Cat.No.**Tk083p**





Nitto Kohki's POVJER TOOLS

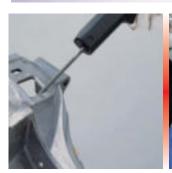
Pneumatic & Electric

















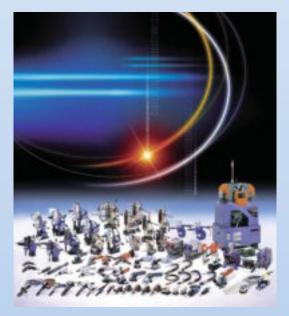


Pneumatic & Electric Power Tools,Labor-saving plusImprovedWork Efficiency!NEEDLE SCALER

POWER TOOLS







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

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

HI CUPLA Series

Machine Tools

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

NOTES ON USING TOOLS - Important Safety Instructions

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| Surface sanding of pre-welded part | Ground work sanding | Trimming, surface finishing of die-casting | Correction of grinding (finish works) | Precision finishing | Precision sanding | Surface sanding of constructed materials | 15 |
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2

NEEDLE SCALER JET CHISEL

JET CHISEL

Powerful scaling with multi-needles

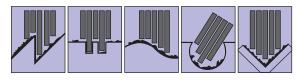


Never skips a blow, cleans and descales all jobs fast. Gets into extremely restricted areas...

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

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

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



Shot Peening Effect

Reinforcement of a welded part with the shot peening effect increases strength by imparting residual stress to the surface of the workpiece through the high speed impact of the needles. Highly suitable for effective reinforcement of deteriorated welded parts. Full Automatic System The only unit of it's kind on the market without springs. This means no springs to break...no irregular power... and the advantage of low air consumption.









Specifications

| Model | AJC-16 | JT-20 | JEX-20 |
|---|---|---|---|
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | 0.6 {6} | 0.6 {6} |
| Air Consumption (No load) m³/min | 0.07 | 0.2 | 0.2 |
| Stroke Speed min ⁻¹ | 6,000 | 4,000 | 4,000 |
| Needle qty | OD 2 × 7 pcs. or OD 3 × 3 pcs. | OD 2 × 29 pcs. or OD 3 × 12 pcs. | OD 2 \times 29 pcs. or OD 3 \times 12 pcs. |
| Hose Size inch | 3/8 | 3/8 | 3/8 |
| Mass (Weight) kg | 0.98 | 2.4 | 2.75 |
| | 1 | 1 | |
| Standard Accessories | Needle OD 3 mm × 180 mm : 3 pcs. (Needle OD 3 mm × 180 mm : 3 pcs. on the body) Bushing R 3/8 × NPT 3/8 : 1 pc. Hose Nipple R 3/8 × 3/8 : 1 pc. | Needle OD 3 mm × 180 mm : 12 pcs. (Needle OD 3 mm × 180 mm : 12 pcs. on the body) Bushing R 3/8 × NPT 3/8 : 1 pc. Hose Nipple R 3/8 × 3/8 : 1 pc. | Needle OD 3 mm × 180 mm : 12 pcs. (Needle OD 3 mm × 180 mm : 12 pcs. on the body) Bushing R 3/8 × NPT 3/8 : 1 pc. Hose Nipple R 3/8 × 3/8 : 1 pc. |

SCALING

NEEDLE SCALER JET CHISEL

173 mm



Specifications

| Model | JC-16 | JEX-24 | JEX-28 | JEX-2800A | | | |
|---|--|--|---|--|--|--|--|
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | | | | | | |
| Air Consumption (No load) m ³ /min | 0.15 | 0.27 | 0.35 | 0.43 | | | |
| Stroke Speed min ⁻¹ | 4,000 | 4,000 | 4,500 | 3,700 | | | |
| Needle qty | OD 2 × 29 pcs. | OD 2 × 53 pcs. or OD 3 × 23 pcs. | OD 2 × 66 pcs. or OD 3 × | 28 pcs. or OD 4 × 14 pcs. | | | |
| Hose Size inch | | 3, | /8 | | | | |
| Mass (Weight) kg | 1.4 | 2.7 | 3.5 | 3.1 | | | |
| Standerd Accessories | • Needle OD 2 mm × 150 mm : 58 pcs. (Needle OD 2 mm × 150 mm : 29 pcs. on the body) • Bushing R 3/8 × NPT 3/8 : 1 pc. • Hose Nipple R 3/8 × 3/8 : 1 pc. | Needle OD 3 mm × 180 mm : 23 pcs. on the body 6 mm Hex. Socket Screw Key : 1 pc. Bushing R 3/8 × NPT 3/8 : 1 pc. Hose Nipple R 3/8 × 3/8 : 1 pc. | Needle OD 4 mm × 180 mm : 14 pcs. Needle OD 3 mm × 180 mm : 28 pcs. on the body Needle Supporter OD 4 mm : 1 pc. 6 mm Hex. Socket Screw Key : 1 pc. Bushing R 3/8 × NPT 3/8 : 1 pc. Hose Nipple R 3/8 × 3/8 : 1 pc. | Needle OD 4 mm × 180 mm : 14 pcs. Needle OD 3 mm × 180 mm : 28 pcs. on the body Needle Supporter OD 4 mm : 1 pc. Bushing R 3/8 × NPT 3/8 : 1 pc. Hose Nipple R 3/8 × 3/8 : 1 pc. | | | |

Electric

225 mm

Electric Needle Scaler Model EJC-32A

520 mm

• Needle OD 3 mm × 180 mm : 30 pcs.

(Needle OD 3 mm × 180 mm : 15 pcs. on the body) • 6 mm Hex. Socket Screw Key : 1 pc.

The same excellent performance as our air tool!

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

Specifications

٦Г

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

Optional Needles

Standard Accessories

CE 230 V AC only



| 11 | Qty | Description | PN |
|-----|----------|-------------------------|---------|
|][1 | 100 pcs. | Needle OD 2 mm × 150 mm | TA98780 |
| 1 | 100 pcs. | Needle OD 2 mm × 180 mm | TA98781 |
|][] | 50 pcs. | Needle OD 2 mm × 300 mm | TA9A213 |
| 11 | 50 pcs. | Needle OD 2 mm × 500 mm | TA9A214 |
| 16 | 100 pcs. | Needle OD 3 mm × 180 mm | TA98782 |
|][1 | 50 pcs. | Needle OD 3 mm × 300 mm | TA9A216 |
| 16 | 50 pcs. | Needle OD 3 mm × 500 mm | TA9A217 |
|][1 | 50 pcs. | Needle OD 3 mm × 800 mm | TA9A218 |
| 15 | 50 pcs. | Needle OD 4 mm × 180 mm | TA98783 |
| 1 1 | 50 pcs. | Needle OD 4 mm × 300 mm | TA9A220 |
| 15 | 50 pcs. | Needle OD 4 mm × 500 mm | TA9A221 |
| 1 | | | |
| | | | |

