

# Nitto Kohki's PONJER TOOLS

**Pneumatic & Electric** 



















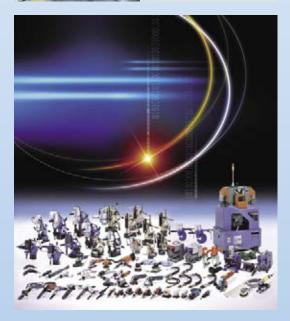


# Pneumatic & Electric Power Tools,Labor-saving plus ImprovedWork Efficiency!NEEDLE SCALER

# **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, couplings and pneumatic hand tools are among the finest precision engineered equipment to be found today.

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

**HI CUPLA Series** 

**Machine Tools** 

delvo, Spring Balancer, Linear Motor Driven Free Piston System

NOTES ON USING TOOLS – Important Safety Instructions

# CONTENTS

Welding	Painting	Metal Casting & Forging	Automotive & Ship Building	Chemical Engineering	Wood Working & Art	Construction	Page
Spatter, chips & sludge scaling	-	Sand blasting & chiseling	Rust scaling, welded-part finish	-	-	Surface coarsening of stone and concrete products	3-4
Flux chiseling, plaster chiseling	Paint chiseling	Trimming, sand chiseling	Various automotive repair works	-	-	Concrete breaking, chiseling of stick	5-6
Spatter, sludge and rust chiseling, scaling	Paint chiseling	Black surface scaling, scaling of ingot remnant in ladle	Removal of weeds, shells, concrete chipping	-	-	Concrete chiseling from framework, removal of linoleum from floor base	7
-	Paint chipping	Sand chipping	Removal of weeds, shells, etc., concrete chipping	-	-	Chipping of stone products	8
Bead grinding, cross section grinding	Grinding of pre- painted surface, buffing	Trimming, chamfering	Additional grinding, rust removal, surface smoothing	-	Sanding	Chamfering of stone products, honing	9-10
Bead grinding	Pre-painted surface regulation	Mold correction, trimming	Precision grinding of parts	Grinding of pipe cross section and inner surface	Correction grinding of molded products, rough grinding	Additional grinding of construction materials & parts	11-12
Initial boring for gas cutting by welder	Paint scrambling (w/attachment)	-	Drilling, removal of spot-welded parts	-	Drilling	Sash works	12
Bead grinding, rust removal, chamfering, section finishing	Rough grinding, rust & paint removal, spot smoothing	Trimming, chamfering, spatter grinding, die-cast finishing	Welding chip grinding, finish grinding, fitting	Grinding of pipe & equipment surface face section	Finish sanding of furniture, profile correction of plastic products	Grinding of parts & elements, repair services of tools	13-14
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	14
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	15
-	Sanding of pre- painted, plastered surface, water sanding	Mold correction	Paint sanding of automotive body	Sanding of plastered surface, and test piece surface	Finish sanding, curved surface sanding, sanding of router groove	Sanding of stone products and floor materials	16
-	Sanding of plastered surface, intermediate finish sanding	Mold correction	Paint sanding of automotive body	Synthetic resin sanding	Rough finish sanding	Inner surface sanding of channeled parts	17
Finish filing	Precision filing of pre-painted surface, sanding	Trimming	Trimming, precision sanding of parts	Filing, superfine filing for profile correction	Filing, superfine filing for profile correction	Correction sanding of metal parts	18
-	-	Trimming	Trimming, precision sanding of parts	Filing, superfine filing for profile correction	-	-	19
-	-	-	To cut the body plate of automotive vehicles or shaped steel	To cut fiber plates. To cut fiber-reinforced plastic plates	-	-	19
-	Chamfering of steel plate	-	Chamfering of steel plate	-	-	Chamfering of steel plate	20-21
Surface Chamfering of shape steel pre-welded	-	Chamfering of cast molds (HB-15B)	-	-	-	Chamfering of columns (HB-15B)	22









2

### NEEDLE SCALER JET CHISEL

# **JET CHISEL**



### **Powerful scaling** with multi-needles



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

An asset in any industry...de-slagging, de-sputtering welds, cleaning, castings, brick, stonework, and other materials. Jet Chisel is a prime pneumatic perfomer in each of these and other tough job areas. Maximum performance in a light-weight, minimumsize 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.



#### 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	JT-20	JEX-20
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }		0.59 {6}	0.59 {6}	0.59 {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
Needles to be used	mm	2 OD x 150 (7pcs.) or 3 OD x 180 (3pcs.)	2 OD x 180 (29pcs.) or 3 OD x 180 (12pcs.)	2 OD x 180 (29pcs.) or 3 OD x180 (12pcs.)
Hose Size	inch	3/8	3/8	3/8
Mass (Weight) kg		0.98	2.4	2.4
Standard Accessor	ies	<ul> <li>Needle 3mm OD x 180 mm : 3 pcs. (Needle 3mm OD x 180 mm : 3 pcs. on the body)</li> <li>Bushing PT3/8 x NPT3/8 : 1 pc.</li> <li>Hose Nipple PT3/8 x 3/8 : 1 pc.</li> </ul>	<ul> <li>Needle 3mm OD x 180 mm : 12 pcs. (Needle 3mm OD x 180 mm : 12 pcs. on the body)</li> <li>Bushing PT3/8 x NPT3/8 : 1 pc.</li> <li>Hose Nipple PT3/8 x 3/8 : 1 pc.</li> </ul>	<ul> <li>Needle 3mm OD x 180 mm : 12 pcs. (Needle 3mm OD x 180 mm : 12 pcs. on the body)</li> <li>Bushing PT3/8 x NPT3/8 : 1 pc.</li> <li>Hose Nipple PT3/8 x 3/8 : 1 pc.</li> </ul>

#### **SCALING**

### NEEDLE SCALER JET CHISEL



#### **Specifications**

Model	JC-16	JEX-24	JEX-28	JEX-2800A	
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}	0.59 {6}	0.59 {6}	0.63 {6.4}	
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	
Needles to be used mm	2 OD x 150 (29pcs.)	2 OD x 180 (53pcs.) or 3 OD x 180 (23pcs.)	2 OD x 180 (66pcs.) or 3 OD x 180	) (28pcs.) or 4 OD x 180 (14pcs.)	
Hose Size inch	3/8	3/8	3/8	3/8	
Mass (Weight) kg	1.4	2.7	3.5	3.1	
Standard Accessories	Needle 2mm OD x 150 mm : 29 pcs.     (Needle 2mm OD x 150 mm : 29 pcs. on the body)	Needle 3mm 0D x 180 mm : 23 pcs. on the body     6 mm Hex. Socket Screw Key : 1 pc.	Needle 4mm OD x 180 mm : 14 pcs.     (Needle 3mm OD x 180 mm : 28 pcs. on the body)	Needle 4mm OD x 180 mm : 14 pcs.     (Needle 3mm OD x 180 mm : 28 pcs. on the body	

