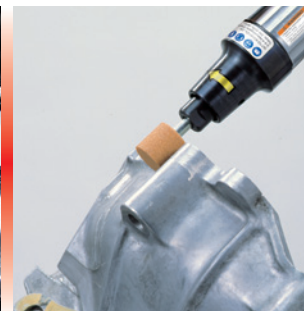




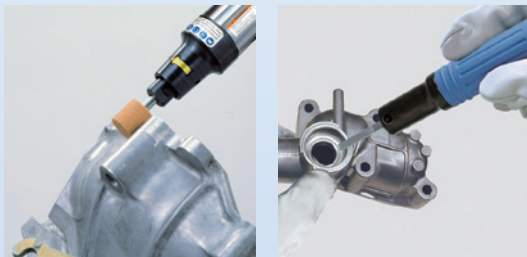
Cat.No. Tk083p

# Nitto Kohki's POWER TOOLS



# Pneumatic & Electric Power Tools, Labor-saving plus Improved Work Efficiency!

## POWER TOOLS



Whether you just glance through this booklet or give it an intensive reading, we are sure you'll agree that NITTO KOHKI's portable hydraulic and electric machines and pneumatic hand tools are among the finest precision engineered equipment to be found today.

	Manufacturing	Sheet-Metal Working	
<b>NEEDLE SCALER</b> <b>JET CHISEL</b>	Various peening works	Paint & rust scaling	
<b>AIR HAMMER</b> <b>AUTO CHISEL</b>	Rivet calking, bush inserting & removing	Sheet metal cutting, paint chiseling, rivet punching	
<b>PNEUMATIC SCALER</b> <b>SUPER KELEN</b>	-	-	
<b>PNEUMATIC CHIPPING HAMMER</b> <b>AIR CHIPPER</b>	-	-	
<b>PNEUMATIC GRINDER</b> <b>MYTON</b>	Sanding, grinding, chamfering, finishing	Chamfering, rough grinding, mold grinding	
<b>PNEUMATIC DIE GRINDER</b> <b>AIR SONIC</b>	Metal working, surface smoothing	Various grinding works	
<b>PNEUMATIC HAND DRILL</b> <b>AIR DRILL</b>	Various drilling works	Various drilling works	
<b>PNEUMATIC BELT SANDER</b> <b>BELTON</b>	Trimming, chamfering corner rounding	Spot smoothing, surface regulation, finish sanding	
<b>PNEUMATIC DUST-FREE SANDER</b> <b>ORBITAL SANDER</b>	Smoothing, intermediate finish sanding	Surface smoothing of steel products, finishing of pressed products	
<b>PNEUMATIC COMPACT SANDER</b> <b>PALM ORBITAL SANDER</b>	Smoothing, intermediate finish sanding	Surface smoothing of steel products, finishing of pressed products	
<b>HANDY PNEUMATIC SANDER</b> <b>FREE SANDER</b>	Surface sanding, rust & stain removal	Spot smoothing, corner rounding, surface smoothing	
<b>PNEUMATIC RECIPROCATING SANDER</b> <b>LINE SANDER</b>	Plane sanding, groove sanding	Spot smoothing, surface regulation	
<b>PORTABLE PRECISION FINISHING FILE</b> <b>SUPER HAND</b>	Precision filing of flash, chamfering, sanding, groove finishing	Trimming, filing in narrow space, surface regulation	
<b>PORTABLE FINE FINISHING FILE</b> <b>MICRO AIR HAND</b>	Precision filing of flash, chamfering, groove finishing	-	
<b>PNEUMATIC HACKSAW</b> <b>SUPER SAW</b>	Cuts with small radii	To cut mild steel plates, aluminum, plastics and other materials	
<b>PORTABLE CHAMFERING TOOLS</b> <b>BEVELER</b>	Chamfering of large workplaces	-	
<b>PNEUMATIC RADIAL CHAMFERING TOOL</b> <b>CIRCUIT BEVELER</b>	Chamfering of dies and machine	Chamfering of steel plate	

### HI CUPLA Series

### Machine Tools

"delvo" Electric Screwdrivers, Spring Balancer, Linear Motor Driven Free Piston System

NOTES ON USING TOOLS – Important Safety Instructions

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	Surface sanding of pre-welded part	Ground work sanding	Trimming, surface finishing of die-casting	Correction of grinding (finish works)	Precision finishing	Precision sanding	Surface sanding of constructed materials	<b>15</b>
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# JET CHISEL

**Powerful scaling with multi-needles**

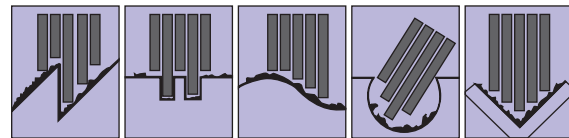


Never skips a blow, cleans and descales all jobs fast. Gets into extremely restricted areas...

An asset in any industry...de-slugging, de-sputtering welds, cleaning, castings, brick, stonework, and other materials. Jet Chisel is a prime pneumatic performer in each of these and other tough job areas.

Maximum performance in a light-weight, minimum-size air tool, Jet Chisel delivers years of trouble-free, efficient operation. And it's a tool that gets all the way down to the surface of matters.

Quick, Jet Chisel needles adjust to any surface contour automatically. They get deep into corners, all the way into uneven surfaces, all types of curvatures making it a tool no shop should be without. It's an equally efficient time-saver in ship-board applications, too.



### Shot Peening Effect

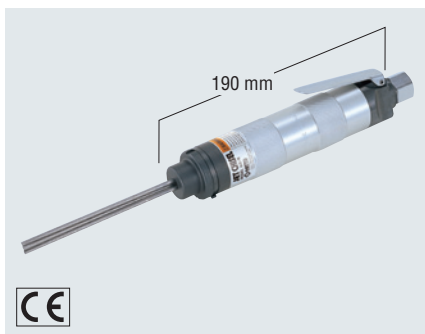
Reinforcement of a welded part with the shot peening effect increases strength by imparting residual stress to the surface of the workpiece through the high speed impact of the needles. Highly suitable for effective reinforcement of deteriorated welded parts.

### Full Automatic System

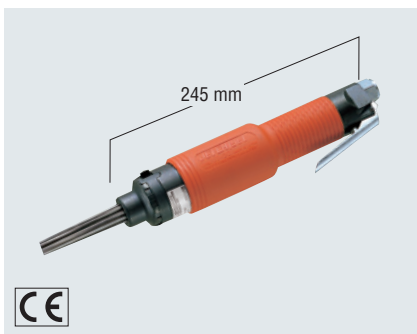
The only unit of it's kind on the market without springs. This means no springs to break...no irregular power... and the advantage of low air consumption.



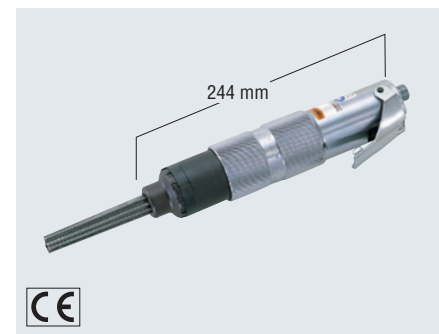
Model **AJC-16** Slim Type



Model **JT-20** Popular Type



Model **JEX-20** Low Vibration Type



### Specifications

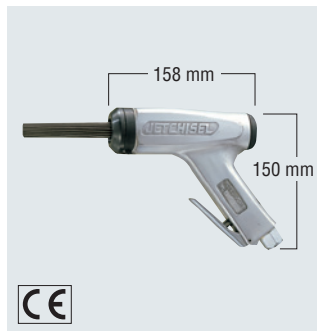
Model	AJC-16	JT-20	JEX-20
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.6 {6}	0.6 {6}	0.6 {6}
Air Consumption (No load) m <sup>3</sup> /min	0.07	0.2	0.2
Stroke Speed min <sup>-1</sup>	6,000	4,000	4,000
Needle qty	OD 2 × 7 pcs. or OD 3 × 3 pcs.	OD 2 × 29 pcs. or OD 3 × 12 pcs.	OD 2 × 29 pcs. or OD 3 × 12 pcs.
Hose Size inch	3/8	3/8	3/8
Mass (Weight) kg	0.98	2.4	2.75

Standard Accessories	AJC-16	JT-20	JEX-20
	<ul style="list-style-type: none"> <li>• Needle OD 3 mm × 180 mm : 3 pcs. (Needle OD 3 mm × 180 mm : 3 pcs. on the body)</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> <li>• Hose Nipple R 3/8 × 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• Needle OD 3 mm × 180 mm : 12 pcs. (Needle OD 3 mm × 180 mm : 12 pcs. on the body)</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> <li>• Hose Nipple R 3/8 × 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• Needle OD 3 mm × 180 mm : 12 pcs. (Needle OD 3 mm × 180 mm : 12 pcs. on the body)</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> <li>• Hose Nipple R 3/8 × 3/8 : 1 pc.</li> </ul>

# SCALING

# NEEDLE SCALER JET CHISEL

Model **JC-16** Lightweight Type



Model **JEX-24** Universal Type



Model **JEX-28** Heavy-duty Type



Model **JEX-2800A** Low-vibration Type



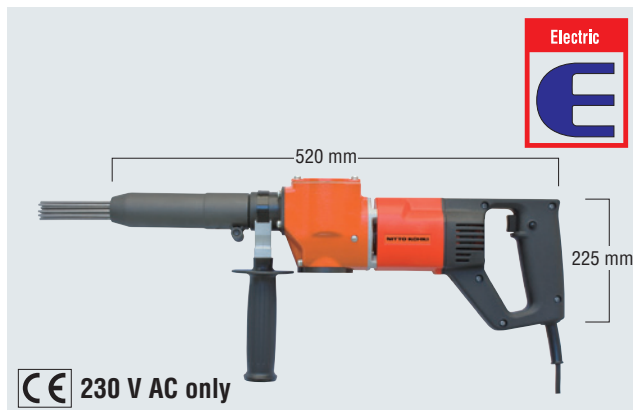
## Specifications

Model	JC-16	JEX-24	JEX-28	JEX-2800A
Rated Air Pressure	MPa (kgf/cm <sup>2</sup> ) 0.6 (6)			
Air Consumption (No load)	m <sup>3</sup> /min 0.15	0.27	0.35	0.43
Stroke Speed	min <sup>-1</sup> 4,000	4,000	4,500	3,700
Needle	qty OD 2 × 29 pcs.	OD 2 × 53 pcs. or OD 3 × 23 pcs.	OD 2 × 66 pcs. or OD 3 × 28 pcs. or OD 4 × 14 pcs.	
Hose Size	inch 3/8			
Mass (Weight)	kg 1.4	2.7	3.5	3.1

Standard Accessories	JC-16	JEX-24	JEX-28	JEX-2800A
	<ul style="list-style-type: none"> <li>• Needle OD 2 mm × 150 mm : 58 pcs. (Needle OD 2 mm × 150 mm : 29 pcs. on the body)</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> <li>• Hose Nipple R 3/8 × 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• Needle OD 3 mm × 180 mm : 23 pcs. on the body</li> <li>• 6 mm Hex. Socket Screw Key : 1 pc.</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> <li>• Hose Nipple R 3/8 × 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• Needle OD 4 mm × 180 mm : 14 pcs.</li> <li>• Needle OD 3 mm × 180 mm : 28 pcs. on the body</li> <li>• Needle Supporter OD 4 mm : 1 pc.</li> <li>• 6 mm Hex. Socket Screw Key : 1 pc.</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> <li>• Hose Nipple R 3/8 × 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• Needle OD 4 mm × 180 mm : 14 pcs.</li> <li>• Needle OD 3 mm × 180 mm : 28 pcs. on the body</li> <li>• Needle Supporter OD 4 mm : 1 pc.</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> <li>• Hose Nipple R 3/8 × 3/8 : 1 pc.</li> </ul>

## Electric Needle Scaler

Model **EJC-32A**



Standard Accessories	EJC-32A
	<ul style="list-style-type: none"> <li>• Needle OD 3 mm × 180 mm : 30 pcs. (Needle OD 3 mm × 180 mm : 15 pcs. on the body)</li> <li>• 6 mm Hex. Socket Screw Key : 1 pc.</li> </ul>

## The same excellent performance as our air tool!

Operated with standard electric supply to households. Special long and slim barrel design suitable for narrow corners. Double-insulated motor does not need grounding. Free subhandle position best fit to your working situation.