| PN | Description | Qty | Model | |
|---------|--------------------------|-------|----------------------|--|
| TP00338 | Needle Supporter OD 2 mm | 1 pc. | JT-20, | |
| TP00337 | Needle Supporter OD 3 mm | 1 pc. | JEX-20 | |
| TQ05210 | Needle Supporter OD 2 mm | 1 pc. | AJC-16 | |
| TQ04554 | Needle Supporter OD 3 mm | 1 pc. | AJU-10 | |
| TP00290 | Needle Supporter OD 2 mm | 1 pc. | JC-16 | |
| TP02244 | Needle Supporter OD 2 mm | 1 pc. | JEX-24 | |
| TP02245 | Needle Supporter OD 3 mm | 1 pc. | JLX-24 | |
| TP01499 | Needle Supporter OD 2 mm | 1 pc. | | |
| TP01461 | Needle Supporter OD 3 mm | 1 pc. | JEX-28, JEX-2800A | |
| TP01462 | Needle Supporter OD 4 mm | 1 pc. | OEN LOOON | |
| TP16475 | Needle Supporter OD 2 mm | 1 pc. | E IC-32A | |
| TP16301 | Needle Supporter OD 3 mm | 1 pc. | EJC-32A | |

AIR HAMMER AUTO CHISEL

AUTO CHISEL

A special spool valve inside grip assures excellent durability



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

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

| Specification | S |
|---------------|---|
|---------------|---|

| • | |
|---|---------|
| Model | A-300 |
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} |
| Air Consumption (No load) m³/min | 0.3 |
| Stroke Speed min ⁻¹ | 2,600 |
| Hose Size inch | 1/4 |
| Mass (Weight) kg | 1.7 |

Optional Attachments

Standard Accessories

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

• Bushing R 1/4 × NPT 1/4 : 1 pc.

• Hose Nipple R 1/4 × 1/4 : 1 pc.

Applications and wide variety of optional attachments



PNEUMATIC SCALER SUPER KELEN

SCALING

SUPER KELEN Industrial and shipboard descaling and cleaning



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

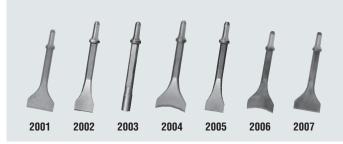
Removes old paint and rust, dislodges solid matter or scale tar. Removes concrete adhering to panels, conveyors, mixers. Strips off bark from lumber, and scores of other applications.



Specifications

| opcontoutions | | | | |
|-------------------------|-------------------|--|--|--|
| Model | | S-250 | S-500 | S-1000 |
| Rated Air Pressure Mi | Pa {kgf/cm²} | 0.6 {6} | 0.6 {6} | 0.6 {6} |
| Air Consumption (No loa | d) m³/min | 0.27 | 0.27 | 0.27 |
| Stroke Speed | min ⁻¹ | 2,500 | 2,500 | 2,500 |
| Size of Chisel Shank | mm | 12.7 | 12.7 | 12.7 |
| Hose Size | inch | 3/8 | 3/8 | 3/8 |
| Dimension | mm | 630 × 49 | 890 × 49 | 1,470 × 49 |
| Mass (Weight) | kg | 4.1 | 4.7 | 6.1 |
| Standard Accessori | ies | 38 mm Bend Scraper (No.2005) : 1 pc. on the body Hose Lock Nut M16 : 1 pc. Hose Nipple 3/8 : 1 pc. | 38 mm Bend Scraper (No.2005) : 1 pc. on the body Hose Lock Nut M16 : 1 pc. Hose Nipple 3/8 : 1 pc. | 38 mm Bend Scraper (No.2005) : 1 pc. on the body Hose Lock Nut M16 : 1 pc. Hose Nipple 3/8 : 1 pc. |

Optional Chisels



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

SCALING

AIR CHIPPER Now chipping after welding is easy!



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

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

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





Specifications

| opeenications | | |
|---|--|---|
| Model | ACH-16 | CH-24 |
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | 0.6 {6} |
| Air Consumption (No load) m³/min | 0.15 | 0.2 |
| Stroke Speed min ⁻¹ | 6,000 | 4,000 |
| Size of Chisel Shank mm | OD 10.5 | 12.7 sq. |
| Hose Size inch | 3/8 | 3/8 |
| Mass (Weight) kg | 0.9 | 1.7 |
| Standard Accessories | Flat Chisel 20 × 120 : 1 pc. on the body Bushing R 3/8 × NPT 3/8 : 1 pc. Hose Nipple R 3/8 × 3/8 : 1 pc. | Curved Flat Chisel 25 × 155 : 1 pc. on the body Bushing R 3/8 × NPT 3/8 : 1 pc. Hose Nipple R 3/8 × 3/8 : 1 pc. |

Optional Chisels



Chisel for Air Chipper ACH-16

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

Chisel for Air Chipper CH-24

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

TP15234 TP15233 TP15166

PNEUMATIC GRINDER **MYTON**

GRINDING & SANDING



Specifications

| Model | MLG-25 | MLG-40 | MAGW-40 |
|-----------------------------------|--|---|---|
| Rated Air Pressure MPa {kgf/cn | 0.6 {6} | 0.6 {6} | 0.6 {6} |
| Air Consumption m³/m | n 0.42 | 0.45 (No Load) 0.91 (Load) | 0.68 (No load) 0.82 (Load) |
| Free Speed min ⁻¹ (rpr |) 19,000 | 13,000 | 13,000 |
| Depressed Center Grinding Wheel m | n 58 | 100 | 100 |
| Hose Size ind | h 1/4 | 3/8 | 3/8 |
| Mass (Weight) | g 0.6 | 1.5 | 1.55 |
| Standard Accessories | Green Disc GS #80 : 1 pc. 5 mm Hex. Socket Screw Key : 1 pc. 19 mm Single Ended Spanner : 1 pc. Bushing R 1/4 × NPT 1/4 : 1 pc. | 6 mm Hex. Socket Screw Key : 1 pc. Bushing R 3/8 × NPT 3/8 : 1 pc. | 6 mm Hex. Socket Screw Key : 1 pc. 17 mm Single Ended Spanner : 1 pc. Bushing R 3/8 × NPT 3/8 : 1 pc. |





Specifications

| opeenieuliene | | | |
|---|--|---------------------------|---|
| Model | MAG-50 | MLG-70 Lever Type | MLG-70 Ring Type |
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | 0.6 {6} | |
| Air Consumption (No load) m³/min | 0.87 | 0.75 (No load) 1.1 (Load) | |
| Free Speed min ⁻¹ (rpm) | 12,000 | 7,600 | |
| Depressed Center Grinding Wheel mm | 125 | 180 | |
| Hose Size inch | 3/8 | 3/8 | |
| Mass (Weight) kg | 2.2 | 2.45 | 2.25 |
| | • Air Hose Sub Ass'y : 1 set • Exhaust Hose Ass'y : 1 set | | et Screw Key : 1 pc. ket Screw Key : 1 pc. |

Standard Accessories Side Handle Ass'y : 1 set • Side Handle Ass'y : 1 set • Side Kandle Ass'y : 1 set