Stanueru Accessories       •Bushing PT3/8 x NPT3/8 : 1 pc.       •Needle Supporter 4mm OD : 1 pc.       •Needle Supporter 4mm OD : 1 pc.		<ul> <li>Needle 2mm OD x 150 mm : 29 pcs.</li> </ul>	• Needle 3mm OD x 180 mm : 23 pcs. on the body	Needle 4mm OD x 180 mm : 14 pcs.	Needle 4mm OD x 180 mm : 14 pcs.
• Bushing P13/8 X NP13/8 . 1 pc. • Bushing P13/8 X NP13/8 . 1 pc. • Needle Supporter 4nnn OD . 1 pc. • Needle Supporter 4nnn OD . 1 pc.	Standard Accessories	(Needle 2mm OD x 150 mm : 29 pcs. on the body)	•6 mm Hex. Socket Screw Key : 1 pc.	(Needle 3mm OD x 180 mm : 28 pcs. on the body)	(Needle 3mm OD x 180 mm : 28 pcs. on the body)
Hose Nipple PT3/8 x 3/8 : 1 pc.     Hose Nipple PT3/8 x 3/8 : 1 pc.	Stalluelu Accessolles	•Bushing PT3/8 x NPT3/8 : 1 pc.	• Bushing PT3/8 x NPT3/8 : 1 pc.	Needle Supporter 4mm OD : 1pc.	Needle Supporter 4mmOD : 1pc.
		•Hose Nipple PT3/8 x 3/8 : 1 pc.	•Hose Nipple PT3/8 x 3/8 : 1 pc.	•Bushing : 1 pc. •Hose Nipple : 1 pc.	•Bushing : 1 pc. •Hose Nipple : 1 pc.

# Electric Needle Scaler

520mm

#### 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 VAC 60Hz	230 VAC 50Hz	
Rated Power Consumption W	300 300		
Rated Current A	2.8	1.4	
Rated Duty minutes	30		
Stroke Speed min <sup>-1</sup>	3,000		
Needles to be used mm	2 OD x 180 (32 pcs.) or 3 OD x180 (15 pcs.		
Power Cord m	5		
Mass (Weight) kg	4.5		

#### **Optional Needles**

**Standard Accessories** 



PN	Part Name	Q'ty	
TA98780	Needle 2 mm OD x 150 mm	100 pcs.	٦
TA98781	Needle 2 mm OD x 180 mm	100 pcs.	1
TA9A213	Needle 2 mm OD x 300 mm	50 pcs.	٦
TA9A214	Needle 2 mm OD x 500 mm	50 pcs.	٦
TA98782	Needle 3 mm OD x 180 mm	100 pcs.	٦
TA9A216	Needle 3 mm OD x 300 mm	50pcs.	٦
TA9A217	Needle 3 mm OD x 500 mm	50pcs.	٦
TA9A218	Needle 3 mm OD x 800 mm	50pcs.	٦
TA98783	Needle 4 mm OD x 180 mm	50 pcs.	1
TA9A220	Needle 4 mm OD x 300 mm	50 pcs.	٦
TA9A221	Needle 4 mm OD x 500 mm	50 pcs.	1
			1

225mm

Needle 3mm OD x 180 mm : 30 pcs. (15 pcs.)
6 mm Hex. Socket Screw Key : 1 pc.

PN	Part Name	Q'ty	Model
TP00338	Needle Supporter 2 mm OD	1 pc.	JT-20,
TP00337	Needle Supporter 3 mm OD	1 pc.	JEX-20
TQ05210	Needle Supporter 2 mm OD	1 pc.	AJC-16
TQ04554	Needle Supporter 3 mm OD	1 pc.	AJU-10
TP00290	Needle Supporter 2 mm OD	1 pc.	JC-16
TP02244	Needle Supporter 2 mm OD	1 pc.	JEX-24
TP02245	Needle Supporter 3 mm OD	1 pc.	JEX-24
TP01499	Needle Supporter 2 mm OD	1 pc.	
TP01461	Needle Supporter 3 mm OD	1 pc.	JEX-28, JEX-2800A
TP01462	Needle Supporter 4 mm OD	1 pc.	02/1 2000/1
TP16475	Needle Supporter 2 mm OD	1 pc.	EJC-32A
TP16301	Needle Supporter 3 mm OD	1 pc.	LJU-JZA

### AIR HAMMER AUTO CHISEL

# **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 material and are subjected to high precision process.

Specifications	
Model	

Model	A-300
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}
Air Consumption (No load) m³/min	0.3
Stroke Speed min <sup>-1</sup>	2,600
Hose Size inch	1/4
Mass (Weight) kg	1.7

#### **Optional Attachments**

**Standard Accessories** 

PN	Part Name	Q'ty	PN	Part Name	Q'ty
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 38mm Scraper	1 pc.
TP00577	No.1006 Rubber Bushing Remover	1 pc.	TP00590	No.1019 60mm Scraper	1 pc.
TP00578	No.1007 Spot Weld Booster	1 pc.	TP00591	No.1020 60mm 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 20mm Bending Chisel	1 pc.	-	_	-

• Bushing PT1/4 x NPT1/4 : 1 pc.

• Hose Nipple PT1/4 x 1/4 : 1 pc.

### Applications and wide variety of optional attachments



### PNEUMATIC SCALER SUPER KELEN

### SCALING

### **SUPER KELEN** Industrial and shipboard descaling and cleaning



The unique scaler preforms 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**

opounioacióno				
Model		S-250	S-500	S-1000
Rated Air Pressure MPa {kgf/	/cm²}	0.59 {6}	0.59 {6}	0.59 {6}
Air Consumption (No load) m <sup>3</sup>	/min	0.27	0.27	0.27
Stroke Speed	nin⁻¹	2,500	2,500	2,500
Size of Chisel Chuck	mm	12.7 OD	12.7 OD	12.7 OD
Hose Size	inch	3/8	3/8	3/8
Dimension	mm	630 x 49 OD	890 x 49 OD	1,470 x 49 OD
Mass (Weight)	kg	4.1	4.7	6.1
	1			
Standard Accessories		<ul> <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> <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> <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	Part Name	Q'ty
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.

#### **SCALING**

### **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 feature 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.





#### **Specifications**

opecifications		
Model	ACH-16	CH-24
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}	0.59 {6}
Air Consumption (No load) m³/min	0.15	0.2
Stroke Speed min <sup>-1</sup>	6,000	4,000
Size of Chisel Chuck mm	10.5 OD	12.7 sq.
Hose Size inch	3/8	3/8
Mass (Weight) kg	0.9	1.7
Standard Accessories	<ul> <li>Flat Chisel 20 x 120 : 1 pc. on the body</li> <li>Bushing PT3/8 x NPT3/8 : 1 pc.</li> <li>Hose Nipple PT3/8 x 3/8 : 1 pc.</li> </ul>	<ul> <li>Curved Flat Chisel 25 x 155 : 1 pc. on the body</li> <li>Bushing PT3/8 x NPT3/8 : 1 pc.</li> <li>Hose Nipple PT3/8 x 3/8 : 1 pc.</li> </ul>

**Optional Chisels** 



TQ 03431 TQ 03453 TQ 03549 TQ 03452



#### Chisel for Air Chipper ACH-16

PN	Part Name	Q'ty
TQ03431	Flat Chisel 20 x 120	1 pc.
TQ03453	Curved Flat Chisel 20 x 120	1 pc.
TQ03549	Flat Chisel 11 x 120	1 pc.
TQ03452	Flat Chisel 20 x 180	1 pc.

