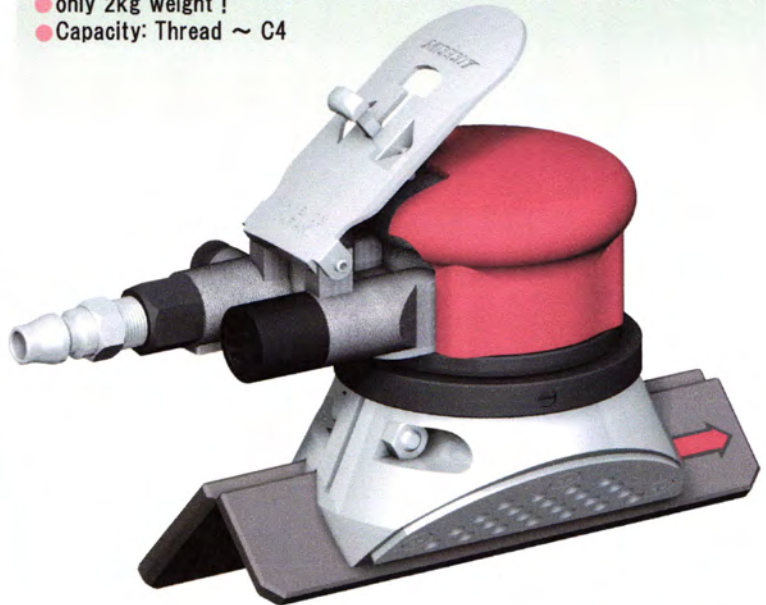
Processing Example

[Chamfering of one corner per 20m in the processing of 1C]

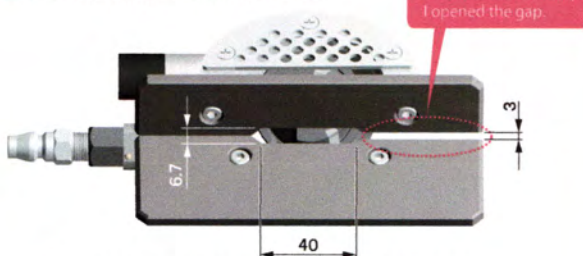
- Insert : SDM11T4AFEN12 ZA20D
- Material..... SUS304

Unique and advanced
Air operated Portable
Handy Chamfering machine !

- only 2kg weight !
- Capacity: Thread ~ C4

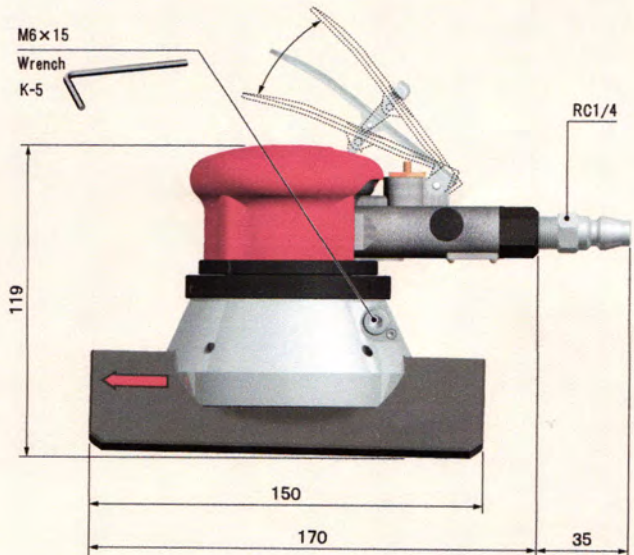
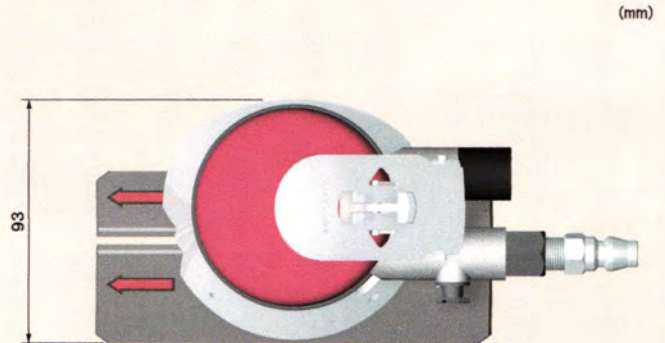
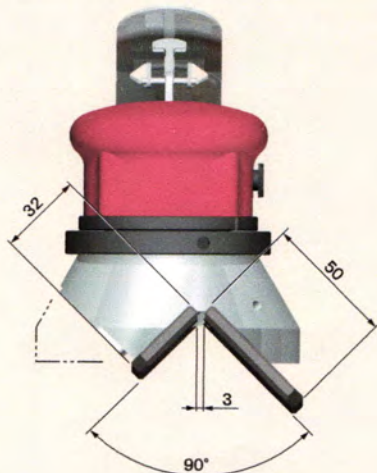