- Bushing R 3/8 × NPT 3/8 : 1 pc.
- Handle Ass'y : 1 set.
- Wheel Guard Ass'y : 1 set

GRINDING & SANDING

PNEUMATIC SANDER **MYTON**







Model



Specifications

| Model | MAS-20B | MAS-40 | MAS-70 |
|---|--|---------|---|
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | 0.6 {6} | 0.6 {6} |
| Air Consumption (No load) m³/min | 0.4 | 0.45 | 0.98 |
| Free Speed min ⁻¹ (rpm) | 22,000 | 13,700 | 7,500 |
| Abrasive Disc | 1" , 1 - 1/2" and 2" | 100 mm | 180 mm |
| Hose Size inch | 1/4 | 3/8 | 3/8 |
| Mass (Weight) kg | 0.5 | 0.9 | 1.9 |
| Standard Accessories | 14 mm Single Ended Spanner : 1 pc. Cupla 20SH : 1 pc. Bushing R 1/4 × NPT 1/4 : 1 pc. Back-up Pad 1" : 1 pc. Back-up Pad 1 - 1/2" : 1 pc. Back-up Pad 2" : 1 pc. Back-up Pad 2" : 1 pc. Abrasive Paper 1: 1/2 * #60, #100, #120 : 2 pcs. each Abrasive Paper 1: 1/2 * #60, #80, #100, #120 : 2 pcs. each | | 10 mm Hex. Socket Screw Key : 1 pc. 41 mm Single Ended Spanner : 1 pc. Hose Nipple NPT 3/8 × 3/8 : 1 pc. Bushing M16 × NPT 3/8 : 1 pc. |

Optional Parts

Green Discs for MYTON MLG-25

| | PN | Description | Qty |
|---|-------------|---------------------|---------|
| 0 | TB08872 | GS#46 × 58 mm | 5 pcs. |
| | TB08873 | GS#60 × 58 mm | 5 pcs. |
| | TB08874 | GS#80 × 58 mm | 10 pcs. |
| | TB08875 | GS#100 × 58 mm | 5 pcs. |
| | TB08876 | GS#120 × 58 mm | 5 pcs. |
| | * Croon Die | an annat ha ugad an | MAC OF |

Disc Pad for MYTON MAS-20B

| ſ | E. | ſ |
|----------|----------|---|
| | | |
| <u> </u> | <u> </u> | |
| | | |

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

* Green Discs cannot be used on MAG-25.

1" Paper for MYTON MAS-20B



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

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

| A CONTRACTOR OF THE OWNER | |
|---------------------------|--|
| 64 BB - 15 - 15 | |
| and Guman | |
| | |

2" Paper for MYTON MAS-20B



| TA9B101 | Paper 1" × #40 | 25 pcs. |
|---------|-----------------|---------|
| TA9B102 | Paper 1" × #60 | 25 pcs. |
| TA9B103 | Paper 1" × #80 | 25 pcs. |
| TA9B104 | Paper 1" × #100 | 25 pcs. |
| | | |

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

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

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

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

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

AIR SONIC



The perfect tool for all tasks!

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

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

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





Specifications

| Model | | L-25B | L-35C | |
|-------------------------|----------------------------|--|---|--|
| Rated Air Pressure | MPa {kgf/cm ² } | 0.6 {6} | | |
| Air Consumption (No loa | ad) m³/min | 0.4 | 0.35 | |
| Free Speed | min ⁻¹ (rpm) | 27,000 37,500 | | |
| Size of Collet Chuck | mm | 6 | | |
| Hose Size | inch | 1/4 | | |
| Mass (Weight) kg | | 0.6 (without hose) | 0.45 (without hose) | |
| Standard Accessor | ies | 14 mm Single Ended Spanner : 1 pc. Mounted Wheel No.2 : 1 pc. Chuck Pin : 1 pc. Mounted Wheel No.3 : 1 pc. Bushing R 1/4 × NPT 1/4 : 1 pc. | 14 mm Single Ended Spanner : 1 pc. Mounted Wheel 13 × 13 × 6 × 38 : 1 pc. Bushing R 1/4 × NPT 1/4 : 1 pc. | |

Model

Optional Accessories

| optional noot | | | | _ | | | | |
|---|----------------|----------------|----------------|------------------|-----------------|-----------------|-----------------|-----------------|
| Mounted Wheel for AIR SONIC L-25B (5 pcs/set) | | | | Rotary Bar for A | IR SONIC L-35C | (1 pc.) | | |
| No.1 : 16 × 32 | No.2 : 16 × 32 | No.3 : 19 × 20 | No.4 : 25 × 25 | | No.1 : CB1C-106 | No.2 : CB2C-105 | No.3 : CB3C-103 | No.4 : CB4C-103 |
| | | | | | | | | |
| PN : TA9A277 | PN : TA9A278 | PN : TA9A279 | PN : TA9A280 | | PN : TP10594 | PN : TP10595 | PN : TP10596 | PN : TP10597 |
| No.5 : 19 × 28 | No.6 : 25 × 13 | No.7 : 32 × 10 | No.8 : 16 ball | | No.5 : CB5C-104 | No.6 : CB6C-102 | No.7 : CB7C-103 | No.8 : CB8C-105 |
| | | | | | | | | |
| PN : TA9A281 | PN : TA9A282 | PN : TA9A283 | PN : TA9A284 | | PN : TP10598 | PN : TP10599 | PN : TP10600 | PN : TP10601 |

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

AL-55 High Speed Rotation 56,500 rpm $\mathbb{C}\in$



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



Specifications

| Model | AL-55 | | |
|---|---|--|--|
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | | |
| Air Consumption (No load) m³/min | 0.17 | | |
| Free Speed min ⁻¹ (rpm) | 56,500 | | |
| Size of Collet Chuck mm | 3 | | |
| Hose Size inch | 1/4 | | |
| Mass (Weight) kg | 0.25 | | |
| | • Mounted Wheel $5 \times 13 \times 3$: 1 pc. • Spanner 7×9 : 1 pc. • Bushing R 1/4 × NPT 1/4: 1 pc. | | |

The power and performance you need to drill deeper and faster





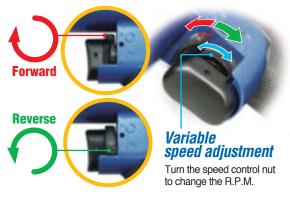
AIR DRIL



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

Reversible

Change rotation direction by turning the valve as indicated.