#### **Chisel for Air Chipper CH-24**

PN	Part Name	Q'ty
TP15234	Straight Flat Chisel 12.7 x165	1 pc.
TP15233	Flat Chisel 25 x 155	1 pc.
TP15166	Curved Flat Chisel 25 x 155	1 pc.

8

### PNEUMATIC GRINDER **MYTON**

### **SCALING & GRINDING**

# MYTON

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



#### MAG-50 Depressed center wheel 125mm 0D



• Rear exhaust system.

- Vibration-damping
- side handle.
- Spindle lock for the replacement of wheel.
- Plastic housing prevents cold hand.
- Side handle can be mounted to right or left.
- Built in governor.

#### Powerful Motor for fast and efficient grinding

#### Specifications

Model	MAG-50
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}
Air Consumption (No load) m³/min	0.87
Free Speed min <sup>-1</sup> (rpm)	12,000
Depressed center wheel mm	125 OD
Hose Size inch	1/4
Mass (Weight) kg	2.2

#### **Standard Accessories**

- Air Hose Sub Ass'y : 1 set
- 4mm Hex. Socket Screw Key : 1 pc.
  Pin Face Wrench : 1 pc.
- Exhaust Hose Ass'y : 1 set
  Pin Face Wrench : 1 pc.
  Bushing PT3/8 x NPT 3/8 : 1 pc.
- Model Model Model MAG-25B Depressed center wheel 58mm OD MAGW-40 Depressed center wheel 100mm OD **Depressed center** wheel 180mm OD 219mm 128mm 277mm 100mm 95n 65mm CE CE CE

-					
Model		MAG-25B	MAGW-40	MAG-70	
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }		0.59 {6}	0.59 {6}	0.59 {6}	
Air Consumption m³/min		0.4 (No load)	0.68 (No load) 0.82 (Load)	0.69 (No load) 1.15 (Load)	
Free Speed	min⁻¹ (rpm)	22,000	13,000	7,100	
Depressed center wheel mm		58 OD	100 OD	180 OD	
Hose Size inch		1/4	3/8	1/2	
Mass (Weight)	kg	0.55	1.55	3.4	
• Abrasive Wheel AC #80 : 1 pc.       • 6 mm Hex. Socket Screw Key : 1 pc.       • 6 mm Hex. Socket Screw Key : 1 pc.       • 6 mm Hex. Socket Screw Key : 1 pc.         • 5 mm Hex. Socket Screw Key : 1 pc.       • 14 mm Single Ended Spanner : 1 pc.       • 14 mm Single Ended Spanner : 1 pc.       • 8 ushing PT3/8 x NPT3/8 : 1 pc.       • 6 mm Hex. Socket Screw Key : 1 pc.         • Bushing PT1/4 x NPT1/4 : 1 pc.       • 8 ushing PT3/8 x NPT3/8 : 1 pc.       • 8 ushing PT1/2 x NPT1/2 : 1 pc.					

#### **SCALING & GRINDING**



128mm



82mm

180mm



#### **Specifications**

101mm

Model		MAS-20B	MAS-40	MAS-70	
Rated Air Pressure	MPa {kgf/cm <sup>2</sup> }	0.59 {6}	0.59 {6}	0.59 {6}	
Air Consumption (No load) m³/min		0.4	0.45	0.98	
Free Speed	min <sup>-1</sup> (rpm)	22,000	13,000	8,000	
Abrasive Disc		1" OD , 1-1/2" OD and 2" OD	100 mm 0D	180 mm OD	
Hose Size inch		1/4	3/8	3/8	
Mass (Weight) kg		0.5	0.9	1.9	
Standard Acces	oorioo	• 14 mm Single Ended Spanner : 1 pc. • Cupla 200-20SH : 1pc.	• 6 mm Hex. Socket Screw Key : 1 pc. • 17 mm Single Ended Spanner : 1 pc.	• 10 mm Hex. Socket Screw Key : 1 pc. • 41 mm Single Ended Spanner : 1 pc.	

**Standard Accessories** 

• 6 mm Hex. Socket Screw Key : 1 pc.
• 17 mm Single Ended Spanner : 1 pc.
• Bushing PT1/4 x NPT1/4 : 1 pc.
• Hose Nipple NPT 1/4 x 3/8 : 1 pc.

#### • 41 mm Single Ended Spanner : 1 pc. • Cupla 200-30SH : 1 pc.

#### **Optional** Parts

#### Grinding Disc for MYTON MAG-25B

	PN	Part Name	Q'ty
	TB00119	AC 46 x 58 mm 0D	5 pcs.
	TB00120	AC 60 x 58 mm 0D	5 pcs.
	TB00121	AC 100 x 58 mm 0D	5 pcs.
	TB00155	AC 80 x 58 mm 0D	10 pcs.

**Disc Pad for MYTON MAS-20B** 



PN	Part Name	Q'ty
TP18576	PAD (1" OD) No.1	1 pc.
TP18575	PAD (1-1/2" OD) No.2	1 pc.
TP18574	PAD (2" OD) No.3	1 pc.

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

ALM1

and the second	PN	Part Name	Q'ty	PN	Part Name	Q'ty
- 1 (343) 2012	TA9B101	Paper 1" OD x #40	25 pcs.	TA9B105	Paper 1" OD x #120	25 pcs.
-1 -1 -1 -10	TA9B102	Paper 1" OD x #60	25 pcs.	TA9B106	Paper 1" OD x #180	25 pcs.
ØBNIN	TA9B103	Paper 1" OD x #80	25 pcs.	TA9B107	Paper 1" OD x #240	25 pcs.
	TA9B104	Paper 1" OD x #100	25 pcs.	TA9B108	Paper 1" OD x #320	25 pcs.

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

ATTITUTE LEASE OF ALL	PN	Part Name	Q'ty	PN	Part Name	Q'ty
AND	TA9B109	Paper 1-1/2" OD x #40	25 pcs.	TA9B113	Paper 1-1/2" OD x #120	25 pcs.
石井 (梁)	TA9B110	Paper 1-1/2" OD x #60	25 pcs.	TA9B114	Paper 1-1/2" OD x #180	25 pcs.
CENTER OFFICE	TA9B111	Paper 1-1/2" OD x #80	25 pcs.	TA9B115	Paper 1-1/2" OD x #240	25 pcs.
	TA9B112	Paper 1-1/2" OD x #100	25 pcs.	TA9B116	Paper 1-1/2" OD x #320	25 pcs.