The Openings Enlarged Photo



For burr-removal, we make a space Cutter area of Guide Plate groove is widen

※ The dimension could be little different



(mm)

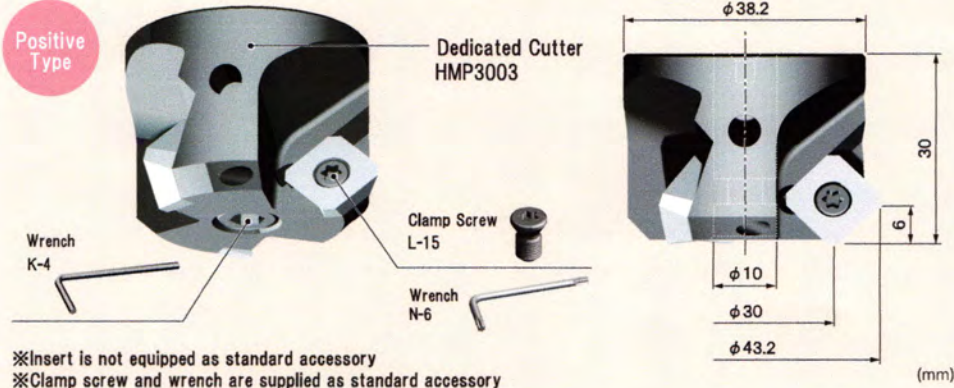
Body

Model No.	Blade	Dimensions(mm)	Guide plate overall length (mm)	Inserts	Weight
HAM4-150CP3003	3	W93×D205×H119	150	SDMW type or SDEW type	2kg

※ Insert is not equipped as standard accessory
 ※ Clamp screw and wrench are supplied as standard accessory

Standard Equipment

Dedicated Cutter (equipped with Body) 3Blade



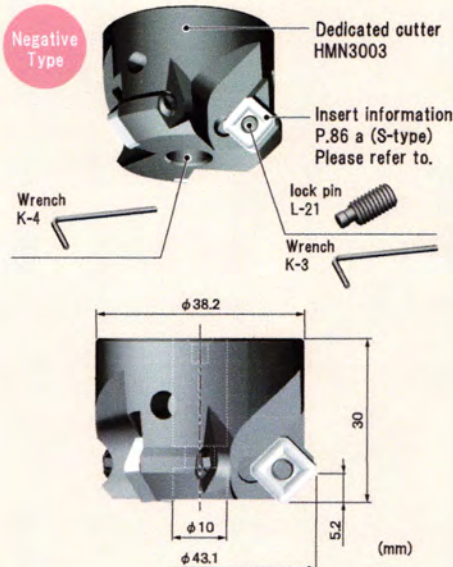
※ Insert is not equipped as standard accessory
 ※ Clamp screw and wrench are supplied as standard accessory