## Specifications

Model	EJC-32A	
Power Supply	115 V AC, 50/60 Hz	230 V AC, 50/60 Hz
Rated Power Consumption	W 300	
Rated Current	A 2.8	1.4
Rated Duty	min 30	
Stroke Speed	min <sup>-1</sup> 3,000	
Needle	qty OD 2 × 32 pcs. or OD 3 × 15 pcs.	
Power Cord Length	m 5	
Mass (Weight)	kg 4.5	

## Optional Needles



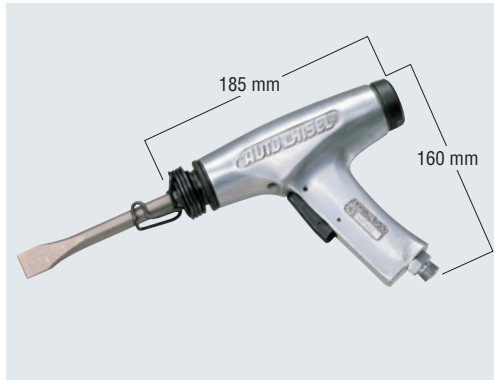
PN	Description	Qty	PN	Description	Qty	Model
TA98780	Needle OD 2 mm × 150 mm	100 pcs.	TP00338	Needle Supporter OD 2 mm	1 pc.	JT-20,
TA98781	Needle OD 2 mm × 180 mm	100 pcs.	TP00337	Needle Supporter OD 3 mm	1 pc.	JEX-20
TA9A213	Needle OD 2 mm × 300 mm	50 pcs.	TQ05210	Needle Supporter OD 2 mm	1 pc.	AJC-16
TA9A214	Needle OD 2 mm × 500 mm	50 pcs.	TQ04554	Needle Supporter OD 3 mm	1 pc.	
TA98782	Needle OD 3 mm × 180 mm	100 pcs.	TP00290	Needle Supporter OD 2 mm	1 pc.	JC-16
TA9A216	Needle OD 3 mm × 300 mm	50 pcs.	TP02244	Needle Supporter OD 2 mm	1 pc.	JEX-24
TA9A217	Needle OD 3 mm × 500 mm	50 pcs.	TP02245	Needle Supporter OD 3 mm	1 pc.	
TA9A218	Needle OD 3 mm × 800 mm	50 pcs.	TP01499	Needle Supporter OD 2 mm	1 pc.	JEX-28,
TA98783	Needle OD 4 mm × 180 mm	50 pcs.	TP01461	Needle Supporter OD 3 mm	1 pc.	
TA9A220	Needle OD 4 mm × 300 mm	50 pcs.	TP01462	Needle Supporter OD 4 mm	1 pc.	EJC-32A
TA9A221	Needle OD 4 mm × 500 mm	50 pcs.	TP16475	Needle Supporter OD 2 mm	1 pc.	
			TP16301	Needle Supporter OD 3 mm	1 pc.	

# AUTO CHISEL

A special spool valve inside grip assures excellent durability



Model **A-300**



The A-300 Auto Chisel is designed for speeding up the repair and sheet metal works of automobiles, etc. Being light and powerful, labor can be reduced remarkably.

This tool enables the work to be done in narrow space where ordinary hammering work is impossible. Thus the skill usually needed in hammering work is eliminated. The respective parts employ high quality material and are subjected to high precision process.

<b>Standard Accessories</b>	• Bushing R 1/4 × NPT 1/4 : 1 pc.
	• Hose Nipple R 1/4 × 1/4 : 1 pc.

### Specifications

<b>Model</b>	<b>A-300</b>
<b>Rated Air Pressure</b> MPa (kgf/cm <sup>2</sup> )	0.6 (6)
<b>Air Consumption (No load)</b> m <sup>3</sup> /min	0.3
<b>Stroke Speed</b> min <sup>-1</sup>	2,600
<b>Hose Size</b> inch	1/4
<b>Mass (Weight)</b> kg	1.7

### Optional Attachments

PN	Description	Qty	PN	Description	Qty
TP00572	No.1001 Blank Chisel	1 pc.	TP00584	No.1013 Fork Chisel 24	1 pc.
TP00573	No.1002 Flat Chisel	1 pc.	TA90051	No.1014 Panel Crimper	1 pc.
TP04606	No.1003 Sheet Metal Chisel A	1 pc.	TP00586	No.1016 Fork Chisel 35	1 pc.
TP00575	No.1004 Sheet Metal Chisel B	1 pc.	TP00585	No.1017 Fork Chisel 15	1 pc.
TP00576	No.1005 Silencer Cutting Chisel	1 pc.	TP00589	No.1018 38 mm Scraper	1 pc.
TP00577	No.1006 Rubber Bushing Remover	1 pc.	TP00590	No.1019 60 mm Scraper	1 pc.
TP00578	No.1007 Spot Weld Booster	1 pc.	TP00591	No.1020 60 mm Concave Scraper	1 pc.
TP00579	No.1008 Bushing Tool	1 pc.	TP04995	No.1023 Sheet Metal Chisel C	1 pc.
TP00580	No.1009 Punch	1 pc.	TP05244	No.1024 Moilpoint Chisel	1 pc.
TP00581	No.1010 Bushing Removing Tool	1 pc.	TP05775	No.1025 Rivet Removing Punch	1 pc.
TP00582	No.1011 Sheet Metal Punch	1 pc.	TP05801	No.1026 Rivet Caulking Chisel	1 pc.
TP00583	No.1012 20 mm Bending Chisel	1 pc.	-	-	-

## Applications and wide variety of optional attachments

**No. 1001 Blank Chisel (TP00572)**

For a variety of sheet metal work, bending, and rivet closing jobs



**No. 1002 Flat Chisel (TP00573)**

Puts increased efficiency into scraping, peeling spot welds, and cutting off bolts and pins



**No. 1003 Sheet Metal Chisel A (TP04606)**

Cuts shapes in sheet metal fast



**No. 1004 Sheet Metal Chisel B (TP00575)**

Just the chisel for cutting off sheet metal body panel



**No. 1005 Silencer Cutting Chisel (TP00576)**

A quick cut-off chisel for muffler piping



**No. 1006 Rubber Bushing Remover (TP00577)**

Helps you remove idle arm sleeves and bushings in record time



**No. 1007 Spot Weld Booster (TP00578)**

Ideal for peeling off spot welded points and cutting off pins



**No. 1008 Bushing Tool (TP00579)**

Puts speed and ease into the job of bushing insertion



**No. 1009 Punch (TP00580)**

For driving out pins and rivets, and fitting and removing bearings and races



**No. 1010 Bushing Removing Tool (TP00581)**

A faster servicing aid in removing bushings



**No. 1011 Sheet Metal Punch (TP00582)**

Opens holes for bolts and rivets



**No. 1012 20 mm Bending Chisel (TP00583)**

Helps you in peening and removing slag around welds



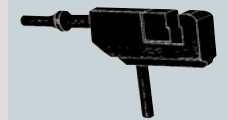
**No. 1013 Fork Chisel 24 (TP00584)**

Disconnecting tie rod ends and ball joints



**No. 1014 Panel Crimper (TA90051)**

Bending sheet metal: external body plates, doors, fenders, etc.



**No. 1016 Fork Chisel 35 (TP00586)**

Disconnecting tie rod end ball joints



**No. 1017 Fork Chisel 15 (TP00585)**

Disconnecting tie rod end ball joints



**No. 1018 38 mm Scraper (TP00589)**

Peeling paint & removing rust from iron plate



**No. 1019 60 mm Scraper (TP00590)**

Peeling paint & removing rust from iron plate



**No. 1020 60 mm Concave Scraper (TP00591)**

Removing incrustation from pipe



**No. 1023 Sheet Metal Chisel C (TP04995)**

Cuts shapes in sheet metal fast



**No. 1024 Mollpoint Chisel (TP05244)**

Breaking-up concrete, removing sand from castings



**No. 1025 Rivet Removing Punch (TP05775)**

Removing rivets from brake lining of heavy duty cars



**No. 1026 Rivet Caulking Chisel (TP05801)**

Caulking brake lining of heavy duty cars



# SUPER KELEN

Industrial and shipboard descaling and cleaning



The unique scaler performs scores of industrial and shipboard descaling and cleaning jobs quickly, efficiently and economically.

Removes old paint and rust, dislodges solid matter or scale tar. Removes concrete adhering to panels, conveyors, mixers. Strips off bark from lumber, and scores of other applications.

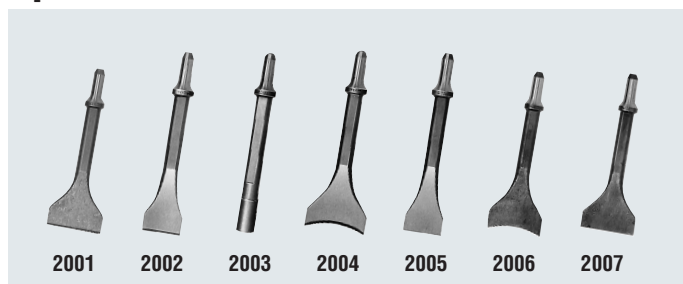


## Specifications

Model	S-250	S-500	S-1000
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.6 {6}	0.6 {6}	0.6 {6}
Air Consumption (No load) m <sup>3</sup> /min	0.27	0.27	0.27
Stroke Speed min <sup>-1</sup>	2,500	2,500	2,500
Size of Chisel Shank mm	12.7	12.7	12.7
Hose Size inch	3/8	3/8	3/8
Dimension mm	630 × 49	890 × 49	1,470 × 49
Mass (Weight) kg	4.1	4.7	6.1

Standard Accessories	S-250	S-500	S-1000
	<ul style="list-style-type: none"> <li>• 38 mm Bend Scraper (No.2005) : 1 pc. on the body</li> <li>• Hose Lock Nut M16 : 1 pc.</li> <li>• Hose Nipple 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• 38 mm Bend Scraper (No.2005) : 1 pc. on the body</li> <li>• Hose Lock Nut M16 : 1 pc.</li> <li>• Hose Nipple 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• 38 mm Bend Scraper (No.2005) : 1 pc. on the body</li> <li>• Hose Lock Nut M16 : 1 pc.</li> <li>• Hose Nipple 3/8 : 1 pc.</li> </ul>

## Optional Chisels



PN	Description	Qty
TP03645	No.2001 60 mm Scraper	1 pc.
TP03646	No.2002 38 mm Scraper	1 pc.
TP03647	No.2003 Blank Chisel	1 pc.
TP04010	No.2004 60 mm Concave Scraper	1 pc.
TP04552	No.2005 38 mm Bend Scraper	1 pc.
TP04553	No.2006 60 mm Concave Bend Scraper	1 pc.
TP04554	No.2007 60 mm Bend Scraper	1 pc.



# AIR CHIPPER

Now chipping after welding is easy!



The AIR CHIPPER are compact, lightweight and economical tools to have on hand for all kinds of chipping work. Easy chisel replacement is made to excellent operation. The straight design is suitable for operation at narrow and deep places.

In addition, the ACH-16 has many features on the followings.....

- Idle running proof structure adopted. No blowing without touching the work piece by the chisel.
- Vibration on operation is reduced by low vibration structure. Especially effective on continuous operation.
- Easy to handle, compact lightweight type, and weight only one kilogram

Model **ACH-16**



Model **CH-24**



### Specifications

Model	ACH-16	CH-24
Rated Air Pressure MPa (kgf/cm <sup>2</sup> )	0.6 {6}	0.6 {6}
Air Consumption (No load) m <sup>3</sup> /min	0.15	0.2
Stroke Speed min <sup>-1</sup>	6,000	4,000
Size of Chisel Shank mm	OD 10.5	12.7 sq.
Hose Size inch	3/8	3/8
Mass (Weight) kg	0.9	1.7

### Standard Accessories

- Flat Chisel 20 × 120 : 1 pc. on the body
- Bushing R 3/8 × NPT 3/8 : 1 pc.
- Hose Nipple R 3/8 × 3/8 : 1 pc.
- Curved Flat Chisel 25 × 155 : 1 pc. on the body
- Bushing R 3/8 × NPT 3/8 : 1 pc.
- Hose Nipple R 3/8 × 3/8 : 1 pc.