2" OD Paper for MYTON MAS-20B

ANT THE REAL PROPERTY	PN	Part Name	Q'ty	PN	Part Name	Q'ty
INK-K service	TA9B117	Paper 2" OD x #40	25 pcs.	TA9B121	Paper 2" OD x #120	25 pcs.
Guara	TA9B118	Paper 2" OD x #60	25 pcs.	TA9B122	Paper 2" OD x #180	25 pcs.
	TA9B119	Paper 2" OD x #80	25 pcs.	TA9B123	Paper 2" OD x #240	25 pcs.
	TA9B120	Paper 2" OD x #100	25 pcs.	TA9B124	Paper 2" OD x #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 handing air tool for all tasks.







#### **Specifications**

•			
Model		L-25B	L-35C
Rated Air Pressure	MPa {kgf/cm <sup>2</sup> }	0.59 {6}	0.59 {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	6
Hose Size	inch	1/4	1/4
Mass (Weight)	kg	0.6 (without hose)	0.45 (without hose)
Standard Accesso	ries	<ul> <li>14mm Single Ended Spanner : 1 pc.</li> <li>Mounted Wheel No.2 : 1 pc.</li> <li>Chunk Pin : 1 pc.</li> <li>Mounted Wheel No.3 : 1 pc.</li> <li>Bushing PT1/4 x NPT 1/4 : 1 pc.</li> </ul>	<ul> <li>14mm Single Ended Spanner : 1 pc.</li> <li>Mounted Wheel 13 x 13 x 6 x 38 : 1 pc.</li> <li>Bushing PTI/4 x NPT 1/4 : 1 pc.</li> </ul>

#### Grinding Stone for AIR SONIC L-25B (Optional)

#### Rotary bar for AIR SONIC L-35C (Optional) No.3 19 OD x 20 No.1 16 OD x 32 No.2 17 OD x 32 No.4 25 OD x 25 No.1 CB1C-106 No.2 CB2C-105 No.3 CB3C-103 No.4 CB4C-103 PN TP10594 PN TP10595 PN TP10596 PN TP10597 **PN TA9A277 PN TA9A278 PN TA9A279 PN TA9A280** No.5 19 OD x 28 No.6 25 OD x 13 No.7 32 OD x 10 No.8 16 OD ball No.5 CB5C-104 No.6 CB6C-102 No.7 CB7C-103 No.8 CB8C-105 PN TP10598 PN TP10599 PN TP10600 PN TP10601 **PN TA9A281 PN TA9A282 PN TA9A283 PN TA9A284**

#### GRINDING PNEUMATIC DRILLING DIE GRINDER AIR SONIC HAND DRILL AIR DRILL

**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.
- ${\boldsymbol \cdot}$  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> }		0.59 {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	essories +HI-CUPLA HA-65SN : 1 pc. • Spanner 7 : 1 pc. • Mounted Wheel 5 x 13 x 3 : 1 pc. • Spanner 7 x 9 : 1 pc.		

### The power and performance you need to drill deeper and faster

### ADR-65



AIR DRILL



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

#### Reversible

Change rotation direction by turning the valve as indicated.



••••••••		
Model	ADR-65	ADR-100
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}	0.59 {6}
Air Consumption (No load) m³/min	0.55	0.67
Free Speed min <sup>-1</sup> (rpm)	2,900	2,000
Max. Drilling Capacity mm	6.5 OD	10.0 OD
Mass (Weight) kg	0.8	1.1
Standard Accessories	Prill Chuck : 1 pc. on the body     Chuck Handle : 1 pc.     Bushing PT1/4 x NPT1/4 : 1 pc.     30SH : 1 pc.	
Optional Accessory	Hanger : 1pc.     *A hanger to be mounted     is available as option.	on the bottom of the grip

### PNEUMATIC BELT SANDER **BELTON**

SANDING



#### **Specifications**

Model	B-10N	B-20N	B-30N	BB-10	BB-20
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.6 {6}	0.6 {6}	0.6 {6}	0.63 {6.4}	0.59 {6}
Air Consumption (No load) m³/min	0.4	0.52	0.68	0.25	0.43
Motor Free Speed min <sup>-1</sup> (rpm)	17,000	17,000	14,000	16,000	16,000
Belt Speed m/min	1,120	2,620	2,160	1,000	1,100
Belt Size mm	10 x 330	20 x 520	30 x 540	10 x 330	20 x 330
Hose Size inch	1/4	1/4	1/4	1/4	1/4
Mass (Weight) kg	0.7	1.2	2.4	0.6	0.8
Standard Accessories	Abrasive Belt Z#60 x 10 mm:2pcs. (1pc. on the body)     Abrasive Belt Z#80 x 10 mm:1pc. Abrasive Belt Z#100 x 10 mm:1pc. Abrasive Belt Z#120 x 10 mm:1pc. 2mm Hex. Wrench Key: 1pc. •Hmm Hex. Wrench Key: 1pc. Bushing PT1/4 x NPT 1/4:1 pc.	Abrasive Belt Z#60 x 20 mm:2pcs. (1pc. on the body)     Abrasive Belt Z#60 x 20 mm:1pc.     Abrasive Belt Z#100 x 20 mm:1pc.     Abrasive Belt Z#100 x 20 mm:1pc.     Abrasive Belt Z#120 x 20 mm:1pc.     Abrasive Wrench Key: 1pc.     Bushing PT1/4 x NPT 1/4:1 pc.     Convex Shoe:1pc.     Finger Pad Ass y: 1pc.	Abrasive Belt Z#60 x 30 mm:2pcs. (1pc. on the body)     Abrasive Belt Z#60 x 30 mm:1pc. Abrasive Belt Z#10 x 30 mm:1pc. Amm Hex. Wrench Key: 1pc. Simm Hex. Wrench Key: 1pc. Bushing PT/14 x NPT 1/4:1pc. Sub Handle Ass'y:1set Grip Guard:1pc.	Abrasive Belt Z#100 x 10 mm: 1pc. (on the body)     Abrasive Belt Z#120 x 10 mm: 1pc.     Abrasive Belt Z#180 x 10 mm: 1pc.     Abrasive Belt Z#240 x 10 mm: 1pc.     1.5mm Hex. Wrench Key : 1pc.     Cupla HA-65SN: 1pc.	<ul> <li>Abrasive Belt Z#60 x 20 mm: 1pc. (on the body)</li> <li>Abrasive Belt Z#120 x 20 mm: 1pc.</li> <li>Abrasive Belt Z#240 x 20 mm: 1pc.</li> <li>2.5mm Hex. Wrench Key : 1pc.</li> <li>3mm Hex. Wrench Key : 1pc.</li> <li>Cupla HA-65N: 1pc.</li> <li>Shoe: 1pc.</li> <li>Dust Cover: 1pc.</li> </ul>