Specifications

| Model | ADR-65 | ADR-100 | |
|---|---|---------------------------|--|
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | 0.6 {6} | |
| Air Consumption (No load) m³/min | 0.55 | 0.67 | |
| Free Speed min ⁻¹ (rpm) | 2,900 | 2,000 | |
| Max. Drilling Capacity mm | 6.5 | 10.0 | |
| Mass (Weight) kg | 0.8 | 1.1 | |
| Standard Accessories | • Drill Chuck : 1 pc. on the body • Chuck Handle : 1 pc. • Bushing R 1/4 × NPT 1/4 : 1 pc. • 30SH : 1 pc. | | |
| Optional Accessory | Hanger : 1 pc. *A hanger to be mounted is available as option. | on the bottom of the grip | |

12

PNEUMATIC BELT SANDER BELTON

SANDING

BELTON Rear exhaust system

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





Specifications

| opounioacióno | | | | |
|---|---|---|--|---|
| Model | B-10N B-20N B-20NB | | B-30N | |
| Rated Air Pressure MPa {kgf/cm ² } | Rated Air Pressure MPa (kgf/cm ²) 0.6 {6} | | 0.6 {6} | 0.6 {6} |
| Air Consumption (No load) m ^{3/min} | 0.4 | 0.52 | 0.52 | 0.68 |
| Motor Free Speed min ⁻¹ (rpm) | 17,000 | 17,000 | 17,000 | 14,000 |
| Belt Speed m/min | 1,120 | 2,620 | 2,620 | 2,160 |
| Belt Size mm | 10 × 330 | 20 × 520 | 20 × 520 | 30 × 540 |
| Hose Size inch | ose Size inch 1/4 | | 1/4 | 1/4 |
| Mass (Weight) kg | 0.7 | 1.2 | 1.2 | 2.4 |
| Standard Accessories | Abrasive Belt Z#60 × 10 mm :2 pcs. (1 pc. on the body) Abrasive Belt Z#80 × 10 mm :1 pc. Abrasive Belt Z#100 × 10 mm :1 pc. Abrasive Belt Z#120 × 10 mm :1 pc. *2 mm Hex. Wrench Key :1 pc. Bushing R 1/4 × NPT 1/4 :1 pc. Sliencer :1 pc. | Abrasive Belt Z#60 × 20 mm :2 pcs. (1 pc. on the body) Abrasive Belt Z#60 × 20 mm :1 pc. Abrasive Belt Z#100 × 20 mm :1 pc. Abrasive Belt Z#120 × 20 mm :1 pc. 2.5 mm Hex. Wrench Key :1 pc. 4 mm Hex. Wrench Key :1 pc. 4 mm Hex. Wrench Key :1 pc. Gonvex Shoe :1 pc. Finger Pad Assy :1 pc. Pan Head Screw 5 × 10 :1 pc. Pan Head Screw 5 × 10 :1 pc. | Abrasive Belt Z#60 × 20 mm :2 pcs. (1 pc. on the body) Abrasive Belt Z#00 × 20 mm :1 pc. Abrasive Belt Z#100 × 20 mm :1 pc. Abrasive Belt Z#120 × 20 mm :1 pc. Abrasive Belt Z#120 × 20 mm :1 pc. A mn Hex. Wrench Key :1 pc. A mn Hex. Wrench Key :1 pc. Bushing R 1/4 × NPT 1/4 :1 pc. Convex Shoe :1 pc. Finger Pad Ass'y :1 pc. Pan Head Screw 5 × 10 :1 pc. Pan Head Screw 5 × 10 :1 pc. | Abrasive Belt Z#60 × 30 mm :2 pcs. (1 pc. on the body) Abrasive Belt Z#80 × 30 mm :1 pc. Abrasive Belt Z#100 × 30 mm :1 pc. 4 mm Hex. Wrench Key :1 pc. 5 mm Hex. Wrench Key :1 pc. Bushing R 1/4 × NPT 1/4 :1 pc. Sub Handle Ass'y :1 set Grip Guard :1 pc. Silencer :1 pc. |

Optional Parts

Optional Parts for B-10N

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

Ahrasive Belt for R-10N

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

Ontional Parts for B-20N/B-20NB

| Optional P | arts for B-20N/B-20NB | NB | | Optional Parts for B-30N | |
|------------|-------------------------|-------|--|--------------------------|-------------------------|
| PN | Description | Qty | | PN | Description |
| TB07109 | Offset Bracket 20 Ass'y | 1 set | | TB08150 | Offset Bracket 30 Ass'y |

asive Belt for R-20N/R-20NR

| ADRASIVE BEIT FOR B-ZUN/B-ZUNB | | | | |
|--------------------------------|------------------------------|---------|--|--|
| PN | Description | Qty | | |
| TA99605 | Abrasive Belt Z#40 × 20 mm | 20 pcs. | | |
| TA99606 | Abrasive Belt Z#60 × 20 mm | 20 pcs. | | |
| TA99607 | Abrasive Belt Z#80 × 20 mm | 20 pcs. | | |
| TA99608 | Abrasive Belt Z#100 × 20 mm | 20 pcs. | | |
| TA99609 | Abrasive Belt Z#120 × 20 mm | 20 pcs. | | |
| TB00250 | Abrasive Belt Z#180 × 20 mm | 20 pcs. | | |
| TB00251 | Abrasive Belt Z#240 × 20 mm | 20 pcs. | | |
| TA9A252 | Abrasive Belt AA#280 × 20 mm | 20 pcs. | | |
| TA9A253 | Abrasive Belt AA#320 × 20 mm | 20 pcs. | | |
| TA9A254 | Abrasive Belt AA#400 × 20 mm | 20 pcs. | | |

Dalk far D 20M

- -. .

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

Qty 1 set

SANDING

PNEUMATIC BELT SANDER BELTON

BABY BELTON



Belt rotation direction can be changed.



Forward



Reverse

Model BB-10A Belt Size 246 mm 79 mm CE



Specifications

| Model | BB-10A | BB-20 |
|---|---|---|
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | 0.6 {6} |
| Air Consumption (No load) m ³ /min | 0.25 | 0.43 |
| Motor Free Speed min ⁻¹ (rpm) | 16,000 | 16,000 |
| Belt Speed m/min | 1,000 | 1,100 |
| Belt Size mm | 10 × 330 | 20 × 330 |
| Hose Size inch | 1/4 | 1/4 |
| Mass (Weight) kg | 0.6 | 0.8 |
| Standard Accessories | Abrasive Belt Z#100 × 10 mm :1 pc. (on the body) Abrasive Belt Z#120 × 10 mm :1 pc. Abrasive Belt Z#180 × 10 mm :1 pc. Abrasive Belt Z#240 × 10 mm :1 pc. 1.5 mm Hex. Wrench Key :1 pc. Cupla HA-65SN :1 pc. | Abrasive Belt Z#60 × 20 mm:1 pc. (on the body) Abrasive Belt Z#120 × 20 mm:1 pc. Abrasive Belt Z#240 × 20 mm:1 pc. 2.5 mm Hex. Wrench Key :1 pc. Gupla HA-65SN:1 pc. Shoe:1 pc. - Dust Cover:1 pc. |

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



Optional Parts For BABY BELTON Abrasive Belt for BB-10A

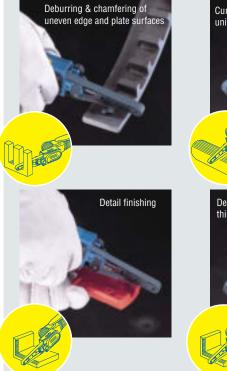
| ADIASIVE DEILIOI DD-TOA | | | | |
|-------------------------|------------------------------|---------|--|--|
| PN | Description | Qty | | |
| TA9A064 | Abrasive Belt Z#60 × 10 mm | 50 pcs. | | |
| TB00076 | Abrasive Belt Z#80 × 10 mm | 50 pcs. | | |
| TB00077 | Abrasive Belt Z#100 × 10 mm | 50 pcs.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

Abrasive Belt for BB-20

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

00 is Aluminium Belt









PNEUMATIC COMPACT SANDER PALM ORBITAL SANDER SANDING

ORBITAL SANDER Compact yet extremely powerful. Built-in adjustable speed regulator



Random orbital action creates a professional finish

The special construction includes the mounting of counter shaft below the rotor. This works in combination with the spindle and circular motions for an extra-fine finish. Speed adjustments

allow selection for the best speed for the best job. Random orbital action eliminates swirl patterns and is suitable for polishing, too.