### Optional Chisels



### Chisel for Air Chipper ACH-16

PN	Description	Qty
TQ03431	Flat Chisel 20 × 120	1 pc.
TQ03453	Curved Flat Chisel 20 × 120	1 pc.
TQ03549	Flat Chisel 11 × 120	1 pc.
TQ03452	Flat Chisel 20 × 180	1 pc.

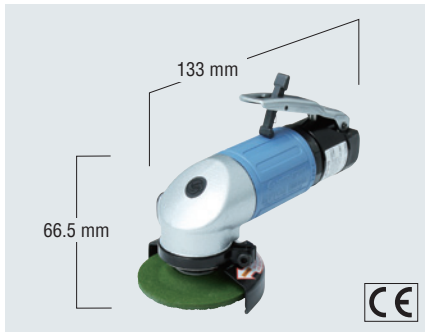
### Chisel for Air Chipper CH-24

PN	Description	Qty
TP15234	Straight Flat Chisel 12.7 × 165	1 pc.
TP15233	Flat Chisel 25 × 155	1 pc.
TP15166	Curved Flat Chisel 25 × 155	1 pc.

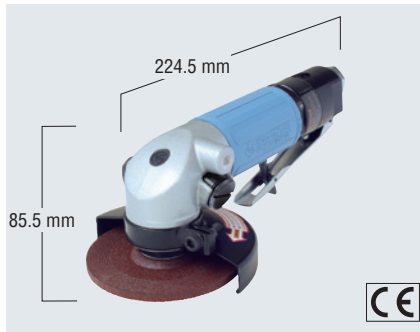
# MYTON

A wide variety of models are available to a particular job!

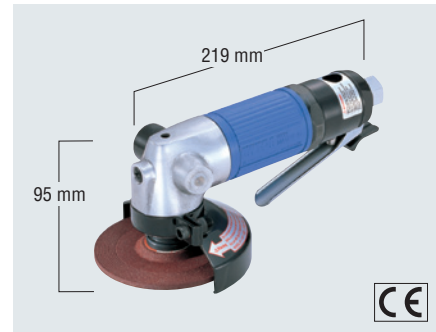
Model **MLG-25** Depressed center wheel 58 mm



Model **MLG-40** Depressed center wheel 100 mm



Model **MAGW-40** Depressed center wheel 100 mm



### Specifications

Model		MLG-25	MLG-40	MAGW-40
Rated Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 {6}	0.6 {6}	0.6 {6}
Air Consumption	m <sup>3</sup> /min	0.42	0.45 (No Load) 0.91 (Load)	0.68 (No load) 0.82 (Load)
Free Speed	min <sup>-1</sup> (rpm)	19,000	13,000	13,000
Depressed Center Grinding Wheel	mm	58	100	100
Hose Size	inch	1/4	3/8	3/8
Mass (Weight)	kg	0.6	1.5	1.55

Standard Accessories			
	<ul style="list-style-type: none"> <li>• Green Disc GS #80 : 1 pc.</li> <li>• 5 mm Hex. Socket Screw Key : 1 pc.</li> <li>• 19 mm Single Ended Spanner : 1 pc.</li> <li>• Bushing R 1/4 × NPT 1/4 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• 6 mm Hex. Socket Screw Key : 1 pc.</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• 6 mm Hex. Socket Screw Key : 1 pc.</li> <li>• 17 mm Single Ended Spanner : 1 pc.</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> </ul>

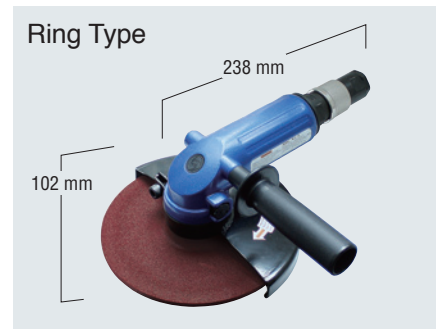
Model **MAG-50** Depressed center wheel 125 mm



Model **MLG-70** Depressed center wheel 180 mm



Model **MLG-70** Depressed center wheel 180 mm

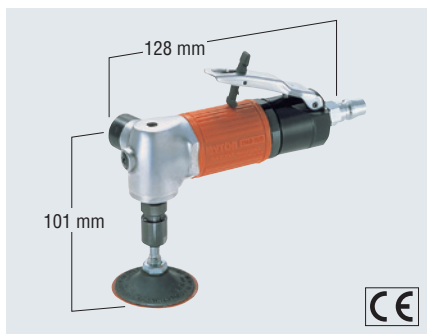


### Specifications

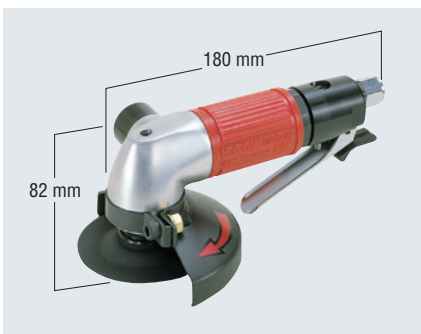
Model		MAG-50	MLG-70 Lever Type	MLG-70 Ring Type
Rated Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 {6}	0.6 {6}	
Air Consumption (No load)	m <sup>3</sup> /min	0.87	0.75 (No load)	1.1 (Load)
Free Speed	min <sup>-1</sup> (rpm)	12,000	7,600	
Depressed Center Grinding Wheel	mm	125	180	
Hose Size	inch	3/8	3/8	
Mass (Weight)	kg	2.2	2.45	2.25

Standard Accessories			
	<ul style="list-style-type: none"> <li>• Air Hose Sub Ass'y : 1 set</li> <li>• Exhaust Hose Ass'y : 1 set</li> <li>• Side Handle Ass'y : 1 set</li> <li>• 4 mm Hex. Socket Screw Key : 1 pc.</li> <li>• Pin Face Wrench : 1 pc.</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> </ul>		<ul style="list-style-type: none"> <li>• 6 mm Hex. Socket Screw Key : 1 pc.</li> <li>• 10 mm Hex. Socket Screw Key : 1 pc.</li> <li>• Bushing R 3/8 × NPT 3/8 : 1 pc.</li> <li>• Handle Ass'y : 1 set.</li> <li>• Wheel Guard Ass'y : 1 set</li> </ul>

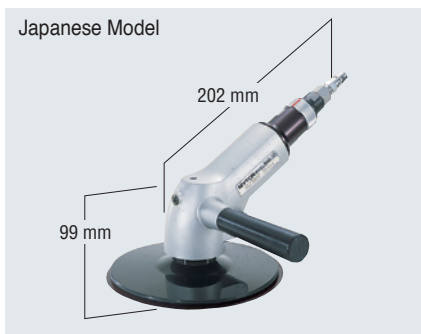
Model  
**MAS-20B** Abrasive disc 1",  
1 - 1/2" & 2"



Model  
**MAS-40** Abrasive disc  
100 mm



Model  
**MAS-70** Abrasive disc  
180 mm



## Specifications

Model	MAS-20B	MAS-40	MAS-70
Rated Air Pressure MPa (kgf/cm <sup>2</sup> )	0.6 {6}	0.6 {6}	0.6 {6}
Air Consumption (No load) m <sup>3</sup> /min	0.4	0.45	0.98
Free Speed min <sup>-1</sup> (rpm)	22,000	13,700	7,500
Abrasive Disc	1", 1 - 1/2" and 2"	100 mm	180 mm
Hose Size inch	1/4	3/8	3/8
Mass (Weight) kg	0.5	0.9	1.9

Standard Accessories	MAS-20B	MAS-40	MAS-70
	<ul style="list-style-type: none"> <li>• 14 mm Single Ended Spanner : 1 pc.</li> <li>• Cupla 20SH : 1 pc.</li> <li>• Bushing R 1/4 × NPT 1/4 : 1 pc.</li> <li>• Back-up Pad 1" : 1 pc.</li> <li>• Back-up Pad 1 - 1/2" : 1 pc.</li> <li>• Back-up Pad 2" : 1 pc.</li> <li>• Abrasive Paper 1" × #60, #80, #100, #120 : 2 pcs. each</li> <li>• Abrasive Paper 1 - 1/2" × #60, #80, #100, #120 : 2 pcs. each</li> <li>• Abrasive Paper 2" × #60, #80, #100, #120 : 2 pcs. each</li> </ul>	<ul style="list-style-type: none"> <li>• 6 mm Hex. Socket Screw Key : 1 pc.</li> <li>• 17 mm Single Ended Spanner : 1 pc.</li> <li>• Bushing R 1/4 × NPT 1/4 : 1 pc.</li> <li>• Hose Nipple NPT 1/4 × 3/8 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• 10 mm Hex. Socket Screw Key : 1 pc.</li> <li>• 41 mm Single Ended Spanner : 1 pc.</li> <li>• Hose Nipple NPT 3/8 × 3/8 : 1 pc.</li> <li>• Bushing M16 × NPT 3/8 : 1 pc.</li> </ul>

## Optional Parts

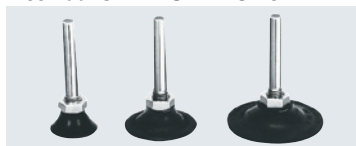
### Green Discs for MYTON MLG-25



PN	Description	Qty
TB08872	GS#46 × 58 mm	5 pcs.
TB08873	GS#60 × 58 mm	5 pcs.
TB08874	GS#80 × 58 mm	10 pcs.
TB08875	GS#100 × 58 mm	5 pcs.
TB08876	GS#120 × 58 mm	5 pcs.

\* Green Discs cannot be used on MAG-25.

### Disc Pad for MYTON MAS-20B



PN	Description	Qty
TP18576	PAD (1") No.1	1 pc.
TP18575	PAD (1 - 1/2") No.2	1 pc.
TP18574	PAD (2") No.3	1 pc.

### 1" Paper for MYTON MAS-20B



PN	Description	Qty
TA9B101	Paper 1" × #40	25 pcs.
TA9B102	Paper 1" × #60	25 pcs.
TA9B103	Paper 1" × #80	25 pcs.
TA9B104	Paper 1" × #100	25 pcs.

PN	Description	Qty
TA9B105	Paper 1" × #120	25 pcs.
TA9B106	Paper 1" × #180	25 pcs.
TA9B107	Paper 1" × #240	25 pcs.
TA9B108	Paper 1" × #320	25 pcs.

### 1 - 1/2" Paper for MYTON MAS-20B



PN	Description	Qty
TA9B109	Paper 1 - 1/2" × #40	25 pcs.
TA9B110	Paper 1 - 1/2" × #60	25 pcs.
TA9B111	Paper 1 - 1/2" × #80	25 pcs.
TA9B112	Paper 1 - 1/2" × #100	25 pcs.

PN	Description	Qty
TA9B113	Paper 1 - 1/2" × #120	25 pcs.
TA9B114	Paper 1 - 1/2" × #180	25 pcs.
TA9B115	Paper 1 - 1/2" × #240	25 pcs.
TA9B116	Paper 1 - 1/2" × #320	25 pcs.

### 2" Paper for MYTON MAS-20B



PN	Description	Qty
TA9B117	Paper 2" × #40	25 pcs.
TA9B118	Paper 2" × #60	25 pcs.
TA9B119	Paper 2" × #80	25 pcs.
TA9B120	Paper 2" × #100	25 pcs.

PN	Description	Qty
TA9B121	Paper 2" × #120	25 pcs.
TA9B122	Paper 2" × #180	25 pcs.
TA9B123	Paper 2" × #240	25 pcs.
TA9B124	Paper 2" × #320	25 pcs.

# AIR SONIC



## The perfect tool for all tasks!

The high-speed mighty mite with super-efficient silencer and rear exhaust system.

Wonder works on all metals, wood, and plastics, even extremely hard and exotic materials. And now that efficiency is upgraded with the addition of an air silencer and new rear exhaust system for grinding dust-it's all the more the perfect tool for toolrooms and model shops. The super efficiency of the silencer makes it possible for all craftsmen to work longer with less irritation due to noise. For precision grinding, deburring machines parts, grinding small castings, removing welding slags, shaping and finishing wood, glass and plastics. This is the compact, easy handling air tool for all tasks.