#### **Optional Parts**

#### Optional Parts for B-10N

PN	Part Name	Q'ty
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

#### Abrasive Belt for B-10N

PN	Part Name	Q'ty		
TB00241	Abrasive Belt Z#60 x 6 mm	50 pcs.		
TB00242	Abrasive Belt Z#80 x 6 mm	50 pcs.		
TB00243	Abrasive Belt Z#100 x 6 mm	50 pcs.		
TB00244	Abrasive Belt Z#120 x 6 mm	50 pcs.		
TB00245	Abrasive Belt Z#180 x 6 mm	50 pcs.		
TB00246	Abrasive Belt Z#240 x 6 mm	50 pcs.		
TA9A237	Abrasive Belt AA#400 x 6 mm	50 pcs.		
TA9A064	Abrasive Belt Z#60 x 10 mm	50 pcs.		
TB00076	Abrasive Belt Z#80 x 10 mm	50 pcs.		
TB00077	Abrasive Belt Z#100 x 10 mm	50 pcs.		
TB00247	Abrasive Belt Z#120 x 10 mm	50 pcs.		
TB00248	Abrasive Belt Z#180 x 10 mm	50 pcs.		
TB00249	Abrasive Belt Z#240 x 10 mm	50 pcs.		
TA9A244	Abrasive Belt AA#400 x 10 mm	50 pcs.		

#### **Optional Parts for B-20N**

PN	Part Name	Q'ty
TB07774	Bracket Ass'y	1 set
TB07109	Offset Bracket 20 Ass'y	1 set

#### Abrasive Belt for B-20N

ADRASIVE BEIL IOF B-ZUN			
PN	Part Name	Q'ty	
TA99605	Abrasive Belt Z#40 x 20 mm	20 pcs.	
TA99606	Abrasive Belt Z#60 x 20 mm	20 pcs.	
TA99607	Abrasive Belt Z#80 x 20 mm	20 pcs.	
TA99608	Abrasive Belt Z#100 x 20 mm	20 pcs.	
TA99609	Abrasive Belt Z#120 x 20 mm	20 pcs.	
TB00250	Abrasive Belt Z#180 x 20 mm	20 pcs.	
TB00251	Abrasive Belt Z#240 x 20 mm	20 pcs.	
TA9A252	Abrasive Belt AA#280 x 20 mm	20 pcs.	
TA9A253	Abrasive Belt AA#320 x 20 mm	20 pcs.	
TA9A254	Abrasive Belt AA#400 x 20 mm	20 pcs.	

#### **Optional Parts for B-30N**

PN	Part Name	Q'ty
TB08150	Offset Bracket 30 Ass'y	1 set

#### Abrasive Belt for B-30N

PN	Part Name	Q'ty	
TB00252	Abrasive Belt Z#40 x 30 mm	20 pcs.	
TB00253	Abrasive Belt Z#60 x 30 mm	20 pcs.	
TB00254	Abrasive Belt Z#80 x 30 mm	20 pcs.	
TB00255	Abrasive Belt Z#100 x 30 mm	20 pcs.	
TB00256	Abrasive Belt Z#120 x 30 mm	20 pcs.	
TB00257	Abrasive Belt Z#180 x 30 mm	20 pcs.	
TB00258	Abrasive Belt Z#240 x 30 mm	20 pcs.	
TA9A262	Abrasive Belt AA#280 x 30 mm	20 pcs.	
TA9A263	Abrasive Belt AA#320 x 30 mm	20 pcs.	
TA9A264	Abrasive Belt AA#400 x 30 mm	20 pcs.	

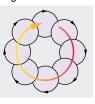
#### PNEUMATIC DUST-FREE SANDER ORBITAL SANDER SANDING

# **ORBITAL SANDER**



#### 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.



• Bushing PT1/4 x NPT1/4 : 1 pc. • Spanner 17 : 1 pc. • Brush : 1 pc. Standard • Dust Hose : 1 pc. Accessories • Dust Bag : 1 pc. • Brush : 1 pc. Hose Nipple : 1 pc.

#### **Optional Parts For BABY BELTON**

Abrasive B	Abrasive Belt for BB-10		
PN	Part Name	Q'ty	
TA9A064	Abrasive Belt Z#60 x 10mm	50 pcs.	
TB00076	Abrasive Belt Z#80 x 10mm	50 pcs.	
TB00077	Abrasive Belt Z#100 x 10mm	50 pcs.	
TB00247	Abrasive Belt Z#120 x 10mm	50 pcs.	
TB00248	Abrasive Belt Z#180 x 10mm	50 pcs.	
TB00249	Abrasive Belt Z#240 x 10mm	50 pcs.	
TA9A244	Abrasive Belt AA#400 x 10mm	50 pcs.	

#### brasive Belt for BB-20 PN Part Name Q'ty 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 (\*) 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-M (Equivalent to #180) 5 pcs. TB07122 Finish Belt A-VF (Equivalent to #320) 5 pcs. TB07123 Finish Belt S-SF (Equivalent to #400) 5 pcs. #400 is Aluminium Belt.

#### 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.

#### **Specifications**

Model	OSV-60A	
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}	
Air Consumption (No load) m³/min	0.68	
Motor Free Speed min <sup>-1</sup> (rpm)	8,500	
Orbit Diameter mm	10 OD	
Paper Size mm	150 OD	
Mass (Weight) kg	2.0	
Pad	for self stick papers	

#### **Optional Accessories**

PN	Part Name	Q'ty
TA99582	Abrasive Paper #40	100 pcs.
TA99583	Abrasive Paper #60	100 pcs.
TA99584	Abrasive Paper #80	100 pcs.
TA99585	Abrasive Paper #100	100 pcs.
TA99586	Abrasive Paper #120	100 pcs.
TA99587	Abrasive Paper #180	100 pcs.
TA99588	Abrasive Paper #240	100 pcs.
TA99589	Abrasive Paper #280	100 pcs.
TA99590	Abrasive Paper #320	100 pcs.
TA99591	Abrasive Paper #400	100 pcs.

### PNEUMATIC COMPACT SANDER PALM ORBITAL SANDER SANDING

# PALM ORBITAL SANDER

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



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

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

#### **Applications**

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

#### 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. **APS-125/150** 





Self Vacuum



**Central Vacuum** 

Model	APS-125	APS-150	
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}	0.59 {6}	
Air Consumption (No load) m³/min	0.45	0.45	
Motor Free Speed min <sup>-1</sup> (rpm)	10,000	10,000	
Orbit Diameter mm	5 OD	5 OD	
Paper Size mm	125 OD	150 OD	
Mass (Weight) kg	0.69 0.72		
Pad Mass (Weight) kg	0.10 0.12		
Standerd Accessories	• Spanner 17 : 1 pc. • Bushing PT1/4 x NPT1/4 : 1 pc.		