Accessories



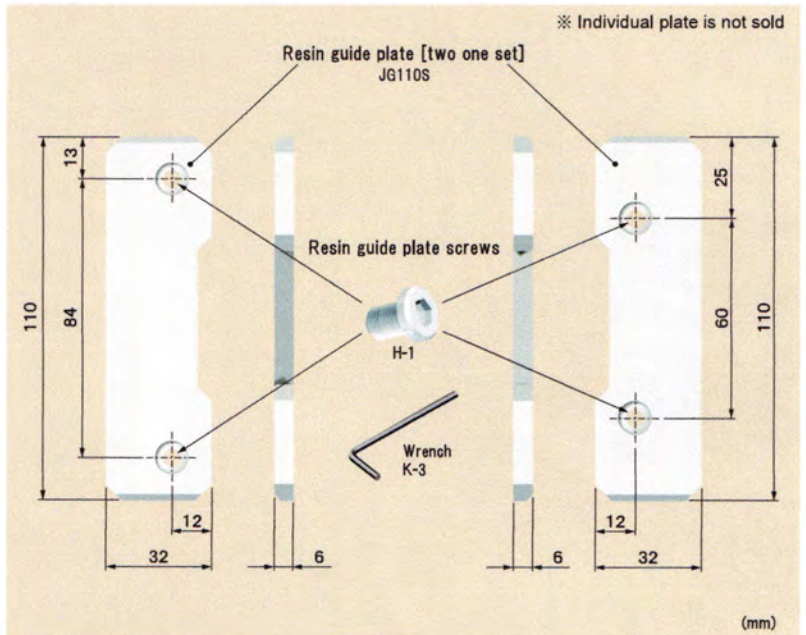
Options

Dedicated Cutter(option) 3Blade



※ Insert is not included. Please order separately.
 ※ lock pin wrench we have standard equipment

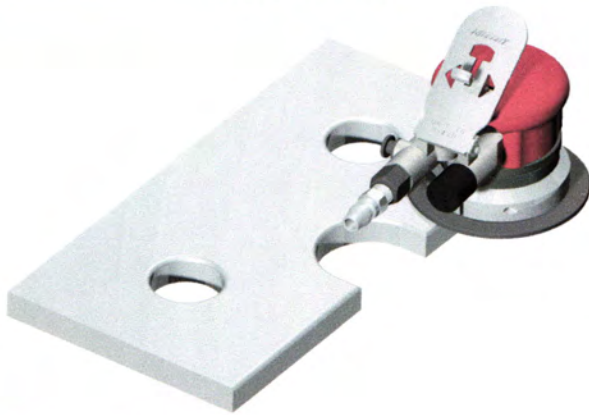
Resin Guide Plate(option)



Insert

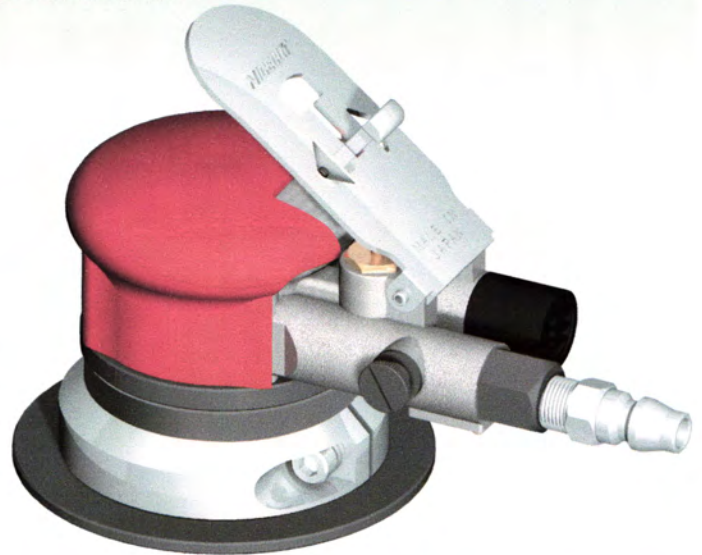
Figure	Model number	Material	Blade shape	Coating	Usable corners	Quantity per box
	SDMW11T4AFEN12 ZB01N	Cermet	Honing edge	None	4	10
	SDEW11T4AFFN12 ZA10D	Carbide K10	Sharp edge	None	4	10
	SDMW11T4AFEN12 ZA20D	Carbide M20	Honing edge	None	4	10
	SDEW11T4AFFN12 ZA10DL	Carbide K10	Sharp edge	None	4	10
	SDMW11T4AFEN12 AC15D	Fine particles Carbide	Honing edge	AICrN	4	10

