

# Power Tools & Machine Tools

General Catalog



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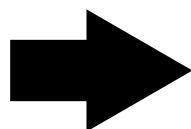
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## Green Procurement

Nitto Kohki has made every effort in developing "Environmental Improvement Plans" through the implementation of ISO14001, to execute environmentally conscious business activities on a company-wide basis. As a part of our ongoing commitment to the environment, we are also committed to reduce and/or exclude restricted chemical substances from our products as designated by RoHS directives, laws and regulations of chemical substances.

## Check out our video gallery to see our products at work.



You can also view this on your smartphone or tablet.

[www.youtube.com/c/NittoKohkiGLOBAL](http://www.youtube.com/c/NittoKohkiGLOBAL)

# High-End Features of ATRA ACE Drilling Machines

## High-End Features of ATRA ACE Drilling Machines Enhance Your Productivity and Safety

Ref. No.	Features	QA-4000	QA-6500	WA-3500	WA-5000	WOJ-3200	AO-5575A	LO-3550	CLA-2720	ARA-100A
1	Auto-feed	●	●	●	●	—	—	—	—	—
2	Slow Start Mechanism	●	●	●	●	—	—	—	—	—
3	Step Feed	●	●	—	—	—	—	—	—	—
4	Variable Automatic Feed	●	●	●	●	—	—	—	—	—
5	Load Sensor	●	●	●	●	—	—	—	—	—
6	Magnet Open-circuit Sensor	●	●	●	●	●	●	●	●	●
7	Fail-safe Restart	●	●	●	●	●	●	●	●	●
8	Built-in Motion Sensor	●	●	●	●	—	●	—	●	●
9	Overload Stop	●	●	●	●	●	●	●	●	●
10	Cycle Stop	●	●	●	●	—	—	—	—	—
11	Unique Battery Conservation	—	—	—	—	—	—	—	●	—
12	One-touch Cutter Replacement	●	●	●	●	●	●	●	●	●

- Automatic control & feed are activated by simply pushing the feed handle to engage the clutch.
- The feed speed is reduced for the first few seconds after boring begins to ensure a smooth cut through the mill scale.
- When the cutter has become dull or it cuts through difficult materials, the load sensor will automatically activate the Step Feed Program to help penetrate material. When working on deep holes or large diameter holes, the Step Program will also help to reduce swarf build up around the cutter as the waste material will break off with each Step cycle.
- The feed speed is continuously monitored and updated proportionally to the load on the cutter.
- QA-4000/QA-6500:** The sensing system responds to drilling forces on the cutter for the optimum cutting condition.  
**WA-3500/WA-5000:** The dual sensing system responds to both drilling and feeding forces on the cutter for the optimum cutting condition.
- The drill will not start until the magnetic field is active.
- QA-4000/QA-6500/WA-3500/WA-5000/WOJ-3200/AO-5575A/LO-3550/ARA-100A:** The drill will not re-start even if power is re-supplied after accidental shutdown. Drilling can only be continued after turning on the drill switch.  
**CLA-2720:** If the battery pack is replaced/removed whilst both the magnet and the drill motor switch are in the on position, the drill will not operate until both switches are reset.
- QA-4000/QA-6500/WA-3500/WA-5000:** If any lateral movement or excess vibration is detected, both the drill and the feed motor stop.  
**AO-5575A/CLA-2720/ARA-100A:** If any lateral movement or excess vibration is detected, the drill motor stops.
- QA-4000/QA-6500/WA-3500/WA-5000:** When an excessive load is applied to the cutter, both the drill and the feed motor will stop automatically.  
**WOJ-3200/AO-5575A/LO-3550/CLA-2720/ARA-100A:** When an excessive load is applied to the cutter, the drill motor will stop automatically.
- QA-4000/QA-6500:** After the cut has finished, a detector responds to the reduction in load, the drill retracts quickly and then both the drill and feed motor automatically stop.  
**WA-3500/WA-5000:** After the cut has finished, a detector responds to the reduction in load and both the drill and the feed motor automatically stop.
- While the drill motor is running, if no load is applied within 10 seconds, the drill will stop automatically to save the battery.
- Replacement is quick and easy with our unique push fit self-centering cutter system.  
**ARA-100A:** Optional one-touch type Holder required.

# ATRA ACE Specifications



**CLA-2720**



**LO-3550**



**WA-3500**



**WA-5000**

## Specifications

Model		CLA-2720		LO-3550	WA-3500		WA-5000				
Electric Drill	Power Source (Single Phase)	Battery (18 V DC)		220 - 240 V AC, 50/60 Hz	110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	110 - 120 V AC, 50/60 Hz		220 - 240 V AC, 50/60 Hz		
	Rated Power Consumption W	-		800	1100		1150				
	Rated Current A	-		3.3	10.2	5.1	10.8		5.4		
	No-load Speed min <sup>-1</sup> (rpm)	430		950	950		350 / 650				
Magnet Power Consumption W		18		35	34		75				
Max. Hole Diameter mm		27		35	35		50				
Max. Plate Thickness mm		20		50	50		75				
Hole Capacity	One-touch Type JETBROACH	Hole Diameter mm	12 to 17	17.5 to 27	12 to 35	17.5 to 35		12 to 17	17.5 to 40	12 to 50	17.5 to 50
		Plate Thickness mm	6 to 12	6 to 20	6 to 50	9 to 50		9 to 25	9 to 35	9 to 50	9 to 75
	Side-lock Type JETBROACH	Hole Diameter mm	-		-	-		-			
		Plate Thickness mm	-		-	-		-			
	One-touch Type HI-BROACH	Hole Diameter mm	12 to 15	16 to 27	-	14 to 35		14 to 50			
		Plate Thickness mm	6 to 12	6 to 20	-	9 to 25		9 to 50			
Twist Drill	Hole Diameter mm	-		-	-		-				
Max. Stroke mm		60		80	83		107				
Magnet Holding Power N(kgf)		5500 (561)		5500 (561)	7056 (720)		9800 (1000)				
Magnet Dimensions mm		65 x 126		65 x 145	92 x 213		101 x 201				
Overall dimensions * (length) x (width) x (height) mm		199 x 151 x 290		339 x 112 x 316	409 x 237 x 530		425 x 237 x 604				
Power Cord Length m		-		3	3		3				
Mass (Weight) kg		7		8.7	20		23				
Feeding		Manual		Manual	Automatic		Automatic				
Page		7		9	11		11				

\*The height is the dimension from the surface of the workpiece to the highest part of the machine when the tip of the Pilot Pin is touching the workpiece with the cutter of the machine's maximum capacity attached.

# ATRA ACE Specifications



**WOJ-3200**



**AO-5575A**



**QA-4000**



**QA-6500**



**ARA-100A**

<b>WOJ-3200</b>		<b>AO-5575A</b>		<b>QA-4000</b>		<b>QA-6500</b>	<b>ARA-100A</b>
110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz		110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz		220 - 240 V AC, 50/60 Hz
950		950		680		1010	1800
8.6	4.3	4.3		6.1	3.0		4.5
870		520		750		400/750	110 - 210 / 330 - 660
38	30	50		50		75	80
32		55		40		65	100
50		75		35		50	75
12 to 32	12 to 17	17.5 to 55	17.5 to 40		17.5 to 65		17.5 to 50
9 to 50	9 to 50	9 to 75	9 to 35		9 to 50		13 to 75
-	-	-	-		-		50 to 100
-	-	-	-		-		13 to 75
-	12 to 50	14 to 15	16 to 18	18 to 35		17.5 to 35	
-	9 to 50	9 to 12	9 to 25	9 to 25		13 to 50	
Max. 13	-	-	-		-		Max. 32
130	105	75		88	296		
9000 (918)	10000 (1020)	6664 (680)		9800 (1000)	17000 (1733)		
99 x 177	86 x 170	82 x 172		100 x 200	110 x 220		
318 x 196 x 420	432 x 197 x 493	407 x 215 x 424		455 x 215 x 534	570 x 274 x 623		
3	3	4	5	5	5		
13	17.5	18.5		26	30		
Manual	Manual	Automatic		Automatic	Manual		
13	13	15		15	5		

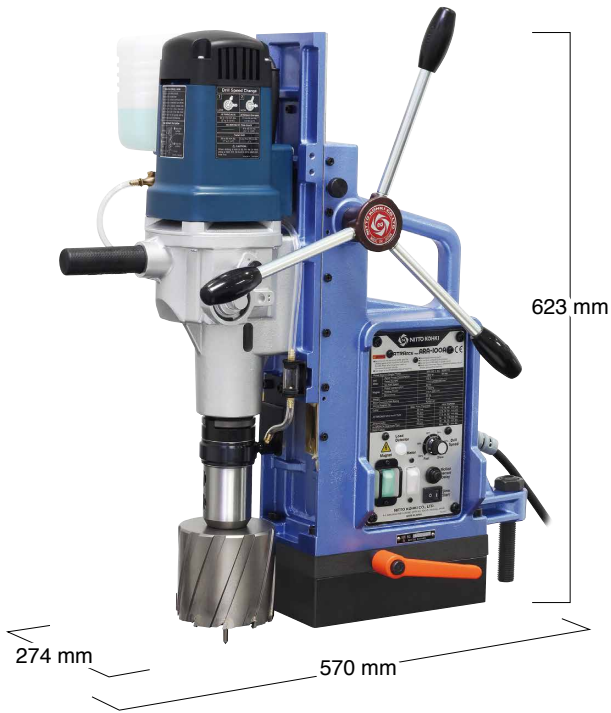
# BORING

Portable Magnetic Base Drilling Machine

## ATRA ACE manual feed

Model **ARA-100A** 

• Max. 100 mm dia. x 75 mm deep



623 mm

274 mm

570 mm

## The versatile drilling machine with top-class power

- Accepts various cutters for diverse drilling
- Advanced electronic control for efficient drilling and operator safety

### Specifications

Model		ARA-100A	
Power Source (Single Phase)		220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption	W	1800
	Rated Current	A	8.2
	No-load Speed	min <sup>-1</sup> (rpm)	110 - 210 / 330 - 660
	Morse Taper No.		MT3
	Rated Duty	min	30
Magnet Power Consumption		W	80
Hole Capacity mm	Cutter	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 35L	17.5 to 40	13 to 35
	One-touch Type JETBROACH 50L	17.5 to 50	13 to 50
	One-touch Type JETBROACH 75L	17.5 to 50	13 to 75
	JETBROACH 75L	50 to 100	13 to 75
	One-touch Type HI-BROACH 25L	17.5 to 35	13 to 25
One-touch Type HI-BROACH 50L	18 to 35	13 to 50	
Twist Drill		Max. 32 mm dia.	
Max. Stroke		mm	296
Magnet Holding Power		N(kgf)	17000 (1733)
Magnet Dimensions		mm	110 x 220
Cutter Position Adjustment	Straight Front to Back	mm	20
	Swivel angle		30°
Power Cord Length		m	5
Mass (Weight)		kg	30

### Accessories Included

- Pilot Pin 12075
- Side Handle
- 2.5 mm Hex. Socket Screw Key
- 5 mm Hex. Socket Screw Key
- 6 mm Hex. Socket Screw Key
- 8 mm Hex. Socket Screw Key
- Drill Drift
- 7 x 8 mm Spanner
- Safety Chain
- Guard
- Oil Tank
- Oil Tank Bracket
- 3 pieces of Rod Handle
- Holder MT03075 Side Lock

### Optional Accessories

Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TB04374	Supporting Magnet Ass'y	
3	TB09727	Holder MT03075 One-touch	

### Slow Starting Function

Slow speed at the beginning of boring will securely set a hole cutting position.



1

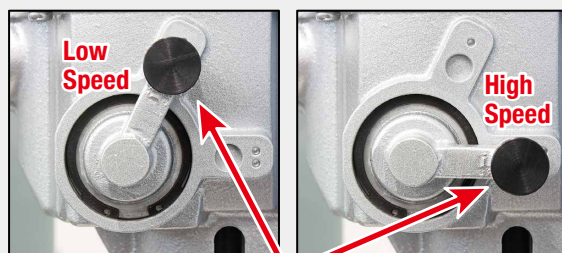
2

3

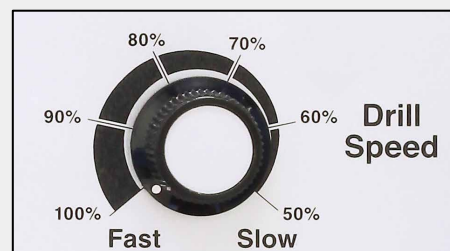


### Two speed electric drill with speed adjustment

Optimum drill speed adjustment can be made to bore a hole on difficult-to-cut materials or to securely set a hole cutting position at initial cutting stage.



Shift Lever



## Load Indication and LED Condition

### Load Indication

The load indicator (LED) indicates the condition of the load with different color of LED light.

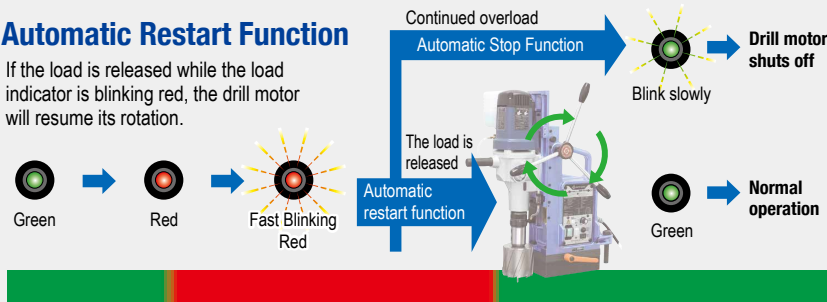
The LED lights up in green. → The load on the drill motor is normal.  
 The LED lights up in red. → The load on the drill motor is close to overload.  
 The LED blinks in red. → The drill motor is overloaded.

### Automatic Stop Function

As the drilling load increases, the load indicator will change in color from green to red. In addition, if excessive feeding force is applied, the load indicator will rapidly blink red and the rotation of the drill motor will slow down and stop. After the drill motor has come to a complete stop, the load indicator will slowly blink in green. To resume the rotation of the drill motor release the load and turn off the switch of the drill motor, and then turn it on.

### Automatic Restart Function

If the load is released while the load indicator is blinking red, the drill motor will resume its rotation.



### Built-in Motion Sensor

If any lateral movement or excess vibration is detected during drilling a hole, the drill motor stop instantly and the LED blink red. To resume operation, turn the magnet switch off and on.



### Fail-safe Restart

The magnetic field will become active, but the drill will not re-start even if power is re-supplied after accidental shutdown. The LED will blink green at this stage. Drilling can only be continued after turning on the drill switch.

### Magnet Open-circuit Sensor

The drill will not start until the magnetic field is active. If malfunction occurs on the magnet, the LED will blink red slowly and the drill motor will not revolve.



## Features

### Reversible Feed Handles

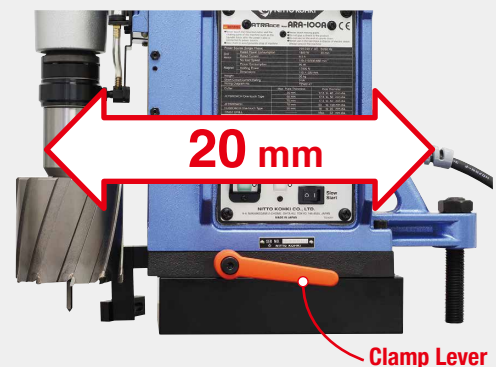


Feed handles can be positioned on the right or left hand side for ease of drilling. When changing the feed handle position, oil tank is required to be positioned opposite to the feed handles.

### Drilling Position Adjustment



When the clamp lever is loosened, the drill position can be adjusted back and forth by 20 mm and pivoted 15 degrees to the left or right. The clamp lever can be positioned for left hand or right hand operation.

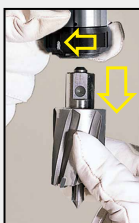


## One-Touch Cutter Replacement (Holder MT03075 One-Touch)



### Mounting the cutter

Align the depression in the cutter shank with the white line on the sleeve, and then insert the cutter.



### Removing the cutter

Turn the sleeve counterclockwise. The cutter will come off.



## Available in the market

### Twist Drill Bit

MT3



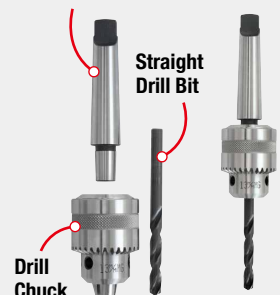
MT3 Morse taper shank drill bit can be directly installed.

Morse taper sleeve MT3



Use Morse taper sleeve MT3 for other sizes than MT3

Drill chuck Arbor MT3



A drill chuck is required to install a straight drill bit.

# BORING

Portable Magnetic Base Drilling Machine

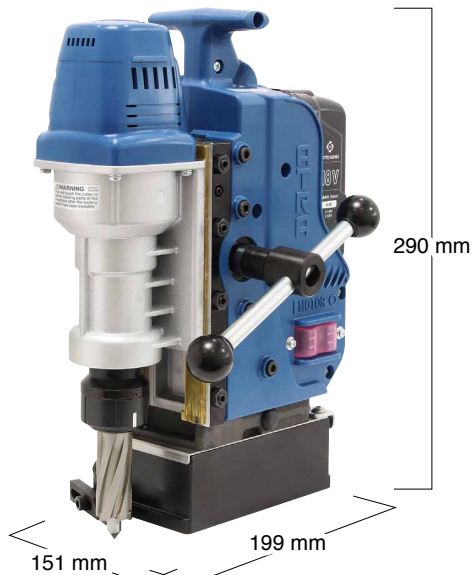
## ATRA ACE manual feed

Model **CLA-2720** 

• Max. 27 mm dia. x 20 mm deep



 YouTube



**Compact and cordless operation,  
powered by a rechargeable lithium-ion battery.**

- Weighs only 7 kg with battery installed
- Compact size allows drilling in tight spots

### Specifications

<b>Model</b>		<b>CLA-2720</b>	
<b>Voltage</b>		18 V DC	
<b>Battery Pack (Lithium-ion Battery)</b>		NBL18006 (18V 4.0 Ah)	
<b>No-load Speed</b> min <sup>-1</sup> (rpm)		430	
<b>Hole Capacity</b> mm	<b>Cutter</b>	<b>Hole Diameter</b>	<b>Plate Thickness</b>
	One-touch Type JETBROACH 25L	12 to 17	6 to 12
	One-touch Type JETBROACH 35L	17.5 to 27	6 to 20
	One-touch Type HI-BROACH 25L	12 to 15	6 to 12
		16 to 27	6 to 20
<b>Magnet Holding Power</b>		N(kgf)	5500 (561)
<b>Magnet Dimensions</b>		mm	65 x 126
<b>Cutter Position</b>	Pivot Side to Side	mm	10
<b>Adjustment</b>	Straight Front to Back	mm	10
<b>Mass (Weight)</b>		kg	7*

\*Including Battery Pack and Feed Handle

<b>Battery Charger</b>	<b>NC14435</b>
<b>Power Source</b>	220 - 240 V AC
<b>Charging Time</b>	90 min*
<b>Chargeable Battery Pack</b>	NBL18006 (18 V 4.0 Ah)

\*In case of a full charge from an empty battery. However, it can be charged up to 95% in 45 min.

### Accessories Included

- Carry Case
- Cutting Oil 0.5L
- Oiler No.3013
- Tube 4 x 7 mm, 1 m Long
- Handle
- Battery Charger
- 2 pieces of Battery Pack 18V NBL18006
- Blade
- 3 mm Hex. Socket Screw Key
- 4 mm Hex. Socket Screw Key
- Hex. Socket Head Cap Screw 5 x 12
- Hex. Socket Head Set Screw 8 x 28
- Spanner 8 x 10
- Guard
- Safety Strap

### TOP-LEVEL SAFETY

#### Highly Sensitive Sensor Equipped

Side slip and inclination detected by a built-in sensor

#### Self-check Function

The machine checks for faults itself

### Highly Advanced Energy-Saving

#### Magnetic Force Control Function

The magnet force is automatically reduced when the drill is not running.

#### Soft Start Function

The large electric current on start-up is prevented by starting the electric drill gently.

#### Automatic Drill Stop and Warning Function

Unnecessary operations are eliminated.



**Li-ion**

Lithium-ion batteries are required to be recycled; never discard a lithium-ion battery in the waste. Please contact your local sales office or community recycling program for information on properly disposing of lithium-ion batteries.

### Optional Accessories

Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TB09657	Oil Tank Ass'y	
3	TB04374	Supporting Magnet Ass'y	
4	TB07696	Pipe Attachment Ass'y	
5	TB09824	Battery Pack 18 V	
6	TB09825	Battery Charger	
7	TQ14333	Guard	
		One-touch Type JETBROACH 25L, 35L	
		One-touch Type HI-BROACH 25L	



### Reversible Feed Handle

Feed handles can be positioned on the right or left side for ease of drilling and mounting in confined spaces.





## CLA-2720 LED Indication Light Safety Features

LED INDICATION – Battery level and Motor load can be monitored while drilling

VOLTAGE LEVEL				
BATTERY LEVEL INDICATION				
	GREEN 3 TIMES*	YELLOW 3 TIMES*	RED 3 TIMES*	RED BLINKING CONTINUOUS
MEANING	BATTERY FULL	PARTIALLY CHARGED	REQUIRE CHARGING	BATTERY LEVEL LOW

LED Indication Light



\*After turning on the magnet switch the light flashes 3 times with the color according to the battery level, then the light will turn green and the tool is ready for use. If the light flashes red 3 times or continuously, replace the low battery pack with a charged battery pack.

ELECTRIC CURRENT OF THE ELECTRIC DRILL					
MOTOR LOAD INDICATION					
	GREEN	YELLOW	RED	RED BLINKING	WHITE BLINKING
MEANING	LIGHT LOAD	MEDIUM LOAD	OVERLOAD		MOTOR STOPPED BY OVERLOAD

“Caution” If an excessive load is maintained during the cut, the motor will shut-off to prevent damage or injury to the operator.

SLIDE SLIP DETECTION		When a slide slip is detected, the blue light will flash and the Motor will stop automatically.	<b>SAFETY</b>
“NO LOAD” DETECTION		While the electric drill is running, if no load is applied for 7 seconds, the green light will flash. After another 3 seconds without load, the electric drill will be stopped automatically.	<b>ENERGY-SAVING</b>
MOTOR NOT ACTIVATED IN TIME		After the Magnet switch is turned on, if the Motor switch is not turned on within 10 seconds, the green light will flash.	

### Chip Breaker

This chip breaker prevents the cutter from becoming jammed with metal shavings.



### Powered by Lithium-ion Battery

Using the Lithium-ion battery it takes about 90 minutes for a full charge. Sufficient charge (95%) can be achieved in just 45 minutes.



### Drilling Position Adjustment

After engaging the magnet, the drill position can be adjusted up to 10 mm travel on each axis straight front to back and pivot side to side.



# BORING

Portable Magnetic Base Drilling Machine

## ATRA ACE manual feed

Model **LO-3550** 

• Max. 35 mm dia. x 50 mm deep



**Compact, light weight, low profile design gives you greater hole making mobility**

- Drilling on 100 mm or more width web and flange of wide flange beam
- Designed to improve drilling on walls, confined and elevated locations
- Drill position can be adjusted up to 10 mm travel on each axis straight front to back and pivot side to side

### Specifications

Model		LO-3550		
Power Source (Single Phase)		220 - 240 V AC, 50/60 Hz		
Electric	Rated Power Consumption	W		
	Rated Current	A		
	No-load Speed	min <sup>-1</sup> (rpm)		
Hole Capacity	Cutter	Hole Diameter	Plate Thickness	
		One-touch Type JETBROACH 25L	12 to 17	6 to 25
		One-touch Type JETBROACH 35L	17.5 to 35	6 to 35
	One-touch Type JETBROACH 50L	12 to 35	6 to 50	
Magnet Holding Power		N(kgf)	5500 (561)	
Magnet Dimensions		mm	65 x 145	
Cutter Position	Pivot Side to Side	mm	10	
Adjustment	Straight Front to Back	mm	10	
Power Cord Length		m	3	
Mass (Weight)		kg	8.7*	

\*Without an electric cord and a sub handle

### Accessories Included

- Carry Case
- Cutting Oil 0.5L
- Feed Handle
- Sub Handle
- Pilot Pin 08035
- Spanner 17
- Blade
- Hex. Socket Bolt 5 x 12
- Hex. Socket Head Set Screw 8 x 28
- 4 mm Hex. Socket Screw Key
- 5 mm Hex. Socket Screw Key
- Spanner 7 x 8
- Guard
- Safety Strap

### Chip Breaker



### Optional Accessories

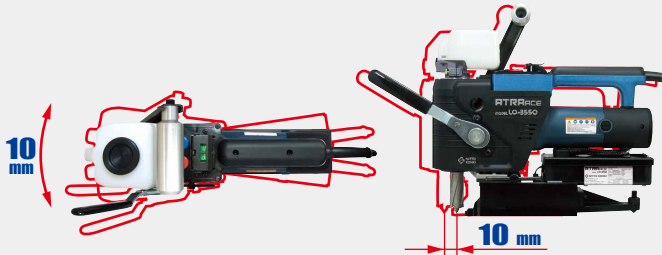
Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TQ10581	Oiler No.3013	
3	TB01098	Tube 4 x 7 x 3000 Ass'y	
4	TB07306	Lubrication Adapter Ass'y	
5	TB04374	Supporting Magnet Ass'y	
6	TB07696	Pipe Attachment Ass'y	
*50L for stacked plates		One-touch Type JETBROACH 25L, 35L, 50L	



# BORING

## Easy Drilling Position Adjustment

After engaging the magnet, the drill position can be adjusted up to 10 mm travel on each axis straight front to back and pivot side to side.



## Adjustable Feed Handle

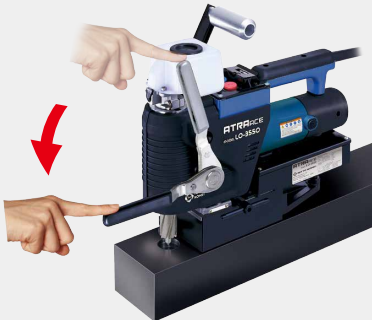
The feed handle can be locked at varying angles to enhance productivity.

Pull the feed handle to adjust the angle.



## Light Handle Operation

Fast revolution of Jetbroach cutter makes less cutting resistance and smooth handling.

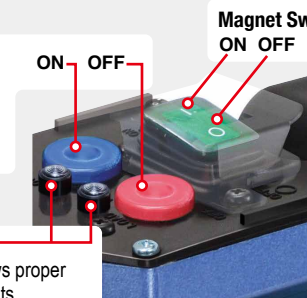


## Easy-to-use Switch Panel

On / off buttons of the magnet and the drill motor are on the front panel and can be operated by one hand. Drilling conditions can be checked by lamp colors.