#### SANDING

# **FREE SANDER**

#### Superlight, Quiet New low-vibration sander



#### 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







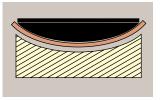
#### **Powerful turbine motor**

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

#### Specifications

opoundationo				
Model	FS-100C	FS-50A		
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}	0.59 {6}		
Air Consumption (No load) m³/min	0.2	0.14		
Motor Free Speed min <sup>-1</sup>	20,000	15,000		
Orbit Diameter mm	1.5 OD	1.2 OD		
Pad Size mm	100 x 110	75 x 82		
Paper Size mm	114 x 140	70 x 114		
Mass (Weight) kg	0.5	0.5		
Standard Accessories	Hose E Ass'y : 1 set     Bushing PT1/4 x NPT1/4 : 1 pc.     Sandpaper #180 : 5 pcs.     Sandpaper #240 : 5 pcs.	Hose E Ass'y : 1 set     Bushing PT1/4 x NPT1/4 : 1 pc.     Sandpaper #180 : 5 pcs.     Sandpaper #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	Part Name	Q'ty
TA91474	Round Pad Ass'y	1 pc.
TA9A265	Sandpaper #100	200 pcs.
TA9A266	Sandpaper #120	200 pcs.
TA9A267	Sandpaper #150	200 pcs.
TA9A268	Sandpaper #180	200 pcs.
TA9A269	Sandpaper #240	200 pcs.
TA9A270	Sandpaper #280	200 pcs.
TA9A271	Sandpaper #320	200 pcs.
TB02235	Dust Collector Ass'y	1 pc.

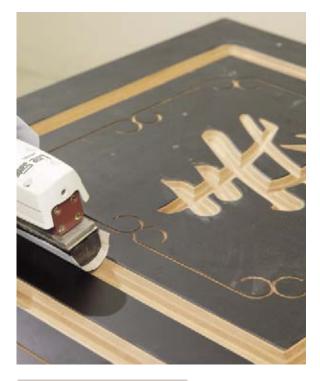
#### For Free Sander FS-50A

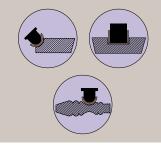
PN	Part Name	Q'ty
TB02240	Dust Collector Ass'y	1 pc.

### PNEUMATIC RECIPROCATING SANDER LINE SANDER

# **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.

Standard Accessories	<ul> <li>Hose E Ass'y : 1 set</li> <li>Bushing PT1/4 x NPT1/4 : 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> </ul>
----------------------	--

#### **Optional Accessories**

PN	Part Name	Q'ty
TB02244	Dust Collector Ass'y	1 pc.

IS-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.

-	
Model	LS-10
Rated Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}
Air Consumption (No load) m³/min	0.11
Free Speed min <sup>-1</sup>	4,000
Stroke mm	4
Pad Size mm	55 x 103
Abrasive Paper Size mm	57 x 140
Mass (Weight) kg	0.75

#### FILING

### PORTABLE PRECISION FINISHING FILE SUPER HAND

# **SUPER HAND**

Super efficient way of easy filing, polishing and finishing



Flat Bastard File SF-13

#### **Rat Tail File SF-10**



#### Triangular Taper File SF-11



#### 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 filling, 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.

### SH-100A



ASH-800



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

#### **Specifications**

Sanding Pad Ass'y for ASH-800

opeenieatione			
Model	SH-100A	ASH-800	
Rated Air Pressure MPa {kgf/cm²}	0.59 {6}	0.59 {6}	
Air Consumption (No load) m³/min	0.24	0.23	
Stroke Speed min <sup>-1</sup>	3,700	6,500	
Stroke mm	9	8	
Max. Shank dia. of Points mm	6.3 OD	5.5 OD	
Mass (Weight) kg	1.1	0.52	
Standard Accessories	<ul> <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 PT1/4 x NPT1/4:1 pc.</li> </ul>	<ul> <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>Hi Cupla (HA-65SNG):1 pc.</li> </ul>	

#### **Optional Accessories**

Rubber Pad Ass'y for SH-100A



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



#### For Super Hand SH-100A & ASH-800

PN	Part Name	Q'ty
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-800	1 set

### PORTABLE FINE FINISHING FILE **MICRO AIR HAND**

# PNEUMATIC SUPER SAW FILING CUTTING

# **MICRO AIR HAND**

#### Fine reciprocating motion best for precision parts filing

### MAH-05/MAH-16



5

R1

0.5

Half-round end file (PN TB07505)



#### Specifications

Model		MAH-05	MAH-16
Rated Air Pressure MPa {kgf/cr	m²}	0.59 {6}	0.59 {6}
Air Consumption (No load) m³/n	nin	0.07	0.07
Stroke Speed min <sup>-1</sup> (rp	<mark>m)</mark>	22,000	13,000
Stroke m	<mark>וווו</mark>	0.5	1.6
Shank diameter of file mm		3 OD	3 OD
Mass (Weight) kg		0.37	0.37
Standard Accessories         • Each 1pc. of diamond flat and round file           • Hex. Wrench key 2 : 1pc.         • Cupla Model HA-65SN : 1pc.			
stones in			s such as ceramic grinding can be also mounted. s 3.2mm x Width 20mm)
Mounting examples			

# **SUPER SAW**

65

Triangular end file (PN TB07504)

ιų.

2

%‡∾



#### **Optional Accessories**



PN	Part Name	Q'ty
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.

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

#### SSW-110 has many feature on the followings.....

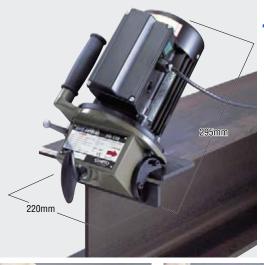
- Low vibration is achieved by the special design of double piston mechanism.
- New adoption of piston rings minimized power loss and improved cutting efficiency.
- Longer piston stroke improved cutting speed so much.
- Rear exhaust system for chip-scattering-free operation.
- New double-lock throttle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

Model	SSW-110	
Rated Air Pressure MPa {kgf/cm	0.59 {6}	
Air Consumption (No load) m³/mi	n 0.29	
Stroke Speed min	1 7,000	
Stroke mr	<mark>ו 11</mark>	
Mass (Weight) k	0.62	
Standard Accessories	<ul> <li>32 mm Saw Blade : 2 pcs.</li> <li>3 mm Hex. Socket Screw Key : 1 pc.</li> <li>Bushing PT1/4 x NPT1/4 : 1 pc.</li> </ul>	

# CHAMFERING PORTABLE CHAMFERING TOOLS HAND BEVELER

# HAND BEVELER HB-15B Chamfering up to 15C

15C







**Chamfering steel plates** 

**Chamfering I-beams** 

- Ideal for chamfering before welding
- Use easy-to-replace super-solid cutting tips
- Each cutting tip has four working edges for good economy
- Finish 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)	115V AC	230V AC
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	0 C - 15 C	
Chamfer Angle	15° ~ 45°	
Mass (Weight) kg	14	

#### Standard accessories

Hex.Socket Screw Key 4,5,6 mm: each 1 pc.
 Spanner 24 x 27: 1 pc.
 Hook spanner 25 ~ 28: 1 pc.