ÖSV-60A CE



Sand and polish metal, wood, plastic to a super fine swirl-free finish. Light weight, compact, powerful, whisper quiet, and adjustable speed regulator.

Productivity and efficiency increase with the orbital sander. The lightweight unit delivers the performance of heavy duty unit with less vibration and reduced operator fatique.

Snecifications

| Model | OSV-60A | | |
|---|-----------------------|--|--|
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | | |
| Air Consumption (No load) m³/min | 0.68 | | |
| Motor Free Speed min ⁻¹ (rpm) | 8,500 | | |
| Orbit Diameter mm | 10 | | |
| Paper Size mm | 150 | | |
| Mass (Weight) kg | 2.0 | | |
| Pad | for self stick papers | | |

Standard Accessories

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

- Hose : 1 pc.
 Hose Band : 1 pc.

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



APS-125/150 CE Self Vacuum 145 mm

For Self Vacuum & Central Vacuum

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

Central Vacuum





Non Vacuum

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

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

Applications

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

| Specifications | | | | |
|--|--|--|--|--|
| APS-125 | APS-150 | | | |
| 0.6 {6} | 0.6 {6} | | | |
| 0.45 | 0.45 | | | |
| 10,000 | 10,000 | | | |
| 5 | 5 | | | |
| 125 | 150 | | | |
| 0.69 | 0.72 | | | |
| 0.10 | 0.12 | | | |
| • Spanner 17 : 1 pc • Bushing R 1/4 × N | | | | |
| | 0.6 {6} 0.45 10,000 5 125 0.69 0.10 • Spanner 17 : 1 pc | | | |

SANDING

HANDY PNEUMATIC SANDER FREE SANDER

FREE SANDER

Superlight, Quiet New low-vibration sander



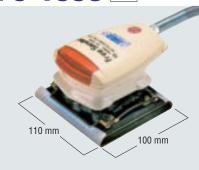
Small and Lightweight for Comfort and Convenience

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

Minimized Hand Vibration

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

FS-100C CE



FS-50A CE





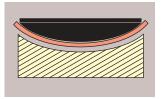
Powerful turbine motor

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

Specifications

| Model | FS-100C | FS-50A |
|---|---|---|
| Rated Air Pressure MPa {kgf/cm ² } | 0.6 {6} | 0.6 {6} |
| Air Consumption (No load) m³/min | 0.2 | 0.14 |
| Motor Free Speed min ⁻¹ | 20,000 | 15,000 |
| Orbit Diameter mm | 1.5 | 1.2 |
| Pad Size mm | 100 × 110 | 75 × 82 |
| Paper Size mm | 114 × 140 | 70 × 114 |
| Mass (Weight) kg | 0.5 | 0.5 |
| Standard Accessories | • Air Hose H Ass'y : 1 set • Bushing R 1/4 × NPT 1/4 : 1 pc. • Abrasive paper #180 : 5 pcs. • Abrasive paper #240 : 5 pcs. | • Air Hose H Ass'y : 1 set • Bushing R 1/4 × NPT 1/4 : 1 pc. • Abrasive paper #180 : 5 pcs. • Abrasive paper #240 : 5 pcs. |

Optional Accessories



Round-Pad for FS-100C The pad is made of sponge rubber and conform easily to the shape being worked. Double-side tape is used with round pad.

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

For Free Sander FS-50A

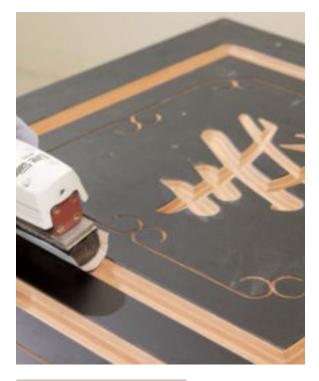
| FUI FIEE Salluel FS-SUA | | | | |
|-------------------------|----------------------|-------|--|--|
| PN | Description | Qty | | |
| TA99828 | Rubber Pad Ass'y | 1 pc. | | |
| TB02240 | Dust Collector Ass'y | 1 pc. | | |

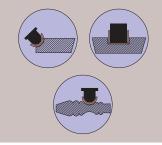
PNEUMATIC RECIPROCATING SANDER LINE SANDER

SANDING

LINE SANDER

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





Special Sanding Pad

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

| Standard Accessories | Hose E Ass'y : 1 set Bushing R 1/4 × NPT 1/4 : 1 pc. Block Rubber Pad Ass'y : 1 set Abrasive Paper #240 : 5 pcs. Abrasive Paper #320 : 5 pcs. Base Plate A Ass'y : 1 set |
|----------------------|---|
|----------------------|---|

Optional Accessories

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



Light sanding with piston movement

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



Double Piston Alignment

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

Specifications

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

Super efficient way of easy

filing, polishing and finishing

SUPER HAND



SUPER HAND replaces work.

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

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

Model SH-100A CE







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

Rat Tail File SF-10



| Specifications | | | | |
|----------------------------------|---|---|--|--|
| Model | SH-100A | ASH-900 | | |
| Rated Air Pressure MPa {kgf/cm²} | 0.6 {6} | 0.6 {6} | | |
| Air Consumption (No load) m³/min | 0.24 | 0.2 | | |
| Stroke Speed min ⁻¹ | 3,700 | 6,300 | | |
| Stroke mm | 9 | 9 | | |
| Max. Shank dia. of Points mm | 6.3 | 5.0 | | |
| Mass (Weight) kg | 1.1 | 0.5 | | |
| Standard Accessories | Flat Bastard File SF-13: 1 pc. Rat Tail File SF-10: 1 pc. Triangular Taper File SF-11: 1 pc. Half Rounded File (Rat Tail/Double Cut) SF-12: 1 pc. 3 mm Hex. Socket Screw Key: 1 pc. Bushing R 1/4 × NPT 1/4: 1 pc. | Flat Bastard File SF-13 : 1 pc. Rat Tail File SF-10 : 1 pc. Triangular Taper File SF-11 : 1 pc. Half Rounded File (Rat Tail/Double Cut) SF-12 : 1 pc. 2.5 mm Hex. Socket Screw Key : 1 pc. Bushing R 1/4 × NPT 1/4 : 1 pc. | | |