Round corner Chamfering



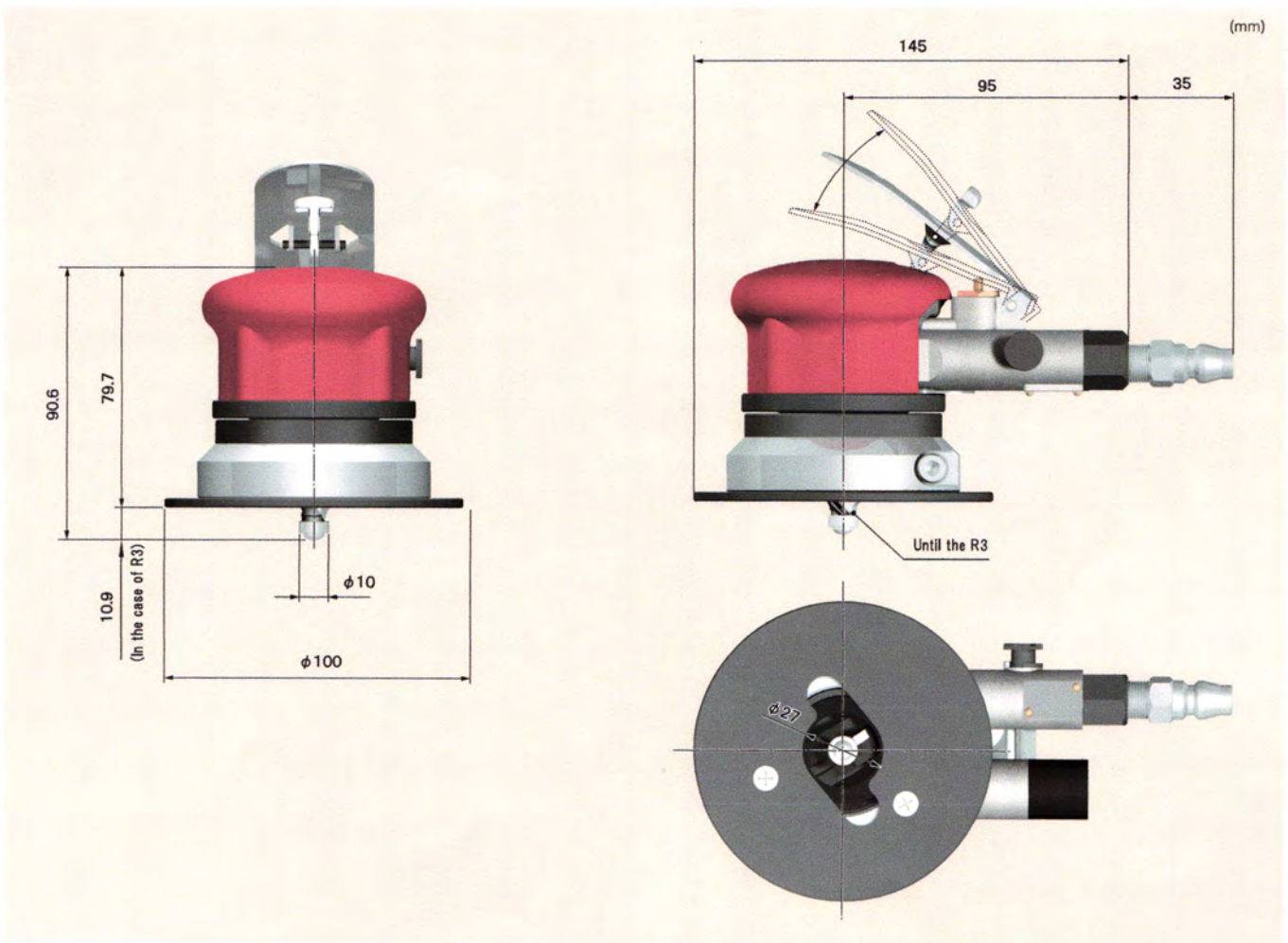
!! Round corner Chamfering machine Handy type Air-driven

- Lightweight (about 1.3) It is possible to process up to R3 (C3) in the handy type.
- low-cost small Insert.