#### **Optional accessories**

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

# Handy Electric Chamfering Tool **MINI BEVELER**



#### 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).

### Model **MB-03A**





#### Specifications

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

#### Standard accessories

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

#### **Optional accessories**

• TA9A386 Tip 9.525, 10 pcs./set

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

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

#### Handy Electric Chamfering Tool CE EVELER EMB-0307B Model R



Chamfer angle and width

Chamfer angle	Milo	l Steel (r	nm)	Stainle	ess Steel	(mm)	Chamfer angle $\alpha$
α	Α	В	С	Α	В	С	A
45°	7	7	9.9	3	3	4.2	
30°	3.8	6.6	7.6	2.2	3.8	4.4	<sup>m</sup> //c
15°	1.5	5.6	5.8	1	3.8	3.9	- <u>×</u>

- Chamfering up to 3C stainless steel chamfering, and up to 7C mild steel chamfering.
- Carbide insert each with cutting edges on 4 sidea.
- 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 rool.
- Dust box collects swarf and chips effectively.

#### **Specifications**

opeemea		
Model		EMB-0307B
Power Supp	ly	220V ~ 240V AC, 50/60Hz
Rated Powe	er Consumption W	1010
Rated Curre	ent A	4.6
Rated Duty		Continuous
Chamfering	Mild Steel	0C ~ 7C, 2R, 3R, 4R
Capacity	Stainless Steel	0C ~ 3C, 2R, 3R, 4R
Chamfer An	gle	15° ~ 45°
Power Cord	m	4.0
Mass (Weig	<b>jht)</b> kg	3.9

#### Standard accessories

Carbon Brush Ass'y : 1 set.
 4 mm Hex. Wrench Key : 1 pc.
 Carbide Insert with Hole 12.7 : 1pc.

Hex. Nut M8 : 2 pcs.
 8 x 25 mm Hex. Socket Set Screw : 2 pcs.
 Spanner T-15D : 1 pc.

Double insulation

Insert Set Screw 4 x 7 : 1 pc.

Double insulation

#### **Electric Radial Chamfering Tool** D Model **ECB-0203** Smoothly chamfering straight and curved edges • Applicable up to 3C (3R) mild steel chamfering, and up to

4R



Chamfering straight edges

Chamfering curved edges

- 1.5C (2R) stainless steel chamfering.
- Minimum chamfering plate thickness is 2mm (Max.0.5C)
- Insert with 4-side blades per piece practices good economy.
- An optional straight plate allows chamfering a straight edge shoulder.

#### **Specifications**

Model		ECB-0203
Power Supp	ily	220V ~ 240V AC, 50/60Hz
Rated Powe	er Consumption W	450
Rated Duty	min	30
Motor No-lo	ad Speed min <sup>-1</sup> (rpm)	11,000
Chamfering	Mild Steel	0C ~ 3C, *2R, 3R
Capacity	Stainless Steel	0C ~ 1.5C, *2R
Chamfer An	gle	45°
Power Cord	m	2.5
Mass (Weig	l <b>ht) k</b> g	2.5

% In case of chamfering 3R, an optional insert for 3R is necessary, and chamfering 2R, an optional guide sleeve 24mm dia, and super solid insert for ŽR are necessary.

#### Standard accessories

- Insert with Hole 12.7: 1 pc.
   Insert Set Screw: 1 pc.
   S mm Hex.Socket Screw Key : 1 pc.
   Spanner 8 x 10: 1 pc.

#### Pneumatic Chamfering Tool **MINI BEVELER** Lever Type CE **AMBL-0307**





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

**Ring Type** 

**AMB-0307** 

#### Specifications

Model		AMBL-0307, AMB-0307
Air Pressure	MPa {kgf/cm <sup>2</sup> }	0.59 {6}
Air Consumption (No load) m³/min		0.9
Free Speed	min <sup>-1</sup> (rpm)	14,000
Chamfering	Mild Steel	0 C ~ 7 C or 2 R, 3 R, 4 R
Capacity	Stainless Steel	0 C ~ 3 C or 2 R, 3 R, 4 R
Chamfer Angl	e	15°~ 45°
Mass (Weight	) kg	2.9

#### Standard accessories

• 3 & 4 mm Hex. Socket Screw key : each	1 pc.
Spanner: 1 pc.	<ul> <li>8 x 25 Hex. Socket Set Screw : 2 pcs</li> </ul>
Hex. nut M8 : 2 pcs.	<ul> <li>Insert Set Screw 4 x 7 : 1 pc.</li> </ul>

#### Pneumatic Radial Chamfering Tool **CIRCUIT BEVELER** CB-02 Lets you chamfer easily and smoothly no matter what the curve line is



- Versatility chamfer either inner or outer edges.
   Presidely adjust chamfer dimensions with access.
  - Precisely adjust chamfer dimensions with accessory gauge.

#### Specifications

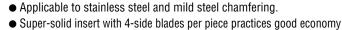
Model	CB-02
Air Pressure MPa {kgf/cm <sup>2</sup> }	0.59 {6}
Air Consumption (No load) m³/min	0.4
Free Speed min <sup>-1</sup> (rpm)	13,000
Chamfering Capacity	0C ~ 2C, 2R
Chamfer Angle	45°
Mass (Weight) kg	1.8

#### Standard accessories

	tective cap: 1 pc. ok Spanner 58-62: 1 pc.
--	---

#### **Optional accessories**

• TA9A386 : Tip 9.525 sq. Ass'y (10 pcs.)
• TA9A592 : Tip 9.525 sq. R2 Ass'y (10 pcs.)
<ul> <li>TA9A638 : Tip 9.525 sq. R3 Ass'y (10 pcs.)</li> </ul>



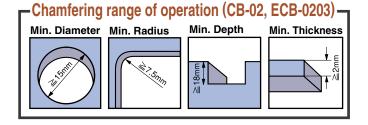
- Super-solid insert with 4-side blades per piece practices get
   Simple to adjust chamforing donth and replace insert
- Simple to adjust chamfering depth and replace insert.
- Pipe outer edge can be also processed with standard accessories.
  Chamfering angle can be adjusted to any desired position at 15°~ 45°.

#### Chamfer angle and width

The tool has the limit of chamfering width which depends on a chamfer angle.