Model **L-25B** For all grinding, deburring and finishing jobs



Model **L-35C** Special design for rotary bars



### Specifications

Model	L-25B	L-35C
Rated Air Pressure MPa (kgf/cm <sup>2</sup> )	0.6 {6}	
Air Consumption (No load) m <sup>3</sup> /min	0.4	0.35
Free Speed min <sup>-1</sup> (rpm)	27,000	37,500
Size of Collet Chuck mm	6	
Hose Size inch	1/4	
Mass (Weight) kg	0.6 (without hose)	0.45 (without hose)

Standard Accessories		
	<ul style="list-style-type: none"> <li>• 14 mm Single Ended Spanner : 1 pc.</li> <li>• Mounted Wheel No.2 : 1 pc.</li> <li>• Mounted Wheel No.3 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• Chuck Pin : 1 pc.</li> <li>• Bushing R 1/4 x NPT 1/4 : 1 pc.</li> <li>• 14 mm Single Ended Spanner : 1 pc.</li> <li>• Mounted Wheel 13 x 13 x 6 x 38 : 1 pc.</li> <li>• Bushing R 1/4 x NPT 1/4 : 1 pc.</li> </ul>

### Optional Accessories

Mounted Wheel for AIR SONIC L-25B (5 pcs/set)			
No.1 : 16 x 32  PN : TA9A277	No.2 : 16 x 32  PN : TA9A278	No.3 : 19 x 20  PN : TA9A279	No.4 : 25 x 25  PN : TA9A280
No.5 : 19 x 28  PN : TA9A281	No.6 : 25 x 13  PN : TA9A282	No.7 : 32 x 10  PN : TA9A283	No.8 : 16 ball  PN : TA9A284

Rotary Bar for AIR SONIC L-35C (1 pc.)			
No.1 : CB1C-106  PN : TP10594	No.2 : CB2C-105  PN : TP10595	No.3 : CB3C-103  PN : TP10596	No.4 : CB4C-103  PN : TP10597
No.5 : CB5C-104  PN : TP10598	No.6 : CB6C-102  PN : TP10599	No.7 : CB7C-103  PN : TP10600	No.8 : CB8C-105  PN : TP10601

Model

## AL-55 High Speed Rotation 56,500 rpm



- Smooth high speed rotation and low vibration enables precision grinding
- Stepless speed change from 0 to 56,500 rpm meets a wide range of grinding applications
- Compact & light weight for comfortable operation over long periods of time
- Triangular grip fits operator's hand
- Special plastic grip prevents cold hands and absorbs vibration
- Rear exhaust system



### Specifications

Model	AL-55
Rated Air Pressure	MPa {kgf/cm <sup>2</sup> } 0.6 {6}
Air Consumption (No load)	m <sup>3</sup> /min 0.17
Free Speed	min <sup>-1</sup> (rpm) 56,500
Size of Collet Chuck	mm 3
Hose Size	inch 1/4
Mass (Weight)	kg 0.25

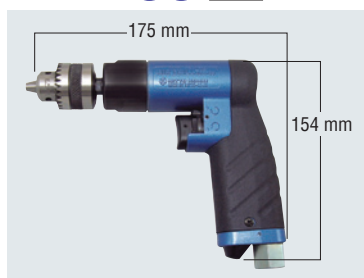
Standard Accessories	
	• Mounted Wheel 5 × 13 × 3 : 1 pc. • Spanner 7 × 9 : 1 pc. • Bushing R 1/4 × NPT 1/4 : 1 pc.

# AIR DRILL

The power and performance you need to drill deeper and faster

Model

## ADR-65



Model

## ADR-100



- Built-in silencer
- Reversible
- Variable speed adjustment
- Rubber grip reduces chilled hand

### Reversible

Change rotation direction by turning the valve as indicated.



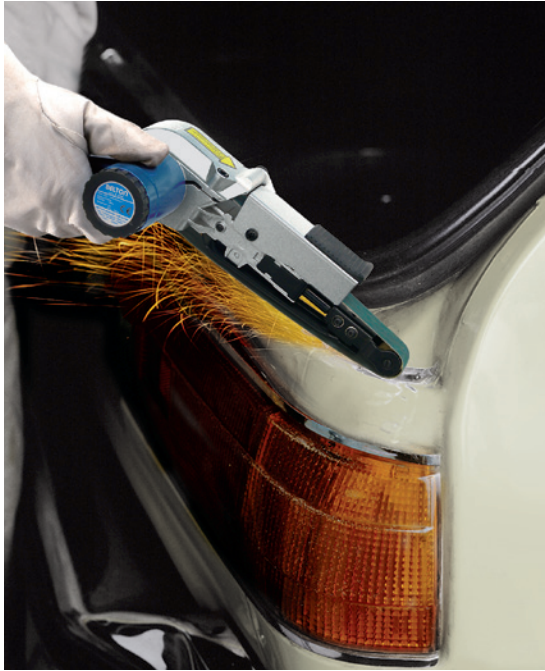
### Specifications

Model	ADR-65	ADR-100
Rated Air Pressure	MPa {kgf/cm <sup>2</sup> } 0.6 {6}	0.6 {6}
Air Consumption (No load)	m <sup>3</sup> /min 0.55	0.67
Free Speed	min <sup>-1</sup> (rpm) 2,900	2,000
Max. Drilling Capacity	mm 6.5	10.0
Mass (Weight)	kg 0.8	1.1

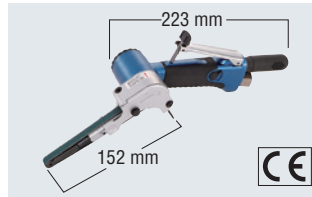
Standard Accessories	
	• Drill Chuck : 1 pc. on the body • Chuck Handle : 1 pc. • Bushing R 1/4 × NPT 1/4 : 1 pc. • 30SH : 1 pc.
Optional Accessory	
	• Hanger : 1 pc. *A hanger to be mounted on the bottom of the grip is available as option.

## BELTON Rear exhaust system

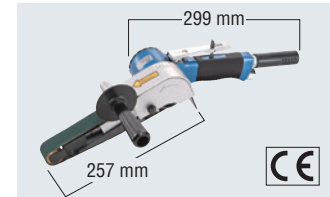
Suitable for sanding jobs in narrow spaces, recessed corners or on curved surfaces



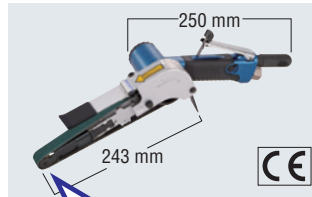
Model **B-10N** Belt Size 10 mm (W)



Model **B-30N** Belt Size 30 mm (W)

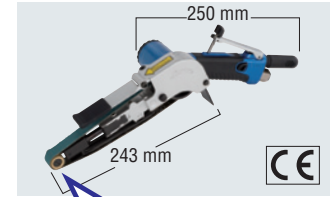


Model **B-20N** Belt Size 20 mm (W)



The Idle Pulley for B-20N is supported by both sides.

Model **B-20NB** Belt Size 20 mm (W)



The Idle Pulley for B-20NB is supported by one side only.

### Specifications

Model	B-10N	B-20N	B-20NB	B-30N
Rated Air Pressure MPa (kgf/cm <sup>2</sup> )	0.6 {6}	0.6 {6}	0.6 {6}	0.6 {6}
Air Consumption (No load) m <sup>3</sup> /min	0.4	0.52	0.52	0.68
Motor Free Speed min <sup>-1</sup> (rpm)	17,000	17,000	17,000	14,000
Belt Speed m/min	1,120	2,620	2,620	2,160
Belt Size mm	10 × 330	20 × 520	20 × 520	30 × 540
Hose Size inch	1/4	1/4	1/4	1/4
Mass (Weight) kg	0.7	1.2	1.2	2.4

### Standard Accessories

- Abrasive Belt Z#60 × 10 mm :2 pcs. (1 pc. on the body)
- Abrasive Belt Z#80 × 10 mm :1 pc.
- Abrasive Belt Z#100 × 10 mm :1 pc.
- Abrasive Belt Z#120 × 10 mm :1 pc.
- 2 mm Hex. Wrench Key :1 pc.
- 4 mm Hex. Wrench Key :1 pc.
- Bushing R 1/4 × NPT 1/4 :1 pc.
- Silencer :1 pc.

- Abrasive Belt Z#60 × 20 mm :2 pcs. (1 pc. on the body)
- Abrasive Belt Z#80 × 20 mm :1 pc.
- Abrasive Belt Z#100 × 20 mm :1 pc.
- Abrasive Belt Z#120 × 20 mm :1 pc.
- 2.5 mm Hex. Wrench Key :1 pc.
- 4 mm Hex. Wrench Key :1 pc.
- Bushing R 1/4 × NPT 1/4 :1 pc.
- Convex Shoe :1 pc.
- Finger Pad Ass'y :1 pc.
- Pan Head Screw 5 × 10 :1 pc.
- Pan Head Screw 6 × 10 :1 pc.

- Abrasive Belt Z#60 × 20 mm :2 pcs. (1 pc. on the body)
- Abrasive Belt Z#80 × 20 mm :1 pc.
- Abrasive Belt Z#100 × 20 mm :1 pc.
- Abrasive Belt Z#120 × 20 mm :1 pc.
- 2.5 mm Hex. Wrench Key :1 pc.
- 4 mm Hex. Wrench Key :1 pc.
- Bushing R 1/4 × NPT 1/4 :1 pc.
- Convex Shoe :1 pc.
- Finger Pad Ass'y :1 pc.
- Pan Head Screw 5 × 10 :1 pc.
- Pan Head Screw 6 × 10 :1 pc.

- Abrasive Belt Z#60 × 30 mm :2 pcs. (1 pc. on the body)
- Abrasive Belt Z#80 × 30 mm :1 pc.
- Abrasive Belt Z#100 × 30 mm :1 pc.
- Abrasive Belt Z#120 × 30 mm :1 pc.
- 4 mm Hex. Wrench Key :1 pc.
- 5 mm Hex. Wrench Key :1 pc.
- Bushing R 1/4 × NPT 1/4 :1 pc.
- Sub Handle Ass'y :1 set
- Grip Guard :1 pc.
- Silencer :1 pc.

### Optional Parts

#### Optional Parts for B-10N

PN	Description	Qty
TQ10942	Shoe 6 (for 6 mm belt)	1 pc.
TB07283	Bracket 6 Ass'y (for 6 mm belt)	1 set
TB05539	Offset Bracket 10 Ass'y	1 set

#### Optional Parts for B-20N/B-20NB

PN	Description	Qty
TB07109	Offset Bracket 20 Ass'y	1 set

#### Optional Parts for B-30N

PN	Description	Qty
TB08150	Offset Bracket 30 Ass'y	1 set

#### Abrasive Belt for B-10N

PN	Description	Qty
TB00241	Abrasive Belt Z#60 × 6 mm	50 pcs.
TB00242	Abrasive Belt Z#80 × 6 mm	50 pcs.
TB00243	Abrasive Belt Z#100 × 6 mm	50 pcs.
TB00244	Abrasive Belt Z#120 × 6 mm	50 pcs.
TB00245	Abrasive Belt Z#180 × 6 mm	50 pcs.
TB00246	Abrasive Belt Z#240 × 6 mm	50 pcs.
TA9A237	Abrasive Belt AA#400 × 6 mm	50 pcs.
TA9A064	Abrasive Belt Z#60 × 10 mm	50 pcs.
TB00076	Abrasive Belt Z#80 × 10 mm	50 pcs.
TB00077	Abrasive Belt Z#100 × 10 mm	50 pcs.
TB00247	Abrasive Belt Z#120 × 10 mm	50 pcs.
TB00248	Abrasive Belt Z#180 × 10 mm	50 pcs.
TB00249	Abrasive Belt Z#240 × 10 mm	50 pcs.
TA9A244	Abrasive Belt AA#400 × 10 mm	50 pcs.

#### Abrasive Belt for B-20N/B-20NB

PN	Description	Qty
TA99605	Abrasive Belt Z#40 × 20 mm	20 pcs.
TA99606	Abrasive Belt Z#60 × 20 mm	20 pcs.
TA99607	Abrasive Belt Z#80 × 20 mm	20 pcs.
TA99608	Abrasive Belt Z#100 × 20 mm	20 pcs.
TA99609	Abrasive Belt Z#120 × 20 mm	20 pcs.
TB00250	Abrasive Belt Z#180 × 20 mm	20 pcs.
TB00251	Abrasive Belt Z#240 × 20 mm	20 pcs.
TA9A252	Abrasive Belt AA#280 × 20 mm	20 pcs.
TA9A253	Abrasive Belt AA#320 × 20 mm	20 pcs.
TA9A254	Abrasive Belt AA#400 × 20 mm	20 pcs.