Specification

Air Pressure	0.49~0.68MPa(5~7l/cm ²)
Non-Load Rotational	10,000r.p.m.
Air Consumption	0.19m ³ /min
Capacity	Until the R3 (~C3)
Work Thickness	12mm~
Weight	About 1.3kg



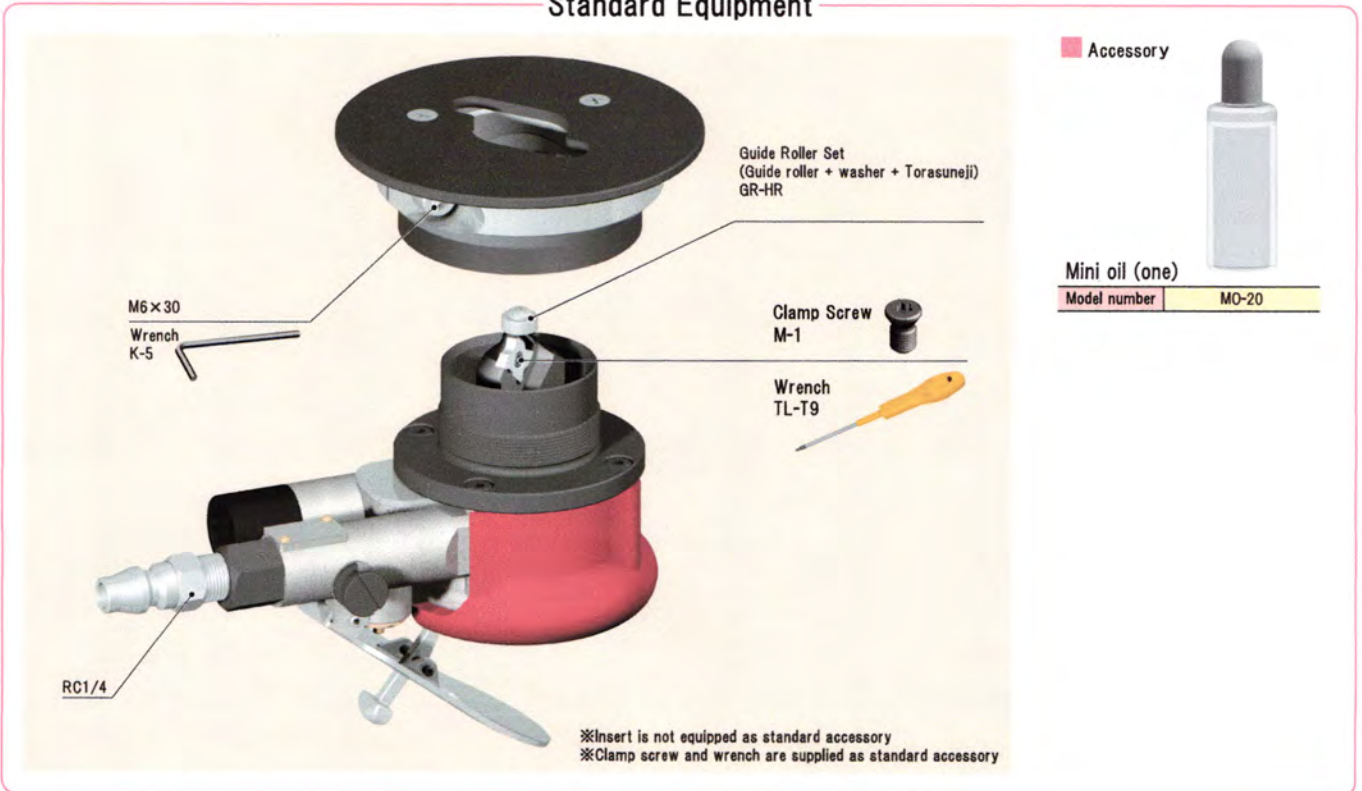
Body

Model No.	Blades	Dimensions(mm)	Inserts	Weight
HAM3R-100S	1	W100×D180×H90.6	SNEQ090308 / S32MOZ / S32GUR	1.3kg