**Motor Switch**  
The motor switch can be activated after the magnet switch is turned on.

**LED Load Indicator**  
The LED load display allows proper cutting pressure adjustments.



## Reversible Feed Handle

The feed handle can be positioned on the right or left hand side for ease of drilling and mounting in confined spaces.



## A Carrying Case Is Provided

The carrying case is a rugged accessory that provides a convenient way to transport and store the LO-3550.



## Optional Accessories for ATRA ACE

### Pipe Attachment Ass'y

The Pipe Attachment Ass'y is an optional base to securely fasten ATRA ACE on pipe for drilling. The chain can easily and securely fit around pipes having an outside diameter of 48.6 to 318.5 mm.

#### Example of installation on a pipe



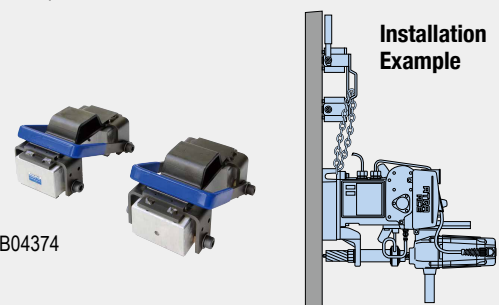
Applicable Pipe Size:  
48.6 to 318.5 mm

PN : TB07696

Applicable Models when a 35 mm or 50 mm length one touch type JETBROACH CUTTER is used:  
**CLA-2720, WOJ-3200, LO-3550, WA-3500, and QA-4000**

### Supporting Magnet Ass'y

If the accessory safety strap or chain is unable to be properly secured to prevent ATRA ACE from falling off the workpiece, the supporting magnet ass'y is recommended. It employs a permanent magnet and can secure ATRA ACE even if power is interrupted.



PN : TB04374

Applicable Models:  
**CLA-2720, LO-3550, WA-3500, WOJ-3200, AO-5575A, QA-4000, and QA-6500**

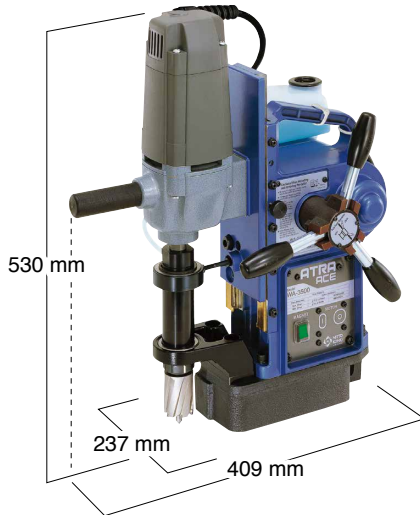
# BORING

Portable Magnetic Base Drilling Machine

## ATRA ACE auto

Model **WA-3500** 

• Max. 35 mm dia. x 50 mm deep



## High-performance feed system & high-tech components

• Drilling time and cutting performance are enhanced by the automatic feed function.

Model **WA-5000** 

• Max. 50 mm dia. x 75 mm deep



 YouTube



### Specifications

Model		WA-3500		WA-5000	
Power Source (Single Phase)		110 - 120 V AC, 50/60 HZ	220 - 240 V AC, 50/60 Hz	110 - 120 V AC, 50/60 HZ	220 - 240 V AC, 50/60 Hz
Electric Drill	Rated Power Consumption	W		1100	
	Rated Current	A	10.2	5.1	
	No-load Speed	min <sup>-1</sup> (rpm)	950		350 / 650
Magnet Power Consumption		W		34	
Hole Capacity mm	Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 25L	-	-	12 to 17	9 to 25
	One-touch Type JETBROACH 35L	17.5 to 35	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L	17.5 to 35	9 to 50	12 to 50	9 to 50
	One-touch Type JETBROACH 75L	-	-	17.5 to 50	9 to 75
	One-touch Type HI-BROACH 25L	14 to 35	9 to 25	14 to 50	9 to 25
One-touch Type HI-BROACH 50L	-	-	14 to 50	9 to 50	
Max. Stroke	mm	83		107	
Magnet Holding Power	N(kgf)	7056 (720)		9800 (1000)	
Magnet Dimensions	mm	92 x 213		101 x 201	
Power Cord Length	m	3		3	
Mass (Weight)	kg	20		23	
Accessories Included		<ul style="list-style-type: none"> <li>• Carry Case</li> <li>• Cutting Oil 0.5L</li> <li>• Pilot Pin 08035</li> <li>• Side Handle</li> </ul>		<ul style="list-style-type: none"> <li>• 3 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Guard</li> <li>• Chain</li> </ul>	
				<ul style="list-style-type: none"> <li>• Carry Case</li> <li>• Cutting Oil 0.5L</li> <li>• Pilot Pin 08050</li> <li>• Side Handle</li> <li>• 3 mm Hex. Socket Screw Key</li> </ul>	
				<ul style="list-style-type: none"> <li>• 4 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Guard</li> <li>• Chain</li> <li>• Chip Breaker</li> </ul>	

### Optional Accessories

Ref. No.	PN	Description	Sales Unit	Applicable Model	
				WA-3500	WA-5000
1	TB05186	Chip Breaker Ass'y	1 piece	●	●
2	TB01507	Cutting Oil 2L	1 piece	●	●
3	TB04374	Supporting Magnet Ass'y	1 piece	●	●
4	TB02536	Sleeve 6.5 for Triangle Shank Drill Bit	1 piece	●	●
5	TB07696	Pipe Attachment Ass'y	1 piece	●	●
		One-touch Type JETBROACH 25L	1 piece	●	●
		One-touch Type JETBROACH 35L	1 piece	●	●
		One-touch Type JETBROACH 50L	1 piece	●	●
		One-touch Type JETBROACH 75L	1 piece	●	●
		One-touch Type HI-BROACH 25L	1 piece	●	●
		One-touch Type HI-BROACH 50L	1 piece	●	●



# BORING

## One-touch Cutter Replacement

Replacement is quick and easy with our unique push fit self-centering cutter system.



Mounting the cutter

Removing the cutter

## Coolant into the Heart of the Cut

Coolant is fed directly to the inside of the cut. The coolant system also features an auto shut-off.



## Improved Bearing Bracket

Our precision bearing bracket aligns cutters precisely, which increases cutter life.



## Fail-Safe Protection

### Built-in Motion Sensor

If any lateral movement or excess vibration is detected, both the drill and the feed motor stop. Nitto Kohki is the first company to incorporate this feature into magnetic base drills.

### Fail-safe Restart

The drill will not re-start even if power is re-supplied after accidental shutdown. Drilling can only be continued after turning on the drill switch.

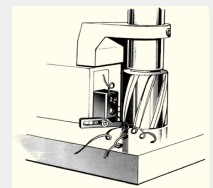
### Magnet Open-circuit Sensor

The drill will not start until the magnetic field is active.

## Chip Breaker

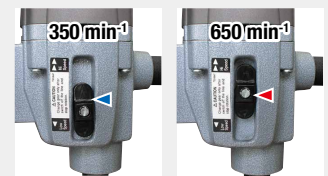
This chip breaker prevents the cutter from becoming jammed with metal shavings.

- Standard accessory for the WA-5000
- Optional accessory for the WA-3500



## Two Speed Selection (WA-5000)

Speed can be changed to suit the type and size of the cutter.



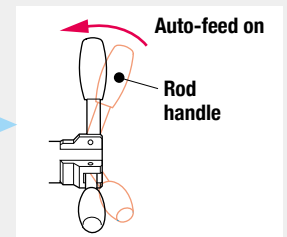
## New drill control prevents cutters from breaking

### Slow Start Mechanism

The feed speed is reduced for the first few seconds after boring begins to ensure a smooth cut through the mill scale.

### Auto-feed

Automatic control & feed are activated by simply pushing the Rod handle to engage the clutch.



### Load Sensor

The dual sensing system responds to both drilling and feeding forces on the cutter for the optimum cutting condition.

### Variable Automatic Feed

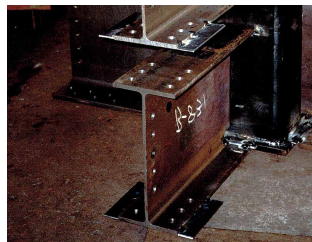
The feed speed is continuously monitored and updated proportionally to the load on the cutter.

### Cycle Stop

After the cut has finished, a detector responds to the reduction in load and both the drill and the feed motor automatically stop.

### Overload Stop

When an excessive load is applied to the cutter, both the drill and the feed motor will stop automatically.



# BORING

Portable Magnetic Base Drilling Machine

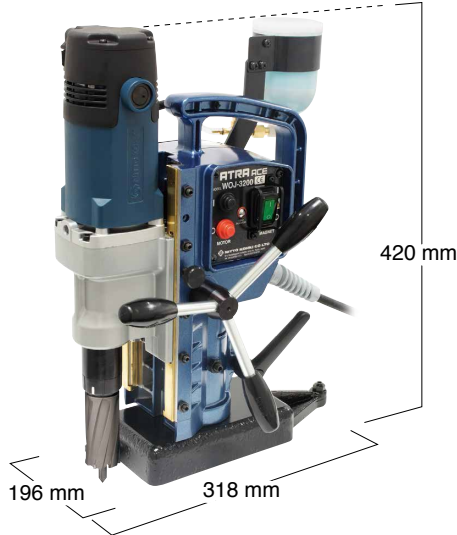
## ATRA ACE manual feed

*New generation magnetic base drilling machines help meet productivity and safety goals.*

- Advanced safety system

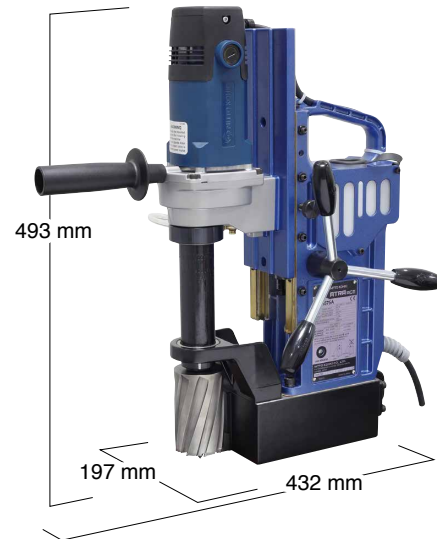
### Model **WOJ-3200**

- Max. 32 mm dia. x 50 mm deep



### Model **AO-5575A**

- Max. 55 mm dia. x 75 mm deep



#### Specifications

Model		WOJ-3200		AO-5575A	
Power Source (Single Phase)		110 - 120 V AC, 50/60 Hz		220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption	950		950	
	Rated Current	8.6	4.3	4.3	
	No-load Speed	870		520	
Magnet Power Consumption		38	30	50	
Hole Capacity mm	Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 25L	12 to 17	9 to 25	12 to 17	9 to 25
	One-touch Type JETBROACH 35L	17.5 to 32	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L	12 to 32	9 to 50	12 to 55	9 to 50
	One-touch Type JETBROACH 75L	-	-	17.5 to 55	9 to 75
	One-touch Type HI-BROACH 25L	-	-	12 to 50	9 to 25
	One-touch Type HI-BROACH 50L	-	-	12 to 50	9 to 50
Twist Drill		Max. 13 mm dia.		-	
Max. Stroke	mm	130		105	
Magnet Holding Power	N(kgf)	9000 (918)		10000 (1020)	
Magnet Dimensions	mm	99 x 177		86 x 170	
Power Cord Length	m	3		3	
Mass (Weight)	kg	13		17.5	
Accessories Included		<ul style="list-style-type: none"> <li>• Carry Case</li> <li>• Oil Tank</li> <li>• Pilot Pin 08035</li> <li>• Sub Handle</li> <li>• 2 pieces of Hex. Socket Head Bolt 5 x 10 mm</li> <li>• 3 pieces of Rod Handle</li> </ul>		<ul style="list-style-type: none"> <li>• 3 mm Hex. Socket Screw Key</li> <li>• 4 mm Hex. Socket Screw Key</li> <li>• 6 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Guard</li> <li>• Safety Strap</li> </ul>	
		<ul style="list-style-type: none"> <li>• 5 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Guard</li> <li>• Chain</li> </ul>		<ul style="list-style-type: none"> <li>• Carry Case</li> <li>• Cutting Oil 0.5L</li> <li>• Pilot Pin 08050</li> <li>• Side Handle</li> <li>• 3 mm Hex. Socket Screw Key</li> </ul>	

#### Optional Accessories

Ref. No.	PN	Description	Sales Unit	Applicable Model	
				WOJ-3200	AO-5575A
1	TB07691	Chip Breaker Ass'y	1 piece	●	
2	TB07474	Chip Breaker Ass'y	1 piece		●
3	TQ10581	Oiler No.3013	1 piece	●	
4	TB01098	Tube 4 x 7 x 3000 Ass'y	1 piece	●	●
5	TB01507	Cutting Oil 2L	1 piece	●	●
6	TB07696	Pipe Attachment Ass'y	1 piece	●	
7	TB04374	Supporting Magnet Ass'y	1 piece	●	●
8	TB07690	One-touch Drill Adapter	1 piece	●	
9	TB02536	Sleeve 6.5 for Triangle Shank Drill Bit	1 piece		●
		One-touch Type JETBROACH 25L	1 piece	●	●
		One-touch Type JETBROACH 35L	1 piece	●	●
		One-touch Type JETBROACH 50L	1 piece	●	●
		One-touch Type JETBROACH 75L	1 piece		●
		One-touch Type HI-BROACH 25L	1 piece		●
		One-touch Type HI-BROACH 50L	1 piece		●

\*50L for stacked plates



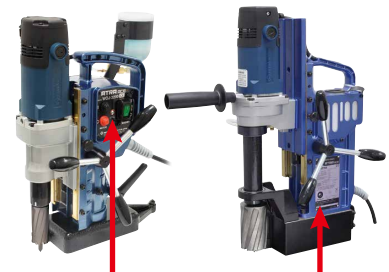
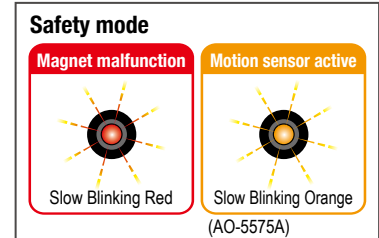
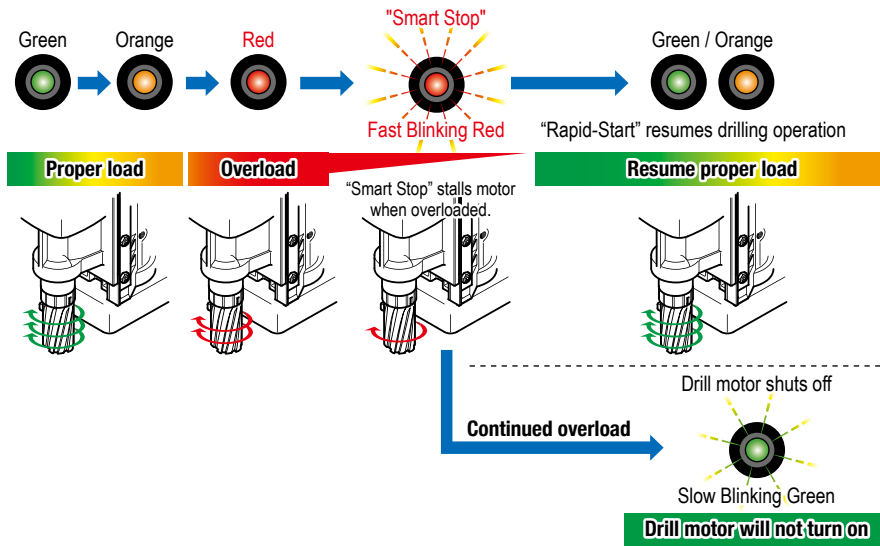
## Load Detector with "Smart-Stop/Rapid-Restart" Technology

### The innovative feature of manual feed ATRA ACE, "Smart-Stop / Rapid-Restart" technology for WOJ-3200 / AO-5575A

This new feature is a breakthrough in the Manual drill industry. Formerly only found on high end Nitto Kohki Automatic drills, this technology displays the current drill status via the LED Load Indicator. Customers will experience a cutting edge drill management system designed solely around saving time and money in replacement parts and cutters in addition to reducing user fatigue and down time.

As the drilling load increases, the load indicator will change in color from green to orange to red. In addition, if excessive feeding force is applied, the load indicator will rapidly blink red and the rotation of the drill motor will slow down and temporarily stop. If the load is released while the load indicator is blinking red, the drill motor will resume its rotation.

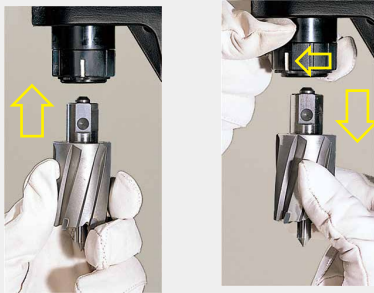
#### LED load indicator



LED load indicator

#### One-Touch Cutter Replacement

Replacement is quick and easy with our unique push fit self-centering cutter system.



Mounting the cutter

Removing the cutter

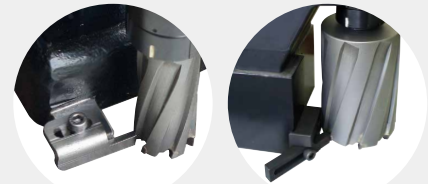
#### Reversible Feed Handle

Feed handles can be positioned on the right or left side for ease of drilling and mounting in confined spaces.



#### Chip Breaker (Optional)

This chip breaker prevents the cutter from becoming jammed with metal shavings.

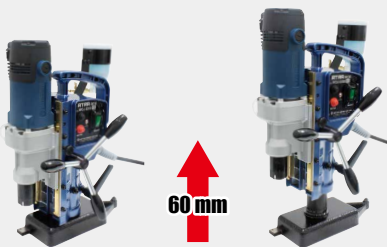


WOJ-3200

AO-5575A

#### Body Height Adjustment (WOJ-3200)

The use of JETBROACH CUTTERS require the frame to be at the lowest position, while twist bit drilling requires the appropriate amount of elevation to be adjusted for safe operation.



60 mm

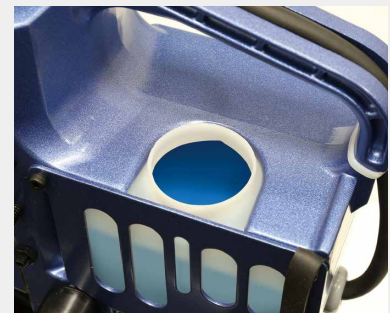
#### One-Touch Drill Adapter (WOJ-3200)

Optional one-touch drill adapter allows the use of up to 13 mm twist drills to be used in the original arbor.



\*Twist drills are not provided with the one-touch drill adapter.

#### Built-in coolant tank to protect against damage (AO-5575A)



# BORING

Portable Magnetic Base Drilling Machine

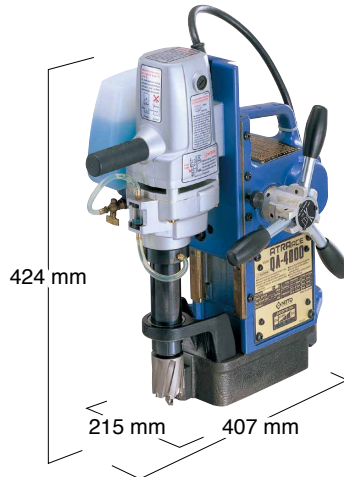
## ATRA ACE quick auto

**Fully automatic drilling for increased productivity and reduced cost**

- Proven Automatic Technology (self feeding, automatic return, load detection for speed and feed regulation)

### Model QA-4000 Non-CE

- Max. 40 mm dia. x 35 mm deep



### Model QA-6500 Non-CE

- Max. 65 mm dia. x 50 mm deep



### Specifications

Model		QA-4000		QA-6500	
Power Source (Single Phase)		110 - 120 V AC, 50/60 HZ	220 - 240 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption	W	680	1010	
	Rated Current	A	6.1	3.0	
	No-load Speed	min <sup>-1</sup> (rpm)	750	400 / 750	
Magnet Power Consumption		W	50	75	
Hole Capacity mm	Cutter	Hole Diameter	Plate Thickness	Hole Diameter	Plate Thickness
	One-touch Type JETBROACH 35L	17.5 to 40	9 to 35	17.5 to 40	9 to 35
	One-touch Type JETBROACH 50L	-	-	17.5 to 65	9 to 50
	One-touch Type HI-BROACH 25L	14 to 15 16 to 18	9 to 12 9 to 25	18 to 35	9 to 25
Max. Stroke	mm	75		88	
Magnet Holding Power	N(kgf)	6664 (680)		9800 (1000)	
Magnet Dimensions	mm	82 x 172		100 x 200	
Power Cord Length	m	4	5	5	
Mass (Weight)	kg	18.5		26	
Accessories Included		<ul style="list-style-type: none"> <li>• Oil Tank</li> <li>• Cutting Oil 0.5L</li> <li>• Pilot Pin 08035</li> <li>• Side Handle</li> <li>• 3 mm Hex. Socket Screw Key</li> </ul>		<ul style="list-style-type: none"> <li>• 4 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Chain</li> <li>• Tool Box</li> </ul>	
		<ul style="list-style-type: none"> <li>• 4 mm Hex. Socket Screw Key</li> <li>• Cutting Oil 0.5L</li> <li>• Pilot Pin 08050</li> <li>• Side Handle</li> <li>• 3 mm Hex. Socket Screw Key</li> </ul>		<ul style="list-style-type: none"> <li>• 4 mm Hex. Socket Screw Key</li> <li>• 8 x 10 mm Spanner</li> <li>• Chip Stopper</li> <li>• Chain</li> <li>• Tool Box</li> </ul>	

### Optional Accessories

Ref. No.	PN	Description	Sales Unit	Applicable Model	
				QA-4000	QA-6500
1	TB01507	Cutting Oil 2L	1 piece	●	●
2	TB04374	Supporting Magnet Ass'y	1 piece	●	●
3	TB07696	Pipe Attachment Ass'y	1 piece	●	●
		One-touch Type JETBROACH 35L	1 piece	●	●
		One-touch Type JETBROACH 50L	1 piece	●	●
		One-touch Type HI-BROACH 12L	1 piece	●	●
		One-touch Type HI-BROACH 25L	1 piece	●	●





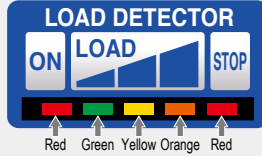
# BORING

## Automatic Return

Once drilling is completed and the slug is ejected from the hole, the cutting bit is quickly retracted. This quick drill motor retraction allows the user to move onto the next hole more quickly.

## Self Feeding & Load Detection

The feeding is controlled by an onboard microcomputer. The feed rate begins slowly and then increases to the appropriate speed for the cutter size and load condition. The load detector clearly shows the amount of resistance on the cutter at anytime.



## Built-in Motion Sensor

If any lateral movement or excess vibration is detected, both the drill and the feed motor stop. Nitto Kohki is the first company to incorporate this feature into magnetic base drills.

## Step Feed

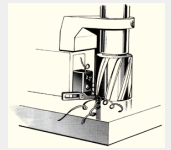
When cutting through difficult materials, the load sensor will automatically activate the Step Feed Program to help penetrate material.

## Limit Switch

The automatic drills of ATRAACE utilize a limit switch that resets the machine when it retracts to the starting position after hole completion, also shuts down the motors in the event of an over-travel at the bottom of the stroke.

## Chip Breaker

This chip breaker prevents the cutter from becoming jammed with metal shavings.



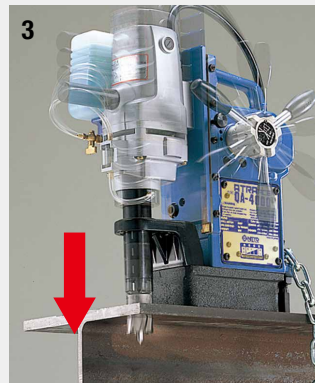
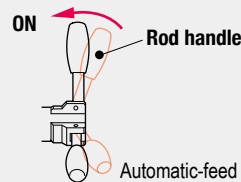
## Automatic-feed Hole-cutting Procedure



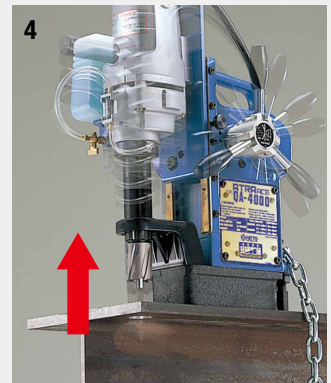
1 Align the pilot pin with the center punch mark of the hole to be drilled. Attach the machine to the beam with the proper safety chain and engage the magnet. Lower the drill down from the top limit switch location to the point of the pilot pin making contact with the material and engage the motor.



2 Engage the clutch by pushing the handles in towards the drill and the motor will begin feeding automatically.



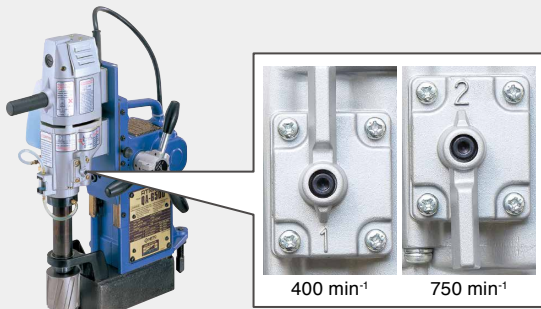
3 Slow start mechanism cuts smoothly through the mill scale. Then, speed and feed rate is controlled by the sensors to achieve efficient drilling.



4 After the hole is completed, the QA Series machines will quickly return and stop at the top of the stroke, ready for the next hole.

## Two Speed Selection (QA-6500)

Speed can be changed to suit the type and size of the cutter.



## One-touch Cutter Replacement

Replacement is quick and easy with our unique push fit self-centering cutter system.



Mounting the cutter



Removing the cutter

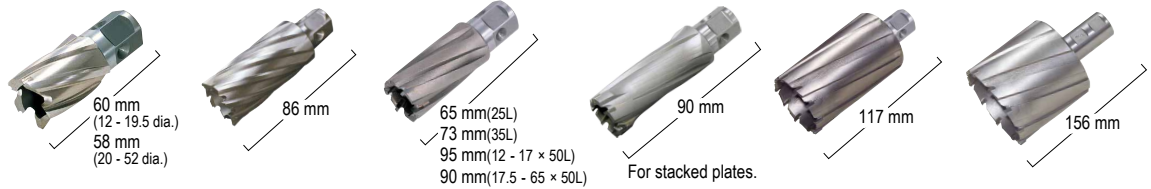
## Annular Cutters

# JETBROACH CUTTERS & HI-BROACH CUTTERS

### BROACH CUTTERS are far better than twist drills

- No dead point
- Peripheral cutting
- Dramatically reduce cutting resistance
- Available diameter size: 12 - 100 mm

Test Drilling is very often the only way to determine the machinability of difficult materials. Use a small size cutter wherever possible in order to minimize trial costs.