#### Abrasive Belt for B-30N

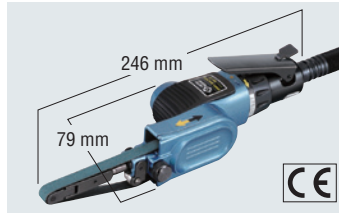
PN	Description	Qty
TB00252	Abrasive Belt Z#40 × 30 mm	20 pcs.
TB00253	Abrasive Belt Z#60 × 30 mm	20 pcs.
TB00254	Abrasive Belt Z#80 × 30 mm	20 pcs.
TB00255	Abrasive Belt Z#100 × 30 mm	20 pcs.
TB00256	Abrasive Belt Z#120 × 30 mm	20 pcs.
TB00257	Abrasive Belt Z#180 × 30 mm	20 pcs.
TB00258	Abrasive Belt Z#240 × 30 mm	20 pcs.
TA9A262	Abrasive Belt AA#280 × 30 mm	20 pcs.
TA9A263	Abrasive Belt AA#320 × 30 mm	20 pcs.
TA9A264	Abrasive Belt AA#400 × 30 mm	20 pcs.

# BABY BELTON

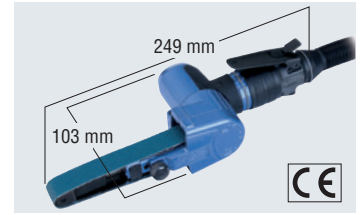


- Compact and lightweight, yet powerful
- Alternative rotation direction
- Ergonomically designed for right or left hand operator convenience

Model **BB-10A** Belt Size 10 mm (W)



Model **BB-20** Belt Size 20 mm (W)



### Specifications

Model	BB-10A	BB-20	
Rated Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 {6}	0.6 {6}
Air Consumption (No load)	m <sup>3</sup> /min	0.25	0.43
Motor Free Speed	min <sup>-1</sup> (rpm)	16,000	16,000
Belt Speed	m/min	1,000	1,100
Belt Size	mm	10 × 330	20 × 330
Hose Size	inch	1/4	1/4
Mass (Weight)	kg	0.6	0.8

Standard Accessories	BB-10A	BB-20
	<ul style="list-style-type: none"> <li>•Abrasive Belt Z#100 × 10 mm: 1 pc. (on the body)</li> <li>•Abrasive Belt Z#120 × 10 mm: 1 pc.</li> <li>•Abrasive Belt Z#180 × 10 mm: 1 pc.</li> <li>•Abrasive Belt Z#240 × 10 mm: 1 pc.</li> <li>•1.5 mm Hex. Wrench Key : 1 pc.</li> <li>•Cupla HA-65SN: 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>•Abrasive Belt Z#60 × 20 mm: 1 pc. (on the body)</li> <li>•Abrasive Belt Z#120 × 20 mm: 1 pc.</li> <li>•Abrasive Belt Z#240 × 20 mm: 1 pc.</li> <li>•2.5 mm Hex. Wrench Key : 1 pc.</li> <li>•3 mm Hex. Wrench Key : 1 pc.</li> <li>•Cupla HA-65SN: 1 pc.</li> <li>•Shoe: 1 pc. •Dust Cover: 1 pc.</li> </ul>

Belt rotation direction can be changed.



**Forward**



**Reverse**

Lever position can be changed for right or left hand operator convenience.



For right-handed user

For left-handed user

Ideal for deburring, chamfering, bead grinding, and polishing applications



Deburring & chamfering of uneven edge and plate surfaces



Curved and unique profiles



Detail finishing



Deburring of thin materials

## Optional Parts For BABY BELTON

### Abrasive Belt for BB-10A

PN	Description	Qty
TA9A064	Abrasive Belt Z#60 × 10 mm	50 pcs.
TB00076	Abrasive Belt Z#80 × 10 mm	50 pcs.
TB00077	Abrasive Belt Z#100 × 10 mm	50 pcs.
TB00247	Abrasive Belt Z#120 × 10 mm	50 pcs.
TB00248	Abrasive Belt Z#180 × 10 mm	50 pcs.
TB00249	Abrasive Belt Z#240 × 10 mm	50 pcs.
TA9A244	Abrasive Belt AA#400 × 10 mm	50 pcs.

### Abrasive Belt for BB-20

PN	Description	Qty
TB07114	Abrasive Belt Z#60	20 pcs.
TB07115	Abrasive Belt Z#80	20 pcs.
TB07116	Abrasive Belt Z#100	20 pcs.
TB07117	Abrasive Belt Z#120	20 pcs.
TB07118	Abrasive Belt Z#180	20 pcs.
TB07119	Abrasive Belt Z#240	20 pcs.
TB07120	Abrasive Belt Z#400*1	20 pcs.
TB07125	Abrasive Belt CE#60	20 pcs.
TB07126	Abrasive Belt CE#80	20 pcs.
TB07127	Abrasive Belt CE#100	20 pcs.
TB07128	Abrasive Belt CE#120	20 pcs.
TB07121	Finish Belt A-VF (Equivalent to #180)	5 pcs.
TB07122	Finish Belt A-M (Equivalent to #320)	5 pcs.
TB07123	Finish Belt S-SF (Equivalent to #400)	5 pcs.

\*1: #400 is Aluminium Belt.

# ORBITAL SANDER

Compact yet extremely powerful.  
Built-in adjustable speed regulator



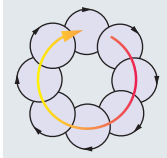
Model  
**OSV-60A**



Sand and polish metal, wood, plastic to a super fine swirl-free finish. Light weight, compact, powerful, whisper quiet, and adjustable speed regulator. Productivity and efficiency increase with the orbital sander. The lightweight unit delivers the performance of heavy duty unit with less vibration and reduced operator fatigue.

### Random orbital action creates a professional finish

The special construction includes the mounting of counter shaft below the rotor. This works in combination with the spindle and circular motions for an extra-fine finish. Speed adjustments allow selection for the best speed for the best job. Random orbital action eliminates swirl patterns and is suitable for polishing, too.



### Specifications

Model	OSV-60A	
Rated Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 {6}
Air Consumption (No load)	m <sup>3</sup> /min	0.68
Motor Free Speed	min <sup>-1</sup> (rpm)	8,500
Orbit Diameter	mm	10
Paper Size	mm	150
Mass (Weight)	kg	2.0
Pad	for self stick papers	

### Standard Accessories

- Bushing R 1/4 x NPT 1/4 : 1 pc.
- Spanner 17 : 1 pc.
- Brush : 1 pc.
- Dust Bag : 1 pc.
- Hose : 1 pc.
- Hose Band : 1 pc.

# PALM ORBITAL SANDER

Ergonomically designed plastic housing conforms to the operator's hand for greater control and comfort



Model  
**APS-125/150**



### For Self Vacuum & Central Vacuum

Available from stock are Non Vacuum Models. You can modify Non Vacuum to Self Vacuum or Central Vacuum by adding a few extra parts.

#### Self Vacuum



#### Central Vacuum



### Random orbital action produces a high-quality swirl-free finish

- Extremely light. APS-125 weighs just 690 g.
- Simple structure for easy maintenance
- Extremely low vibration
- Adjustable speed

### Applications

- Feather edging, metal preparation, and finishing work on body filler
- Curved surface sanding and corner rounding in wood work

### Specifications

Model	APS-125	APS-150	
Rated Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 {6}	0.6 {6}
Air Consumption (No load)	m <sup>3</sup> /min	0.45	0.45
Motor Free Speed	min <sup>-1</sup> (rpm)	10,000	10,000
Orbit Diameter	mm	5	5
Paper Size	mm	125	150
Mass (Weight)	kg	0.69	0.72
Pad Mass (Weight)	kg	0.10	0.12

### Standard Accessories

- Spanner 17 : 1 pc.
- Bushing R 1/4 x NPT 1/4 : 1 pc.



# FREE SANDER

## Superlight, Quiet New low-vibration sander



### Powerful turbine motor

This newly developed motor features a turbine disc and is capable of high speed orbits for super-fine finishing of all materials.

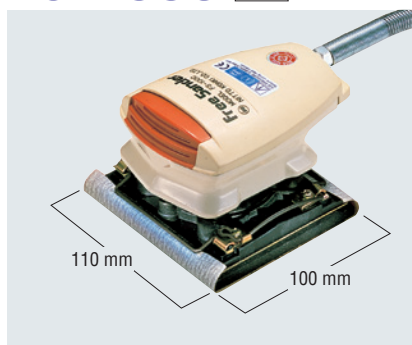
### Small and Lightweight for Comfort and Convenience

Free Sander fits the hand like a glove. It's human-engineered to less tiring over longer periods of operation for big jobs, and compact enough to permit working easily in corners and other spots.

### Minimized Hand Vibration

The turbine motor of FS-100C and the single-ball air motor of FS-50A are mounted directly onto the sanding pad to minimize the discomfort of hand vibration and lessen operator fatigue caused by vibration. This along with excellent control results in a finer finish on all surface materials.

### Model **FS-100C**



### Model **FS-50A**



### Specifications

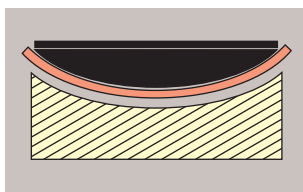
Model		FS-100C	FS-50A
Rated Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)	0.6 (6)
Air Consumption (No load)	m <sup>3</sup> /min	0.2	0.14
Motor Free Speed	min <sup>-1</sup>	20,000	15,000
Orbit Diameter	mm	1.5	1.2
Pad Size	mm	100 × 110	75 × 82
Paper Size	mm	114 × 140	70 × 114
Mass (Weight)	kg	0.5	0.5

### Standard Accessories

- Air Hose H Ass'y : 1 set
- Bushing R 1/4 × NPT 1/4 : 1 pc.
- Abrasive paper #180 : 5 pcs.
- Abrasive paper #240 : 5 pcs.

- Air Hose H Ass'y : 1 set
- Bushing R 1/4 × NPT 1/4 : 1 pc.
- Abrasive paper #180 : 5 pcs.
- Abrasive paper #240 : 5 pcs.

## Optional Accessories



### Round-Pad for FS-100C

The pad is made of sponge rubber and conform easily to the shape being worked. Double-side tape is used with round pad.

### For Free Sander FS-100C

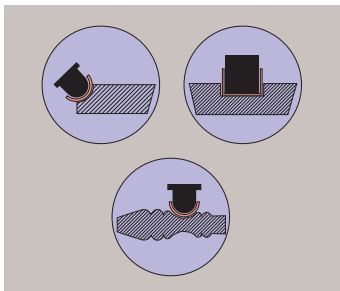
PN	Description	Qty
TA9A367	Rubber Pad Ass'y	1 pc.
TA91474	Round Pad Ass'y	1 pc.
TA9A265	Abrasive paper #100	200 pcs.
TA9A266	Abrasive paper #120	200 pcs.
TA9A267	Abrasive paper #150	200 pcs.
TA9A268	Abrasive paper #180	200 pcs.
TA9A269	Abrasive paper #240	200 pcs.
TA9A270	Abrasive paper #280	200 pcs.
TA9A271	Abrasive paper #320	200 pcs.
TB02235	Dust Collector Ass'y	1 pc.

### For Free Sander FS-50A

PN	Description	Qty
TA99828	Rubber Pad Ass'y	1 pc.
TB02240	Dust Collector Ass'y	1 pc.

# LINE SANDER

**Sands to a clean finish and more in less time. Compact and light.**



### Special Sanding Pad

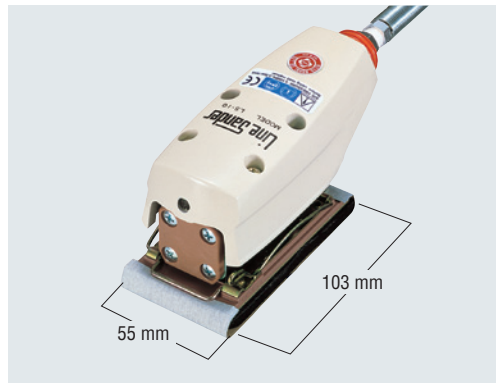
An accessory Block Rubber Pad Ass'y can be easily trimmed to conform the shape being worked.