Optional Accessories

Rubber Pad Ass'y for SH-100A



Sanding Pad Ass'y for ASH-900

For Super Hand SH-100A & ASH-900

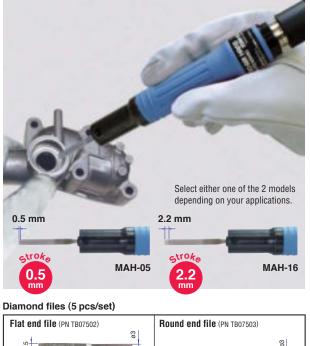
| PN | Description | Qty | | | | | | |
|---------|--|--------|--|--|--|--|--|--|
| TA9A222 | Rat Tail SF-10 | 5 pcs. | | | | | | |
| TA9A223 | Triangular Taper File SF-11 | 5 pcs. | | | | | | |
| TA9A224 | Half Rounded File (Rat Tail/Double Cut) SF-12 | 5 pcs. | | | | | | |
| TA9A225 | Flat Bastard File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

PORTABLE FINE FINISHING FILE **MICRO AIR HAND**

PNEUMATIC SUPER SAW FILING CUTTING

MICRO AIR HAND

Fine reciprocating motion best for precision parts filing



5

R1

0.5

Half-round end file (PN TB07505)

g

MAH-05/MAH-16 CC

Specifications

| <u>.</u> | | | | | | |
|---|-------------------------|------------|--|--|--|--|
| Model | | MAH-05 | MAH-16 | | | |
| Rated Air Pressure MP | a {kgf/cm²} | 0.6 {6} | | | | |
| Air Consumption (No load |) m³/min | 0.07 | | | | |
| Stroke Speed | min ⁻¹ | 22,000 | 11,000 | | | |
| Stroke | mm | 0.5 | 2.2 | | | |
| Shank diameter of file | mm | 3 | | | | |
| Mass (Weight) | kg | 0.4 | | | | |
| Stannarn Accessnies | Flat end fi Round en | | R1/4 × NPT 1/4 : 1 pc. ench key 2 : 1 pc. | | | |
| Vice Holder (PN TB07506) Grinding stone plates such as ceramic grinding stones in the market can be also mounted. (Max size: Thickness 3.2 mm × Width 20 mm) | | | | | | |
| | Mounting | g examples | | | | |

SUPER SAW

ñ

65

Triangular end file (PN TB07504)

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344~



Optional Accessories



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

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

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

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

Specifications

| Model | SSW-110 |
|---|---|
| Rated Air Pressure MPa {kgf/cm ² | } 0.6 {6} |
| Air Consumption (No load) m³/mi | 0.29 |
| Stroke Speed min | 1 7,000 |
| Stroke mn | <mark>ו 11</mark> |
| Mass (Weight) kg | 0.62 |
| Standard Accessories | 9 32 mm Saw Blade : 2 pcs. 9 3 mm Hex. Socket Screw Key : 1 pc. 9 Bushing R 1/4 × NPT 1/4 : 1 pc. |

HAND BEVELER HB-15B Chamfering up to 15C









- Uses easy-to-replace indexable inserts
- Indexable inserts have four working edges for good economy

Chamfering I-beams

- Finishes a surface so fine that post-sanding is unnecessary
- Column R-section can be chamfered with optional attachment
- No damage of workpieces is expected as heat-hardening or oxidization will seldom happen

Specifications

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

Standard accessories

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

Optional accessories

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

Chamfer angle and width

| Chamfer | HB- | 15B | Chamfar | + v | |
|----------------|----------------|------|----------|-----|----------|
| Angle α | Mild Steel(mm) | | Chamfer | X | |
| Allyle a | Х | Y | | -α/ | |
| 45° | 15 | 15 | ' | | Straight |
| 30° | 9 | 15.5 | | | |
| 15° | 4 | 15.4 | | | |

Handy Electric Chamfering Tool MINI BEVELER MB-03A







Compact and light for speed chamfering

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

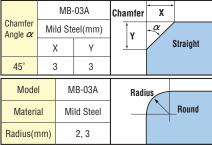
| Specifications | | | | | | | | |
|---|-----------------------------|--|--|--|--|--|--|--|
| Model | MB-03A | | | | | | | |
| Power Supply (Single phase) | 230 V or 115 V AC, 50/60 Hz | | | | | | | |
| Rated Power Consumption W | 430 | | | | | | | |
| Rated Current A | 2 / 4.5 | | | | | | | |
| Chamfering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

| S | ta | an | d | ard | a | cce | SS | 0 | ri | es | |
|---|----|----|---|-----|---|-----|----|---|----|----|--|
| | ~ | ~ | | | | - | | | ~ | | |

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

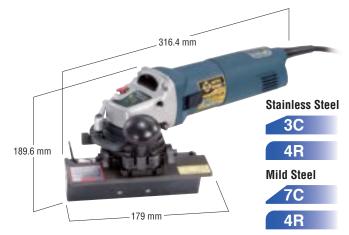
Optional accessories • TA9A386 Indexable Insert 9.525, 10 pcs./set • TA9A592 Indexable Insert 9.525 2R, 10 pcs./set • TA9A638 Indexable Insert 9.525 3R, 10 pcs./set • TA9A634 Inner Head Ass y

Chamfer angle, width and radius



PORTABLE CHAMFERING TOOLS MINI BEVELER/CIRCUIT BEVELER CHAMFERING

Handy Electric Chamfering Tool CE Model BEVELER **EMB-0307B**



Chamfer angle, width and radius

| Observáse | | | EMB-03 | | + | * | | |
|---------------------------|-------------|--|-------------------------------|----------------|------|---------|--------------|----------|
| Chamfer Angle α | Stainless X | | Steel(mm) | Mild Steel(mm) | | Chamfer | Х | |
| Aligie a | | | Y | Х | Y | l iv | - <i>α</i> / | |
| 45° | 3 | | 3 | 7 | 7 |] ' | | Straight |
| 30° | 2.2 | | 3.8 | 3.8 | 6.6 |] | | - |
| 15° | 1 | | 3.8 | 1.5 | 5.6 | | | |
| Mod | lel | | EMB | -0307B | | Radi | us | |
| Material | | | Stainless Steel Mild Steel | |] | () | _Round | |
| Radius | (mm) | | 2, 3, 4 | 2, | 3, 4 | | | |

· Applicable up to 3C stainless steel chamfering, and up to 7C mild steel chamfering

Double insulation

- Indexable inserts have four working edges for good economy
- · Chamfering angle can be adjusted to any desired position at 15° - 45°
- · Pipe outer edge can be also chamfered with standard accessories that come with the tool
- · Dust box collects swarf and chips effectively

Specifications

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

Standard accessories

| Carbon Brush Ass'y : 1 set. | • Hex. Nut M8 |
|--|----------------------------------|
| 4 mm Hex. Wrench Key : 1 pc. | • 8 × 25 mm H |
| Indexable Insert with Hole 12.7 : 1 pc. | Spanner T-15 |
| Indexable Insert Set Screw 4 × 7 : 1 pc. | Pan Head Sci |
| Dust Box Ass'v : 1 set. | |

: 2 pcs , ε μυς. Hex. Socket Set Screw : 2 pcs. 5D : 1 pc. ;rew 5 × 10 : 3 pcs.