### Specifications

		HI-BROACH One-touch Type/25L	HI-BROACH One-touch Type/50L	JETBROACH One-touch Type/25,35,50L	JETBROACH One-touch Type/50L(W)	JETBROACH One-touch Type/75L	JETBROACH Side lock Type/75L
Hole Diameter		25L: 12 - 52 dia.	-	25L: 12 - 17 dia.	-	-	-
		-	-	35L: 17.5 - 40 dia.	-	-	-
Hole Capacity mm		-	50L: 12 - 52 dia.	50L: 12 - 65 dia.	50L(W): 18, 22, 24 - 26.5, 28, 32, and 35 dia.	75L: 17.5 - 55 dia.	75L: 50 - 100 dia.
	Plate Thickness	25L: 25	-	25L: 25	-	-	-
		-	-	35L: 35	-	-	-
		-	50L: 50	50L: 50	50L(W): 50	-	-
		-	-	-	-	75L: 75	75L: 75
Feed Speed	mm/rev	0.02 - 0.1					
Circumferential Speed	m/min	15 - 35 (mild steel)			35 - 50 (mild steel)		

HI-BROACH One-touch Type		AO-5575A	WA-3500	WA-5000	QA-4000	QA-6500	CLA-2720	ARA-100A	Pilot Pin
Depth	mm dia.								
	PN								
25 mm	12	TK00698	•						06025
	13	TK00699	•						
	14	TK00700	•	•	•	•			
	15	TK00701	•	•	•	•			
	16	TK00702	•	•	•	•			
	17	TK00703	•	•	•	•			
	17.5	TK01391	•	•	•	•	•	•	
	18	TK01392	•	•	•	•	•	•	
	19	TK01393	•	•	•	•	•	•	
	19.5	TK01394	•	•	•	•	•	•	
	20	TK01395	•	•	•	•	•	•	
	21	TK01396	•	•	•	•	•	•	
	21.5	TK01397	•	•	•	•	•	•	
	22	TK01398	•	•	•	•	•	•	
	22.5	TK01399	•	•	•	•	•	•	
	23	TK01400	•	•	•	•	•	•	
	23.5	TK01401	•	•	•	•	•	•	
	24	TK01402	•	•	•	•	•	•	
	24.5	TK01403	•	•	•	•	•	•	
	25	TK01404	•	•	•	•	•	•	
	26	TK01405	•	•	•	•	•	•	
	27	TK01407	•	•	•	•	•	•	
	28	TK01408	•	•	•	•	•	•	
	29	TK01409	•	•	•	•	•	•	
	30	TK01410	•	•	•	•	•	•	
	31	TK01411	•	•	•	•	•	•	
	32	TK01412	•	•	•	•	•	•	
	33	TK01413	•	•	•	•	•	•	
	34	TK01414	•	•	•	•	•	•	
	35	TK01415	•	•	•	•	•	•	
	36	TK01416	•	•	•	•	•	•	
	37	TK01417	•	•	•	•	•	•	
38	TK01418	•	•	•	•	•	•		
39	TK01419	•	•	•	•	•	•		
40	TK01420	•	•	•	•	•	•		
41	TK01421	•	•	•	•	•	•		
42	TK01422	•	•	•	•	•	•		
43	TK01423	•	•	•	•	•	•		
44	TK01424	•	•	•	•	•	•		
45	TK01425	•	•	•	•	•	•		
46	TK01426	•	•	•	•	•	•		
47	TK01427	•	•	•	•	•	•		
48	TK01428	•	•	•	•	•	•		
49	TK01429	•	•	•	•	•	•		
50	TK01430	•	•	•	•	•	•		
51	TK01431	•	•	•	•	•	•		
52	TK01432	•	•	•	•	•	•		

HI-BROACH One-touch Type		AO-5575A	WA-5000	ARA-100A	Pilot Pin
Depth	mm dia.				
	PN				
50 mm	12	TK00721	•		06050
	13	TK00722	•		
	14	TK00723	•	•	
	15	TK00724	•	•	
	16	TK00725	•	•	
	17	TK00726	•	•	
	18	TK00727	•	•	
	19	TK00728	•	•	
	20	TK00729	•	•	
	21	TK00730	•	•	
	22	TK00731	•	•	
	23	TK00732	•	•	
	24	TK00733	•	•	
	25	TK00734	•	•	
	26	TK00735	•	•	
	27	TK00736	•	•	
	28	TK00737	•	•	
	29	TK00738	•	•	
	30	TK00739	•	•	
	31	TK00740	•	•	
	32	TK00741	•	•	
	33	TK00742	•	•	
	34	TK00743	•	•	
	35	TK00744	•	•	
	36	TK00745	•	•	
	37	TK00746	•	•	
	38	TK00747	•	•	
	39	TK00748	•	•	
	40	TK00749	•	•	
	41	TK00750	•	•	
	42	TK00751	•	•	
	43	TK00752	•	•	
44	TK00753	•	•		
45	TK00754	•	•		
46	TK00755	•	•		
47	TK00756	•	•		
48	TK00757	•	•		
49	TK00758	•	•		
50	TK00759	•	•		
51	TK00760	•	•		
52	TK00761	•	•		

JETBROACH One-touch Type		LO-3550	WOJ-3200	AO-5575A	WA-3500	WA-5000	QA-4000	QA-6500	CLA-2720	ARA-100A	Pilot Pin
Depth	mm dia.										
	PN										
25 mm	12	TK01148	•	•	•	•	•	•	•	•	06025
	13	TK01149	•	•	•	•	•	•	•	•	
	14	TK01150	•	•	•	•	•	•	•	•	
	15	TK01151	•	•	•	•	•	•	•	•	
	16	TK01152	•	•	•	•	•	•	•	•	
	17	TK01153	•	•	•	•	•	•	•	•	
	17.5	TK01249	•	•	•	•	•	•	•	•	
	18	TK01250	•	•	•	•	•	•	•	•	
	18.5	TK01251	•	•	•	•	•	•	•	•	
	19	TK01252	•	•	•	•	•	•	•	•	
	19.5	TK01253	•	•	•	•	•	•	•	•	
	20	TK01254	•	•	•	•	•	•	•	•	
	20.5	TK01255	•	•	•	•	•	•	•	•	
	21	TK01256	•	•	•	•	•	•	•	•	
	21.5	TK01257	•	•	•	•	•	•	•	•	
	22	TK01258	•	•	•	•	•	•	•	•	
	22.5	TK01259	•	•	•	•	•	•	•	•	
23	TK01260	•	•	•	•	•	•	•	•		
23.5	TK01261	•	•	•	•	•	•	•	•		
24	TK01262	•	•	•	•	•	•	•	•		
24.5	TK01263	•	•	•	•	•	•	•	•		
25	TK01264	•	•	•	•	•	•	•	•		
25.5	TK01265	•	•	•	•	•	•	•	•		
26	TK01266	•	•	•	•	•	•	•	•		
26.5	TK01267	•	•	•	•	•	•	•	•		
27	TK01268	•	•	•	•	•	•	•	•		
28	TK01269	•	•	•	•	•	•	•	•		
29	TK01270	•	•	•	•	•	•	•	•		
30	TK01271	•	•	•	•	•	•	•	•		
31	TK01272	•	•	•	•	•	•	•	•		
32	TK01273	•	•	•	•	•	•	•	•		
33	TK01274	•	•	•	•	•	•	•	•		
34	TK01275	•	•	•	•	•	•	•	•		
35	TK01276	•	•	•	•	•	•	•	•		
36	TK01277	•	•	•	•	•	•	•	•		
37	TK01278	•	•	•	•	•	•	•	•		
38	TK01279	•	•	•	•	•	•	•	•		
39	TK01280	•	•	•	•	•	•	•	•		
40	TK01281	•	•	•	•	•	•	•	•		

# BORING

JETBROACH One-touch Type			LO-3550	WOJ-3200	AO-5575A	WA-3500	WA-5000	QA-6500	ARA-100A	Pilot Pin
Depth	mm dia.	PN								
50 mm	12	TK01154	●	●	●	●	●	●	●	06050
	13	TK01155	●	●	●	●	●	●	●	
	14	TK01156	●	●	●	●	●	●	●	
	15	TK01157	●	●	●	●	●	●	●	
	16	TK01158	●	●	●	●	●	●	●	
	17	TK01159	●	●	●	●	●	●	●	
	17.5	TK01282	●	●	●	●	●	●	●	
	18	TK01283	●	●	●	●	●	●	●	
	19	TK01284	●	●	●	●	●	●	●	
	19.5	TK01285	●	●	●	●	●	●	●	
	20	TK01286	●	●	●	●	●	●	●	
	20.5	TK01287	●	●	●	●	●	●	●	
	21	TK01288	●	●	●	●	●	●	●	
	21.5	TK01289	●	●	●	●	●	●	●	
	22	TK01290	●	●	●	●	●	●	●	
	22.5	TK01291	●	●	●	●	●	●	●	
	23	TK01292	●	●	●	●	●	●	●	
	23.5	TK01293	●	●	●	●	●	●	●	
	24	TK01294	●	●	●	●	●	●	●	
	24.5	TK01295	●	●	●	●	●	●	●	
	25	TK01296	●	●	●	●	●	●	●	
	25.5	TK01297	●	●	●	●	●	●	●	
	26	TK01298	●	●	●	●	●	●	●	
	26.5	TK01299	●	●	●	●	●	●	●	
	27	TK01300	●	●	●	●	●	●	●	
	28	TK01301	●	●	●	●	●	●	●	
	29	TK01302	●	●	●	●	●	●	●	
	30	TK01303	●	●	●	●	●	●	●	
	31	TK01304	●	●	●	●	●	●	●	
	32	TK01305	●	●	●	●	●	●	●	
	33	TK01306	●	●	●	●	●	●	●	
	34	TK01307	●	●	●	●	●	●	●	
	35	TK01308	●	●	●	●	●	●	●	
	36	TK01309	●	●	●	●	●	●	●	
	37	TK01310	●	●	●	●	●	●	●	
38	TK01311	●	●	●	●	●	●	●		
39	TK01312	●	●	●	●	●	●	●		
40	TK01313	●	●	●	●	●	●	●		
41	TK01314	●	●	●	●	●	●	●		
42	TK01315	●	●	●	●	●	●	●		
43	TK01316	●	●	●	●	●	●	●		
44	TK01317	●	●	●	●	●	●	●		
45	TK01318	●	●	●	●	●	●	●		
46	TK01319	●	●	●	●	●	●	●		
47	TK01320	●	●	●	●	●	●	●		
48	TK01321	●	●	●	●	●	●	●		
49	TK01322	●	●	●	●	●	●	●		
50	TK01323	●	●	●	●	●	●	●		
51	TK01324	●	●	●	●	●	●	●		
52	TK01325	●	●	●	●	●	●	●		
53	TK01326	●	●	●	●	●	●	●		
54	TK01327	●	●	●	●	●	●	●		
55	TK01328	●	●	●	●	●	●	●		
56	TK01329	●	●	●	●	●	●	●		
57	TK01330	●	●	●	●	●	●	●		
58	TK01331	●	●	●	●	●	●	●		
59	TK01332	●	●	●	●	●	●	●		
60	TK01333	●	●	●	●	●	●	●		
61	TK01334	●	●	●	●	●	●	●		
62	TK01335	●	●	●	●	●	●	●		
63	TK01336	●	●	●	●	●	●	●		
64	TK01337	●	●	●	●	●	●	●		
65	TK01338	●	●	●	●	●	●	●		

JETBROACH One-touch Type 50L(W) for stacked plates			LO-3550	WOJ-3200	AO-5575A	ARA-100A	Pilot Pin
Depth	mm dia.	PN					
50 mm	18	TK01068	●	●	●	●	06050
	22	TK00622	●	●	●	●	
	24	TK00623	●	●	●	●	
	24.5	TK00631	●	●	●	●	
	25	TK00624	●	●	●	●	
	26	TK00625	●	●	●	●	
	26.5	TK00632	●	●	●	●	
	28	TK00626	●	●	●	●	
	32	TK00627	●	●	●	●	
	35	TK00628	●	●	●	●	

JETBROACH One-touch Type			AO-5575A	WA-5000	ARA-100A	Pilot Pin
Depth	mm dia.	PN				
75 mm	17.5	TK01350	●	●	●	08075
	18	TK01351	●	●	●	
	19	TK01352	●	●	●	
	20	TK01353	●	●	●	
	21	TK01354	●	●	●	
	22	TK01355	●	●	●	
	23	TK01356	●	●	●	
	24	TK01357	●	●	●	
	24.5	TK01358	●	●	●	
	25	TK01359	●	●	●	
	26	TK01360	●	●	●	
	26.5	TK01361	●	●	●	
	27	TK01362	●	●	●	
	28	TK01363	●	●	●	
	29	TK01364	●	●	●	
	30	TK01365	●	●	●	
	31	TK01366	●	●	●	
	32	TK01367	●	●	●	
	33	TK01368	●	●	●	
	34	TK01369	●	●	●	
	35	TK01370	●	●	●	
	36	TK01371	●	●	●	
	37	TK01372	●	●	●	
	38	TK01373	●	●	●	
	39	TK01374	●	●	●	
	40	TK01375	●	●	●	
	41	TK01376	●	●	●	
	42	TK01377	●	●	●	
	43	TK01378	●	●	●	
	44	TK01379	●	●	●	
	45	TK01380	●	●	●	
	46	TK01381	●	●	●	
	47	TK01382	●	●	●	
	48	TK01383	●	●	●	
	49	TK01384	●	●	●	
50	TK01385	●	●	●		
51	TK01386	●	●	●		
52	TK01387	●	●	●		
53	TK01388	●	●	●		
54	TK01389	●	●	●		
55	TK01390	●	●	●		

JETBROACH Side-lock Type			ARA-100A	Pilot Pin
Depth	mm dia.	PN		
75 mm	50	TK01433	●	12075
	51	TK01434	●	
	52	TK01435	●	
	53	TK01436	●	
	54	TK01437	●	
	55	TK01438	●	
	56	TK01439	●	
	57	TK01440	●	
	58	TK01441	●	
	59	TK01442	●	
	60	TK01443	●	
	61	TK01444	●	
	62	TK01445	●	
	63	TK01446	●	
	64	TK01447	●	
	65	TK01448	●	
	66	TK01449	●	
	67	TK01450	●	
	68	TK01451	●	
	69	TK01452	●	
	70	TK01453	●	
	71	TK01454	●	
	72	TK01455	●	
	73	TK01456	●	
	74	TK01457	●	
	75	TK01458	●	
	76	TK01459	●	
	77	TK01460	●	
	78	TK01461	●	
	79	TK01462	●	
	80	TK01463	●	
	81	TK01464	●	
	82	TK01465	●	
	83	TK01466	●	
	84	TK01467	●	
	85	TK01468	●	
	86	TK01469	●	
	87	TK01470	●	
	88	TK01471	●	
	89	TK01472	●	
	90	TK01473	●	
	91	TK01474	●	
	92	TK01475	●	
	93	TK01476	●	
	94	TK01477	●	
	95	TK01478	●	
	96	TK01479	●	
	97	TK01480	●	
	98	TK01481	●	
	99	TK01482	●	
100	TK01483	●		

Pilot Pin		PN
06025	81 mm	TK01167
08025	76 mm	TK01486
06050	112 mm	TK01166
0850	100 mm	TK00802
08050	112 mm	TK01488
08035	91 mm	TK01487
08075	133 mm	TJ17436
12075	192 mm	TA9A207

Sales Unit: 1 Piece

## BROACH HOLDERS

### Industrial cutters for faster and better finished holes

- The Spring-loaded pilot pin picks up the hole location quickly, and ejects the slug automatically at the end of cut
- Available with No. 2 to 4 Morse taper shanks
- Oil cup complete Ass'y (PN TB00350) is available as an optional attachment which provides continuous and adjustable cutting oil flow to the cutting area



163 mm  
BHM-02035



182 mm  
BHM-03050



248 mm  
BHM-13075



232 mm  
BHM-14075

Specifications		M.T.No.2		M.T.No.3						M.T.No.4	
Morse Taper No.		M.T.No.2		M.T.No.3						M.T.No.4	
Model		BHM-02035		BHM-03050						BHM-13075	BHM-14075
PN		TB00390		TB00392						TB00352	TB00354
Cutter		HBO-25L	JBO-35L	HBO-25L	HBO-50L	JBO-35L	JBO-50L	JBO-50L(W)	JBS-75L		
Cutter Diameter		12 - 17 dia.	17.5 - 35 dia.	12 - 17 dia.	17.5 - 52 dia.	12 - 18 dia.	19 - 52 dia.	17.5 - 40 dia.	17.5 - 65 dia.	18 - 35 dia.	50 - 100 dia.
Pilot Pin		06025	08025	08035	06025	08025	06050	0850/08050	08035	08050	12075
		Optional		Included	Optional			Included	Optional	Included	

HBO: HI-BROACH One-touch Type

JBO: JETBROACH One-touch Type

JBS: JETBROACH Side-lock Type

# PUNCHING

Portable Double-Acting Hydraulic Puncher

## SELFER ACE

**Double acting hydraulic system allows automatic and inching (manual mode) operation.** \*CE model is available without auto-return function.

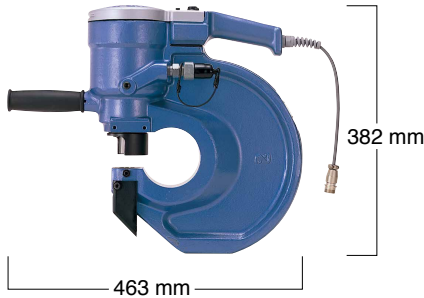
• Applicable for both mild steel and stainless steel punching



YouTube

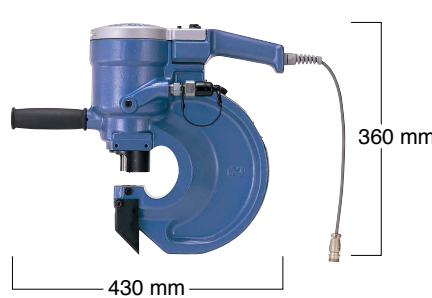
### Model HS11-1624 Non-CE/ \*

- Max. punching thickness: 16 mm
- Max. punching diameter: 24 mm
- Max. throat depth: 110 mm



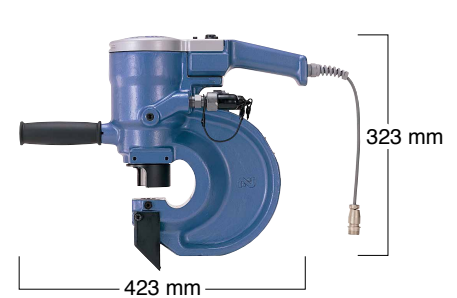
### Model HS07-1624 Non-CE/ \*

- Max. punching thickness: 16 mm
- Max. punching diameter: 24 mm
- Max. throat depth: 70 mm



### Model HS06-1322 Non-CE/ \*

- Max. punching thickness: 13 mm
- Max. punching diameter: 22 mm
- Max. throat depth: 60 mm



### Specifications

Model	HS11-1624		HS07-1624		HS06-1322		
Max. Throat Depth	mm 110		70		60		
Punching Capacity	Material	Mild Steel	Stainless Steel	Mild Steel	Stainless Steel	Mild Steel	Stainless Steel
	Max. Punching Thickness* mm	16	6	16	6	13	6
	Max. Punching Diameter mm	24		22		22	
Hole Making time	Punching Time	sec. 11.8		7.9		7.9	
	Returning Time	sec. 5.7		3.4		3.4	
Allowable Max. Pressure	MPa (kgf/cm <sup>2</sup> ) 68.65 (700)						
Max. Output	kN (tf) 464 (47)				367 (37)		
Ram Stroke	mm 25				21		
Mass (Weight)	kg 30		25.5		20.5		
Accessories Included	<ul style="list-style-type: none"> <li>• D Punch 22 (Installed)</li> <li>• D Die 22 (Installed)</li> <li>• Sub Handle</li> <li>• Ultra-high Pressure Hose</li> </ul>		<ul style="list-style-type: none"> <li>• Hose Cord Ass'y</li> <li>• Chip Guard Ass'y</li> <li>• Spanner</li> <li>• 12 mm Spanner</li> </ul>		<ul style="list-style-type: none"> <li>• 4 mm Hex. Socket Screw Key</li> <li>• 5 mm Hex. Socket Screw Key</li> <li>• Tool Box</li> </ul>		

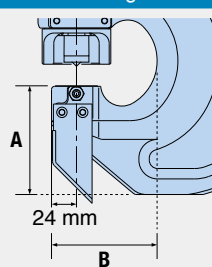
\*Mild steel: Maximum punching thickness must be calculated by the equation  $0.8 \times$  punching diameter.

\*Stainless steel: Maximum punching thickness must be calculated by the equation  $0.5 \times$  punching diameter. For the details see the instruction manual.

### Optional Accessories

PN	Description	Sales Unit
TB02506	Hose Kit Ass'y	1 piece
TP05184	Ultra-high Pressure Hose 5 m	
TB02390	Switch Cord Ass'y 5 m	
TP05777	Ultra-high Pressure Hose 10 m	
TB02545	Switch Cord Ass'y 10 m	
TB02141	Foot Switch Ass'y	
TA92729	4L Oil Can	
TB02142	Hook Clamp Ass'y	
TA99037	Lock Nut Ass'y for 25 mm Punch	
TQ01279	Hex. Socket Head Screw 8 x 14 for Securing Oblong Hole D Dies	

### Dimension from Edge to Punch Center



	A	B
HS11-1624	127	134
HS07-1624	105	94
HS06-1322	84	85



## HYDRAULIC PUMP for SELFER ACE

### Model HPD-05 Non-CE/ \*

- Double-acting



### Specifications

Model	HPD-05	
Power Source (Single Phase)	115 V / 230 V AC	
Max. Output Pressure	MPa (kgf/cm <sup>2</sup> ) 68.65 (700)	
Output	50 Hz	60 Hz
	At No-load	L/min 1.20
At 68.65 MPa	L/min 0.55	0.66
Motor	0.4 kW 4P	
Reservoir Capacity	L 4.0	
Discharge Port	Rc 3/8	
Electro-Magnetic Valve	4 way 3 position valve	
Mass (Weight)	kg 32.5	

\*CE model is available without auto-return function.

# PUNCHING

Portable Single-Acting Hydraulic Puncher

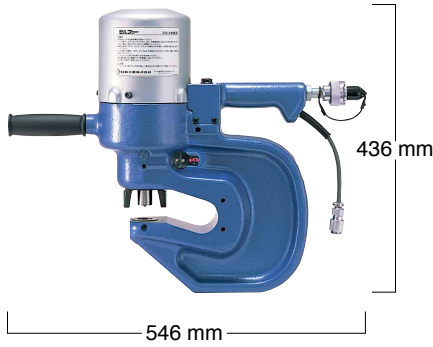
## SELFER HA Type

**Punch, return, and reset operations are fully automatic.**  
**An emergency switch returns the punch at any time.**

- Will punch both round and oblong holes

### Model HA11-1624 Non-CE

- Max. punching thickness: 16 mm
- Max. punching diameter: 24 mm
- Max. throat depth: 110 mm



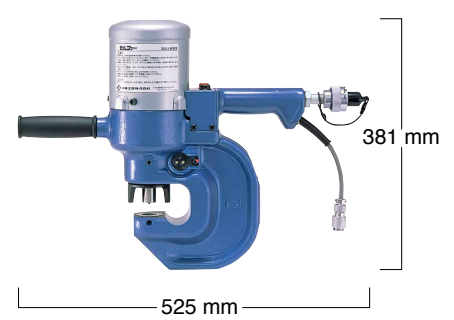
### Model HA07-1624 Non-CE

- Max. punching thickness: 16 mm
- Max. punching diameter: 24 mm
- Max. throat depth: 70 mm



### Model HA06-1322 Non-CE

- Max. punching thickness: 13 mm
- Max. punching diameter: 22 mm
- Max. throat depth: 60 mm



### Specifications

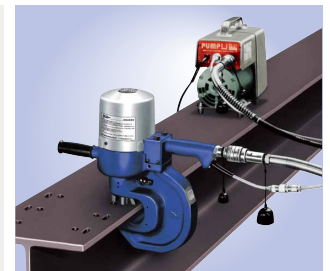
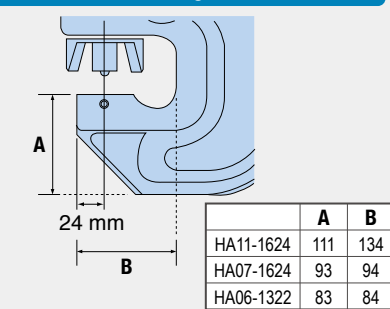
Model	HA11-1624	HA07-1624	HA06-1322	
Max. Throat Depth	mm	110	70	60
Punching Material	Mild Steel			
Capacity	Max. Punching Thickness*1	mm	16	13
	Max. Punching Diameter	mm	24	22
Hole Making Time*2	sec.	16.5		10.5
Allowable Max. Pressure	MPa (kgf/cm <sup>2</sup> )	68.65 (700)		
Max. Output	kN (tf)	431 (44)		304 (31)
Ram Stroke	mm	25		21
Mass (Weight)	kg	35.5	28.5	21.5
Accessories Included	<ul style="list-style-type: none"> <li>• D Punch 22 (Installed)</li> <li>• D Die 22 (Installed)</li> <li>• Sub Handle</li> <li>• Hose Cord Ass'y</li> <li>• Spanner</li> <li>• 4 mm Hex. Socket Screw Key</li> <li>• Tool Box</li> </ul>			

\*1: Mild steel: Maximum punching thickness must be calculated by the equation  $0.8 \times$  punching diameter. Stainless steel and hard materials cannot be punched. For the details see the instruction manual.  
 \*2: The hole making time may vary depending on the temperature of the hydraulic oil during operation.