<b>Standard Accessories</b>	<ul style="list-style-type: none"> <li>• Hose E Ass'y : 1 set</li> <li>• Bushing R 1/4 x NPT 1/4 : 1 pc.</li> <li>• Block Rubber Pad Ass'y : 1 set</li> <li>• Abrasive Paper #240 : 5 pcs.</li> <li>• Abrasive Paper #320 : 5 pcs.</li> <li>• Base Plate A Ass'y : 1 set</li> </ul>
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### Optional Accessories

PN	Description	Qty
TB02244	Dust Collector Ass'y	1 pc.

Model **LS-10**



### Light sanding with piston movement

A compact, lightweight and economical unit having amazingly low air consumption. Built rugged for long continuous hours of operation. Incorporates no gears and other complicated mechanisms.



### Double Piston Alignment

Special double-action minimizes both noise and vibration so the operator works in more comfort.

### Specifications

Model	<b>LS-10</b>	
<b>Rated Air Pressure</b>	MPa (kgf/cm <sup>2</sup> )	0.6 {6}
<b>Air Consumption (No load)</b>	m <sup>3</sup> /min	0.11
<b>Free Speed</b>	min <sup>-1</sup>	4,000
<b>Stroke</b>	mm	4
<b>Pad Size</b>	mm	55 x 103
<b>Abrasive Paper Size</b>	mm	57 x 140
<b>Mass (Weight)</b>	kg	0.75

# SUPER HAND

Super efficient way of easy filing, polishing and finishing

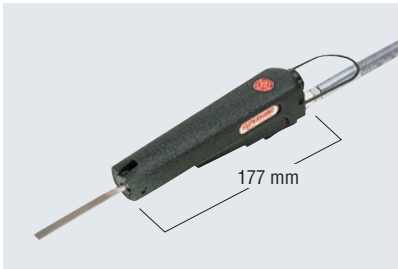


**SUPER HAND replaces work.**

SUPER HAND is ultra-small, ultra-lightweight; yet performs with the power and efficiency of a much larger tool to meet user requirements of filing, chamfering and other jobs.

It comes with the quick-change tool points for different jobs. You can work on steel, glass, brass, aluminium, wood and other materials silently. It also handles scores of big jobs with speed and ease.

Model **SH-100A**



Model **ASH-900**



*Weight reduced by half for comfortable operation over long period of time*

**Rat Tail File SF-10**



**Triangular Taper File SF-11**



**Half Round File (Rat Tail/Double Cut) SF-12**



**Flat Bastard File SF-13**



**Specifications**

Model	SH-100A	ASH-900
Rated Air Pressure MPa (kgf/cm <sup>2</sup> )	0.6 {6}	0.6 {6}
Air Consumption (No load) m <sup>3</sup> /min	0.24	0.2
Stroke Speed min <sup>-1</sup>	3,700	6,300
Stroke mm	9	9
Max. Shank dia. of Points mm	6.3	5.0
Mass (Weight) kg	1.1	0.5

Standard Accessories	SH-100A	ASH-900
	<ul style="list-style-type: none"> <li>• Flat Bastard File SF-13 : 1 pc.</li> <li>• Rat Tail File SF-10 : 1 pc.</li> <li>• Triangular Taper File SF-11 : 1 pc.</li> <li>• Half Rounded File (Rat Tail/Double Cut) SF-12 : 1 pc.</li> <li>• 3 mm Hex. Socket Screw Key : 1 pc.</li> <li>• Bushing R 1/4 × NPT 1/4 : 1 pc.</li> </ul>	<ul style="list-style-type: none"> <li>• Flat Bastard File SF-13 : 1 pc.</li> <li>• Rat Tail File SF-10 : 1 pc.</li> <li>• Triangular Taper File SF-11 : 1 pc.</li> <li>• Half Rounded File (Rat Tail/Double Cut) SF-12 : 1 pc.</li> <li>• 2.5 mm Hex. Socket Screw Key : 1 pc.</li> <li>• Bushing R 1/4 × NPT 1/4 : 1 pc.</li> </ul>

**Optional Accessories**

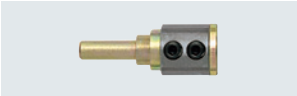
**Rubber Pad Ass'y for SH-100A**



**Sanding Pad Ass'y for ASH-900**



**Supporter Ass'y for SH-100A**

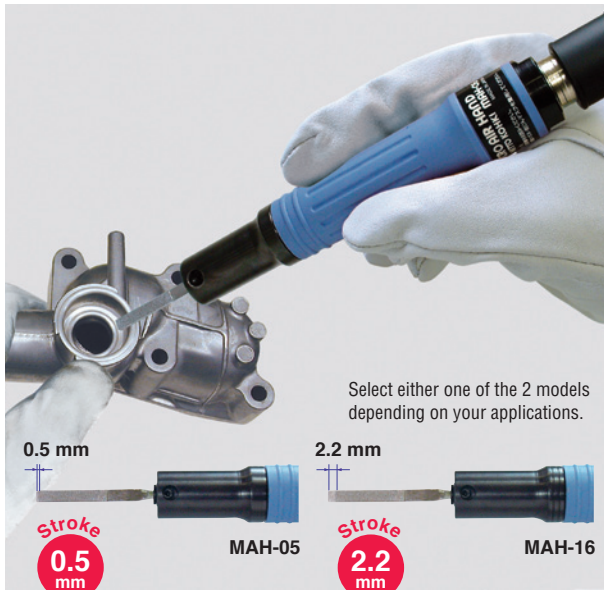


**For Super Hand SH-100A & ASH-900**

PN	Description	Qty
TA9A222	Rat Tail SF-10	5 pcs.
TA9A223	Triangular Taper File SF-11	5 pcs.
TA9A224	Half Rounded File (Rat Tail/Double Cut) SF-12	5 pcs.
TA9A225	Flat Bastard File SF-13	5 pcs.
TA91752	Rubber Pad Ass'y for SH-100A	1 set
TA94625	Supporter Ass'y for SH-100A	1 set
TB04319	Sanding Pad Ass'y for ASH-900	1 set

# MICRO AIR HAND

Fine reciprocating motion best for precision parts filing



Select either one of the 2 models depending on your applications.

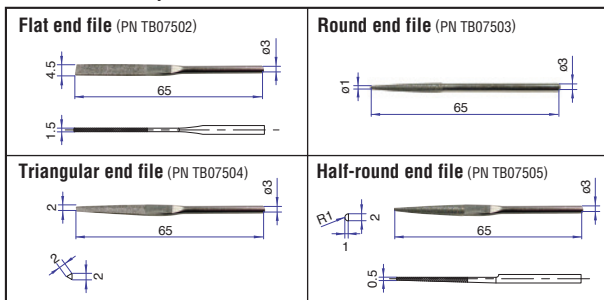
Model **MAH-05/MAH-16**



### Specifications

Model	MAH-05	MAH-16
Rated Air Pressure	MPa {kgf/cm <sup>2</sup> } 0.6 {6}	
Air Consumption (No load)	m <sup>3</sup> /min 0.07	
Stroke Speed	min <sup>-1</sup> 22,000	11,000
Stroke	mm 0.5	2.2
Shank diameter of file	mm 3	
Mass (Weight)	kg 0.4	

### Diamond files (5 pcs/set)



Standard Accessories	<ul style="list-style-type: none"> <li>• Flat end file : 1 pc.</li> <li>• Round end file : 1 pc.</li> <li>• Bushing R1/4 x NPT 1/4 : 1 pc.</li> <li>• Hex. Wrench key 2 : 1 pc.</li> </ul>	
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**Vice Holder (PN TB07506)**

Grinding stone plates such as ceramic grinding stones in the market can be also mounted. (Max size: Thickness 3.2 mm x Width 20 mm)

Mounting examples

# SUPER SAW

Special double-piston system achieved low vibration while cutting speed improved!!

Model **SSW-110**



SSW-110 has many features on the followings.....

- Low vibration is achieved by the special design of double piston mechanism
- New adoption of piston rings minimized power loss and improved cutting efficiency
- Optimized blade stroke for maximum cutting performance
- Rear exhaust system for chip-scattering-free operation
- New double-lock throttle lever prevents unintended start
- Cutting Capacity : Max. plate thickness 3 mm (for Mild Steel)

### Optional Accessories



PN	Description	Qty
TA9A005	32 mm Saw Blade	10 pcs.
TA9A011	24 mm Saw Blade	10 pcs.
TB00193	18 mm Saw Blade	10 pcs.
TB00192	14 mm Saw Blade	10 pcs.

### Specifications

Model	SSW-110	
Rated Air Pressure	MPa (kgf/cm <sup>2</sup> ) 0.6 {6}	
Air Consumption (No load)	m <sup>3</sup> /min 0.29	
Stroke Speed	min <sup>-1</sup> 7,000	
Stroke	mm 11	
Mass (Weight)	kg 0.62	

Standard Accessories	<ul style="list-style-type: none"> <li>• 32 mm Saw Blade : 2 pcs.</li> <li>• 3 mm Hex. Socket Screw Key : 1 pc.</li> <li>• Bushing R 1/4 x NPT 1/4 : 1 pc.</li> </ul>
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# HAND BEVELER Model **HB-15B** *Chamfering up to 15C*



- Ideal for chamfering before welding
- Uses easy-to-replace indexable inserts
- Indexable inserts have four working edges for good economy
- Finishes a surface so fine that post-sanding is unnecessary
- Column R-section can be chamfered with optional attachment
- No damage of workpieces is expected as heat-hardening or oxidization will seldom happen

**Specifications**

Model	HB-15B	
Power Source (Single phase)	115 V AC, 50/60 Hz	230 V AC, 50/60 Hz
Rated Power Consumption	W 910	910
Rated Current	A 10.5	4
No-load Speed	min <sup>-1</sup> (rpm) 3,340	2,750
Chamfering Capacity	0C - 15C	
Chamfer Angle	15° - 45°	
Mass (Weight)	kg 14	

**Standard accessories**

- Hex. Socket Screw Key 4,5,6 mm : each 1 pc.
- Spanner 24 × 27 : 1 pc.
- Hook Spanner 25 - 28 : 1 pc.
- 3 mm T Wrench Key : 1 pc.
- TA9A093 Indexable Insert 12.7 sq. 1 set (12 pcs./ set)

**Optional accessories**

- TA9A728 Pipe Plate Ass'y for 5" to 32" (125 mm to 800 mm)

**Chamfer angle and width**

Chamfer Angle α	HB-15B Mild Steel(mm)		Chamfer X Y	Straight
	X	Y		
45°	15	15		Straight
30°	9	15.5		
15°	4	15.4		

## Handy Electric Chamfering Tool **MINI BEVELER** Model **MB-03A**

Double insulation



**Compact and light for speed chamfering**

- An outer R-part attachment allows chamfering of outer diameters with a radius greater than 170 mm
- An optional inner head ass'y allows chamfering a pipe of inner diameter larger than 100 mm (50R)

**Specifications**

Model	MB-03A	
Power Supply (Single phase)	230 V or 115 V AC, 50/60 Hz	
Rated Power Consumption	W 430	
Rated Current	A 2 / 4.5	
Chamfering Capacity	0C - 3C	
Chamfering Radius Capacity	2R, 3R	
Chamfer Angle	45°	
Rated Revolutions	min <sup>-1</sup> (rpm) 7,100	
Mass (Weight)	kg 2.5	

**Standard accessories**

- 3 & 4 mm Hex. Socket Screw Key : each 1 pc.
- Spanner T-9F : 1 pc.