※ Insert is not equipped as standard accessory

※ Clamp screw and wrench are supplied as standard accessory

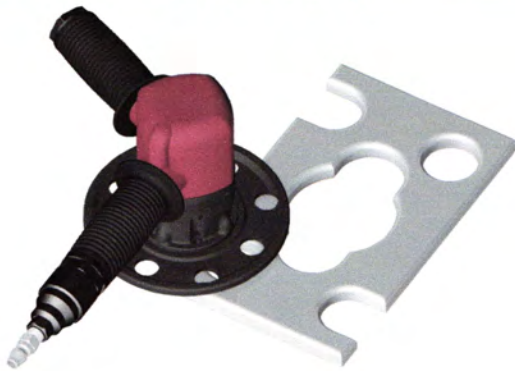
Standard Equipment



Insert

Figure	Model number	Material	Blade shape	Coating	Usable corner	Quantity per box
(SNEQ090308-□RY) 	SNEQ090308-1RY ZA20N	Carbide M20	The Same R Each corner	None	4	12
	SNEQ090308-2RY ZA20N	Carbide M20	The Same R Each corner	None	4	12
	SNEQ090308-3RY ZA20N	Carbide M20	The Same R Each corner	None	4	12
	SNEQ090308-XRY ZA20N (R4 can not be used)	Carbide M20	R1·2·3·4	None	3	12
(S32MOZ) 	S32MOZ NK2001	Cermet	Honing edge	None	8	12
	S32MOZ NK2050	Cermet	Honing edge	None	8	12
	NEW S32MOZ AB01F	Cermet	Honing edge	AlCrN	8	12
	S32MOZ NK1010	Carbide K10	Sharp edge	None	8	12
	S32MOZ NK2020	Carbide M20	Honing edge	None	8	12
	S32MOZ NK3030	Carbide M20	Honing edge	TiN	8	12
	S32MOZ NK6060	Carbide M20	Honing edge	TiAlN	8	12
	S32MOZ AC15T	Fine particles Carbide	Honing edge	AlCrN	8	12
(S32GUR) 	S32GUR NK2001	Cermet	Honing edge	None	8	12
	S32GUR NK1010	Carbide K10	Sharp edge	None	8	12
	S32GUR NK2020	Carbide M20	Honing edge	None	8	12
	S32GUR NK3030	Carbide M20	Honing edge	TiN	8	12
	S32GUR NK5050	Carbide K10	Sharp edge	TiN	8	12
	S32GUR NK6060	Carbide M20	Honing edge	TiAlN	8	12
	S32GUR NK8080	Carbide K10	Sharp edge	TiAlN	8	12