### Optional Accessories

PN	Description	Sales Unit
TA96534	Hose Kit Ass'y 5 m	1 piece
TP05184	Ultra-high Pressure Hose 5 m	
TA93778	Switch Cord Ass'y 5 m	
TA9B044	Hose Kit Ass'y 10 m	
TP05777	Ultra-high Pressure Hose 10 m	
TA95307	Switch Cord Ass'y 10 m	
TA94386	Foot Switch Ass'y	
TA92729	4L Oil Can	
TA96342	Hook Clamp Ass'y for HA07-1624 and HA11-1624	
TA99037	Lock Nut Ass'y for 25 mm Punch	
TQ01279	Hex. Socket Head Screw 8 x 14 for Securing Oblong Hole D Dies	

### Dimension from Edge to Punch Center



## HYDRAULIC PUMP for SELFER HA Type

### Model SC-05 Non-CE

- Single-acting



### Specifications

Model	SC-05		
Power Source (Single Phase)	115 V / 230 V AC		
Max. Output Pressure	MPa (kgf/cm <sup>2</sup> )		
Output	50 Hz	60 Hz	
At No-load	L/min	1.20	1.44
At 68.65 MPa	L/min	0.55	0.66
Motor	0.4 kW 4P		
Reservoir Capacity	L	4.0	
Discharge Port	Rc 3/8		
Mass (Weight)	kg	27.5	

# PUNCHING

Electrically Operated Hydraulic Puncher

## HANDY SELFER

*Self-contained hydraulic punch shows its power in making round or elongated holes in flat bar, angle bar or channel iron.*

### Model E25-0615 Non-CE

- Double insulation
- E punch and E die
- Max. punching thickness: 6 mm
- Max. punching diameter: 15 mm
- Max. throat depth: 25 mm



### Model E55-0619 Non-CE

- EL punch and EL die
- Max. punching thickness: 6 mm
- Max. punching diameter: 19 mm
- Max. throat depth: 55 mm



### Specifications

Model		E25-0615		E55-0619	
Power Source (Single Phase)		220 - 240 V AC, 50/60 Hz		110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60Hz
Max. Throat Depth		25 mm		55	
Motor	Rated Power Consumption	305 W		670	
	Rated Current	1.4 A		6.0	3.0
Punching Capacity	Material	Mild Steel			
	Max. Punching Diameter	15 mm		19	
	Max. Punching Thickness	6 mm		6	
Punching time		4 sec (single pass)		2	
Power Cord Length		m		2.4	
Mass (Weight)		7.0 kg		14	
Accessories Included		<ul style="list-style-type: none"> <li>• E Punch 15 (Installed)</li> <li>• E Die 15A</li> <li>• E Die 15B (Installed)</li> <li>• Sub Handle</li> <li>• 2.5 mm Hex. Socket Screw Key</li> </ul>	<ul style="list-style-type: none"> <li>• 4 mm Hex. Socket Screw Key</li> <li>• 10 x 12 mm Spanner</li> <li>• Auxiliary Oil 40 cc</li> <li>• Tool Box</li> <li>• Spanner 8</li> </ul>	<ul style="list-style-type: none"> <li>• EL Punch 18 (Installed)</li> <li>• EL Die 18A</li> <li>• EL Die 18B (Installed)</li> <li>• Sub Handle</li> <li>• 3 mm Hex. Socket Screw Key</li> <li>• 4 mm Hex. Socket Screw Key</li> </ul>	<ul style="list-style-type: none"> <li>• 5 mm Hex. Socket Screw Key</li> <li>• 10 x 12 mm Spanner</li> <li>• Stand Ass'y</li> <li>• Auxiliary Oil 40 cc</li> <li>• Tool Box</li> </ul>

### Optional Accessory (E25-0615)

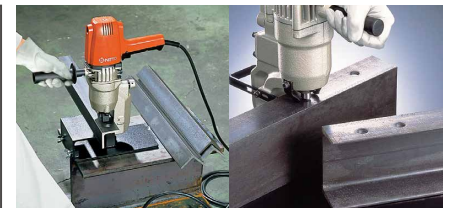
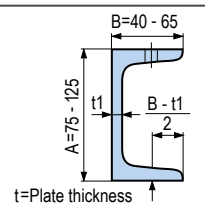
PN	Description	Sales Unit
TB00800	Stand Ass'y	1 piece

### Die Selection

E Die and EL Die	Punching Thickness (mm)		Model
	Mild Steel	Stainless Steel	
Round Hole E Die A (for Thin Sheets)	2 to 3.2	Max. 3	E25-0615
Round Hole E Die B (for Thick Sheets)	4 to 6	Max. 4	
Round Hole EL Die A (for Thin Sheets)	2 to 3.2	Max. 3	E55-0619
Round Hole EL Die B (for Thick Sheets)	4 to 6	Max. 4	
Round Hole EL Die C (for Channel Iron)	7 to 8	-	

### Punching Capacity in Channel Iron (E55-0619)

Punching Dia. Size	10 OD	11 OD	12 OD	13 OD	14 OD	15 OD	16 OD
75 x 40 t7	○	○	○	○	○	○	○
100 x 50 t7.5	○	○	○	○	○	○	-
125 x 65 t8	○	○	○	○	○	-	-



### Oblong Hole Size

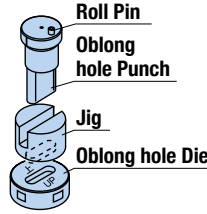
Model	Hole Dimensions (mm)
E25-0615	10 x 6.5
	10 x 6.5
	12 x 6.5
	13 x 6.5
	13 x 6.5
E55-0619	10 x 6.5
	13 x 6.5
	13 x 6.5
	13.5 x 9
	15 x 10
	16.5 x 11
	17 x 8.5
	18 x 9
	18 x 12
	19.5 x 13
20 x 10	
21 x 14	

unit: mm

## Punches & Dies for SELFER Puncher

FOR HS06-1322/HS07-1624/HS11-1624/HA06-1322/HA07-1624/HA11-1624

Oblong hole D Punch		Oblong hole D Die		Oblong hole Jig	
PN	Size	PN	Size	PN	Size
TK01512	D Punch 16 x 8	TK01544	D Die 16 x 8	TK01694	Jig 16 x 8
TK01513	D Punch 18 x 9	TK01545	D Die 18 x 9	TK01695	Jig 18 x 9
TK01514	D Punch 20 x 10	TK01546	D Die 20 x 10	TK01696	Jig 20 x 10
TK01515	D Punch 22 x 11	TK01547	D Die 22 x 11	TK01697	Jig 22 x 11
TK01516	D Punch 24 x 12	TK01548	D Die 24 x 12	TK01698	Jig 24 x 12
TK01517	D Punch 25 x 9*	TK01549	D Die 25 x 9	TK01699	Jig 25 x 9
TK01518	D Punch 25 x 12*	TK01550	D Die 25 x 12	TK01700	Jig 25 x 12
TK01519	D Punch 25 x 14*	TK01551	D Die 25 x 14	TK01701	Jig 25 x 14
TK01520	D Punch 25 x 18*	TK01552	D Die 25 x 18	TK01702	Jig 25 x 18



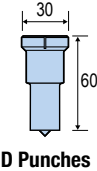
Optional Accessories

PN	Description	Sales Unit
TQ01279	Hex. Set Screw 8 x 14 for Securing Oblong Hole Dies	1 piece
TA99037	Lock Nut Ass'y for D Punch 25	1 set

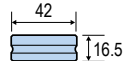
\*TA99037 Lock Nut Ass'y is required for Oblong hole D Punch 25 x 9 / 12 / 14 / 18

FOR HS06-1322/HS07-1624/HS11-1624/HA06-1322/HA07-1624/HA11-1624

Round hole D Punch		Round hole D Die	
PN	Size	PN	Size
TK01489	D Punch 8	TK01521	D Die 8
TK01490	D Punch 9	TK01522	D Die 9
TK01491	D Punch 10	TK01523	D Die 10
TK01492	D Punch 11	TK01524	D Die 11
TK01493	D Punch 12	TK01525	D Die 12
TK01494	D Punch 13	TK01526	D Die 13
TK01495	D Punch 14	TK01527	D Die 14
TK01496	D Punch 14.5	TK01528	D Die 14.5
TK01497	D Punch 15	TK01529	D Die 15
TK01498	D Punch 16	TK01530	D Die 16
TK01499	D Punch 17	TK01531	D Die 17
TK01500	D Punch 17.5	TK01532	D Die 17.5
TK01501	D Punch 18	TK01533	D Die 18
TK01502	D Punch 19	TK01534	D Die 19
TK01503	D Punch 20	TK01535	D Die 20
TK01504	D Punch 20.5	TK01536	D Die 20.5
TK01505	D Punch 21	TK01537	D Die 21
TK01506	D Punch 21.5	TK01538	D Die 21.5
TK01507	D Punch 22	TK01539	D Die 22
TK01508	D Punch 23	TK01540	D Die 23
TK01509	D Punch 23.5	TK01541	D Die 23.5
TK01510	D Punch 24	TK01542	D Die 24
TK01511	D Punch 25	TK01543	D Die 25



D Punches



D Dies

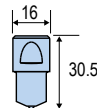
\* TA99037 Lock Nut Ass'y is required for D Punch 25

FOR E25-0615

Round hole E Punch		Round hole E Die (Type A for thin sheets)		Round hole E Die (Type B for thick sheets)	
PN	Size	PN	Size	PN	Size
TK01553	E Punch 4	TK01571	E Die 4A	-	-
TK01554	E Punch 5	TK01572	E Die 5A	TK01584	E Die 5B
TK01555	E Punch 5.5	TK01573	E Die 5.5A	TK01585	E Die 5.5B
TK01556	E Punch 6	TK01574	E Die 6A	TK01586	E Die 6B
TK01557	E Punch 6.5	TK01575	E Die 6.5A	TK01587	E Die 6.5B
TK01558	E Punch 8	TK01576	E Die 8A	TK01588	E Die 8B
TK01559	E Punch 8.5	TK01577	E Die 8.5A	TK01589	E Die 8.5B
TK01560	E Punch 10	TK01578	E Die 10A	TK01590	E Die 10B
TK01561	E Punch 11	TK01579	E Die 11A	TK01591	E Die 11B
TK01562	E Punch 12	TK01580	E Die 12A	TK01592	E Die 12B
TK01563	E Punch 13	TK01581	E Die 13A	TK01593	E Die 13B
TK01564	E Punch 14	TK01582	E Die 14A	TK01594	E Die 14B
TK01565	E Punch 15	TK01583	E Die 15A	TK01595	E Die 15B

Oblong hole E Punch		Oblong hole E Die (Type A for thin sheets)		Oblong hole E Die (Type B for thick sheets)	
PN	Size	PN	Size	PN	Size
TK01566	E Punch 10 x 5	TK01596	E Die 10 x 5A	TK01601	E Die 10 x 5B
TK01567	E Punch 10 x 6.5	TK01597	E Die 10 x 6.5A	TK01602	E Die 10 x 6.5B
TK01568	E Punch 12 x 6	TK01598	E Die 12 x 6A	TK01603	E Die 12 x 6B
TK01569	E Punch 13 x 6.5	TK01599	E Die 13 x 6.5A	TK01604	E Die 13 x 6.5B
TK01570	E Punch 13 x 8.5	TK01600	E Die 13 x 8.5A	TK01605	E Die 13 x 8.5B



E Punches



Front view of E Dies Type A



Side face of E Dies Type A



Front view of E Dies Type B

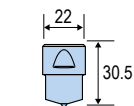


Side face of E Dies Type B

FOR E55-0619

Oblong hole EL Punch		Oblong hole EL Die (Type A for thin sheets)		Oblong hole EL Die (Type B for thick sheets)	
PN	Size	PN	Size	PN	Size
TK01621	EL Punch 10 x 6.5	TK01670	EL Die 10 x 6.5A	TK01682	EL Die 10 x 6.5B
TK01622	EL Punch 13 x 6.5	TK01671	EL Die 13 x 6.5A	TK01683	EL Die 13 x 6.5B
TK01623	EL Punch 13 x 8.5	TK01672	EL Die 13 x 8.5A	TK01684	EL Die 13 x 8.5B
TK01624	EL Punch 13.5 x 9	TK01673	EL Die 13.5 x 9A	TK01685	EL Die 13.5 x 9B
TK01625	EL Punch 15 x 10	TK01674	EL Die 15 x 10A	TK01686	EL Die 15 x 10B
TK01626	EL Punch 16.5 x 11	TK01675	EL Die 16.5 x 11A	TK01687	EL Die 16.5 x 11B
TK01627	EL Punch 17 x 8.5	TK01676	EL Die 17 x 8.5A	TK01688	EL Die 17 x 8.5B
TK01628	EL Punch 18 x 9	TK01677	EL Die 18 x 9A	TK01689	EL Die 18 x 9B
TK01629	EL Punch 18 x 12	TK01678	EL Die 18 x 12A	TK01690	EL Die 18 x 12B
TK01630	EL Punch 19.5 x 13	TK01679	EL Die 19.5 x 13A	TK01691	EL Die 19.5 x 13B
TK01631	EL Punch 20 x 10	TK01680	EL Die 20 x 10A	TK01692	EL Die 20 x 10B
TK01632	EL Punch 21 x 14	TK01681	EL Die 21 x 14A	TK01693	EL Die 21 x 14B

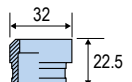
Round hole EL Punch		Round hole EL Die (Type A for thin sheets)		Round hole EL Die (Type B for thick sheets)		Round hole EL Die (Type C for channel iron)	
PN	Size	PN	Size	PN	Size	PN	Size
TK01606	EL Punch 6	TK01633	EL Die 6A	TK01648	EL Die 6B	-	-
TK01607	EL Punch 6.5	TK01634	EL Die 6.5A	TK01649	EL Die 6.5B	-	-
TK01608	EL Punch 8	TK01635	EL Die 8A	TK01650	EL Die 8B	-	-
TK01609	EL Punch 8.5	TK01636	EL Die 8.5A	TK01651	EL Die 8.5B	-	-
TK01610	EL Punch 10	TK01637	EL Die 10A	TK01652	EL Die 10B	TK01663	EL Die 10C
TK01611	EL Punch 11	TK01638	EL Die 11A	TK01653	EL Die 11B	TK01664	EL Die 11C
TK01612	EL Punch 12	TK01639	EL Die 12A	TK01654	EL Die 12B	TK01665	EL Die 12C
TK01613	EL Punch 13	TK01640	EL Die 13A	TK01655	EL Die 13B	TK01666	EL Die 13C
TK01614	EL Punch 14	TK01641	EL Die 14A	TK01656	EL Die 14B	TK01667	EL Die 14C
TK01615	EL Punch 15	TK01642	EL Die 15A	TK01657	EL Die 15B	TK01668	EL Die 15C
TK01616	EL Punch 16	TK01643	EL Die 16A	TK01658	EL Die 16B	TK01669	EL Die 16C
TK01617	EL Punch 17	TK01644	EL Die 17A	TK01659	EL Die 17B	-	-
TK01618	EL Punch 18	TK01645	EL Die 18A	TK01660	EL Die 18B	-	-
TK01619	EL Punch 18.5	TK01646	EL Die 18.5A	TK01661	EL Die 18.5B	-	-
TK01620	EL Punch 19	TK01647	EL Die 19A	TK01662	EL Die 19B	-	-



EL Punches



Front view of EL Dies Type A, B & C



Side face of EL Dies Type A, B & C

Sales Unit: 1 Piece

# NITTO KOHKI Tools for Professional Use

	Chamfering	Scaling & Chipping	Grinding & Sanding	Flat Sanding
Machining & Molding	◎	●	●	●
Sheet-metal Working	●	●	●	●
Welding	●	◎	●	
Painting	●		●	
Steel Fabricating & Can Manufacturing	●	●	●	●
Molding & Die-casting	●	●	●	●
Bridges & Ship Building	●	●	●	●
Plant Construction & Piping		●	●	●
Wood Working & Art			●	●
Automotive & Painting	●	●	●	◎
Construction		◎	●	

◎ : Best Suited  
● : Suited

**HAND BEVELER**



P27

**AIR CHIPPER**



P32

**MYTON**



**COMPACT MULTI SANDER**



P43

**MINI BEVELER**



P27 - 29

**AUTO CHISEL**



P33

**FREE SANDER**



P37 - 38

**FREE SANDER**



P44

**CIRCUIT BEVELER**



P28 - 30

**SUPER KELEN**



P34

**BELTON**



P39 - 42

**LINE SANDER**



P44

**JET CHISEL**



P35 - 36

**ORBITAL SANDER**



P45

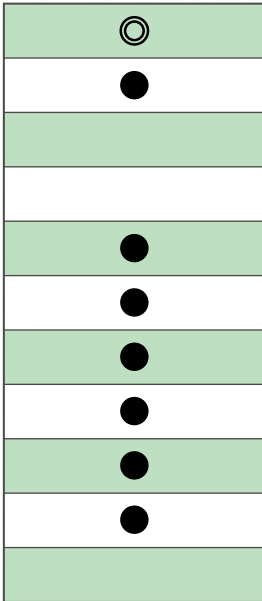
**PALM ORBITAL SANDER**



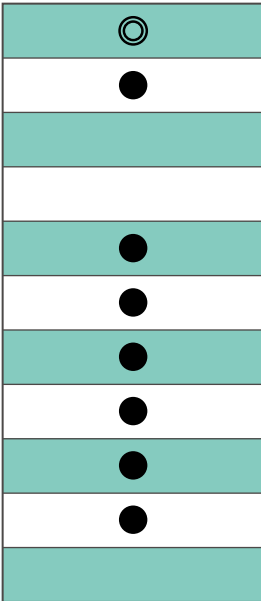
P45



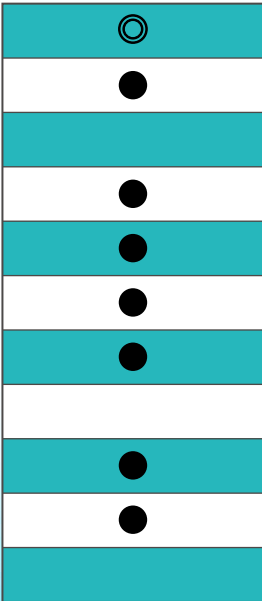
Precision Grinding



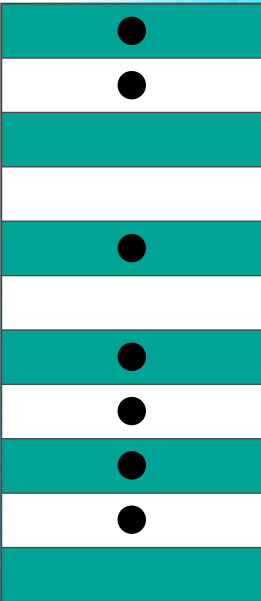
Filing



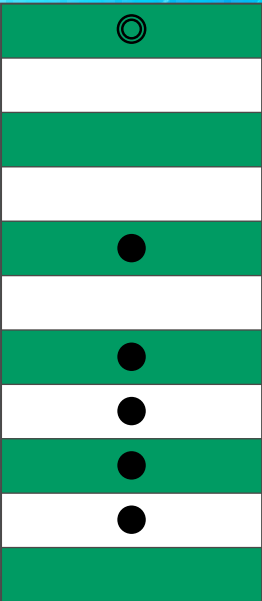
Deburring



Cutting



Drilling



**AIR SONIC**

 Three different air sonic tools are shown against a light green background.

**P46**

**SUPER HAND**

 Two different super hand tools are shown against a light green background.

**P47**

**BURR CUTTER**

 A burr cutter tool is shown against a light green background.

**P48**

**SUPER SAW**

 A super saw tool is shown against a light green background.

**P49**

**AIR DRILL**

 An air drill tool is shown against a light green background.

**P49**

**SUPER HAND LIGHT**

 A super hand light tool is shown against a light green background.

**P47**

**MICRO AIR HAND**

 A micro air hand tool is shown against a light green background.

**P48**

## Guide for Selecting Portable Chamfering Tools

Select the model according to the conditions of chamfering capacity, electrical or pneumatic tool required, and materials to be chamfered.

### Max. Chamfering Capacity for Mild Steel

**Electric**

For straight edges  
**Model HB-15B**  
Up to 15 mm Chamfer  
(Max. chamfering capacity for one-cut is 7C)

For straight edges  
**Model EMB-0307C**  
Up to 7 mm Chamfer or 2, 3, 4 mm Radius

For straight edges  
**Model MB-03A**  
Up to 3 mm Chamfer or 2 and 3 mm Radius

For curved edges  
**Model ECB-0203**  
Up to 3 mm Chamfer or 2 and 3 mm Radius

**Pneumatic**

For straight edges  
**Model AML-0307/AMB-0307**  
Up to 7 mm Chamfer or 2, 3, 4 mm Radius

For curved edges  
**Model CB-02**  
Up to 2 mm Chamfer or 2 mm Radius

For curved edges  
**Model CB-01**  
Up to 1 mm Chamfer or 1 mm Radius

**15C**

**7C**

**3C**

**2C**

**1C**

**Pneumatic**

For bridge and shipbuilding applications

With locking throttle lever  
**Model CBR-03**

**Exclusive for 3 mm Radius Chamfering**

### Max. Chamfering Capacity for Stainless Steel

Applicable to stainless steel chamfering

**Electric**

For straight edges  
**Model EMB-0307C**  
Up to 3 mm Chamfer or 2, 3, 4 mm Radius

For curved edges  
**Model ECB-0203**  
Up to 1.5 mm Chamfer or 2 mm Radius

**Pneumatic**

For straight edges  
**Model AML-0307/AMB-0307**  
Up to 3 mm Chamfer or 2, 3, 4 mm Radius

For curved edges  
**Model CB-01**  
Up to 0.5 mm Chamfer  
(with optional indexable insert)

**3C**

**1.5C**

**0.5C**

### Max. Chamfering Capacity for Aluminum


Applicable to aluminum chamfering

**C1**

**C0**

**Pneumatic**

For curved edges  
**Model CB-01**  
Up to 1 mm Chamfer  
(with optional indexable insert)



For curved edges

**CBR-03**

# CHAMFERING

**HAND BEVELER**  
Model **HB-15B**  
• Mild steel: 15C



**MINI BEVELER**  
Model **EMB-0307C**  
• Mild steel: 7C, 4R  
• Stainless steel: 3C, 4R



**MINI BEVELER**  
Model **MB-03A**  
• Mild steel: 3C, 3R









**CIRCUIT BEVELER**  
Model **ECB-0203**  
• Mild steel: 3C, 3R  
• Stainless steel: 1.5C, 2R



For further information, see the following pages.

P27 for Model HB-15B  
P27 for Model EMB-0307C  
P28 for Model MB-03A  
P28 for Model ECB-0203

Specifications		ELECTRIC			
Model		HB-15B	EMB-0307C	MB-03A	ECB-0203
Power Source (Single Phase)		220 - 240 V AC 50/60 Hz 110 - 120 V AC 50/60 Hz	220 - 240 V AC 50/60 Hz 110 - 120 V AC 50/60 Hz	220 - 240 V AC 50/60 Hz	220 - 240 V AC 50/60 Hz
Rated Power Consumption	W	910	900	430	450
Duty Cycle	min	Continuous			30
No-load Speed	min <sup>-1</sup> (rpm)	2750 (220 - 240 V) 3340 (110 - 120 V)	12700 (220 - 240 V) 13300 (110 - 120 V)	11000	10000
Chamfering Capacity	Mild Steel	Up to 15 mm Chamfer (Initial chamfer is 7 mm.)	Up to 7 mm Chamfer 2, 3, 4 mm Radius	Up to 3 mm Chamfer 2 and 3 mm Radius	
	Stainless Steel	-	Up to 3 mm Chamfer 2, 3, 4 mm Radius	-	Up to 1.5 mm Chamfer 2 mm Radius
Chamfer Angle		15° - 45°			45°
Mass (Weight)	kg	14	3.9	2.5	
Optional Accessories		<ul style="list-style-type: none"> <li>TA9A728 Pipe Plate Ass'y for Pipe Outer Edge Beveling (Pipe O.D. 125 to 800 mm)</li> </ul> 	<ul style="list-style-type: none"> <li>TB02539 Attachment for Pipe Outer Edge Beveling (Pipe O.D. 80 to 200 mm) *Pipe O.D. more than 200 mm can be chamfered with the standard accessory.</li> </ul> 	<ul style="list-style-type: none"> <li>TA9A594 Inner Head Ass'y for Pipe Inner Edge Beveling (Minimum Inner Pipe Diameter : 100 mm)</li> </ul> 	<ul style="list-style-type: none"> <li>TB03097 Plate Ass'y for Straight Edge Beveling</li> <li>TB02862 Dust Box Ass'y Used with TB03097 Plate Ass'y</li> <li>TB02857 Guide Sleeve 24 mm Dia. Ass'y</li> </ul>   

**MINI BEVELER**  
Model **AMBL-0307 (Lever)**  
Model **AMB-0307 (Ring)**  
• Mild steel: 7C, 4R  
• Stainless steel: 3C, 4R



**CIRCUIT BEVELER**  
Model **CB-01**  
• Mild steel: 1C, 1R  
• Stainless steel: 0.5C\*  
• Aluminum: 1C\*



**CIRCUIT BEVELER**  
Model **CB-02**  
• Mild steel: 2C, 2R







**CIRCUIT BEVELER**  
Model **CBR-03**  
• Mild steel: 3R



For further information, see the following pages.

P29 for Model AMBL-0307/AMB-0307  
P29 for Model CB-01  
P30 for Model CB-02  
P30 for Model CBR-03

Specifications		PNEUMATIC			
Model		AMBL-0307/AMB-0307	CB-01	CB-02	CBR-03
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)			
Air Consumption (No Load)	m <sup>3</sup> /min	0.9	0.15	0.4	0.65
Free Speed	min <sup>-1</sup> (rpm)	14000	28000	15000	12000
Chamfering Capacity	Mild Steel	Up to 7 mm Chamfer 2, 3, 4 mm Radius	Up to 1 mm Chamfer 1 mm Radius	Up to 2 mm Chamfer 2 mm Radius	3 mm Radius
	Stainless Steel	Up to 3 mm Chamfer 2, 3, 4 mm Radius	Up to 0.5 mm Chamfer *	-	-
	Aluminum	-	Up to 1 mm Chamfer *	-	-
Chamfer Angle		15° - 45°			45°
Mass (Weight)	kg	2.9	0.5	1.8	2
Optional Accessories		<ul style="list-style-type: none"> <li>TB02539 Attachment for Pipe Outer Edge Beveling (Pipe O.D. 80 to 200 mm)</li> </ul> 	<ul style="list-style-type: none"> <li>TB09143 Plate Ass'y for Straight Edge Beveling</li> <li>TB09140 Guide Plate 78 Ass'y for More Stable Operation</li> </ul>  	<ul style="list-style-type: none"> <li>TB02437 Thin Plate Attachment Ass'y (Minimum thickness 1.2 mm)</li> </ul> 	-

For further information of optional Beveler accessories, see P31.