**Optional accessories**

- TA9A386 Indexable Insert 9.525, 10 pcs./set
- TA9A592 Indexable Insert 9.525 2R, 10 pcs./set
- TA9A638 Indexable Insert 9.525 3R, 10 pcs./set
- TA9A594 Inner Head Ass'y

**Chamfer angle, width and radius**

Chamfer Angle α	MB-03A Mild Steel(mm)		Chamfer X Y	Straight		
	X	Y				
45°	3	3		Straight		
Model	MB-03A					Radius
Material	Mild Steel					
Radius(mm)	2, 3					

Handy Electric Chamfering Tool

## MINI BEVELER Model EMB-0307B



Double insulation



Stainless Steel

3C

4R

Mild Steel

7C

4R

### Chamfer angle, width and radius

Chamfer Angle $\alpha$	EMB-0307B				Chamfer	X	Y	$\alpha$	Straight
	Stainless Steel(mm)		Mild Steel(mm)						
45°	3	3	7	7					
30°	2.2	3.8	3.8	6.6					
15°	1	3.8	1.5	5.6					

Model	EMB-0307B		Radius	Round
Material	Stainless Steel	Mild Steel		
Radius(mm)	2, 3, 4	2, 3, 4		

- Applicable up to 3C stainless steel chamfering, and up to 7C mild steel chamfering
- Indexable inserts have four working edges for good economy
- Chamfering angle can be adjusted to any desired position at 15° - 45°
- Pipe outer edge can be also chamfered with standard accessories that come with the tool
- Dust box collects swarf and chips effectively

### Specifications

Model	EMB-0307B	
Power Supply	220 V - 240 V AC, 50/60 Hz	
Rated Power Consumption	W	1010
Rated Current	A	4.6
Rated Duty	Continuous	
Chamfering Capacity	Mild Steel	0C - 7C, 2R, 3R, 4R
	Stainless Steel	0C - 3C, 2R, 3R, 4R
Chamfer Angle	15° - 45°	
Power Cord Length	m	4.0
Mass (Weight)	kg	3.9

### Standard accessories

- Carbon Brush Ass'y : 1 set.
- 4 mm Hex. Wrench Key : 1 pc.
- Indexable Insert with Hole 12.7 : 1 pc.
- Indexable Insert Set Screw 4 × 7 : 1 pc.
- Dust Box Ass'y : 1 set.
- Hex. Nut M8 : 2 pcs.
- 8 × 25 mm Hex. Socket Set Screw : 2 pcs.
- Spanner T-15D : 1 pc.
- Pan Head Screw 5 × 10 : 3 pcs.

Electric Radial Chamfering Tool

## CIRCUIT BEVELER Model ECB-0203

Model



Double insulation

Smoothly chamfering straight and curved edges



Stainless Steel

1.5C 2R

Mild Steel

3C 3R

- Applicable up to 3C (3R) mild steel chamfering, and up to 1.5C (2R) stainless steel chamfering
- Minimum chamfering plate thickness is 2 mm (Max.0.5C)
- Indexable inserts have four working edges for good economy
- An optional straight plate allows chamfering a straight edge shoulder

### Specifications

Model	ECB-0203	
Power Supply	220 V - 240 V AC, 50/60 Hz	
Rated Power Consumption	W	450
Rated Duty	min	30
Motor No-load Speed	min <sup>-1</sup> (rpm)	11,000
Chamfering Capacity	Mild Steel	0C - 3C, 2R*1, 3R*1
	Stainless Steel	0C - 1.5C, 2R*1
Chamfer Angle	45°	
Power Cord Length	m	2.5
Mass (Weight)	kg	2.5

\*1: In case of chamfering 3R, an optional indexable insert for 3R is necessary, and chamfering 2R, an optional guide sleeve 24 mm dia, and indexable insert for 2R are necessary.

### Standard accessories

- Indexable Insert with Hole 12.7 : 1 pc.
- Indexable Insert Set Screw : 1 pc.
- 5 mm Hex. Socket Screw Key : 1 pc.
- Spanner 8 × 10 : 1 pc.
- Spanner T-15D : 1 pc.
- Sub Handle : 1 pc.
- Grip Guard : 1 pc.
- Ball Bearing 687zz : 1 pc.
- Gauge C3 : 1 pc.

### Chamfer angle, width and radius

Chamfer Angle $\alpha$	ECB-0203				Chamfer	X	Y	$\alpha$	Straight
	Stainless Steel		Mild Steel(mm)						
45°	1.5	1.5	3	3					

Model	ECB-0203		Radius	Round
Material	Stainless Steel	Mild Steel		
Radius(mm)	2	2, 3		

Chamfering range of operation			
Min. Diameter	Min. Radius	Min. Depth	Min. Thickness

# CHAMFERING PORTABLE CHAMFERING TOOLS **MINI BEVELER/CIRCUIT BEVELER**

Pneumatic Chamfering Tool

## MINI BEVELER

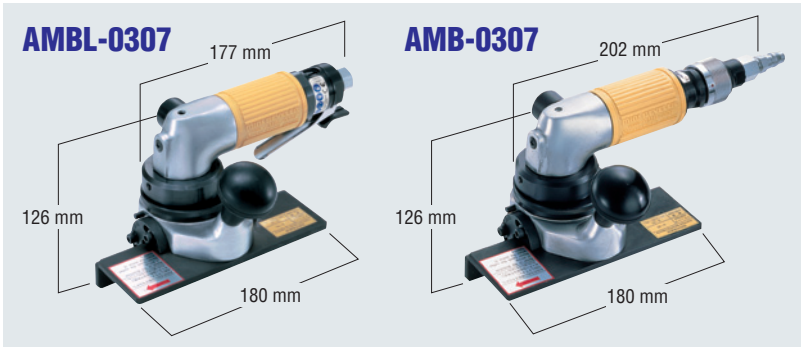
Lever Type

**AMBL-0307**



Ring Type

**AMB-0307**



Stainless Steel

**3C**

**4R**

Mild Steel

**7C**

**4R**

**NOW A SMALL AIR BEVELER DOES THE BIG JOBS, TOO**

- Applicable to stainless steel and mild steel chamfering
- Indexable inserts have four working edges for good economy
- Simple to adjust chamfering depth and replace Indexable Inserts
- Pipe outer edge can be also processed with standard accessories
- Chamfering angle can be adjusted to any desired position at 15° - 45°

### Chamfer angle, width and radius

Chamfer Angle $\alpha$	AMBL-0307/AMB-0307				Chamfer	Straight
	Stainless Steel (mm)		Mild Steel (mm)			
	X	Y	X	Y		
45°	3	3	7	7		
30°	2.2	3.8	4	7		
15°	1	3.8	2.2	8		

Model	AMBL-0307/AMB-0307		Radius	Round
Material	Stainless Steel	Mild Steel		
Radius (mm)	2, 3, 4	2, 3, 4		

### Specifications

Model	AMBL-0307, AMB-0307	
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No load)	m <sup>3</sup> /min	0.9
Free Speed	min <sup>-1</sup> (rpm)	14,000
Chamfering Capacity	Mild Steel	0C - 7C or 2R, 3R, 4R
	Stainless Steel	0C - 3C or 2R, 3R, 4R
Chamfer Angle	15° - 45°	
Mass (Weight)	kg	2.9

### Standard accessories

- 3 & 4 mm Hex. Socket Screw key : 1 pc. each
- Spanner : 1 pc.
- Hex. nut M8 : 2 pcs.
- Bushing R 3/8 x NPT 3/8
- 8 x 25 Hex. Socket Set Screw : 2 pcs.
- Indexable Insert Set Screw 4 x 7 : 1 pc.
- Indexable Insert : 1 pc.

Pneumatic Radial Chamfering Tool

## CIRCUIT BEVELER

Model



**CB-02**

*Lets you chamfer easily and smoothly no matter what the curve line is*



### Chamfer angle, width and radius

Chamfer Angle $\alpha$	CB-02		Chamfer	Straight	Model	CB-02	Radius	Round
	Mild Steel (mm)							
	X	Y						
45°	2	2						

- Versatility — chamfer either inner or outer edges
- Precisely adjust chamfer dimensions with accessory gauge

### Specifications

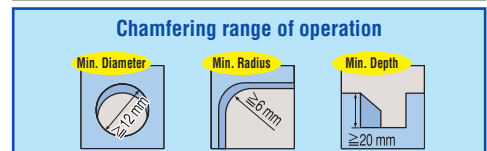
Model	CB-02	
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No load)	m <sup>3</sup> /min	0.4
Free Speed	min <sup>-1</sup> (rpm)	13,000
Chamfering Capacity	0C - 2C, 2R	
Chamfer Angle	45°	
Mass (Weight)	kg	1.8

### Standard accessories

- Indexable Insert : 1 pc.
- Adjustment gauge : 1 pc.
- Spanner T-9F : 1 pc.
- Protective cap : 1 pc.
- Hook Spanner 58-62 : 1 pc.
- Bushing R 1/4 x NPT 1/4

### Optional accessories

- TA9A386 : Indexable Insert 9.525 sq. Ass'y (10 pcs.)
- TA9A592 : Indexable Insert 9.525 sq. R2 Ass'y (10 pcs.)



# Optional Accessories for HAND BEVELER / MINI BEVELER / CIRCUIT BEVELER

	PN	Description	Sales Unit	Application model	Remarks
	TA9A093	Indexable Insert 12.7 Ass'y	12 pcs./set	HB-15B	
	TB01159	Indexable Insert 12.7 with hole Ass'y	10 pcs./set	EMB-0307B, AMB-0307, AMBL-0307, ECB-0203	
	TB01791	Indexable Insert 12.7 Ass'y R2	10 pcs./set	EMB-0307B, AMB-0307, AMBL-0307, ECB-0203	
	TB01651	Indexable Insert 12.7 Ass'y R3	10 pcs./set	EMB-0307B, AMB-0307, AMBL-0307, ECB-0203	
	TB01790	Indexable Insert 12.7 Ass'y R4	10 pcs./set	EMB-0307B, AMB-0307, AMBL-0307	
	TA9A386	Indexable Insert 9.525 with hole Ass'y	10 pcs./set	MB-03A, CB-02	
	TA9A592	Indexable Insert 9.525 Ass'y R2	10 pcs./set	MB-03A, CB-02	
	TA9A638	Indexable Insert 9.525 Ass'y R3	10 pcs./set	MB-03A	
	TA9A728	Plate Ass'y for pipe	1 set	HB-15B	For pipe 125 - 800 mm dia.
	TB02539	Attachment for small dia. pipe	1 set	EMB-0307B, AMB-0307, AMBL-0307	For pipe 80 - 200 mm dia.
	TA9A594	Inner head Ass'y	1 set	MB-03A	For min. 100 mm dia.
	TB02857	Guide sleeve 24 mm dia. Ass'y	1 set	ECB-0203	For chamfering R2
	TB03097	Plate Ass'y for straight line use	1 set	ECB-0203	
	TB02862	Dust Box Ass'y	1 set	ECB-0203	Used with Plate Ass'y for straight line use
	TB03424	Spanner T-9D	1 pc.	MB-03A, CB-02	
	TQ01683	Spanner T-15D	1 pc.	EMB-0307B, AMB-0307, AMBL-0307, ECB-0203	

# QUICK CONNECTIVE COUPLINGS FOR PNEUMATIC TOOLS **HI CUPLA series**

## HI CUPLA / HI CUPLA 200 (One-touch connection & Big flow rate type)



- One-way shut-off cupla with an automatic shut-off valve in the socket
- Important parts are hardened for excellent wear resistance and durability

Plug				P	S	Socket						
<b>For hose connection</b>				40PH	For 1/2" hose	<b>For hose connection</b>						
17PH	For 1/4" hose	400PH	For 1/2" hose		40SH	For 1/2" hose	<b>For female thread connection</b>					
20PH	For 1/4" hose	600PH	For 3/4" hose		10SM	For Rc 1/8"	400SM	For Rc 1/2"				
30PH	For 3/8" hose	800PH	For 1" hose		20SM	For Rc 1/4"	600SM	For Rc 3/4"				
<b>For female thread connection</b>				40PM	For Rc 1/2"	<b>For male thread connection</b>						
10PM	For Rc 1/8"	400PM	For Rc 1/2"		20SF	For R 1/4"	400SF	For R 1/2"				
20PM	For Rc 1/4"	600PM	For Rc 3/4"		30SF	For R 3/8"	600SF	For R 3/4"				
30PM	For Rc 3/8"	800PM	For Rc 1"		40SF	For R 1/2"	800SF	For R 1"				
<b>For male thread connection</b>				20PF	For R 1/4"	400PF	For R 1/2"					
30PF	For R 3/8"	600PF	For R 3/4"						<b>For hose connection</b>			
40PF	For R 1/2"	800PF	For R 1"						200-17SH	For 1/4" hose	200-40SH	For 1/2" hose
<b>For male thread connection (parallel thread)</b>					20PFF	For G 1/4"					200-20SH	For 1/4" hose
								200-30SH	For 3/8" hose			
<b>Specifications</b>						<b>For female thread connection</b>						
Type	Hi Cupla		Hi Cupla 200		<b>For male thread connection</b>							
Body material	Steel (chrome-plated)		Steel (chrome-plated)									
Size	1/8", 1/4", 3/8", 1/2", 3/4", 1"		1/8", 1/4", 3/8", 1/2"									
Working pressure	1.5 MPa		1.0 MPa									
Pressure resistance	2.0 MPa		1.5 MPa									
Packing material	NBR		NBR									
Working temp.range	-20°C - 80°C		-5°C - 60°C									