Round corner Chamfering



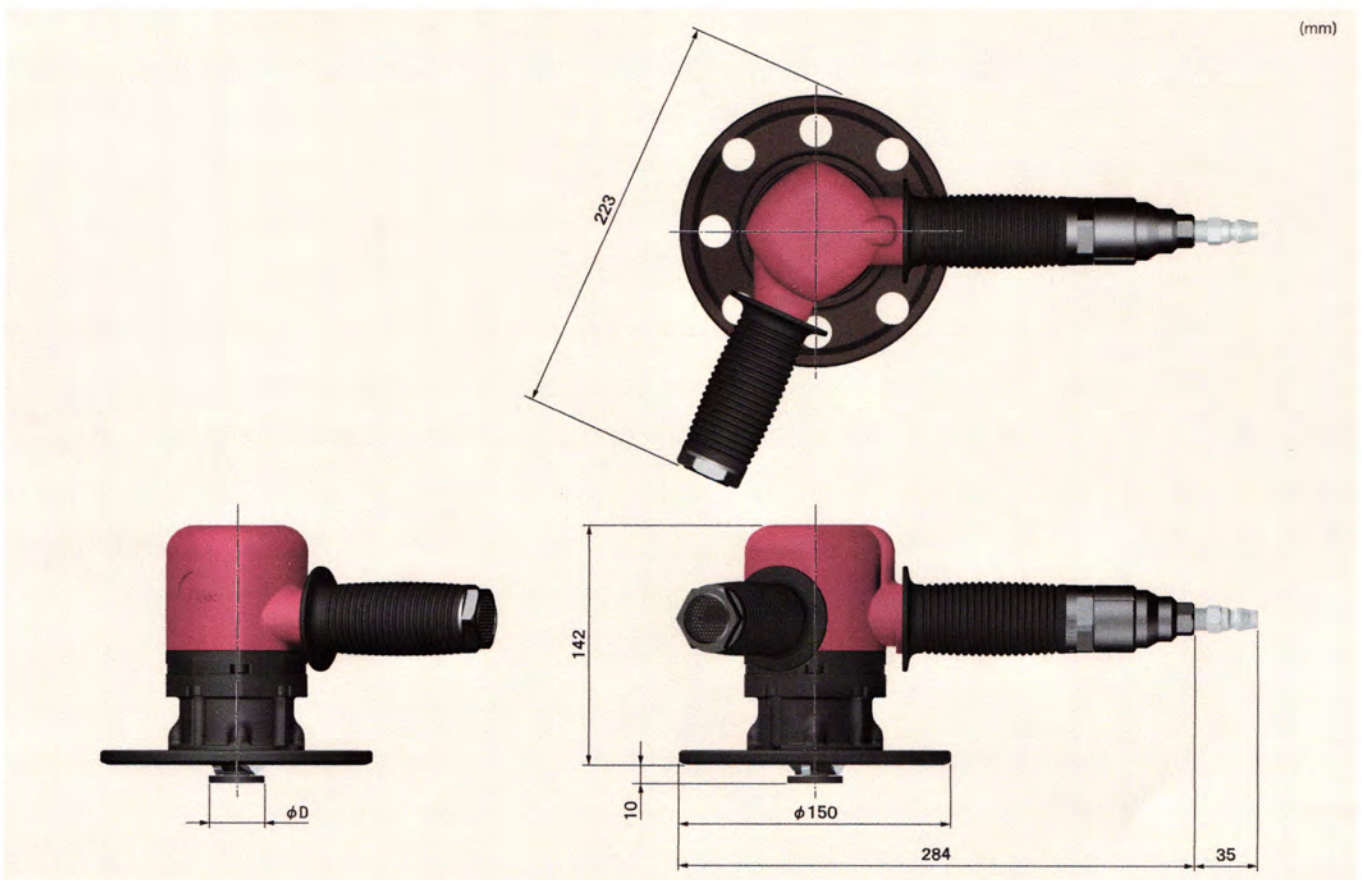
High-Power !! Air operated Portable Handy Chamfering Machine

- Only 3.4kg weight Handy type
- Capacity: R3(C3), R4(C4), R5(C5)



Specification

Model number	HAM3R-150N	HAM4R-150N	HAM5R-150N
Air Pressure	0.49~0.68MPa(5~71/cm ²)		
Non-Load Rotational	10,000r.p.m.		
Air Consumption	0.96m ³ /min		
Capacity	Until the R3 (C3)	Until the R4 (C4)	Until the R5 (C5)
Work Thickness	12mm~		
Weight	About 3.4kg		



Body

Model No.	Blades	φD	Dimensions(mm)	Inserts	Weight
NEW HAM3R-150N	3	30.7	W223×D319×H142	N43GXR / N43MOZ / N43GUR	3.4
NEW HAM4R-150N	3	29.7	W223×D319×H142	N43GXR / N43MOZ / N43GUR	3.4
NEW HAM5R-150N	3	28.7	W223×D319×H142	N43GXR / N43MOZ / N43GUR	3.4