Electric Radial Chamfering Tool BEVEL Ε

Smoothly chamfering straight and curved edges



Chamfering straight edges

Chamfering curved edges

Stainless

Steel

2

ECB-0203

Mild Stee

2.3

Radius

Model

Material

Radius(mm)

CE Model ECB-0203 Double insulation

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

Specifications

| 0/60 Hz |
|---------|
| 0/60 Hz |
| |
| |
| |
| |
| R*1 |
| *1 |
| |
| |
| |
| |

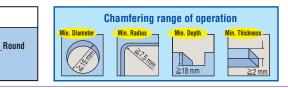
*1: In case of chamfering 3R, an optional indexable insert for 3R is necessary, and chamfering 2R, an optional guide sleeve 24 mm dia, and indexable insert for 2R are necessary.

Standard accessories

Indexable Insert with Hole 12.7 : 1 pc.
Indexable Insert Set Screw : 1 pc.

Spanner 8 × 10 : 1 pc.
 Spanner T-15D : 1 pc.

Sub Handle : 1 pc.
Grip Guard : 1 pc.
Ball Bearing 687zz : 1 pc.
Gauge C3 : 1 pc.



Chamfer angle, width and radius

| | | ECB- | 0203 | | Chamfer | X | |
|---------------------------|-----|-------------|------------|-------------|----------|-----|----------|
| Chamfer Angle α | | less eel | M Steel | ild (mm) | Y | ~~/ | Diveinhi |
| | Х | Y | Х | Y | <u>+</u> | , | Straight |
| 45° | 1.5 | 1.5 | 3 | 3 | | | |

Pneumatic Chamfering Tool CE Lever Type **Ring Type** ELER **AMBL-0307 AMB-0307**





NOW A SMALL AIR BEVELER DOES THE BIG JOBS. TOO

Applicable to stainless steel and mild steel chamfering

Chamfer angle width and redius

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

| Linamier | angie, | width and r | aulus | | | | | |
|-------------------------------|--------------|--------------------|---------|----------|---------|-------------|----------|--|
| 0 (| | AMBL-0307 | | • | • | | | |
| Chamfer Angle <i>&</i> | Stainle | ess Steel (mm) | Mild St | eel (mm) | Chamfer | Х | | |
| | Х | Y | Х | X Y | | ~~/ | | |
| 45° | 3 | 3 | 7 | 7 7 | - Y | | Straight | |
| 30° | 2.2 | 3.8 | 4 | 7 | | | | |
| 15° | 1 | 3.8 | 2.2 | 8 | | | | |
| Mode | Model AMBL-0 | | | 0307 | Radi | us | | |
| Material | | Stainless Steel | | | | \bigwedge | _Round | |
| Radius (mm) | | 2, 3, 4 | | 2, 3, 4 | | | | |

Specifications

| Model | | AMBL-0307, AMB-0307 | | |
|------------------------------------|----------------------------|-----------------------|--|--|
| Air Pressure | MPa {kgf/cm ² } | 0.6 {6} | | |
| Air Consumption (No load) m³/min | | 0.9 | | |
| Free Speed min ⁻¹ (rpm) | | 14,000 | | |
| Chamfering | Mild Steel | 0C - 7C or 2R, 3R, 4R | | |
| Capacity | Stainless Steel | 0C - 3C or 2R, 3R, 4R | | |
| Chamfer Angle | | 15° - 45° | | |
| Mass (Weight) | kg | 2.9 | | |

Standard accessories

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

Pneumatic Radial Chamfering Tool CE Model BEVELER **CB-02**

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



Chamfer angle, width and radius

| Chamfer | - | | Chamfer | | Model | CB-02 | Radius | |
|----------------|----------|--------------|---------|-------------------|-------------|------------|--------|------|
| Angle α | Mild Ste | el (mm) Y | Y | α Straight | Material | Mild Steel | | ound |
| 45° | 2 | 2 | | | Radius (mm) | 2 | | |

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

Specifications

| Model | CB-02 |
|---|-------------|
| Air Pressure MPa {kgf/cm ² } | 0.6 {6} |
| Air Consumption (No load) m³/min | 0.4 |
| Free Speed min ⁻¹ (rpm) | 13,000 |
| Chamfering Capacity | 0C - 2C, 2R |
| Chamfer Angle | 45° |
| Mass (Weight) kg | 1.8 |

Standard accessories

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

Optional accessories



Optional Accessories for HAND BEVELER / MINI BEVELER / CIRCUIT BEVELER

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

QUICK CONNECTIVE COUPLINGS FOR PNEUMATIC TOOLS HI CUPLA Series

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

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

| | | Plug | | P | S | | Socket | | |
|------------|------------------|-------------------|--------------|--|--|------------|-------------------|----------|---------------|
| For hose | connection | 40PH | For 1/2" ho: | se | | For hose c | onnection | 40SH | For 1/2" hose |
| 17PH | For 1/4" hos | e 400PH | For 1/2" ho: | se | C. C | 17SH | For 1/4" hose | 400SH | For 1/2" hose |
| 20PH | For 1/4" hos | e 600PH | For 3/4" ho | se management | States and States and | 20SH | For 1/4" hose | 600SH | For 3/4" hose |
| 30PH | For 3/8" hos | e 800PH | For 1" hose | | | 30SH | For 3/8" hose | 800SH | For 1" hose |
| For female | e thread connect | ion 40PM | For Rc 1/2" | _ | | For female | thread connection | 40SM | For Rc 1/2" |
| 10PM | For Rc 1/8" | 400PM | For Rc 1/2" | and the local diversion of the local diversio | | 10SM | For Rc 1/8" | 400SM | For Rc 1/2" |
| 20PM | For Rc 1/4" | 600PM | For Rc 3/4" | | Contract, Name | 20SM | For Rc 1/4" | 600SM | For Rc 3/4" |
| 30PM | For Rc 3/8" | 800PM | For Rc 1" | | | 30SM | For Rc 3/8" | 800SM | For Rc 1" |
| For male | thread connec | tion | | | | For male t | hread connectio | n | |
| 20PF | For R 1/4" | 400PF | For R 1/2" | the second se | | 20SF | For R 1/4" | 400SF | For R 1/2" |
| 30PF | For R 3/8" | 600PF | For R 3/4" | | Concernance of the local diversion of the loc | 30SF | For R 3/8" | 600SF | For R 3/4" |
| 40PF | For R 1/2" | 800PF | For R 1" | | | 40SF | For R 1/2" | 800SF | For R 1" |
| For male | thread connec | tion (parallel t | hread) | | | | | | |
| 20PFF | For G 1/4" | | | the second se | | For hose c | | | |
| | | | | | A REAL PROPERTY. | 200-17SH | For 1/4" hose | 200-40SH | For 1/2" hos |
| | | | | | | 200-20SH | For 1/4" hose | | |
| | | | | | | 200-30SH | For 3/8" hose | | _ |
| pecifica | ations | | | | | | thread connect | ion | |
| Туре | | Hi Cup | | Hi Cupla 200 | A REPORT OF THE | 200-20SM | For Rc 1/4" | | |
| Body mat | | Steel (chrom | | Steel (chrome-plated) | | 200-30SM | For Rc 3/8" | | |
| Size | | 1/8", 1/4", 3/8", | | 1/8", 1/4", 3/8", 1/2" | | 200-40SM | For Rc 1/2" | | |
| Working (| | 1.5 M | | 1.0 MPa | | | hread connectio | n | |
| | resistance | 2.0 M | | 1.5 MPa | C BRIDE D | 200-20SF | For R 1/4" | | |
| Packing n | | NBF | | NBR | The local division in which the | 200-30SF | For R 3/8" | | |
| Working t | emp.range | -20°C - | 80°C | -5°C - 60°C | | 200-40SF | For R 1/2" | | |