\*With optional indexable insert

# CHAMFERING

Portable Chamfering Tools

## HAND BEVELER

Model **HB-15B** 



 YouTube

### Chamfering up to 15C

- Ideal for plate, pipe, and tube chamfering for welding preparation
- Chamfer width up to 15 mm at 45° angle using multiple passes
- 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
- High speed cutting action minimizes material hardening



**15C**  
Mild Steel



#### Specifications

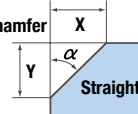
Model	HB-15B	
Power Source (Single Phase)	110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz
Rated Power Consumption	W 910	
Rated Current	A 10.5	A 4
Duty Cycle	min Continuous	
No-load Speed	min <sup>-1</sup> (rpm) 3350	2750
Chamfering Capacity (Mild Steel)	Up to 15 mm Chamfer *	
Chamfer Angle	15° - 45°	
Power Cord Length	m 5	
Mass (Weight)	kg 15	

\*Max. Chamfering Capacity for one - cut is 7C

#### Accessories Included

- 12 pieces of Indexable Insert 12.7 (Installed)
- 12 pieces of Indexable Insert 12.7
- 4 mm Hex. Socket Screw Key
- 5 mm Hex. Socket Screw Key
- 6 mm Hex. Socket Screw key
- 24 x 27 mm Spanner
- Hook Spanner 25 - 28
- 3 mm T Wrench
- Roller Bracket Ass'y
- Spacer A
- Spacer B
- Plate B

#### Chamfer Angle and Width

Chamfer Angle $\alpha$	Mild Steel(mm)		Chamfer	Straight
	X	Y		
45°	15	15		
30°	9	15.5		
15°	4	15.4		

Handy Electric Chamfering Tool

## MINI BEVELER

Model **EMB-0307C** 

 Double insulation

### Designed to chamfer stainless and mild steel

- Ideal for edge chamfering pipe, tube, and plate
- Adjustable to chamfer angles from 15° to 45°
- Chamfer width up to 7 mm on mild steel.
- Uses indexable carbide inserts
- Swarf and chip collection box included



**7C**  
**4R**  
Mild Steel

**3C**  
**4R**  
Stainless Steel

#### Specifications

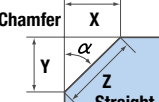
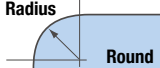
Model	EMB-0307C	
Power Source (Single Phase)	110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz
Rated Power Consumption	W 900	
Rated Current	A 7.8	A 3.9
Duty Cycle	min Continuous	
No-load Speed	min <sup>-1</sup> (rpm) 13300	12700
Chamfering Capacity	Mild Steel	Up to 7 mm Chamfer or 2, 3, 4 mm Radius
	Stainless Steel	Up to 3 mm Chamfer or 2, 3, 4 mm Radius
Chamfer Angle	15° - 45°	
Power Cord Length	m 4.0	
Mass (Weight)	kg 3.9	

\*115 V available on request.

#### Accessories Included

- Indexable Insert with Hole 12.7 (Installed)
- Indexable Insert Set Screw 4 x 7 (Installed)
- Indexable Insert with Hole 12.7
- Indexable Insert Set Screw 4 x 7
- Dust Box Ass'y
- Carbon Brush Ass'y
- 2 pieces of Hex. Nut M8
- 2 pieces of Hex. Socket Set Screw 8 x 25
- 3 pieces of Pan Head Screw 5 x 10
- 4 mm Hex. Socket Screw Key
- Spanner T-15D

#### Chamfer Angle, Width and Radius

Chamfer Angle $\alpha$	Mild Steel(mm)			Stainless Steel(mm)			Chamfer	Radius
	X	Y	Z	X	Y	Z		
45°	7	7	9.9	3	3	4.2		
30°	3.8	6.6	7.6	2.2	3.8	4.4		
15°	1.5	5.6	5.8	1	3.8	3.9		

# CHAMFERING

Handy Electric Chamfering Tool

## MINI BEVELER

Model **MB-03A** Non-CE

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)



**3C**  
**3R**  
Mild Steel

#### Specifications

Model	MB-03A	
Power Source (Single Phase)	230 V AC, 50/60 Hz	
Rated Power Consumption	W	430
Rated Current	A	2
Duty Cycle	min	30
No-load Speed	min <sup>-1</sup> (rpm)	11000
Chamfering Capacity (Mild Steel)	Up to 3 mm Chamfer or 2 mm and 3 mm Radius	
Chamfer Angle	45°	
Power Cord Length	m	2.5
Mass (Weight)	kg	2.5

#### Accessories Included

- Indexable Insert 9.525 R2 (Installed)
- Indexable Insert 9.525
- 3 mm Hex. Socket Screw Key
- 4 mm Hex. Socket Screw Key
- Spanner T-9F
- Hex. Nut
- 2 pieces of Hex. Socket Set Screw 8 x 25

#### Chamfer Angle, Width and Radius

Mild Steel(mm)		Chamfer	X	Y	45°	Straight	Mild Steel(mm)		Radius	Round
X	Y						Radius	2, 3		
3	3									

Electric Radial Chamfering Tool

## CIRCUIT BEVELER

Model **ECB-0203**

Double insulation



YouTube

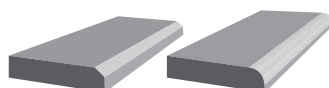
### Smoothly chamfering straight and curved edges

- Designed to chamfer stainless and mild steel
- Minimum chamfering plate thickness is 2 mm (Max. 0.5 mm Chamfer)
- Indexable inserts have four working edges for good economy
- An optional straight plate allows chamfering a straight edge shoulder



**3C**  
**3R**  
Mild Steel

**1.5C**  
**2R**  
Stainless Steel



Chamfering straight edges



Chamfering curved edges

#### Specifications

Model	ECB-0203	
Power Source (Single Phase)	220 - 240 V AC, 50/60 Hz	
Rated Power Consumption	W	450
Rated Current	A	2.1
Duty Cycle	min	30
No-load Speed	min <sup>-1</sup> (rpm)	11000
Chamfering Capacity	Mild Steel	Up to 3 mm Chamfer or 2* and 3 mm Radius
	Stainless Steel	Up to 1.5 mm Chamfer or 2* mm Radius
Chamfer Angle	45°	
Power Cord Length	m	2.5
Mass (Weight)	kg	2.5

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

#### Accessories Included

- Indexable Insert with Hole 12.7 (Installed)
- Indexable Insert Set Screw 4 x 7 (Installed)
- Indexable Insert with Hole 12.7
- Indexable Insert Set Screw 4 x 7
- Sub Handle
- Grip Guard
- Ball Bearing 687zz
- 5 mm Hex. Socket Screw Key
- 8 x 10 mm Spanner
- Spanner T-150
- Gauge C3

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

#### Chamfer Angle, Width and Radius

Mild Steel(mm)		Stainless Steel(mm)		Chamfer	X	Y	45°	Straight	Mild Steel (mm)		Radius	Round
X	Y	X	Y						Radius	2, 3		
3	3	1.5	1.5									

# CHAMFERING

Pneumatic Chamfering Tool

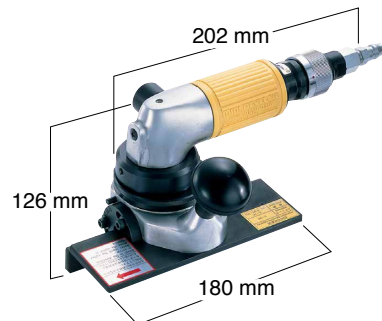
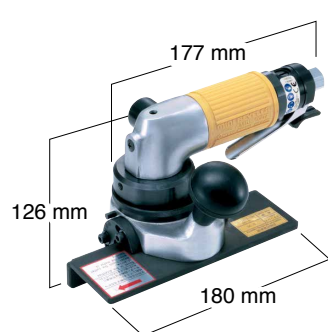
## MINI BEVELER

Model **AMBL-0307** 

• Lever switch type

Model **AMB-0307** Non-CE

• Ring switch type



**7C**  
**4R**  
Mild Steel

**3C**  
**4R**  
Stainless Steel

**Ideal for chamfering plate, pipe, tube and other profiles**

- Lightweight design for portable edge chamfering applications
- Designed to chamfer stainless and carbon steels
- Adjustable to chamfer angles from 15° to 45°
- 300 mm minimum radius bend
- Chamfer width up to 7 mm at 45°
- Uses indexable carbide inserts

### Specifications

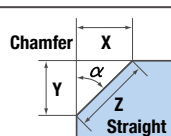
Model		AMBL-0307 / AMB-0307
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.9
Free Speed	min <sup>-1</sup> (rpm)	14000
Chamfering Capacity	Mild Steel	Up to 7 mm Chamfer or 2, 3, 4 mm Radius
	Stainless Steel	Up to 3 mm Chamfer or 2, 3, 4 mm Radius
Chamfer Angle		15° - 45°
Inlet Size		Rc 3/8
Mass (Weight)	kg	2.9

### Accessories Included

- Indexable Insert with Hole 12.7 (Installed)
- Indexable Insert Set Screw 4 x 7 (Installed)
- Indexable Insert with Hole 12.7
- Indexable Insert Set Screw 4 x 7
- Knob
- 2 pieces of Hex. Socket Set Screw 8 x 25
- 2 pieces of Hex. Nut M8
- 3 mm Hex. Socket Screw Key
- 4 mm Hex. Socket Screw Key
- Spanner T-15F
- Bushing R 3/8 x NPT 3/8

### Chamfer Angle, Width and Radius

Chamfer Angle $\alpha$	Mild Steel(mm)			Stainless Steel(mm)		
	X	Y	Z	X	Y	Z
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



	Mild Steel(mm)	Stainless Steel(mm)
Radius	2, 3, 4	2, 3, 4

Pneumatic Radial Chamfering Tool

## CIRCUIT BEVELER

Model **CB-01** 



 YouTube



**1C**  
Aluminum\*

**1C**  
**1R**  
Mild Steel

**0.5C**  
Stainless Steel\*

**Ideally suited for chamfering machine and mold component parts**

- Only requires a 6.8 mm diameter hole for chamfering
- Two 3-sided indexable inserts provide a cost effective way to get a smooth, chatter free finish
- Aluminum and stainless steel can also be processed with optional indexable insert

### Specifications

Model		CB-01
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.15
Free Speed	min <sup>-1</sup> (rpm)	28000
Chamfering Capacity	Mild Steel	Up to 1 mm Chamfer or 1 mm Radius
	Stainless Steel*	Up to 0.5 mm Chamfer
	Aluminum*	Up to 1 mm Chamfer
Chamfer Angle		45°
Minimum Workpiece Thickness	mm	1.5 (0.5 mm Chamfer)
Inlet Size		Rc 1/4
Mass (Weight)	kg	0.5

\*Optional indexable insert is required.

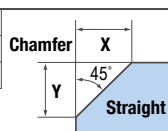
### Accessories Included

- 2 pieces of Indexable Insert 8.4 (Installed)
- 2 pieces of Indexable Insert Set Screw (Installed)
- 2 pieces of Indexable Insert Set Screw
- 2 mm Hex. Socket Screw Key for Chamfering Adjustments
- Spanner T-6F for Replacement of Indexable Insert
- Bushing R 1/4 x NPT 1/4

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

### Chamfer Angle and Width

Mild Steel(mm)		Stainless Steel(mm)		Aluminum(mm)	
X	Y	X	Y	X	Y
1	1	0.5	0.5	1	1



	Mild Steel(mm)
Radius	1

# CHAMFERING

Pneumatic Radial Chamfering Tool

## CIRCUIT BEVELER

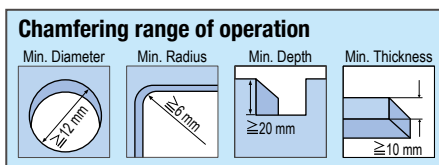
Model **CB-02** 



 YouTube



**2C**  
**2R**  
Mild Steel



### Specifications

Model	<b>CB-02</b>	
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)	15000
Chamfering Capacity	Up to 2 mm Chamfer or 2 mm Radius	
Chamfer Angle	45°	
Inlet Size	Rc 1/4	
Mass (Weight)	kg	1.8

### Accessories Included

- Indexable Insert 9.525 (Installed)
- Indexable Insert 9.525
- Adjustment Gauge
- Spanner T-9F
- Protective Cap
- Hook Spanner 58-65
- Bushing R 1/4 x NPT 1/4

### Chamfer Angle, Width and Radius

Mild Steel(mm)		Chamfer	Radius	Mild Steel(mm)	
X	Y			Radius	2
2	2				

Pneumatic Radial Chamfering Tool

## CIRCUIT BEVELER

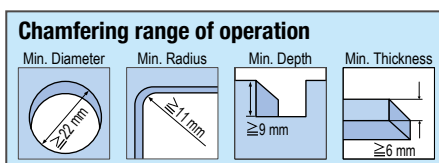
Model **CBR-03** 



 YouTube



**3R**  
Steel



## For bridge and shipbuilding applications

### Bridge

- Radius chamfering on the scallop parts or holes of bridge members

### Shipbuilding

- Meets or exceeds PSPC\* requirements on surface preparation of steel materials prior to coating
- Radius chamfering on steel materials used in seawater ballast tanks and double-side skin bulk carrier production
- Dual cutting head with 4 radius surfaces per tip and a quick-change base

\*PSPC stands for Performance Standard for Protective Coatings regulated by International Marine Organization.

### Specifications

Model	<b>CBR-03</b>	
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.65
Free Speed	min <sup>-1</sup> (rpm)	12000
Chamfering Capacity	3 mm Radius	
Minimum Workpiece Thickness	mm	6
Inlet Size	Rc 1/4	
Mass (Weight)	kg	2

### Accessories Included

- 2 pieces of Indexable Insert 12.7 R3 (Installed)
- 2 pieces of Indexable Insert Set Screw (Installed)
- Indexable Insert Set Screw
- Spanner T-15D
- Handle

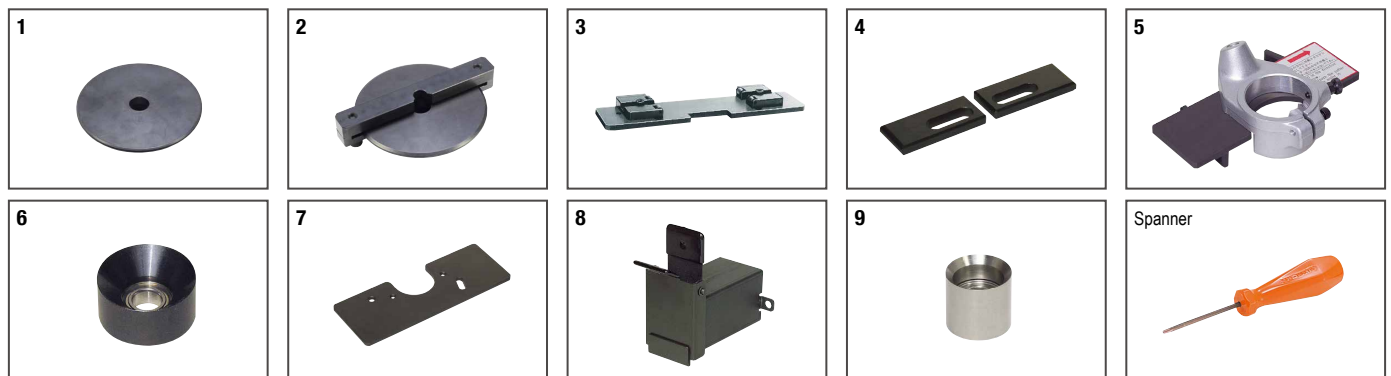
### Chamfer Angle and Width

Mild Steel(mm)		Radius
Radius	3	

## Optional Beveler Accessories

Ref. No.	PN	Description	Sales Unit	HB-15B	EMB-0307C AMBL-0307 AMB-0307	MB-03A	ECB-0203	CB-01	CB-02	CBR-03
-	TB11074	Indexable Insert 8.4 for Mild Steel	10 pcs./set					●		
-	TB11076	Indexable Insert 8.4 for Stainless Steel	10 pcs./set					●		
-	TB11075	Indexable Insert 8.4 for Aluminum	4 pcs./set					●		
-	TB10656	Indexable Insert 8.4 R1	4 pcs./set					●		
-	TB11068	Indexable Insert 12.7	12 pcs./set	●						
-	TB11069	Indexable Insert 12.7 with Hole	10 pcs./set		●		●			
-	TB11070	Indexable Insert 12.7 R2	10 pcs./set		●		●			
-	TB11071	Indexable Insert 12.7 R3	10 pcs./set		●		●			
-	TB11072	Indexable Insert 12.7 R4	10 pcs./set		●					
-	TB11073	Indexable Insert 12.7 R3	10 pcs./set							●
-	TB11064	Indexable Insert 9.525	10 pcs./set			●			●	
-	TB11065	Indexable Insert 9.525 R2	10 pcs./set			●			●	
-	TB11066	Indexable Insert 9.525 R3	10 pcs./set			●				
1	TB09140	Guide Plate 78 Ass'y for More Stable Operation	1 set					●		
2	TB09143	Plate Ass'y for Straight Edge Use	1 set					●		
3	TA9A728	Pipe and tube Beveling Attachment	1 set	●						
4	TB02539	Attachment for Small Dia. Pipe	1 set		●					
5	TA9A594	Inner Head Ass'y	1 set			●				
6	TB02857	Guide sleeve 24 mm dia. Ass'y	1 set				●			
7	TB03097	Plate Ass'y for Straight Line Use	1 set				●			
8	TB02862	Dust Box Ass'y	1 set				●			
9	TB02437	Thin Plate Attachment Ass'y (Minimum thickness 1.2 mm)	1 set						●	
-	TB03424	Spanner T-9D	1 piece			●			●	
-	TQ01683	Spanner T-15D	1 piece		●		●			

Ref. No.2: Requires use of TB09140 Guide Plate 78 Ass'y Ref. No.3: Capacity 125 to 800 mm O.D. Ref. No.4: Capacity 80 to 200 mm O.D. Ref. No.5: Capacity Minimum 100 mm I.D.  
 Ref. No.6: For chamfering R2 Ref. No.7: Used with Plate Ass'y for Straight Line Use Ref. No.8: Used with Plate Ass'y for Straight Line Use



TB09140 Guide Plate 78 Ass'y for More Stable Operation



TB09143 Plate Ass'y for Straight Edge Use



# SCALING

Pneumatic Chipping Hammer

## AIR CHIPPER

### Removes weld spatter quickly and easily

- Ideal tool for quickly and efficiently removing weld spatter, rust and other debris from most surfaces
- Compact, heavy-duty construction for tough industrial applications
- Easy one-touch chisel installation and removal – NO tools required
- Idle protection system, helps prevent accidental start-up “ACH-16” only

Model **ACH-16** 



Model **CH-24** 



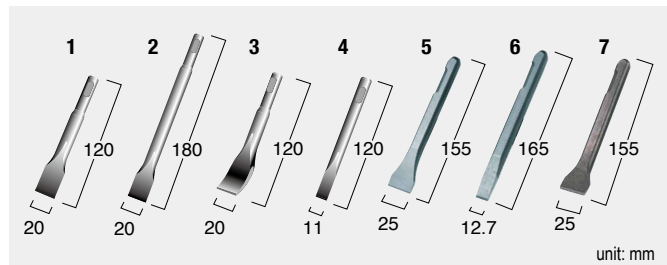
Specifications		ACH-16	CH-24
Model			
Air Pressure	MPa (kgf/cm <sup>2</sup> )		0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.15	0.2
Strokes per Minute	min <sup>-1</sup>	6000	4000
Shank Size	mm	10.5 Round	12.7 Square
Inlet Size			Rc 3/8
Mass (Weight)	kg	0.9	1.7
Accessories Included		<ul style="list-style-type: none"> <li>• TQ03431 Flat Chisel (Installed)</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>	<ul style="list-style-type: none"> <li>• TP15166 Curved Flat Chisel (Installed)</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>

#### Optional Chisels for Air Chipper ACH-16

Ref. No.	PN	Description	Sales Unit
1	TQ03431	Flat Chisel 20 x 120	1 piece
2	TQ03452	Flat Chisel 20 x 180	
3	TQ03453	Curved Flat Chisel 20 x 120	
4	TQ03549	Flat Chisel 11 x 120	

#### Optional Chisels for Air Chipper CH-24

Ref. No.	PN	Description	Sales Unit
5	TP15233	Flat Chisel 25 x 155	1 piece
6	TP15234	Straight Flat Chisel 12.7 x 165	
7	TP15166	Curved Flat Chisel 25 x 155	



# SCALING

Air Hammer

## AUTO CHISEL

Model **A-300** 

### A special spool valve inside grip assures excellent durability

- Designed for speeding up the repair and sheet metal work of automobiles, etc.
- Enables hammering work in narrow spaces
- Durable and powerful action
- Fast and easy chisel change to reduce downtime
- A wide variety of chisels available


























#### Specifications

Model	A-300	
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.3
Strokes per Minute	min <sup>-1</sup>	2600
Shank Size	mm	10
Inlet Size		Rc 1/4
Mass (Weight)	kg	1.7
Accessories Included	<ul style="list-style-type: none"> <li>• Bushing R 1/4 x NPT 1/4</li> <li>• Hose Nipple R 1/4 x 1/4</li> </ul>	

\*Chisels are not included as standard.

#### Optional Chisels

\*An order is available from one piece.

<p><b>PN: TP00572</b> <b>Blank Chisel</b> No.1001</p>  <p>For a variety of sheet metal work, bending, and rivet closing jobs</p>	<p><b>PN: TP00573</b> <b>Flat Chisel</b> No.1002</p>  <p>Puts increased efficiency into scraping, peeling spot welds, and cutting off bolts and pins</p>	<p><b>PN: TP04606</b> <b>Sheet Metal Chisel A</b> No.1003</p>  <p>Cuts shapes in sheet metal fast</p>	<p><b>PN: TP00575</b> <b>Sheet Metal Chisel B</b> No.1004</p>  <p>Just the chisel for cutting off sheet metal body panel</p>
<p><b>PN: TP00576</b> <b>Silencer Cutting Chisel</b> No.1005</p>  <p>A quick cut-off chisel for muffler piping</p>	<p><b>PN: TP00577</b> <b>Rubber Bushing Remover</b> No.1006</p>  <p>Helps you remove idle arm sleeves and bushings in record time</p>	<p><b>PN: TP00578</b> <b>Spot Weld Booster</b> No.1007</p>  <p>Ideal for peeling off spot welded points and cutting off pins</p>	<p><b>PN: TP00579</b> <b>Bushing Tool</b> No.1008</p>  <p>Puts speed and ease into the job of bushing insertion</p>
<p><b>PN: TP00580</b> <b>Punch</b> No.1009</p>  <p>For driving out pins and rivets, and fitting and removing bearings and races</p>	<p><b>PN: TP00581</b> <b>Bushing Removing Tool</b> No.1010</p>  <p>A faster servicing aid in removing bushings</p>	<p><b>PN: TP00582</b> <b>Sheet Metal Punch</b> No.1011</p>  <p>Opens holes for bolts and rivets</p>	<p><b>PN: TP00583</b> <b>20 mm Bending Chisel</b> No.1012</p>  <p>Helps you in peening and removing slag around welds</p>
<p><b>PN: TP00584 *</b> <b>Fork Chisel 24</b> No.1013</p>  <p>Disconnecting tie rod ends and ball joints</p>	<p><b>PN: TP00586 *</b> <b>Fork Chisel 35</b> No.1016</p>  <p>Disconnecting tie rod ends and ball joints</p>	<p><b>PN: TP00585 *</b> <b>Fork Chisel 15</b> No.1017</p>  <p>Disconnecting tie rod ends and ball joints</p>	<p><b>PN: TP00589</b> <b>38 mm Scraper</b> No.1018</p>  <p>Peeling paint &amp; removing rust from iron plate</p>
<p><b>PN: TP00590</b> <b>60 mm Scraper</b> No.1019</p>  <p>Peeling paint &amp; removing rust from iron plate</p>	<p><b>PN: TP00591</b> <b>60 mm Concave Scraper</b> No.1020</p>  <p>Removing incrustation from pipe</p>	<p><b>PN: TP04995</b> <b>Sheet Metal Chisel C</b> No.1023</p>  <p>Cuts shapes in sheet metal fast</p>	<p><b>PN: TP05244</b> <b>Moilpoint Chisel</b> No.1024</p>  <p>Breaking-up concrete, removing sand from castings</p>
<p><b>PN: TP05775</b> <b>Rivet Removing Punch</b> No.1025</p>  <p>Removing rivets from brake lining of heavy duty cars</p>	<p><b>PN: TP05801</b> <b>Rivet Caulking Chisel</b> No.1026</p>  <p>Caulking brake lining of heavy duty cars</p>	<p><b>PN: TQ02662</b> <b>Fork Chisel Spring</b></p>  <p>Mount this part when using Fork Chisel 24, Fork Chisel 35 or Fork Chisel 15.</p>	<p>*Fork Chisel Spring must be mounted in order to use Fork Chisel 24, Fork Chisel 35 or Fork Chisel 15.</p>

# SCALING

Pneumatic Scaler

## SUPER KELEN

### Industrial and shipboard pneumatic scalers

- Quickly and efficiently removes rust, scale, paint, tar and concrete from most surfaces
- Ideal for industrial, maritime and shipboard cleaning and descaling operations
- Idle protection system, tool will not activate unless contacting work surface
- S-1000 – over 1.3 m in length for extended reach applications and operator convenience
- Tool-less chisel installation and removal

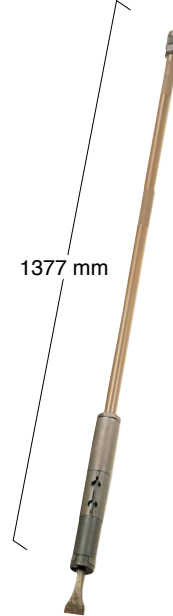
Model **S-250** Non-CE



Model **S-500** Non-CE



Model **S-1000** Non-CE



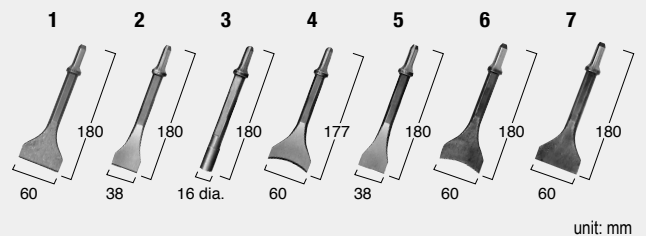
#### Specifications

Model	S-250	S-500	S-1000
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)	
Air Consumption (No-load)	m <sup>3</sup> /min	0.27	
Strokes per Minute	min <sup>-1</sup>	2500	
Shank Size	mm	12.7	
Inlet Size		Rc 1/4	
Mass (Weight)	kg	4.1	6.1
Accessories Included	<ul style="list-style-type: none"> <li>• No.2005 38 mm Bend Scraper (Installed)</li> <li>• Hose Lock Nut M16</li> <li>• Hose Nipple 3/8</li> </ul>		