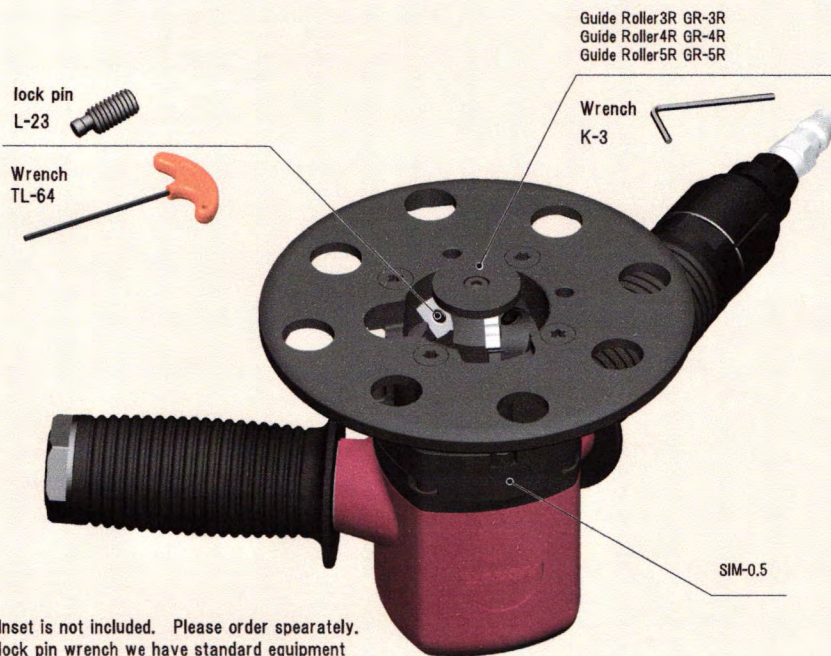
※ Insert is not equipped as standard accessory

※ Clamp screw and wrench are supplied as standard accessory



During the insert mounting, because of the eccentric lock system, and poor accuracy due to the reverse lock, may lead to insert damage. During the insert replacement, please be sure to confirm whether the reverse lock is not.

Standard Equipment



※ Inset is not included. Please order separately.
※ lock pin wrench we have standard equipment

Accessory



Mini oil (one)

Model number	MO-20
--------------	-------

Fig.	ModelNo.	Material	Blade Shape	Coating	Usable corner	Quantity per box	
(N43GXR) 	N43GXR-3R NK2001	Cermet	The Same R Each corner	None	4	3/12	
	N43GXR-4R NK2001	Cermet	The Same R Each corner	None	4	3/12	
	N43GXR-3R NK2020	Carbide M20	The Same R Each corner	None	4	3/12	
	N43GXR-4R NK2020	Carbide M20	The Same R Each corner	None	4	3/12	
	N43GXR-3R NK6060	Carbide M20	The Same R Each corner	TiA ₂ N	4	3/12	
	N43GXR-4R NK6060	Carbide M20	The Same R Each corner	TiA ₂ N	4	3/12	
(N43GXR Semi-Standard) <p>※ Semi-Standard Insert have no breaker</p>	N43GXR-5R NK2020 (Semi-Standard)	Carbide M20	The Same R Each corner	None	4	3/12	
	(N43MOZ) 	N43MOZ NK2001	Cermet	Honing edge	None	8	12
		N43MOZ NK1010	Carbide K10	Sharp edge	None	8	12
		N43MOZ NK2020	Carbide M20	Honing edge	None	8	12
		N43MOZ NK3030	Carbide M20	Honing edge	TiN	8	12
		N43MOZ NK6060	Carbide M20	Honing edge	TiA ₂ N	8	12
(N43GUR) 	N43GUR NK2001	Cermet	Honing edge	None	8	12	
	N43GUR NK1010	Carbide K10	Sharp edge	None	8	12	
	N43GUR NK2020	Carbide M20	Honing edge	None	8	12	
	N43GUR NK3030	Carbide M20	Honing edge	TiN	8	12	
	N43GUR NK6060	Carbide M20	Honing edge	TiA ₂ N	8	12	
	N43GUR NK8080	Carbide M20	Honing edge	TiA ₂ N	8	12	