## HI CUPLA ACE

- Plastic Cuplas with a built-in locking mechanism
- Pressure ratings comparable to steel Cuplas

Specifications	
Body material	Engineering plastics
Size	1/4", 3/8", others
Working pressure	1.5 MPa
Pressure resistance	2.0 MPa
Packing material	NBR
Working temp.range	-5°C - 60°C

Plastic Plug				P	S	Hi Cupla Ace Socket				
<b>For hose connection (PH)</b>					<b>For hose connection (SH)</b>					
20PH-PLA	For 1/4" hose					HA-20SH	For 1/4" hose			
30PH-PLA	For 3/8" hose					HA-30SH	For 3/8" hose			
<b>For female thread connection (PM)</b>					<b>For female thread connection (SM)</b>					
20PM-PLA	For Rc 1/4"					HA-20SM	For Rc 1/4"			
30PM-PLA	For Rc 3/8"					HA-30SM	For Rc 3/8"			
<b>For urethane hose with spring nut connection (PNG)</b>					<b>For urethane hose with spring nut connection (SNG)</b>					
50PNG-PLA	For 5 ID x 8 OD hose					HA-50SNG	For 5 ID x 8 OD hose			
65PNG-PLA	For 6.5 ID x 10 OD hose					HA-65SNG	For 6.5 ID x 10 OD hose			
85PNG-PLA	For 8.5 ID x 12.5 OD hose					HA-85SNG	For 8.5 ID x 12.5 OD hose			
<b>For male thread connection (PF)</b>					<b>Hi Cupla Ace T type (for 2 branches)</b>					
20PFF-PLA	For G 1/4"					HA-T	20-PLA / HA-65S x 2			



**MACHINE TOOLS**

*Electric & Hydarulic Machine Tools,  
Labor-saving plus improved work efficiency*

A wide range of unique tools for boring and punching

**ATRA ACE auto**  
PORTABLE MAGNETIC BASE AUTOMATIC DRILLING MACHINE



**BORING**

*Model WA-3500*

**ATRA ACE manual feed**  
PORTABLE MAGNETIC BASE DRILLING MACHINE



**BORING**

*Model WOJ-3200*

**ATRA ACE manual feed**  
PORTABLE MAGNETIC BASE DRILLING MACHINE



**BORING**

*Model AO-5575*

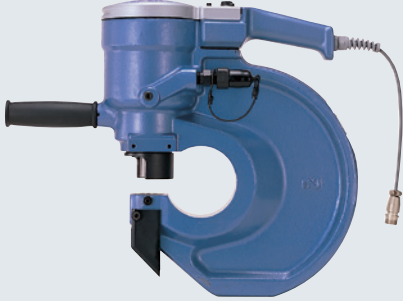
**JETBROACH CUTTERS & HI-BROACH CUTTERS**



**BORING**

*ANNULAR CUTTERS*

**SELFER ACE**  
PORTABLE DOUBLE-ACTING HYDRAULIC PUNCHER



**PUNCHING**

*Puncher*

**SELFER HA Type**  
PORTABLE SINGLE-ACTING HYDRAULIC PUNCHER



**PUNCHING**

*Puncher*

**HANDY SELFER**  
ELECTRICALLY OPERATED HYDRAULIC PUNCHER



**PUNCHING**

*Model E25-0615*

**HYDARULIC PUMP for SELFER ACE**

*Double-Acting*



**Puncher & Pump**

**HYDRAULIC PUMP for SELFER HA Type**

*Single-Acting*



**Puncher & Pump**

# "delvo" Electric Screwdrivers / Spring Balancer Linear-motor-driven Free Piston System

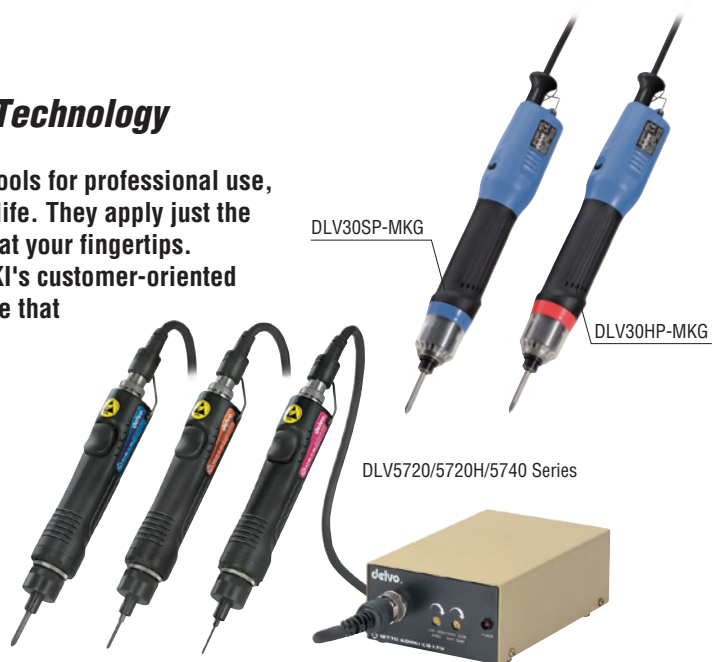
OTHER PRODUCT LINES

## delvo Professional Tools for High Technology

NITTO KOHKI "delvo" Electric Screwdrivers are high-quality tools for professional use, with special emphasis on precise control of torque and long life. They apply just the correct amount of torque –with sure, positive control always at your fingertips. They're smooth and shockless in operation, too. NITTO KOHKI's customer-oriented service system is directly connected to sales agents to ensure that you can use "delvo" Electric Screwdrivers with confidence.

### delvo Models

- DLV7300 Series
- DLV7500/8500 Series
- DLV7000/8000 Series
- DLV7100/7200/8100/8200 Series
- DLV3100/3300 Series
- DLV5720/5720H/5740/5740H/5750 Series
- DLV5800 Series
- DLV30SP/30HP-MKG (with built-in brushless motors)



## Spring Balancer

**TIGON Spring Balancer Improves Work Safety & Efficiency**

### TIGON Spring Balancer Models

- TW-00/TW-0/TW-3/TW-5/TW-9/TW-15/TW-22/
- TW-30/TW-40/TW-50/TW-60/TW-70

Capacities ranging from 0.5 - 70 kg.



## Linear Motor Driven Free Piston System

MEDO pumps are unique products featuring a Linear-motor-driven Free Piston System. NITTO KOHKI has made available a complete series of air compressors and suction pumps that incorporate this revolutionary mechanism. These are quite appropriate as air sources or suction power units for various pneumatically operated equipment and apparatus in advanced industries.



# SAFETY GUIDE

**Be sure to read and understand all safety precautions mentioned below and to follow the instructions given to operate each Nitto Kohki brand tool as stated in the operator's manual. Keep operators manual close by when operating machines or tools for reference of safe operation and precautions.**

## Safety Precautions

**Failure to observe the following warnings may cause a potentially hazardous situation, which if not corrected could result in serious injury or death. To prevent the risk of fire, electric shock, and/or personal injury, proper safety guidelines should be followed at all times.**

### Warning for ALL Machines and Tools

- Always keep the work area free from clutter and potentially dangerous conditions such as hanging power cords, working debris, air hoses, and garbage to prevent accidents from occurring.
- Consider proper working environments for each tool carefully. Do not expose tools to extreme amounts of moisture or direct contact with water or rain. Keep area well lit at all times to prevent hidden dangers and never operate the equipment near flammable liquids or in gaseous or explosive atmospheres.
- Keep all tools and tool accessories away from children and all unauthorized personnel. Serious injury or possible death may result from machines being handled by children.
- Properly store machines and accessories while not in use. They should be kept in a dry, locked-up location out of reach of children or unauthorized personnel.
- Improper or negligent use of tools will cause increased maintenance costs, and the amount of time in which to complete the job. Always let the tool do the work at the rate of which it was designed. Best performance is always achieved by reading and understanding the proper operation of each machine or tool.
- Always wear safety glasses and protective hand and foot wear during or around operating tools. Wear a protective hair covering to contain long hair. Do not wear loose clothing and/or accessories as they may be caught in moving parts and inflict serious injury or possible death.
- Wear respiratory protection when working in an environment where dust particles are generated during operation.
- Do not over-reach or allow yourself to become unstable during tool operation and always maintain a correct posture.
- Use clamps or a vise to secure the work piece tightly and eliminate vibration. Never hold the work piece with your hands, keep both hands on the tool for increased productivity.
- Use the right tool or machine that can complete the job within its specifications. Do not attempt to adapt smaller machines or tools to complete a job designed for heavy-duty equipment. Do not use the tools for other than what they were designed for. There is a right tool for each job, be aware of tool limitations and never overload.
- Make sure to inspect all external screws, nuts, bolts and attached accessories are fastened tightly and secure prior to each use. All moving parts should be free from obstruction and allowed to operate smoothly. Any damaged or missing parts should be repaired or replaced by the sales agent or distributor from which the tool was originally purchased. Do not use machines or tools which cannot be activated or stopped with a power switch or lever.
- Do not use any machine with a damaged, frayed, cut, or deteriorated power cords or air hoses. Always replace at the first sign of damage.
- Always remove all tools required to adjust, add, or remove parts from tools prior to use to prevent tool damage or user injury.
- Always avoid an unexpected start by having all power buttons or levers in the off position prior to attaching to a power or air supply. Never carry tools with your finger on the on/off switch or lever when the power or air supply is attached.
- Do not use the power or air supply lines to move, carry or support the tool during usage or transportation. Do not place the power or air line near a heat source, oil, water, or items with sharp edges.
- Never leave a machine or tool running unattended. Keep a firm grip on the designated areas of the machine or tool until it comes to a complete stop. Always turn the power switch or lever to the off position and disconnect from the power source when not in use.
- Do not disassemble or modify a tool to complete a job other than what it was designed for. This will void any warranty on the equipment and may cause serious personal injury or possible death.
- Maintenance is necessary for all machines and tools. Always maintain blades and cutters properly and replace when edges become damaged or are not sharp enough for safe operation. Follow the instruction manual for lubrication needs and adjustment points if applicable. Check the power and air supply lines periodically and change accordingly to safety regulations. If an extension line is adopted, always make sure that it meets or exceeds tool requirements for amperage or air supply before using and is rated for outdoor usage. Change supply lines whenever they are found to be defective or damaged. Keep the grip and handles dry and clean of grease or oil so that it will not disturb proper operation.
- Switch off and disconnect from power source before servicing equipment or changing accessories.
- Be alert and pay close attention to the work being performed at all times. Do not operate machines or tools when heavily fatigued. Users should be aware of all circumstances surrounding their application.
- Use only recommended parts and accessories as per individual machine or tool operator manuals. Use of improper accessories or attachments may result in serious injury or possible death.
- All repairs and services must be performed by authorized Nitto Kohki dealers or technicians.
- Do not deface or remove any label, warning indicator, or nameplate associated with each machine or tool.

### Notice for Electric Tools

- The power source must be limited to the individual tools specifications as stated on the nameplate or instruction manual.
- Make sure that all machine and power tools are properly grounded at all times (excludes double-insulated tools). Always use a GFCI (Ground-Fault-Circuit-Interrupt) to protect the user and surrounding persons from electric shock.
- Be aware of low voltage situations. Improperly gauged extension cords or power cords used or shared with other electrical devices will cause all tools on the line to not run at optimal performance. This condition may result in damage to the machine and/or operator.

### Notice for Air Tools

- Air pressure at the inlet of the tool must not exceed 0.6 MPa (6 kgf/cm<sup>2</sup>).

# POWER TOOLS

## Technologies that Respond to the Needs of the Times



### Overseas Affiliates / Offices

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**NITTO KOHKI DEUTSCHLAND GMBH**  
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**NITTO KOHKI AUSTRALIA PTY LTD**  
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**NITTO KOHKI (SHANGHAI) CO., LTD.**  
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**SHENZHEN BRANCH**  
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**NITTO KOHKI CO., LTD.**  
**SINGAPORE BRANCH**  
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★ Specifications and designs are subject to change at any time without notice.



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