#### Optional Chisels

Ref. No.	PN	Description	Sales Unit
1	TP03645	No.2001 60 mm Scraper	1 piece
2	TP03646	No.2002 38 mm Scraper	
3	TP03647	No.2003 Blank Chisel	
4	TP04010	No.2004 60 mm Concave Scraper	
5	TP04552	No.2005 38 mm Bend Scraper	
6	TP04553	No.2006 60 mm Concave Bend Scraper	
7	TP04554	No.2007 60 mm Bend Scraper	



# SCALING

Needle Scaler

## JET CHISEL

### Powerful scaling with multi-needles

- Quickly and efficiently removes weld slag, rust, paint and scale from most surfaces
- Ideal for cleaning and descaling steel, bridgework, castings, brick, stone and many other materials
- Heavy-duty construction for industrial and maritime applications
- Proven superior design features with no internal spring components ensure trouble-free performance (JEX-2800A and JEX-20 have balancing springs)

#### Model **JC-16**

• Lightweight model



#### Model **JEX-24**

• Universal model



#### Model **JEX-28**

• Heavy-duty model



#### Model **JEX-2800A**

• Reduced vibration model



#### Specifications

Model	JC-16	JEX-24	JEX-28	JEX-2800A
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
Strokes per Minute	min <sup>-1</sup>	4000	4000	4500
Inlet Size			Rc 3/8	
Mass (Weight)	kg	1.4	2.7	3.5
Accessories Included	<ul style="list-style-type: none"> <li>• 29 pieces of 2 mm x 150 mm Needles (Installed)</li> <li>• 29 pieces of 2 mm x 150 mm Needles</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>	<ul style="list-style-type: none"> <li>• 23 pieces of 3 mm x 180 mm Needles (Installed)</li> <li>• 6 mm Hex. Socket Screw Key</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>	<ul style="list-style-type: none"> <li>• 28 pieces of 3 mm x 180 mm Needles (Installed)</li> <li>• 14 pieces of 4 mm x 180 mm Needles</li> <li>• Needle supporter 4 mm</li> <li>• 6 mm Hex. Socket Screw Key</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>	<ul style="list-style-type: none"> <li>• 28 pieces of 3 mm x 180 mm Needles (Installed)</li> <li>• 14 pieces of 4 mm x 180 mm Needles</li> <li>• Needle supporter 4 mm</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>

#### Model **AJC-16**

• Slim model



#### Model **JT-16**

• Small and lightweight model



YouTube



#### Model **JT-20**

• Medium duty model

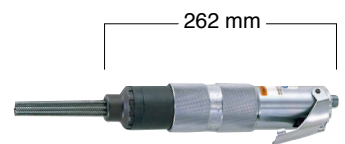


YouTube



#### Model **JEX-20**

• Reduced vibration model



#### Specifications

Model	AJC-16	JT-16	JT-20	JEX-20
Air Pressure	MPa (kgf/cm <sup>2</sup> )		0.6 (6)	
Air Consumption (No-load)	m <sup>3</sup> /min	0.07	0.16	0.2
Strokes per Minute	min <sup>-1</sup>	6000	6000	4000
Inlet Size			Rc 3/8	
Mass (Weight)	kg	0.98	0.8	2.4
Accessories Included	<ul style="list-style-type: none"> <li>• 3 pieces of 3 mm x 180 mm Needles (Installed)</li> <li>• 3 pieces of 3 mm x 180 mm Needles</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>	<ul style="list-style-type: none"> <li>• 6 pieces of 3 mm x 180 mm Needles (Installed)</li> <li>• 6 pieces of 3 mm x 180 mm Needles</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>	<ul style="list-style-type: none"> <li>• 12 pieces of 3 mm x 180 mm Needles (Installed)</li> <li>• 12 pieces of 3 mm x 180 mm Needles</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>	<ul style="list-style-type: none"> <li>• 12 pieces of 3 mm x 180 mm Needles (Installed)</li> <li>• 12 pieces of 3 mm x 180 mm Needles</li> <li>• Bushing R 3/8 x NPT 3/8</li> <li>• Hose Nipple R 3/8 x 3/8</li> </ul>

# SCALING

Electric Needle Scaler

## JET CHISEL

Model **EJC-32A** 



### Powerful 300 watt double insulated motor

- Extended length, slim barrel design
- Adjustable front handle for operator comfort and convenience

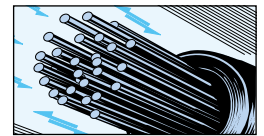
#### Specifications

Model	EJC-32A	
Power Source (Single Phase)	110 - 120 V AC, 50/60 Hz	220 - 240 V AC, 50/60 Hz
Rated Power Consumption	W	300
Rated Current	A	2.8
Duty Cycle	min	30
Strokes per Minute	min <sup>-1</sup>	3000
Power Cord Length	m	5
Mass (Weight)	kg	4.5



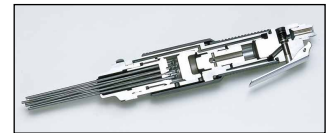
### Shot Peening Effect

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.



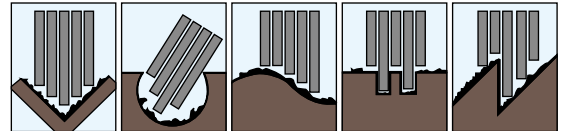
### Full Automatic System - Excludes EJC-32A

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



### Self-Adjusting Needles

The needles automatically adjust to any surface contour. They get deep into corners, reach into uneven surfaces, and conform to all types of shapes, making it a tool no shop should be without.



Combination of Needle and Needle Supporter		Model								
		JC-16	JEX-24	JEX-28	JEX-2800A	AJC-16	JT-16	JT-20	JEX-20	EJC-32A
2 mm	Number of Needles Required	29 pcs.	53 pcs.	66 pcs.	66 pcs.	7 pcs.	15 pcs.	29 pcs.	29 pcs.	32 pcs.
	Needle Supporter PN	TP00290	TP02244	TP01499	TP01499	TQ05210	TQ15316	TP00338	TP00338	TP16475
3 mm	Number of Needles Required	-	23 pcs.	28 pcs.	28 pcs.	3 pcs.	6 pcs.	12 pcs.	12 pcs.	15 pcs.
	Needle Supporter PN	-	TP02245	TP01461	TP01461	TQ04554	TQ15315	TP00337	TP00337	TP16301
4 mm	Number of Needles Required	-	-	14 pcs.	14 pcs.	-	-	-	-	-
	Needle Supporter PN	-	-	TP01462	TP01462	-	-	-	-	-

Material	Needle		PN	Sales Unit	Model								
	Diameter	Length			JC-16	JEX-24	JEX-28	JEX-2800A	AJC-16	JT-16	JT-20	JEX-20	EJC-32A
Steel	2 mm	150 mm	TB11053	100 pcs./set	●	●	●	●	●	●	●	●	●
		180 mm	TB11054	100 pcs./set	●	●	●	●	●	●	●	●	●
		300 mm	TB11057	50 pcs./set	●	●	●	●	●	●	●	●	●
		500 mm	TB11060	50 pcs./set	●	●	●	●	●	●	●	●	●
	3 mm	180 mm	TB11055	100 pcs./set		●	●	●	●	●	●	●	●
		300 mm	TB11058	50 pcs./set		●	●	●	●	●	●	●	●
		500 mm	TB11061	50 pcs./set		●	●	●	●	●	●	●	●
	4 mm	800 mm	TB11063	50 pcs./set		●	●	●	●	●	●	●	●
		180 mm	TB11056	50 pcs./set			●	●					
300 mm		TB11059	50 pcs./set			●	●						
	500 mm	TB11062	50 pcs./set			●	●						
Stainless Steel	2 mm	180 mm	TB10878	30 pcs./set	●	●	●	●	●	●	●	●	●
	3 mm	180 mm	TB10877	30 pcs./set		●	●	●	●	●	●	●	●



### Optional Needles

Premium Nitto Kohki needles out-perform competitors' needles ensuring optimal performance and trouble-free operation.

# GRINDING & SANDING

Pneumatic Grinder

## MYTON

### Heavy-duty grinders for tough applications

- Side exhaust with noise reduction system
- Great power/weight ratio

#### Model MYG-25

- For Grinding Wheel 58 mm
- Compact and lightweight type



 YouTube



#### Model MYG-40

- For Grinding Wheel 100 mm
- Powerful type

#### Model MG-40

- Lever switch type
- Depressed center wheel 100 mm



 YouTube



#### Model MG-40 Non-CE

- Ring switch type
- Depressed center wheel 100 mm



#### Specifications

Model	MYG-25	MYG-40	MG-40 Lever Type	MG-40 Ring Type
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)		
Air Consumption	m <sup>3</sup> /min	0.42 (No-load)	0.50 (No-load) 0.69 (Load)	0.50 (No-load)
Free Speed	min <sup>-1</sup> (rpm)	19000	13000	
Depressed Center Grinding Wheel	mm	58	100	
Inlet Size		Rc 1/4	Rc 3/8	
Mass (Weight)	kg	0.6	1.5	1.4
Accessories Included	<ul style="list-style-type: none"> <li>• 5 mm Hex. Socket Screw Key</li> <li>• 19 mm Single Ended Spanner</li> <li>• Grinding Wheel GS #80 x 58</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>			

#### Model MYG-50

- Lever switch type
- For Grinding wheel 125 mm
- Heavy grinding type
- Anti-vibration handle



 YouTube



#### Model MYG-70

- Lever switch type
- For Grinding wheel 180 mm
- Heavy grinding type



#### Model MYG-70 Non-CE

- Ring switch type
- For Grinding wheel 180 mm
- Heavy grinding type



#### Specifications

Model	MYG-50	MYG-70 Lever Type	MYG-70 Ring Type
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)	
Air Consumption	m <sup>3</sup> /min	0.75 (No-load)	0.70 (No-load) 0.95 (Load)
Free Speed	min <sup>-1</sup> (rpm)	11000	7600
Depressed Center Grinding Wheel	mm	125	180
Inlet Size		Rc 3/8	
Mass (Weight)	kg	2.5 (with handle)	
Accessories Included	<ul style="list-style-type: none"> <li>• Handle (anti-vibration type)</li> <li>• 4 mm Hex. Socket Screw Key</li> <li>• 6 mm Hex. Socket Screw Key</li> <li>• Pin Face Wrench</li> <li>• Bushing R 3/8 x NPT 3/8</li> </ul>		

# GRINDING & SANDING

Pneumatic Sander

## MYTON

**Ideal for sanding and/or polishing metal, aluminum, wood, plastic and many other materials**

- Compact and lightweight design for working in confined spaces
- Side exhaust with noise reduction system

### Model **MYS-20**

- For Abrasive discs 1", 1-1/2" & 2"
- Compact and lightweight type



YouTube



### Model **MYS-40**

- For Abrasive disc 100 mm
- Light sanding type



### Model **MYS-70** Non-CE

- Ring switch type
- For Abrasive disc 180 mm
- Medium sanding type
- Japanese model



#### Specifications

Model	MYS-20	MYS-40	MYS-70
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)	
Air Consumption (No-load)	m <sup>3</sup> /min	0.42	0.90
Free Speed	min <sup>-1</sup> (rpm)	19000	7600
Abrasive Disc	1", 1-1/2" and 2"	100 mm	180 mm
Inlet Size	Rc 1/4		Rc 3/8
Mass (Weight)	kg	0.6	2.4
Accessories Included	<ul style="list-style-type: none"> <li>• 2 pieces of 14 mm Single Ended Spanner</li> <li>• Bushing R 1/4 x NPT 1/4</li> <li>• 1" Disc Sanding Pad</li> <li>• 1-1/2" Disc Sanding Pad</li> <li>• 2" Disc Sanding Pad</li> <li>• Assortment of Sample Abrasive Discs Contains: 2 each of #60, #80, #100 and #120 1" Abrasive Disc 2 each of #60, #80, #100 and #120 1-1/2" Abrasive Disc 2 each of #60, #80, #100 and #120 2" Abrasive Disc</li> </ul>	<ul style="list-style-type: none"> <li>• 5 mm Hex. Socket Screw Key</li> <li>• 6 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>	<ul style="list-style-type: none"> <li>• Handle</li> <li>• 41 mm Single Ended Spanner</li> <li>• 10 mm Hex. Socket Screw Key</li> </ul>

#### Grinding Wheels for MYTON MYG-25

PN	Description	Sales Unit	Appearance
TB11078	GS#46 x 58 mm	5 pcs./set	
TB11079	GS#60 x 58 mm		
TB11077	GS#80 x 58 mm	10 pcs./set	
TB11080	GS#100 x 58 mm	5 pcs./set	
TB11081	GS#120 x 58 mm		

#### Flap Discs for MYTON MYG-25

PN	Description	Sales Unit	Appearance
TB11229	Myton Disc Z Z#40 x 58	5 pcs./set	
TB11230	Myton Disc Z Z#60 x 58		
TB11231	Myton Disc Z Z#80 x 58		
TB11232	Myton Disc Z Z#100 x 58		
TB11233	Myton Disc Z Z#120 x 58		
TB11234	Myton Disc SA A#40 x 58	5 pcs./set	
TB11235	Myton Disc SA A#60 x 58		
TB11236	Myton Disc SA A#80 x 58		
TB11237	Myton Disc SA A#100 x 58		
TB11238	Myton Disc SA A#120 x 58		

\*Please use commercially available consumables for MYG-40/MYG-70.

#### Abrasive Discs and Disc Pads for MYTON MYS-20

PN	Description	Sales Unit	Abrasive Disc	Disc Pad	Sales Unit				
TB10986	Abrasive Disc 1" x #40	25 pcs./set			1 piece				
TB10987	Abrasive Disc 1" x #60								
TB10988	Abrasive Disc 1" x #80								
TB10989	Abrasive Disc 1" x #100								
TB10990	Abrasive Disc 1" x #120								
TB10991	Abrasive Disc 1" x #180								
TB10992	Abrasive Disc 1" x #240								
TB10993	Abrasive Disc 1" x #320								
TB10994	Abrasive Disc 1-1/2" x #40					25 pcs./set			1 piece
TB10995	Abrasive Disc 1-1/2" x #60								
TB10996	Abrasive Disc 1-1/2" x #80								
TB10997	Abrasive Disc 1-1/2" x #100								
TB10998	Abrasive Disc 1-1/2" x #120								
TB10999	Abrasive Disc 1-1/2" x #180								
TB11000	Abrasive Disc 1-1/2" x #240								
TB11001	Abrasive Disc 1-1/2" x #320								
TB11002	Abrasive Disc 2" x #40	25 pcs./set			1 piece				
TB11003	Abrasive Disc 2" x #60								
TB11004	Abrasive Disc 2" x #80								
TB11005	Abrasive Disc 2" x #100								
TB11006	Abrasive Disc 2" x #120								
TB11007	Abrasive Disc 2" x #180								
TB11008	Abrasive Disc 2" x #240								
TB11009	Abrasive Disc 2" x #320								

\*Please use commercially available consumables for MYS-40/MYS-70.

#### Optional Accessories

Ref. No.	PN	Description	Sales Unit	Remarks
1 *	TB08265	Handle Ass'y	1 set	Standard accessory of MYG-70
2 *	TB09680	Side Handle Ass'y (anit-vibration type)	1 set	Standard accessory of MYG-50
3	TA90078	Rubber Pad Ass'y	1 piece	For MYS-40

\*Handle Ass'y and Side Handle Ass'y can be used on MYG-40, MG-40 and MYG-70.



# SANDING

Pneumatic Belt Sander

## BELTON

*Ideal for sanding and grinding in narrow spaces, recessed areas and on curved surfaces*

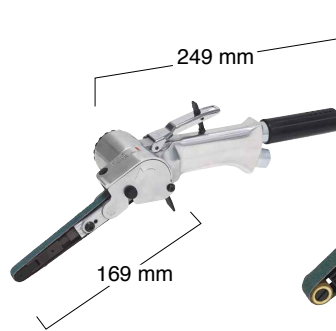
- Quick belt change
- Rear exhaust system



**BELTON-10**

Model **B-10CL**

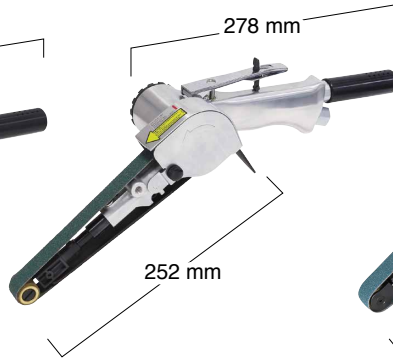
- Belt size 10 mm (W)



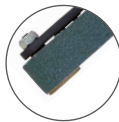
**BELTON-20**

Model **B-20CL**

- Belt size 20 mm (W)



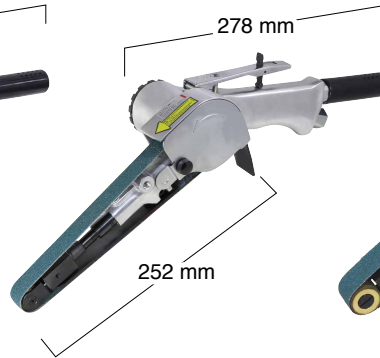
The Idle Pulley for B-20CL is supported on one side only.



**BELTON-20**

Model **B-20CL-A**

- Belt size 20 mm (W)



The Idle Pulley for B-20CL-A is supported on both sides.



**BELTON-30**

Model **B-30CL**

- Belt size 30 mm (W)



### Specifications

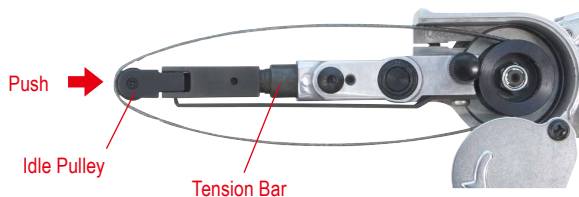
Model	B-10CL	B-20CL	B-20CL-A	B-30CL	
Air Pressure	MPa (kgf/cm <sup>2</sup> )		0.6 (6)		
Air Consumption (No-load)	m <sup>3</sup> /min	0.4	0.48	0.82	
Free Speed	min <sup>-1</sup> (rpm)	17000	18000	15000	
Belt Speed	m/min	1120	2770	2310	
Belt Size	mm	10 x 330	20 x 520	30 x 540	
Inlet Size			Rc 1/4		
Mass (Weight)	kg	0.9	1.6	1.5	2.4
Accessories Included	<ul style="list-style-type: none"> <li>• 2 pieces of Abrasive Belt Z#60 x 10 mm (1 piece installed)</li> <li>• Abrasive Belt Z#80 x 10 mm</li> <li>• Abrasive Belt Z#100 x 10 mm</li> <li>• Abrasive Belt Z#120 x 10 mm</li> <li>• 1.5 mm Hex. Socket Screw Key</li> <li>• 4 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>	<ul style="list-style-type: none"> <li>• 2 pieces of Abrasive Belt Z#60 x 20 mm (1 piece installed)</li> <li>• Abrasive Belt Z#80 x 20 mm</li> <li>• Abrasive Belt Z#100 x 20 mm</li> <li>• Abrasive Belt Z#120 x 20 mm</li> <li>• 2.5 mm Hex. Socket Screw Key</li> <li>• 4 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> <li>• Convex Shoe</li> </ul>	<ul style="list-style-type: none"> <li>• 2 pieces of Abrasive Belt Z#60 x 30 mm (1 piece installed)</li> <li>• Abrasive Belt Z#80 x 30 mm</li> <li>• Abrasive Belt Z#100 x 30 mm</li> <li>• 5 mm Hex. Socket Screw Key</li> <li>• Handle Assy</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>		

### Easy belt change

Abrasive belt can be changed easily. \*Rotate and open the cover when changing.

**Self-locking**

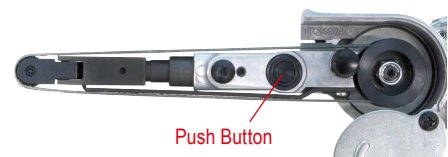
Push the idle pulley into self-lock position to loosen the belt.



For all models

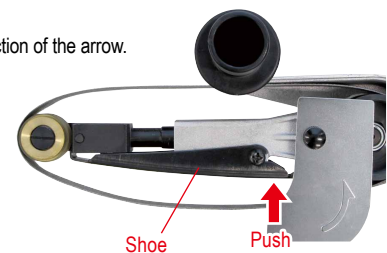
**Unlock**

Press the push button to pull back the tension bar.



10/20 Type

Press the shoe in the direction of the arrow.



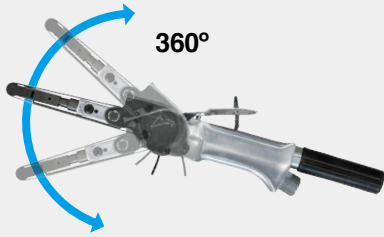
30 Type



# SANDING

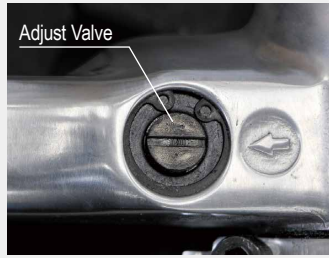
## Adjustable angle for efficient operation

Guard angle can be changed freely in accordance with the working position and shape of the workpiece.



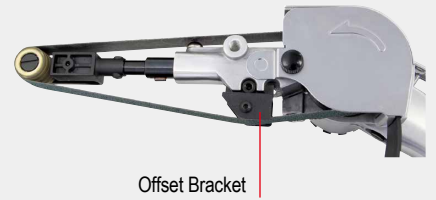
## Belt Speed Adjustment

Belt speed can be easily adjusted by turning the adjust valve with a screwdriver.



## Curved surface grinding

Curved surface grinding is possible by using the Offset Bracket (Optional).



## Abrasive Belt for BELTON-10

Belt Size : 6 mm x 330 mm (W x L)

Grit	PN	
	Zirconia (Z)	Alumina (AA)
#40	-	-
#60	TB10924	-
#80	TB10925	-
#100	TB10926	-
#120	TB10927	-
#180	TB10928	-
#240	TB10929	-
#400	-	TB10941

Sales Unit: 50 pcs./set

When using the belt, optional Bracket 6 Ass'y and Shoe 6 are required. (Ref. No.5, 6)

## Abrasive Belt for BELTON-10

Belt Size : 10 mm x 330 mm (W x L)

Grit	PN		
	Zirconia (Z)	Alumina (AA)	Ceramic (CE)
#40	-	-	TB10943
#60	TB10904	-	TB10944
#80	TB10905	-	TB10945
#100	TB10906	-	TB10946
#120	TB10907	-	TB10947
#180	TB10908	-	-
#240	TB10909	-	-
#400	-	TB10936	-

Sales Unit: 50 pcs./set

## Abrasive Belt for BELTON-20

Belt Size : 20 mm x 520 mm (W x L)

Grit	PN		
	Zirconia (Z)	Alumina (AA)	Ceramic (CE)
#40	TB10910	-	TB10948
#60	TB10911	-	TB10949
#80	TB10912	-	TB10950
#100	TB10913	-	TB10951
#120	TB10914	-	TB10952
#180	TB10915	-	-
#240	TB10916	-	-
#320	-	TB10937	-
#400	-	TB10938	-

Sales Unit: 20 pcs./set

## Abrasive Belt for BELTON-30

Belt Size : 30 mm x 540 mm (W x L)

Grit	PN		
	Zirconia (Z)	Alumina (AA)	Ceramic (CE)
#40	TB10917	-	TB10953
#60	TB10918	-	TB10954
#80	TB10919	-	TB10955
#100	TB10920	-	TB10956
#120	TB10921	-	TB10957
#180	TB10922	-	-
#240	TB10923	-	-
#320	-	TB10939	-
#400	-	TB10940	-

Sales Unit: 20 pcs./set

## Optional Parts

Ref. No.	PN	Description	Sales Unit	Applicable Model			
				B-10CL		B-20CL	B-30CL
				6 mm	10 mm	B-20CL-A	
1	TB09997	Offset Bracket 10 Ass'y	1 set		●		
2	TB10192	Offset Bracket 20 Ass'y	1 set			●	
3	TB08150	Offset Bracket 30 Ass'y	1 set				●
4	TB09938	Finger Pad Ass'y	1 set			●	
5	TB09996	Bracket 6 Ass'y	1 set	●			
6	TP14770	Shoe 6	1 piece	●			
7	TB10160	Idle Pully Bracket Ass'y	1 set			●	
8	TB10191	Convex Shoe	1 piece			●	
-	TB08337	Idle Pully Ass'y (Steel) for B-20CL-A	1 set			●	
-	TB08387	Idle Pully Ass'y (Steel) for B-20CL	1 set			●	



\* for Abrasive belt width 6 mm



# SANDING

Pneumatic Belt Sander

## BABY BELTON

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

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

BABY BELTON-10

Model **BB-10B** 

- Lever switch type
- Belt size 10 mm (W)



BABY BELTON-10

Model **BB-10B** Non-CE

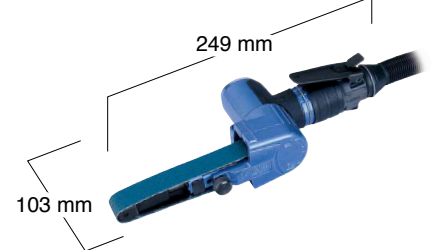
- Ring switch type
- Belt size 10 mm (W)



BABY BELTON-20

Model **BB-20** 

- Belt size 20 mm (W)



### Specifications

Model	BB-10B Lever Type	BB-10B Ring Type	BB-20
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)	
Air Consumption (No-load)	m <sup>3</sup> /min	0.2	0.43
Free Speed	min <sup>-1</sup> (rpm)	17000	16000
Belt Speed	m/min	1120	1100
Belt Size	mm	10 x 330	20 x 330
Inlet Size		Rc 1/4	
Mass (Weight)	kg	0.55	0.8
Accessories Included	<ul style="list-style-type: none"> <li>• Abrasive Belt Z#100 x 10 mm (Installed)</li> <li>• Abrasive Belt Z#120 x 10 mm</li> <li>• Abrasive Belt Z#180 x 10 mm</li> <li>• Abrasive Belt Z#240 x 10 mm</li> <li>• 1.5 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> <li>• Offset Bracket Ass'y</li> </ul>	<ul style="list-style-type: none"> <li>• Abrasive Belt Z#100 x 10 mm (Installed)</li> <li>• Abrasive Belt Z#120 x 10 mm</li> <li>• Abrasive Belt Z#180 x 10 mm</li> <li>• Abrasive Belt Z#240 x 10 mm</li> <li>• 1.5 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> <li>• Offset Bracket Ass'y</li> </ul>	<ul style="list-style-type: none"> <li>• Abrasive Belt Z#60 x 20 mm (Installed)</li> <li>• Abrasive Belt Z#120 x 20 mm</li> <li>• Abrasive Belt Z#240 x 20 mm</li> <li>• 2.5 mm Hex. Socket Screw Key</li> <li>• 3 mm Hex. Socket Screw Key</li> <li>• Shoe</li> <li>• Dust Cover</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>

### Quick and easy belt installation and removal "NO Tools Required"

1 Remove side cover.



Push idle pulley bracket into self-locking position.