HI CUPLA ACE



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

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

| Plastic Plug P | | | S Hi Cupla Ace Socket | | |
|--------------------------------------|---|--|-----------------------|---|--|
| For hose cor 20PH-PLA | nection (PH) For 1/4" hose | | | For hose cor HA-20SH | nection (SH) For 1/4" hose |
| 30PH-PLA | For 3/8" hose | | | HA-30SH | For 3/8" hose |
| For female t 20PM-PLA 30PM-PLA | hread connection (PM) For Rc 1/4" For Rc 3/8" | | | For female the HA-20SM HA-30SM | rread connection (SM) For Rc 1/4" For Rc 3/8" |
| 50PNG-PLA 65PNG-PLA | | | | For urethane hose HA-50SNG HA-65SNG HA-85SNG | se with spring nut connection (SNG For 5 ID × 8 OD hose For 6.5 ID × 10 OD hose For 8.5 ID × 12.5 OD hose |
| For male thr 20PFF-PLA | ead connection (PF) For G 1/4" | | | Hi Cupla Ace HA-T | T type (for 2 branches) 20P-PLA / HA-65S × 2 |

23

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

A wide range of unique tools for boring and punching



"delvo" Electric Screwdrivers / Spring BalancerOTHER PRODUCT LINESLinear-motor-driven Free Piston System



Spring Balancer

TIGON Spring Balancer Improves Work Safety & Efficiency

TIGON Spring Balancer Models

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

Capacities ranging from 0.5 - 70 kg.



Linear Motor Driven Free Piston System

MEDO pumps are unique products featuring a Linear-motor-driven Free Piston System. NITTO KOHKI has made available a complete series of air compressors and suction pumps that incorporate this revolutionary mechanism.

These are quite appropriate as air sources or suction power units for various pneumatically operated equipment and apparatus in advanced industries.



SAFETY GUIDE

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

Safety Precautions

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

Warning for ALL Machines and Tools

- Always keep the work area free from clutter and potentially dangerous conditions such as hanging power cords, working debris, air hoses, and garbage to prevent accidents from occurring.
- Consider proper working environments for each tool carefully. Do not expose tools to extreme amounts of moisture or direct contact with water or rain. Keep area well lit at all times to prevent hidden dangers and never operate the equipment near flammable liquids or in gaseous or explosive atmospheres.
- Keep all tools and tool accessories away from children and all unauthorized personnel. Serious injury or possible death may result from machines being handled by children.
- Properly store machines and accessories while not in use. They should be kept in a dry, locked-up location out of reach of children or unauthorized personnel.
- Improper or negligent use of tools will cause increased maintenance costs, and the amount of time in which to complete the job. Always let the tool do the work at the rate of which it was designed. Best performance is always achieved by reading and understanding the proper operation of each machine or tool.
- Always wear safety glasses and protective hand and foot wear during or around operating tools. Wear a protective hair covering to contain long hair. Do not wear loose clothing and/or accessories as they may be caught in moving parts and inflict serious injury or possible death.
- Wear respiratory protection when working in an environment where dust particles are generated during operation.
- Do not over-reach or allow yourself to become unstable during tool operation and always maintain a correct posture.
- Use clamps or a vise to secure the work piece tightly and eliminate vibration. Never hold the work piece with your hands, keep both hands on the tool for increased productivity.
- Use the right tool or machine that can complete the job within its specifications. Do not attempt to adapt smaller machines or tools to complete a job designed for heavy-duty equipment. Do not use the tools for other than what they were designed for. There is a right tool for each job, be aware of tool limitations and never overload.
- Make sure to inspect all external screws, nuts, bolts and attached accessories are fastened tightly and secure prior to each use. All moving parts should be free from obstruction and allowed to operate smoothly. Any damaged or missing parts should be repaired or replaced by the sales agent or distributor from which the tool was originally purchased. Do not use machines or tools which cannot be activated or stopped with a power switch or lever.

Notice for Electric Tools

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

- Do not use any machine with a damaged, frayed, cut, or deteriorated power cords or air hoses. Always replace at the first sign of damage.
- Always remove all tools required to adjust, add, or remove parts from tools prior to use to prevent tool damage or user injury.
- Always avoid an unexpected start by having all power buttons or levers in the off position prior to attaching to a power or air supply. Never carry tools with your finger on the on/off switch or lever when the power or air supply is attached.
- Do not use the power or air supply lines to move, carry or support the tool during usage or transportation. Do not place the power or air line near a heat source, oil, water, or items with sharp edges.
- Never leave a machine or tool running unattended. Keep a firm grip on the designated areas of the machine or tool until it comes to a complete stop. Always turn the power switch or lever to the off position and disconnect from the power source when not in use.
- Do not disassemble or modify a tool to complete a job other than what it
 was designed for. This will void any warranty on the equipment and may
 cause serious personal injury or possible death.
- Maintenance is necessary for all machines and tools. Always maintain blades and cutters properly and replace when edges become damaged or are not sharp enough for safe operation. Follow the instruction manual for lubrication needs and adjustment points if applicable. Check the power and air supply lines periodically and change accordingly to safety regulations. If an extension line is adopted, always make sure that it meets or exceeds tool requirements for amperage or air supply before using and is rated for outdoor usage. Change supply lines whenever they are found to be defective or damaged. Keep the grip and handles dry and clean of grease or oil so that it will not disturb proper operation.
- Switch off and disconnect from power source before servicing equipment or changing accessories.
- Be alert and pay close attention to the work being performed at all times. Do not operate machines or tools when heavily fatigued. Users should be aware of all circumstances surrounding their application.
- Use only recommended parts and accessories as per individual machine or tool operator manuals. Use of improper accessories or attachments may result in serious injury or possible death.
- All repairs and services must be performed by authorized Nitto Kohki dealers or technicians.
- Do not deface or remove any label, warning indicator, or nameplate associated with each machine or tool.

Notice for Air Tools

• Air pressure at the inlet of the tool must not exceed 0.6 MPa (6 kgf/cm²).

Technologies that Respond to the Needs of the Times



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



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