			-			-	-
Chamfer angle	Milc	l Steel (r	nm)	Stainle	ess Steel	l (mm)	Chamfer angle $\alpha$
α	Α	В	С	Α	В	C	
45°	7	7	9.9	3	3	4.2	
30°	4	7	8.1	2.2	3.8	4.4	
15°	2.2	8	8.3	1	3.8	3.9	- <u>e</u>

# 136m 2C 2R 2R



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

	PN	Part Name	Sales Unit	Application model	Remarks
Flatter	TA9A093	Insert 12.7 Ass'y	12pcs./set	HB-15B	
-	TA9A896	Insert 12.7 with hole Ass'y	10pcs./set	AMB-07	
Aga a La	TB01159	Insert 12.7 with hole Ass'y	10pcs./set	EMB-0307B, AMB-0307, AMBL-0307, ECB-0203	
and the second s	TB01791	Insert 12.7 Ass'y R2	10pcs./set	EMB-0307B, AMB-0307, AMBL-0307, ECB-0203	
a the to be let	TB01651	Insert 12.7 Ass'y R3	10pcs./set	EMB-0307B, AMB-0307, AMBL-0307, ECB-0203	
a the	TB01790	Insert 12.7 Ass'y R4	10pcs./set	EMB-0307B, AMB-0307, AMBL-0307	
	TA9A386	Insert 9.525 with hole Ass'y	10pcs./set	MB-03A, CB-02	
A R R R	TA9A592	Insert 9.525 Ass'y R2	10pcs./set	MB-03A, CB-02	
R B	TA9A638	Insert 9.525 Ass'y R3	10pcs./set	MB-03A	
GE	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 HICUPLA 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 pars are hardened for excellent wear resistance and durability.

		Plug		P	S		Socket			
For hose o	connection	40PH	For 1/2" hos	se		For hose co	nnection	40SH	For 1/2" hose	
17PH	For 1/4" ho	se 400PH	For 1/2" hos			17SH	For 1/4" hose	400SH	For 1/2" hose	
20PH	For 1/4" ho	se 600PH	For 3/4" hos	se management		20SH	For 1/4" hose	600SH	For 3/4" hose	
30PH	For 3/8" ho	se 800PH	For 1 <sup>®</sup> hose			30SH	For 3/8" hose	800SH	For 1" hose	
For female	e thread connec	tion 40PM	For Rc 1/2"	_		For female	thread connection	40SM	For Rc 1/2"	
10PM	For Rc 1/8	400PM	For Rc 1/2"	and the second		10SM	For Rc 1/8"	400SM	For Rc 1/2"	
20PM	For Rc 1/4	600PM	For Rc 3/4"	Contraction of the local division of the loc		20SM	For Rc 1/4"	600SM	For Rc 3/4"	
30PM	For Rc 3/8'	800PM	For Rc 1*			30SM	For Rc 3/8"	800SM	For Rc 1"	
For male	thread connecti	on				For male thread connection				
20PF	For R 1/4"	400PF	For R 1/2"	The second se		20SF	For R 1/4"	400SF	For R 1/2"	
30PF	For R 3/8"	600PF	For R 3/4"	and the second s		30SF	For R 3/8"	600SF	For R 3/4"	
40PF	For R 1/2"	800PF	For R 1"			40SF	For R 1/2"	800SF	For R 1"	
For male	thread connecti	on (parallel thie	ad)						•	
20PFF For G 1/4				Contraction of the local division of the loc		For hose connection				
		•		and the second second	A COLUMN TO THE	200-17SH	For 1/4" hose	200-40SH	For 1/2" hose	
				_	and the second se	200-20SH	For 1/4" hose			
						200-30SH	For 3/8" hose			
Specifica	ations						thread connection			
Туре		Hi Cu		Hi Cupla 200		200-20SM	For Rc 1/4"			
Body mat	erial	Steel (chron		Steel (chrome-plated)	Statistics of the local division of the loca	200-30SM	For Rc 3/8"			
Size		1/8", 1/4", 3/8", 1/2", 3/4", 1"		1/8", 1/4", 3/8", 1/2"		200-40SM	For Rc 1/2"			
Working pressure         1.5MPa           Pressure resistance         2.0MPa           Packing material         NBR           Working temp.range         -20°C-80°C		2.0MPa		1.0MPa	a Menigue		read connection			
				1.5MPa		200-20SF	For R 1/4"			
				NBR		200-30SF	For R 3/8"			
		-5°C~60°C	-5°C~60°C		For R 1/2"					

#### **HI CUPLA ACE**



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

- Plastic Cuplas with a bult-in locking mechanism!
  Pressure ratings comprable to steel Cuplas.
- **Plastic Plug** Hi Cupla Ace Socket For hose connection (PH) For hose connection (SH) For 1/4" hose For 3/8" hose 20PH-PLA For 1/4" hose 30PH-PLA For 3/8" hose HA-20SH HA-30SH For female thread connection (SM For female thread connection (PM) 20PM-PLA For Rc 1/4 30PM-PLA For Rc 3/8 HA-20SM For Rc 1/4" For Rc 3/8" HV-306W For urethane hose with spring nut connection (PNG) For urethane hose with spring nut connection (SNG) 50PNG-PLAFor 5 ID x 8 0D hose65PNG-PLAFor 6.5 ID x 10 0D hose HA-50SNG For 5 ID x 8 0D hose HA-65SNG For 6.5 ID x 10 0D hose Decement **ARARARARA** 85PNG-PLA For 8.5 ID x 12.5 OD hose HA-85SNG For 8.5 ID x 12.5 OD hose For male thread connection (PF) Hi Cupla Ace T type (for 2 branches) 20PFF-PLA For G 1/4" HA-T 20P-PLA / HA-65S x

### **MACHINE TOOLS**

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

A wide range of unique tools for boring and punching



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



### **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 $\sim$ 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 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.

#### **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.

- 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 Air Tools**

• Air pressure at the inlet of the tool must not exceed 0.59MPa (6kgf/cm<sup>2</sup>).

# Technologies that Respond to the Needs of the Times





#### Overseas Affiliates/Offices —

NITTO KOHKI U.S.A. INC. TEL:+1-630-924-9393 FAX:+1-630-924-0303

NITTO KOHKI EUROPE CO., LTD.(UK) TEL:+44-1923-239-668 FAX:+44-1923-248-815

**NITTO KOHKI DEUTSCHLAND GMBH** TEL:+49-7157-22436 FAX:+49-7157-22437

**NITTO KOHKI AUSTRALIA PTY. LTD.** TEL:+61-7-3340-4600 FAX:+61-73340-4640

NITTO KOHKI CO., LTD. SINGAPORE BRANCH TEL:+65-6227-5360 FAX:+65-6227-0192 NITTO KOHKI CO., LTD. BANGKOK REPRESENTATIVE OFFICE TEL:+66-2-632-0307 FAX:+66-2-632-0308

NITTO KOHKI CO., LTD. SHANGHAI REPRESENTATIVE OFFICE TEL:+86-21-6415-3935 FAX:+86-21-6472-6957

NITTO KOHKI CO., LTD. SHENZHEN REPRESENTATIVE OFFICE TEL:+86-755-8375-2185 FAX:+86-755-8375-2187

NITTO KOHKI CO., LTD. SEOUL Representative office

 $\star$  Specifications and designs are subject to change at any time without notice.



Head Office 9-4, Nakaikegami 2-chome, Оhta-ku, Tokyo 146-8555 Japan Phone : +81-3-3755-1111 Fax : +81-3-3753-8791

E-mail: overseas@nitto-kohki.co.jp
 URL: www.nitto-kohki.co.jp

**DISTRIBUTED BY**