2



Replace grinding belt.

3



Press the push button to tighten the belt.

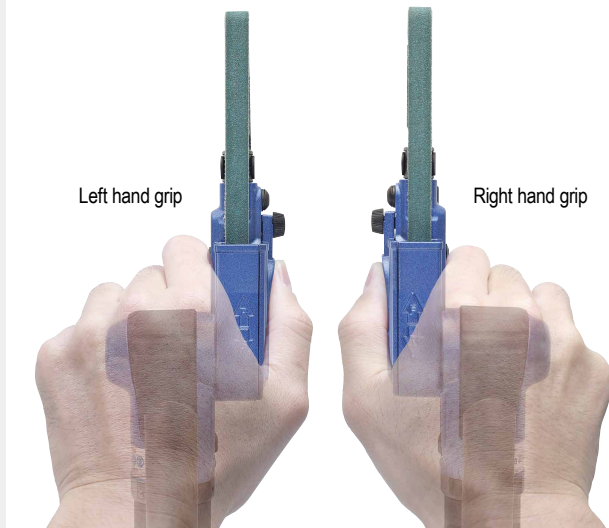
Push Button

### The throttle lever can be turned by 180 degrees.

Ergonomically designed for right or left hand operator convenience

Left hand grip

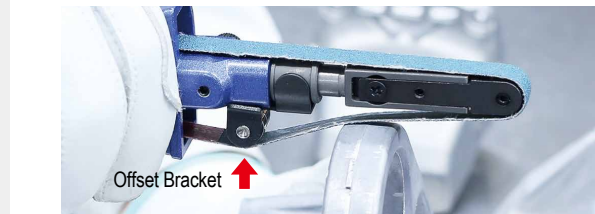
Right hand grip



### Sanding for curved surfaces

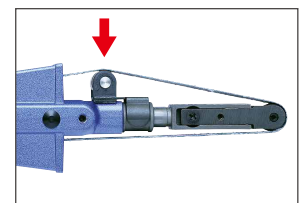
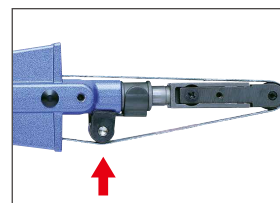
Curved surface sanding is possible by using the offset bracket.

Offset Bracket



### The offset bracket can be positioned up or down.

Push-in offset bracket pulley allows the following use.



# SANDING

## Easy switching of belt rotation direction (BB-10B)

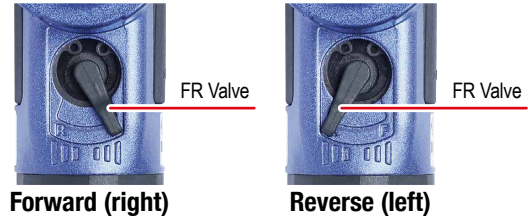
By adjusting the lever of the FR valve, the rotation direction of the abrasive belt can be changed. The direction of the chip splash can be changed by switching the rotation direction. The rotation speed can also be adjusted by the angle of the lever.

### Controlling the chip splash direction



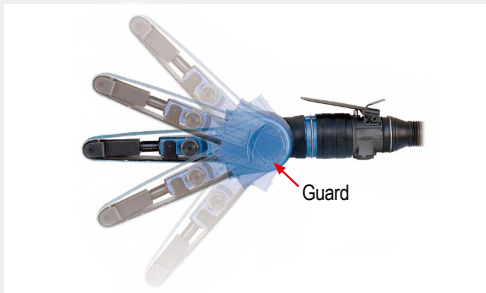
### Adjusting FR Valve

The rotation speed can also be adjusted by the angle of the lever.



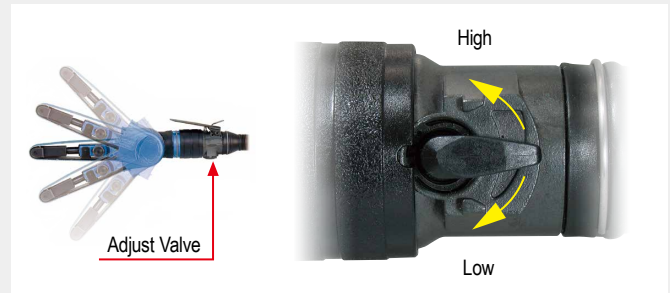
## Guard position is adjustable (BB-20)

Guard angle can be changed freely in accordance with the working position and shape of the workpieces.



## Belt Speed Adjustment (BB-20)

Belt speed can be easily adjusted by turning the adjust valve without a tool.



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

Deburring of die cast parts.



Detail finishing of aluminum material.



Chamfering of straight parts.



### Optional Parts

Ref. No.	PN	Description	Sales Unit	Model
1	TB10549	Offset Bracket Ass'y	1 set	BB-10B
2	TB07109	Offset Bracket 20 Ass'y	1 set	BB-20
3	TB07224	Tension Bar 520 Ass'y*	1 set	
4	TQ10701	Shoe 520*	1 piece	
5	TB07227	Finger Pad Ass'y 520	1 set	



\*TB07224 and TQ10701 are used together.

### Abrasive Belt for BABY BELTON-10

Belt Size : 10 mm x 330 mm (W x L)			
Grit	PN		
	Zirconia (Z)	Alumina (AA)	Ceramic (CE)
#40	-	-	TB10943
#60	TB10904	-	TB10944
#80	TB10905	-	TB10945
#100	TB10906	-	TB10946
#120	TB10907	-	TB10947
#180	TB10908	-	-
#240	TB10909	-	-
#400	-	TB10936	-
Sales Unit			
50 pcs./set			

### Abrasive Belt for BABY BELTON-20

Belt Size : 20 mm x 330 mm (W x L)				
Grit	PN			
	Zirconia (Z)	Alumina (AA)	Ceramic (CE)	Non-woven
#40	-	-	-	-
#60	TB10930	-	TB10958	-
#80	TB10931	-	TB10959	-
#100	TB10932	-	TB10960	-
#120	TB10933	-	TB10961	-
#180	TB10934	-	-	TB11047 A-M Equivalent to #180
#240	TB10935	-	-	-
#320	-	-	-	TB11046 A-VF Equivalent to #320
#400	-	TB10942	-	TB11048 S-SF Equivalent to #400
Sales Unit				
	20 pcs./set	20 pcs./set	20 pcs./set	5 pcs./set

# SANDING

Pneumatic Sander

## COMPACT MULTI SANDER

Model **CMX-20** 



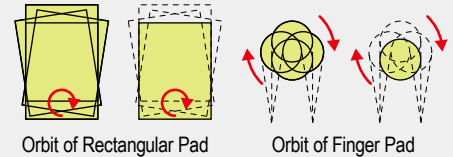
 YouTube

**Excellent for sanding on narrow, confined, and hard-to-reach areas with three types of pads**

- By replacement of the pad, both random orbital action and multiple movement are available with one set
- Finish sanding on a small part is possible with a small pad
- Sanding in a confined space is possible due to compact and lightweight body

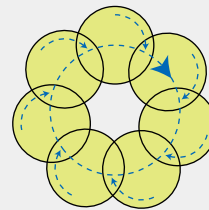


### Orbital Movement (Rectangular Pad, Finger Pad)



Offset rotation makes above orbit.

### Dual Action Movement (2" Round Pad)



Offset rotation and self rotation makes orbit as shown on the left.

### Speed Adjustment



Turn the adjust valve to limit the tools speed. Adjust the speed according to the workpiece material, grit of sand paper, and the desired surface finish.

### Pad Replacement



Pad replacement can easily be made with the included spanner 10 and 4 mm hex. socket screw key. In case of 2" round pad, only the spanner 10 is used. Use a suitable pad in accordance with the work area or area to be sanded.

### Specifications

Model	CMX-20	
Air Pressure	MPa	0.6
Air Consumption (No load)	m <sup>3</sup> /min	0.15
Orbit Diameter	mm	2
Mass (Weight)	kg	0.53 (without pad)

The rectangular pad comes mounted to the tool.

### Accessories Included

- 2 pieces of 2" Velcro Abrasive Paper #80
- 2 pieces of 2" Velcro Abrasive Paper #120
- 2 pieces of 2" Velcro Abrasive Paper #180
- 2 pieces of 26 x 50 mm Velcro Abrasive Paper #80
- 2 pieces of 26 x 50 mm Velcro Abrasive Paper #120
- 2 pieces of 26 x 50 mm Velcro Abrasive Paper #180
- 5 pieces of 16 mm Self Adhesive Abrasive Paper #80
- 5 pieces of 16 mm Self Adhesive Abrasive Paper #120
- 5 pieces of 16 mm Self Adhesive Abrasive Paper #180
- 2" Round Pad
- 16 mm Finger Pad
- 4 mm Hex. Socket Screw Key
- Bushing R 1/4 x NPT 1/4
- Ultra-thin Wrench SNT1012
- Tool Box

### Accessory Sanding Pad

Type of Pad	Rectangular Pad	2" Round Pad	16 mm Finger Pad	
Free Speed	min <sup>-1</sup>	13000	14500	13000
Paper Size	mm	26 x 50	50 dia.	16 dia.

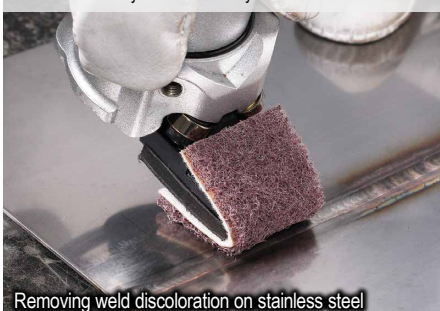
### Optional Accessories

Ref. No.	PN	Description	Sales Unit
1	TB11010	26 x 50 mm Velcro Abrasive Paper #80	100 pcs. /set
	TB11011	26 x 50 mm Velcro Abrasive Paper #120	
	TB11012	26 x 50 mm Velcro Abrasive Paper #180	
2	TB11049	26 x 50 mm Velcro Non-woven Abrasive Pad #320	50 pcs. /set
	TB11013	2" Velcro Abrasive Paper #80	
3	TB11014	2" Velcro Abrasive Paper #120	100 pcs. /set
	TB11015	2" Velcro Abrasive Paper #180	
4	TB11016	16 mm Self Adhesive Abrasive Paper #80	100 pcs. /set
	TB11017	16 mm Self Adhesive Abrasive Paper #120	
	TB11018	16 mm Self Adhesive Abrasive Paper #180	



For Rectangular Pad    For Rectangular Pad    For 2" Round Pad    For 16 mm Finger Pad

\*In the case of non-woven abrasive pad, it does not remove base metal. It may not clean heavily discolored welds.



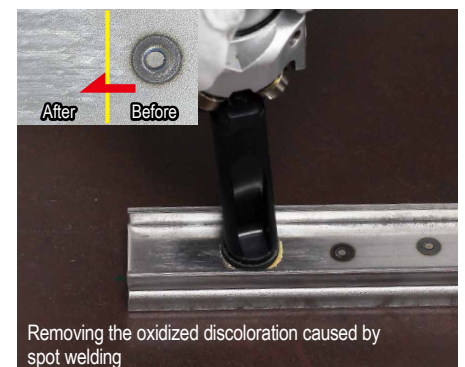
Removing weld discoloration on stainless steel

Rectangular Pad



Sanding a slight difference in level caused by tool change on a milled surface

2" Round Pad



Removing the oxidized discoloration caused by spot welding

16 mm Finger Pad

# SANDING

Handy Pneumatic Sander

## FREE SANDER

Model **FS-50A**



## Super lightweight, low-vibration design

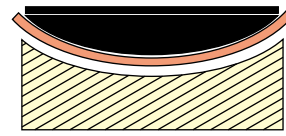
- Ideal for sanding and surface finishing wood, metal, plastic and other materials
- Lightweight design with minimal vibration
- High output and low air consumption motors produce high speed orbits for swirl-free finishes
- Oil free design
- Suitable for industrial and production applications

Model **FS-100C**



### Round-Pad for FS-100C

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



### Specifications

Model	FS-50A	FS-100C
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.14
Free Speed	min <sup>-1</sup> (rpm)	15000
Orbit Diameter	mm	1.2
Pad Size	mm	75 x 82
Paper Size	mm	110 x 100
Inlet Size		Rc 1/8
Mass (Weight)	kg	0.5
Accessories Included	<ul style="list-style-type: none"> <li>• Air Hose H Ass'y</li> <li>• 5 pieces of Sanding Paper #180</li> </ul>	<ul style="list-style-type: none"> <li>• 5 pieces of Sanding Paper #240</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>

### Optional Accessories

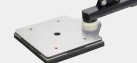
Ref. No.	PN	Description	Sales Unit	Model
1	TA99828	Rubber Pad	1 piece	FS-50A
2	TB02240	Dust Collector		
3	TA9A367	Rubber Pad	1 piece	
4	TA91474	Round Pad		
5	TB02235	Dust Collector		
6	TA9A265	Sanding Paper #100	200 pcs./set	FS-100C
	TA9A266	Sanding Paper #120		
	TA9A267	Sanding Paper #150		
	TA9A268	Sanding Paper #180		
	TA9A269	Sanding Paper #240		
	TA9A270	Sanding Paper #280		
	TA9A271	Sanding Paper #320		

1 & 3



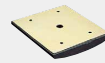
Rubber Pad

2 & 5



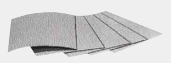
Dust Collector

4



Round Pad

6



Sanding Paper

Pneumatic Reciprocating Sander

## LINE SANDER

Model **LS-10**

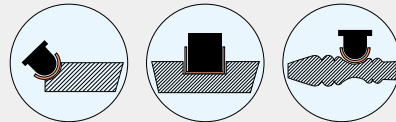


## Ideal for inline and grain sanding applications

- Ideal for most inline and profile sanding applications
- Compact and lightweight 0.75 kg design
- Low vibration and minimal noise output
- Suitable for sanding steel, aluminum, wood, plastic and other materials

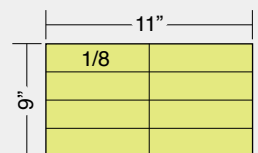
### Special Sanding Pad

The Block Rubber Pad Assembly can be easily trimmed to conform to the shape being worked and is available as an accessory.



### Abrasive Paper

Cut standard size paper (9" x 11") into 8 pieces, as shown below. For dry sanding, use an open coat abrasive paper with silicon carbide or aluminum oxide abrasive grains to prevent clogging, improve grinding efficiency, and prolong the life of the paper.



### Specifications

Model	LS-10
Air Pressure	MPa (kgf/cm <sup>2</sup> )
Air Consumption (No-load)	m <sup>3</sup> /min
Free Speed	min <sup>-1</sup>
Stroke Length	mm
Pad Size	mm
Paper Size	mm
Inlet Size	
Mass (Weight)	kg
Accessories Included	<ul style="list-style-type: none"> <li>• Air Hose E Ass'y</li> <li>• Block Rubber Pad</li> <li>• Base Plate A Ass'y</li> <li>• 5 pieces of Sanding Paper #240</li> <li>• 5 pieces of Sanding Paper #320</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>



### Optional Accessories

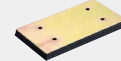
Ref. No.	PN	Description	Sales Unit
1	TB02244	Dust Collector	
2	TA96665	Rubber Pad	1 piece
3	TA96739	Block Rubber Pad	

1



Dust Collector

2



Rubber Pad

3



Block Rubber Pad

# SANDING

Pneumatic Compact Sander

## ORBITAL SANDER

Model **OSV-60A** 

**Heavy-duty and powerful with adjustable speed regulator**

- Powerful dual action for tough applications
- Standard with dust extraction system
- Rugged construction for years of reliable performance



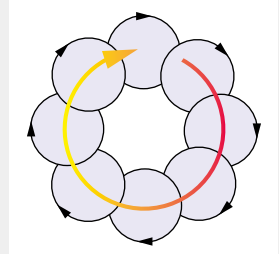
### Specifications

Model	OSV-60A	
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.68
Free Speed	min <sup>-1</sup> (rpm)	8500
Orbit Diameter	mm	10
Paper Size	mm	150 (6")
Pad Type		PSA with 6 holes
Inlet Size		Rc 1/4
Mass (Weight)	kg	2
Accessories Included	<ul style="list-style-type: none"> <li>• Dust Collection Ass'y with Dust Bag</li> <li>• Single Ended Spanner 17</li> <li>• Bushing R 1/4 x NPT 1/4</li> <li>• Brush</li> </ul>	



### Random orbital action creates a professional finish

By offsetting the sanding pad shaft, fast aggressive sanding is achieved while dramatically reducing swirl patterns. Speed adjustments allow for the best speed for the best job.

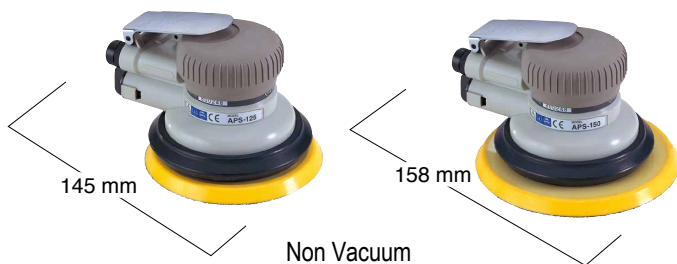


Pneumatic Compact Sander

## PALM ORBITAL SANDER

Model **APS-125** 

Model **APS-150** 



### Ergonomic lightweight design

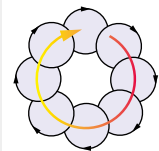
- Extremely light. APS-125 weighs just 690 g
- Ergonomically designed for operator convenience and comfort
- Powerful high speed 10000 RPM motor
- Ultra small orbital action for high quality swirl-free finishes
- Available with 125 mm or 150 mm pads
- Variable speed control

### Applications

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

### Random orbital action creates a professional finish

By offsetting the sanding pad shaft, fast aggressive sanding is achieved while dramatically reducing swirl patterns. Speed adjustments allow for the best speed for the best job.



### Specifications

Model	APS-125	APS-150	
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)	
Air Consumption (No-load)	m <sup>3</sup> /min	0.45	
Free Speed	min <sup>-1</sup> (rpm)	10000	
Orbit Diameter	mm	5	
Paper Size	mm	125 (5")	150 (6")
Pad Type	Leather or Velcro with 5 holes	Velcro with 6 holes	
Inlet Size		Rc 1/4	
Mass (Weight)	kg	0.69	0.72
Accessories Included	<ul style="list-style-type: none"> <li>• 17 mm Single Ended Spanner</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>		

### For Self Vacuum & Central Vacuum

The non-vacuum model is available from stock and can easily be modified to self-vacuum or central vacuum type.

#### Self Vacuum



Optional parts required for adding Self Vacuum function

- TQ04685 Stopper
- TB03594 Ejector Ass'y
- LQ02848 P Tapping Screw
- TA99239 Hose Ass'y
- TP14836 Dust Bag

#### Central Vacuum



Optional parts required for adding Central Vacuum function

- TQ04682 Ejector
- LQ02848 P Tapping Screw

# GRINDING

Pneumatic Die Grinder

## AIR SONIC

### Model L-25B

- For all grinding, deburring and finishing jobs



### Model L-35C

- Special design for rotary burrs



#### Specifications

Model	L-25B	L-35C
Air Pressure	MPa (kgf/cm <sup>2</sup> )	0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.35
Free Speed	min <sup>-1</sup> (rpm)	37500
Chuck Size	mm	6
Inlet Size		Rc 1/4
Mass (Weight)	kg	0.45 (without hose)
Accessories Included	<ul style="list-style-type: none"> <li>• 14 mm Single Ended Spanner</li> <li>• Mounted Wheel No.2</li> <li>• Mounted Wheel No.3</li> <li>• Chuck Pin</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>	<ul style="list-style-type: none"> <li>• 2 pieces of 14 mm Single Ended Spanner</li> <li>• Mounted Wheel 13 x 13 x 6 x 38</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>







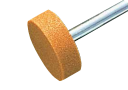

#### Optional Accessory

PN	Description	Sales Unit
TP02806	Chuck Sleeve 6 x 3 mm	1 piece



A mounted wheel or rotary burr with 3 mm shaft can be installed on L-25B and L-35C by using the chuck sleeve 6 x 3.

#### Optional Accessories

Mounted Wheel for AIR SONIC L-25B (Sales Unit: 5 pcs./set)				*All items Grit #60
No.1: 16 x 32	No.2: 16 x 32	No.3: 19 x 20	No.4: 25 x 25	
				
PN: TB11082	PN: TB11083	PN: TB11084	PN: TB11085	
No.5: 19 x 28	No.6: 25 x 13	No.7: 32 x 10	No.8: 16 ball	
				
PN: TB11086	PN: TB11087	PN: TB11088	PN: TB11089	

Rotary Burr for AIR SONIC L-35C (Sales Unit: 1 piece)			
No.1: CB1C-106	No.2: CB2C-105	No.3: CB3C-103	No.4: CB4C-103
			
PN: TB11198	PN: TB11199	PN: TB11200	PN: TB11201
No.5: CB5C-104	No.6: CB6C-102	No.7: CB7C-103	No.8: CB8C-105
			
PN: TB11202	PN: TB11203	PN: TB11204	PN: TB11205

Pneumatic Die Grinder

## AIR SONIC

### Model AL-55A



YouTube



### High speed rotation 56500 rpm

- Smooth high speed rotation and low vibration enables precision grinding
- Stepless speed change from 0 to 56500 rpm meets a wide range of grinding applications
- Compact and 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-55A
Air Pressure	MPa (kgf/cm <sup>2</sup> )
Air Consumption (No-load)	m <sup>3</sup> /min
Free Speed	min <sup>-1</sup> (rpm)
Chuck Size	mm
Inlet Size	
Mass (Weight)	kg
Accessories Included	<ul style="list-style-type: none"> <li>• 7 x 9 mm Spanner</li> <li>• Lock Wrench</li> <li>• Mounted Wheel 5 x 13 x 3</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>

#### Optional Accessory

PN	Description	Sales Unit
TB11090	Mounted Wheel 5 x 13 x 3	10 pcs./set



# GRINDING/FILING

Portable Precision Finishing File

## SUPER HAND

### Fast, efficient filing, sanding and deburring tools

- Eliminates time consuming manual hand-filing operations
- Ideal for industrial production filing applications on steel, aluminum, brass, wood and other materials
- Unique and compact design delivers reduced vibration performance while reducing operator fatigue.
- Interchangeable files
- Rear exhaust system
- Weight reduced by half for comfortable operation over long period of time (ASH-900)

#### Model SH-100A

- Rugged construction for reliable performance



#### Model ASH-900

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



Specifications		SH-100A	ASH-900
Model			
Air Pressure	MPa (kgf/cm <sup>2</sup> )		0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min	0.24	0.13
Stroke Speed	min <sup>-1</sup>	3700	6300
Stroke Length	mm		9
File shank Size	mm	6.3	5.0
Inlet Size		Rc 1/4	
Mass (Weight)	kg	1.1	0.5
Accessories Included		<ul style="list-style-type: none"> <li>• Rat Tail File SF-10</li> <li>• Triangular Taper File SF-11</li> <li>• Half Round File SF-12</li> <li>• Flat File SF-13</li> <li>• 3 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> <li>• Air Hose E Ass'y</li> </ul>	<ul style="list-style-type: none"> <li>• Rat Tail File SF-10</li> <li>• Triangular Taper File SF-11</li> <li>• Half Round File SF-12</li> <li>• Flat File SF-13</li> <li>• 2.5 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>

Optional Accessories	
Sales Unit: 5 pcs./set	
Rat Tail File SF-10	
PN: TB11095	
Triangular Taper File SF-11	
PN: TB11096	
Half Round File SF-12	
PN: TB11097	
Flat File SF-13	
PN: TB11098	

Optional Accessories			
Ref. No.	PN	Description	Sales Unit
1	TA91752	Rubber Pad Ass'y for SH-100A	1 set
2	TA94625	Supporter Ass'y for SH-100A (use with TA91752)	
3	TB04319	Sanding Pad Ass'y for ASH-900	



Portable Precision Finishing File

## SUPER HAND LIGHT

### Best suited for deburring of die-cast aluminum products and machined parts

- Small size, light-weight, and low-vibration model
- Reduced operator fatigue for greater productivity

#### Model SHL-40



Specifications		SHL-40
Model		
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>	9000
Stroke Length	mm	4
File shank Size	mm	3.0
Inlet Size		Rc 1/4
Mass (Weight)	kg	0.4
Accessories Included		<ul style="list-style-type: none"> <li>• Flat File LF-13</li> <li>• 2 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>

Optional Accessories	
Sales Unit: 3 pcs./set	
Rat Tail File LF-10	
PN: TB11092	
Triangular Taper File LF-11	
PN: TB11094	
Half Round File LF-12	
PN: TB11093	
Flat File LF-13	
PN: TB11091	



# FILING/DEBURRING

Portable Fine Finishing File

## MICRO AIR HAND

**Light weight, ultra-low vibration filer for polishing and lapping operations**

• Fine reciprocating motion best for precision parts filing

Model **MAH-05**

Model **MAH-16**



Reciprocating motion  
0.5 mm stroke



Reciprocating motion  
2.2 mm stroke

### Mounting Examples

\*This holder can be used for polishing and lapping applications by mounting ceramic stones, etc. (Max size: Thickness 3.2 mm x Width 20 mm)



### Specifications

Model	MAH-05	MAH-16
Air Pressure	MPa (kgf/cm <sup>2</sup> ) 0.6 (6)	
Air Consumption (No-load)	m <sup>3</sup> /min 0.07	
Stroke Speed	22000	11000
Stroke Length	0.5	2.2
File Shank Size	mm 3	
Inlet Size	Rc 1/4	
Mass (Weight)	kg 0.37	
Accessories Included	<ul style="list-style-type: none"> <li>• Flat End Diamond File</li> <li>• Round End Diamond File</li> <li>• 2 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>	

### Optional Accessories

PN	Description	Sales Unit
TB11105	Flat End Diamond File 	5 pcs./set
TB11106	Round End Diamond File 	5 pcs./set
TB11107	Triangular End Diamond File 	5 pcs./set
TB11108	Half-round End Diamond File 	5 pcs./set
TB07506	Vice Holder* 	1 set

Pneumatic Deburring Tool

## BURR CUTTER

Model **BC-005**



**For deburring machined holes**

- While gripping the lever, push the countersink into the machined holes to remove burrs
- Optimum speed can be obtained by the adjust valve, resulting in clear deburred surfaces
- Push-to-engage type prevents the countersink from coming off the hole and damaging the workpiece
- Replacement of the countersink is easy and quick with a set of three quick change chucks provided

### Specifications

Model	BC-005
Air Pressure	MPa (kgf/cm <sup>2</sup> ) 0.6 (6)
Air Consumption (No-load)	m <sup>3</sup> /min 0.22
Free Speed	min <sup>-1</sup> (rpm) 420
Deburring Hole diameter	mm 3 to 34
Countersink Shank Size	mm 6, 8, 10, 12*
Inlet Size	Rc 1/8
Mass (Weight)	kg 0.75
Accessories Included	<ul style="list-style-type: none"> <li>• Chuck 6 mm</li> <li>• Chuck 8 mm</li> <li>• Chuck 10 mm (Installed)</li> <li>• Suspension Bail</li> <li>• 2.5 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/8 x NPT 1/4</li> </ul>

\*Chuck 12 mm is optional. (PN: TB09876)

Countersinks are not provided with the tool. Please purchase them locally.

### Compatibility table between chuck and countersink shank diameter

Chuck	Appearance*	Countersink Shank Diameter (mm)	Overall Length of Chuck (mm)
Chuck 6		6	49.5
Chuck 8		8	49.5
Chuck 10		10	49.5
Chuck 12		12	60

\*indicates outer appearances of the chucks around the hex. socket head set screw.

# CUTTING/DRILLING

Pneumatic Hacksaw

## SUPER SAW

Model **SSW-110** 



**Special double-piston system provides low vibration while improving cutting speed!**

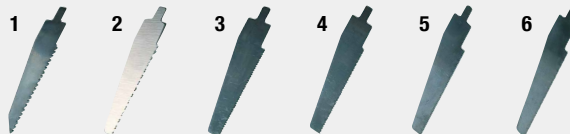
- Ideal for sawing and trimming operations on sheet metal, aluminum, plastic and other materials
- Suitable for automotive, fabrication, HVAC, electrical and woodworking applications
- Ultra lightweight construction with low vibration performance
- Optimized blade stroke for maximum cutting performance
- Powerful dual piston construction
- Locking throttle lever helps prevent accidental start-up

### Specifications

Model	SSW-110	
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>	7000
Stroke Length	mm	11
Capacity (Max. plate thickness)	mm	3
Inlet Size		Rc 1/4
Mass (Weight)	kg	0.62
Accessories Included	<ul style="list-style-type: none"> <li>• 2 pieces of 32 TPI Saw Blade</li> <li>• 3 mm Hex. Socket Screw Key</li> <li>• Bushing R 1/4 x NPT 1/4</li> </ul>	

### Optional Accessories

Ref. No.	PN	Description	Sales Unit
1	TB11099	9 TPI Saw Blade for Gypsum-board	10 pcs./set
2	TB11100	12 TPI Saw Blade for Plywood Panel	
3	TB11101	14 TPI Saw Blade for Plastic	
4	TB11102	18 TPI Saw Blade for Plastic	
5	TB11103	24 TPI Saw Blade for Mild Steel	
6	TB11104	32 TPI Saw Blade for Mild Steel	



Pneumatic Hand Drill

## AIR DRILL

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

- Ultra high power to weight ratio
- Ergonomically designed to reduce operator fatigue
- Variable speed control
- Reversible
- Designed for industrial and production applications

Model **ADR-65** 

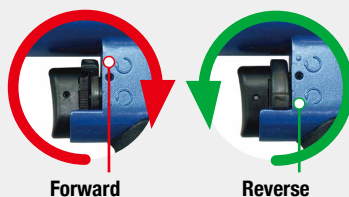
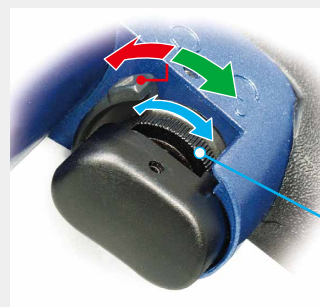


Model **ADR-100** 



### Reversible

Change rotation direction by turning the valve as indicated.



**Variable speed adjustment**  
Turn the speed control nut to change the R.P.M.

### Specifications

Model	ADR-65	ADR-100
Air Pressure	MPa (kgf/cm <sup>2</sup> ) 0.6 (6)	
Air Consumption (No-load)	m <sup>3</sup> /min 0.55	0.67
Free Speed	min <sup>-1</sup> (rpm) 2900	2000
Max. drilling Capacity	mm 6.5	10.0
Inlet Size	Rc 1/4	
Mass (Weight)	kg 0.8	1.1
Accessories Included	<ul style="list-style-type: none"> <li>• Drill chuck (Installed)</li> <li>• Chuck Handle</li> <li>• Bushing R 1/4 x NPT 1/4</li> <li>• CUPLA 30SH</li> </ul>	

### Optional Accessory

PN	Description	Sales Unit
TQ10969	Hanger	1 piece

# SPRING BALANCER

## SPRING BALANCER series



### Spring balancer improves work safety and efficiency

Our spring balancers offer a simple cost effective solution to take the strain out of handling tools thus improving work safety and efficiency. The balancer range covers 0.5 to 70 kg tool capacity with a maximum cable length of 2 meters.

#### Specifications

Model		TW-00	TW-0	TW-3	TW-5
Capacity	kg	0.5 - 1.5	0.5 - 1.5	1.0 - 3.0	2.5 - 5.0
Stroke	m	0.5	1.0	1.3	1.3
Weight	kg	0.2	0.5	1.4	1.5

Model		TW-9	TW-15	TW-22	TW-30
Capacity	kg	4.5 - 9.0	9.0 - 15.0	15.0 - 22.0	22.0 - 30.0
Stroke	m	1.3	1.3	1.5	1.5
Weight	kg	3.4	3.8	7.2	7.6

Model		TW-40	TW-50	TW-60	TW-70
Capacity	kg	30.0 - 40.0	40.0 - 50.0	50.0 - 60.0	60.0 - 70.0
Stroke	m	1.5	1.5	1.5	1.5
Weight	kg	9.8	10.4	11.6	11.8

## HOSE REEL BALANCER series



### Functions both as balancer and hose reel

#### Specifications

Model		HW-0	HW-3	HW-5
Capacity	kg	0.5 - 1.5	1.5 - 3.0	3.5 - 5.0
Stroke	m	1.3	1.3	1.3
Weight	kg	1.6	1.7	1.8
Hose Diameter	I.D. mm	6.5	6.5	6.5
	O.D. mm	10	10	10

## RETRACTOR series



### Handy knob for easy tension adjustment

#### Specifications

Model		RW-0	RW-3	RW-5	TW-06R	TW-1R
Capacity	kg	0.5 - 1.5	1.0 - 3.0	2.5 - 5.0	0.2 - 0.6	0.5 - 1.5
Stroke	m	2.0	2.0	2.0	1.5	1.5
Weight	kg	0.5	0.7	0.9	0.3	0.3

# Vibration Level, Sound Pressure Level, and Sound Power Level

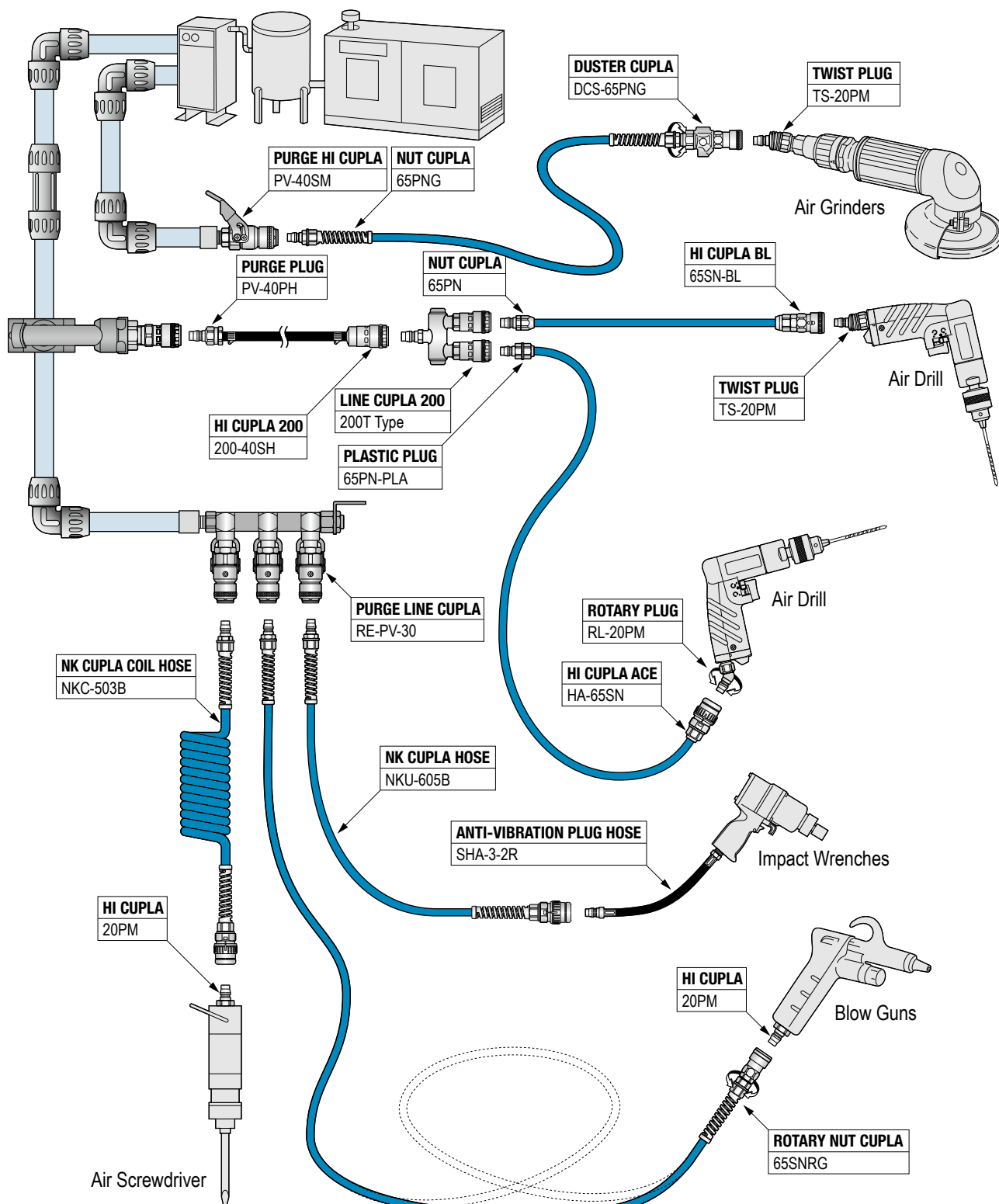
Figures may vary depending on applications

Series	Model	Vibration Level m/s <sup>2</sup>	Measurement Point	Vibration Standard	Sound Pressure Level dB(A)	Sound Power Level dB(A)
AIR CHIPPER (Pneumatic)	ACH-16	66	Grip	EN 28927-9	86	97
	CH-24	100	Grip		87	98
AIR SONIC (Pneumatic)	AL-55A	0.8	Grip	ISO28927-12	71	82
	L-25B	7.2	Grip		76	87
	L-35C	3.1	Grip		76	87
AUTO CHISEL (Pneumatic)	A-300	≦ 30	—	EN 28927-9	97	108
BELTON (Pneumatic)	B-10CL	≦ 2.5	Grip	ISO 20643	78	89
	B-20CL	≦ 2.5	Grip		81	92
	B-20CL-A	≦ 2.5	Grip		80	91
	B-30CL	≦ 2.5	Sub Handle		86	97
	BB-10B Lever Type	≦ 2.5	Grip L		79	90
		≦ 2.5	Grip R			
	BB-10B Ring Type	≦ 2.5	Grip L		79	90
≦ 2.5		Grip R				
BB-20	≦ 2.5	Grip L	85	96		
	≦ 2.5	Grip R				
BEVELER (Pneumatic)	AMB-0307	4.1	Grip	EN ISO 20643	87	98
		6.3	Knob			
	AMBL-0307	4.1	Grip		87	98
		6.3	Knob			
	CB-01	≦ 2.5	Grip		88	99
	CB-02	4.1	Grip		74	85
CBR-03	≦ 2.5	Grip	81	92		
	3.4	Handle				
BEVELER (Electric)	ECB-0203	7.0	Grip	EN 60745-1	83	84
		7.0	Knob			
	EMB-0307C	8.3	Grip		88	99
		3.7	Knob			
	HB-15B	≦ 2.5	Grip		64	75
		4.6	Handle			
MB-03A	5.9	Grip	80	91		
	6.6	Knob				
BURR CUTTER (Pneumatic)	BC-005	4.2	Grip	EN 20643	89	100
COMPACT MULTI SANDER (Pneumatic)	CMX-20	≦ 2.5	Grip	EN 28927-3	76	87
FREE SANDER (Pneumatic)	FS-50A	2.7	Grip		77	88
JET CHISEL (Pneumatic)	FS-100C	≦ 2.5	Grip	EN ISO 28927-9	85	96
	AJC-16	4.8	Grip		84	95
		JC-16	8.3			
	JEX-20	11.5	Needle Guide		81	92
		JEX-24	9.0			
	JEX-28	10.5	Grip		92	103
		28	Needle Guide			
	JEX-2800A	15.0	Grip		93	104
		17.5	Needle Guide			
	JT-16	11.5	Grip		96	107
		14.5	Needle Guide			
JT-20	9.5	Grip	94	105		
	15.5	Grip				
JET CHISEL (Electric)	EJC-32A	16.0	Grip	EN 60745-2-6	92	103
		15.0	Handle			
LINE SANDER (Pneumatic)	LS-10	6.0	Grip	EN 20643	78	89
MICRO AIR HAND (Pneumatic)	MAH-05	≦ 2.5	Grip	EN 28927-8	64	75
	MAH-16	≦ 2.5	Grip		64	75
MYTON (Pneumatic)	MG-40 Lever	5.9	Grip	ISO 28927-1	86	97
	MG-40 Ring	6.0	Grip	ISO 20643	84	95
	MYG-25	≦ 2.5	Grip	ISO 28927-1	82	93
	MYG-40	4.2	Grip		94	105
	MYG-50	4.5	Grip	92	103	
		4.2	Handle			
	MYG-70 Lever	3.2	Grip	92	103	
		8.2	Handle			
	MYG-70 Ring	3.2	Grip	92	103	
		8.2	Handle			
	MYS-20	3.3	Grip	ISO 28927-3	82	93
	MYS-40	≦ 2.5	Grip		82	93
MYS-70	≦ 2.5	Grip	89		100	
	≦ 2.5	Handle				
ORBITAL SANDER (Pneumatic)	OSV-60A	4.6	Grip	ISO 28927-3	89	100
		7.2	Supporting Section			
PALM ORBITAL SANDER (Pneumatic)	APS-125	5.5	Grip	EN 28927-8	78	89
	APS-150	7.4	Grip		81	92
SUPER HAND (Pneumatic)	ASH-900	4.8	Grip	EN 28927-8	62	73
	SH-100A	6.8	Grip		76	87
	SHL-40	≦ 2.5	Grip		71	81
SUPER KELEN (Pneumatic)	S-250	50	Grip	EN 28927-9	101	112
	S-500	29	Grip		100	111
		17.0	Supporting Section			
	S-1000	58	Grip		99	110
		81	Supporting Section			
SUPER SAW (Pneumatic)	SSW-110	9.3	Grip	EN 28927-8	71	82

# QUICK CONNECT COUPLINGS FOR PNEUMATIC TOOLS

## CUPLA

Nitto Kohki supplies various types of air couplings to meet all needs of air piping from main supply, relays in factories, pipe end connections to pneumatic tools, and those of air piping within equipment. The following sketch gives you some examples of air piping using HI CUPLA Series and may serve as a good reference in selecting appropriate couplings. For more information, please visit [http://www.nitto-kohki.co.jp/e/prd/d\\_cat/](http://www.nitto-kohki.co.jp/e/prd/d_cat/) and see our eCatalog here.



# QUICK CONNECT COUPLINGS FOR PNEUMATIC TOOLS

## HI CUPLA



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

### Specifications

<b>Body material</b>	Steel (Chrome-plated)	Brass	Stainless steel
<b>Working pressure</b>	1.5 MPa (15 kgf/cm <sup>2</sup> )	1.0 MPa (10 kgf/cm <sup>2</sup> )	1.5 MPa (15 kgf/cm <sup>2</sup> )
<b>Seal material</b>	Nitrile rubber / Fluoro rubber		

## HI CUPLA 200



- Simple and secure push-to-connect type
- New valve design for low pressure loss to achieve flow rate increase

### Specifications

<b>Body material</b>	Steel (Chrome-plated)
<b>Working pressure</b>	1.5 MPa (15 kgf/cm <sup>2</sup> )
<b>Seal material</b>	Nitrile rubber

## NUT CUPLA



- No hose clamp required
- Nut types are available in HI CUPLA Series and HI CUPLA 200 Series
- To mount on hose, simply slide it over the nipple and tighten the nut

### Specifications

<b>Body material</b>	Steel (Chrome-plated), Stainless steel
<b>Working pressure</b>	1.5 MPa (15 kgf/cm <sup>2</sup> )
<b>Seal material</b>	Nitrile rubber

## HI CUPLA ACE



- Lightweight plastic coupling with safety lock
- Pressure ratings comparable to steel HI CUPLA
- Just push plug into socket for simple connection

### Specifications

<b>Body material</b>	Engineering plastics (PBT, POM)
<b>Working pressure</b>	1.5 MPa (15 kgf/cm <sup>2</sup> ) 1.0 MPa (10 kgf/cm <sup>2</sup> ) for Model HA-T
<b>Seal material</b>	Nitrile rubber

## ROTARY PLUG



- Newly developed rotary function allows 360° swivelling
- Rotary neck plug for hose connection to pneumatic tools and pneumatic devices
- Fits at 45° angle to the tool eliminating annoying offset load caused by connected hose

### Specifications

<b>Body material</b>	Steel (Nickel-plated), Stainless steel
<b>Working pressure</b>	1.5 MPa (15 kgf/cm <sup>2</sup> )
<b>Seal material</b>	Nitrile rubber

## FULL-BLOW CUPLA



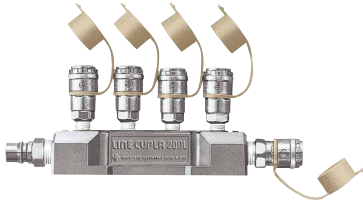
- Unique full-open gate type valve mechanism realizes low pressure loss and high flow rate, which reduces required source air volume
- The flow rate is increased by up to 40% more than that of conventional HI CUPLA
- During connection and disconnection, the valve is closed, enabling connection/disconnection under zero line pressure

### Specifications

<b>Body material</b>	Aluminum alloy
<b>Working pressure</b>	1.5 MPa (15 kgf/cm <sup>2</sup> )
<b>Seal material</b>	Nitrile rubber

# QUICK CONNECT COUPLINGS FOR PNEUMATIC TOOLS

## LINE CUPLA



- Enables several air lines to be taken simultaneously from one supply line
- Just push in the plug into socket for simple and secure connection
- Choose from the 2-outlet type (Model 200T), the 5-outlet straight type (Model 200L) and the 5-outlet star type (Model 200S) to suit your application

### Specifications

Body material	Aluminum
CUPLA	Steel (Chrome-plated)
Working pressure	1.5 MPa (15 kgf/cm <sup>2</sup> )
Seal material	Nitrile rubber

## HI CUPLA BL



- Sleeve-lock mechanism prevents accidental disconnection
- Critical structural parts made of steel are heat-treated for increased strength giving greater durability and resistance to wear
- SN-BL type for connection to urethane hose requires no hose clamp

### Specifications

Body material	Steel (Chrome-plated), Stainless steel
Working pressure	1.5 MPa (15 kgf/cm <sup>2</sup> )
Seal material	Nitrile rubber

## PURGE PLUG



- Eliminates an unpleasant popping noise and accidental hose whip on disconnection
- Unique design of air purge system enables the residual pressure release quickly and quietly.
- The function is assured even under a high supply pressure or with a long hose

### Specifications

Body material	Steel (Chrome-plated)
Working pressure	1.0 MPa (10 kgf/cm <sup>2</sup> )
Seal material	Nitrile rubber

## ANTI-VIBRATION PLUG HOSE

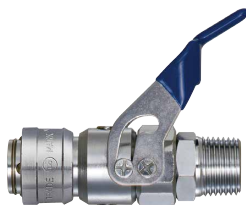


- Protects the "CUPLA" from shock generated by vibrating tools and impact tools
- Prevents hard-to-notice flow reduction caused by "CUPLA" wear under continuous vibration
- Flexible rubber hose allows free and wide range of tool motion.

### Specifications

Size (Thread)	R 1/4", R 3/8"
Inlet (Plug)	HI CUPLA (30PH)
Overall length	320 mm

## PURGE HI CUPLA



- Just push in the plug for connection regardless of internal pressure in socket
- Eliminates an unpleasant popping noise and accidental hose whip on disconnection
- Even after connection, lever operation gives perfect control over valve opening/closing

### Specifications

Body material	Brass (Chrome-plated)
Working pressure	1.0 MPa (10 kgf/cm <sup>2</sup> )
Seal material	Nitrile rubber

## ROTARY LINE CUPLA



- Multiple outlets are available from single air supply source.
- Sideway air outlets are rotatable to any angle. Possible hose twists can be eliminated by the swivel mechanism
- Choose either RT type (2 outlets) or RE type (3 outlets) to suit you application

### Specifications

Body material	Body: Brass (Chrome-plated), CUPLA: Steel (Chrome-plated)
Working pressure	1.5 MPa (15 kgf/cm <sup>2</sup> )
Seal material	Nitrile rubber

# Nitto Kohki's Labor Saving Products

Nitto Kohki is capturing the needs of users by introducing to the world not only "machine tools and power "CUPLA" quick connect couplings, and linear-motor-driven piston "compressors/vacuum pumps".

## Professional Tools for Assembling High-Technology Goods

Electric screwdriver "delvo" is the high quality tool for professional use, with special emphasis on precise torque control and long-term reliability. "delvo" give you the ability to get it right, every time.

### Delvo Brushless Type C series (DLV45C)



DLV45C12L



DLV45C12P



DCC0241X

- Torque range: 0.6 - 4.5 Nm
- Speed: 100 - 1200 min<sup>-1</sup>
- Machine screw size: 3.0 - 6.0 mm
- Current controlled torque system
- Build-in screw counting function
- Thirty different torque setting can be set on a single screwdriver.

### Delvo Brushless Type C series (DLV04C/DLV10C)

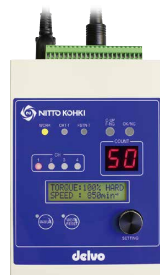


DLV04C10L



DLV10C10L

DCC0101X



- Torque range: 0.05 - 1.0 Nm
- Speed: 100 - 1000 min<sup>-1</sup>
- Machine screw size: 1.2 - 4.0 mm
- Current controlled torque system
- Build-in screw counting function

### Delvo Brushless Type S series (DLV30S/DLV45S/DLV70S)



DLV30S06P



DLV30S12P



DLV30S20L



DEA0151N-AZ



DEA0241N-AZ

- Torque range: 0.4 - 7.0 Nm
- Speed: 160 - 2000 min<sup>-1</sup>
- Machine screw size: 2.6 - 8.0 mm
- Automatic speed control function
- Setting with the Remote Controller
- Build-in screw counting function

### Delvo Brushless Type A series (DLV30A/DLV45A/DLV70A)



DLV30A06P



DLV30A12L



DLV30A20P



DLV45A12L

- Torque range: 0.4 - 7.0 Nm
- Speed: 650 - 2000 min<sup>-1</sup>
- Machine screw size: 2.6 - 8.0 mm
- Brushless motor and newly designed clutch provide a more consistent torque output over the life of the tool
- More accurate torque control and considerably quieter operation when compared to pneumatic screwdrivers

\*For more information, please visit <http://www.nitto-kohki.co.jp/e/> and see our eCatalog here.



# Nitto Kohki's Labor Saving Products

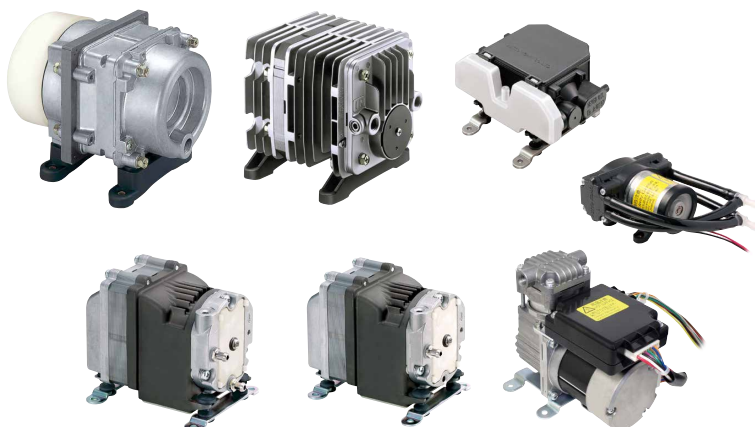
tools”, but also next-generation laborsaving devices, including high precision “delvo” electric screw drivers,

## Nitto Kohki's Compressors and Vacuum Pumps will enhance your system flexibility

Nitto Kohki offers a lineup of various types of compressors and pumps. These include linear-driven, electro-magnetic diaphragm, DC, and “bimorph” piezoelectric products. Our compressors and pumps are renowned for being compact and lightweight as well as for their low noise level, clean operation and durability for longer life. In further applying these technologies, we are also expanding applications to various fields that include medical, well-being, health devices and environment related equipment.

- AC Linear Free Piston Compressor**
- AC Linear Free Piston Vacuum Pump**
- DC Linear Free Piston Compressor**
- DC Linear Free Piston Vacuum Pump**
- AC Linear Diaphragm Pump**
- DC Diaphragm Pump**
- DC Piston Pump**

- Compact, lightweight, low vibration, low noise level, clean operation and longer durability



### Piezoelectric Pump

- Compact, lightweight, durable and quiet
- Low power consumption and electromagnetic noise



### DC Diaphragm Liquid Pump

- Built-in pulse absorption chamber
- Many build material options for different liquids
- Self-priming type with air suction acceptable



### AC Linear Free Piston Blower

- Linear blowers for aeration
- Low noise and easy maintenance



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>).

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