

ACINE



**Electric & Hydraulic Machine Tools,** Labor-saving plus Improved Work Efficiency!

A wide range of unique tools for boring, punching, beveling and machining.

### **MACHINE TOOLS LINE-UP**

PORIABLE MAGNELIC BASE DRILLING MACHINE ATRAACE AUTO ATRAACE QUICKAUTO ATRAACE MANUAL FEED

TUNGSTEN GARBIDE TIPPED & ILS.S ANNULAR GUTTERS JEIBROACH HI-BROACH

PORTABLE MAGNETIC DRILL STAND ATRA MASTER

PORTABLE HYDRAULIC FUNCHER SELFER ACE HS SERIES SELFER HA SERIES HANDY SELFER

PORTABLE BEVELING TOOL HAND BEVELER MINI BEVELER CIRCUIT BEVELER



### MACHINE TOOLS CONTENTS

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, couplers and pneumatic hand tools are among the finest precision engineered equipment found today.

#### **ONE YEAR LIMITED WARRANTY!**

	Manufacturing	Steel Fabricating	Welding	Metal Casting & Forging	Automotive & Ship Building	Construction	Page
PORTABLE MAGNETIC BASE AUTOMATIC DRILLING MACHINE ATRA ACE AUTO (WA-3500/WA-5000)	Speedy, high precision hole drilling	Speedy, high precision hole drilling			Drilling holes through steel	Drilling holes through shaped steel	7
PORTABLE MAGNETIC BASE AUTOMATIC DRILLING MACHINE <b>ATRA ACE</b> QUICK AUTO AND MANUAL FEED	Speedy, high precision hole drilling	Speedy, high precision hole drilling			Drilling holes through steel	Drilling holes through shaped steel	8-9
PORTABLE MAGNETIC DRILL STAND ATRA MASTER	Precision drilling through flanges	Drilling	Initial drilling for sheet cutting by welder	Versatile drilling	Various drilling	Drilling through shaped steel, drilling at elevated site	10
ANNULAR CUTTERS BROACH CUTTERS & BROACH HOLDERS	Drilling of large and small diameter holes through steel	Drilling holes through steel			Drilling holes	Drilling of large and small diameter holes through steel	11-12
PORTABLE DOUBLE ACTING HYDRAULIC PUNCHER SELFER ACE HS SERIES AND HYDRAULIC PUMP	Hole punching through steel plates	Punching bolt holes through steel plates			Punching holes through ship frameworks	On-site punching holes through shaped steel	13
PORTABLE SINGLE ACTING HYDRAULIC PUNCHER SELFER HA SERIES AND HYDRAULIC PUMP	Hole punching through steel plates	Punching bolt holes through steel plates			Punching holes through ship frameworks	On-site punching holes through shaped steel	14
ELECTRICALLY OPERATED HYDRAULIC PUNCHER HANDY SELFER PUNCHES AND DIES FOR SELFER	Speedy, easy hole punching through steel sheets	Punching holes through angles and channels				On-site small hole punching	15-16
PORTABLE BEVELING TOOLS BEVELER HAND BEVELER	Beveling of large workpieces	Beveling of steel plates				Beveling of columns	17

**TIGON Spring Balancers and Retractors** 

18

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

#### nls NER TII







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

**ONE YEAR LIMITED WARRANTY!** 

	Manufacturing	Sheet-Metal Working	Welding	Painting	Metal Casting & Forging	Automotive & Ship Building	Chemical Engineering	Wood Working & Art	Construction	Pa
IEEDLE SCALER JET CHISEL	Various peening works	Paint & rust scaling	Spatter, chips & sludge scaling		Sand blasting & chiseling	Rust scaling, welded-part finish	-	-	Surface coarsening of stone and concrete products	19
PNEUMATIC SCALER SUPER KELEN	-	-	Spatter, sludge and rust chiseling, scaling	Paint chiseling	Black surface scaling, scaling of ingot remnant in ladle	Removal of weeds, shells, concrete chipping	-:	-	Concrete chiseling from framework, removal of linoleum from floor base	2
NEUMATIC CHIPPING HAMMER	-	-	-	Paint chipping	Sand chipping	Removal of weeds, shells, etc., concrete chipping	-	-	Chipping of stone products	2
NEUMATIC GRINDER AND SANDER	Sanding, grinding, chamfering, finishing	Chamfering, rough grinding, mold grinding	Bead grinding, cross section grinding	Grinding of pre- painted surface, buffing	Trimming, chamfering	Additional grinding, rust removal, surface smoothing		Sanding	Chamfering of stone products, honing	23
neumatic die grinder AIR SONIC	Metal working, surface smoothing	Various grinding work	Bead grinding	Pre-painted surface regulation	Mold correction, trimming	Precision grinding of parts	Grinding of pipe cross section and inner surface	Correction grinding of molded products, rough grinding	Additional grinding of construction materials & parts	25
NEUMATIC HAND DRILL	Various drilling work	Various drilling work	Initial boring for gas cutting by welder	Paint scrambling (w/attachment)	-	Drilling, removal of spot-welded parts		Drilling	Sash work	1
PNEUMATIC BELT SANDER BELTON/BABY BELTON	Trimming, chamfering corner rounding	Spot smoothing, surface regulation, finish sanding	Bead grinding, rust removal, chamfering, section finishing	Rough grinding, rust & paint removal, spot smoothing	Trimming, chamfering, spatter grinding, die-cast finishing	Welding chip grinding, finish grinding, fitting	Grinding of pipe & equipment surface face section	Finish sanding of furniture, profile correction of plastic products	Grinding of parts & elements, repair services of tools	27
PORTABLE CHAMFERING TOOLS BEVELER	Chamfering of large workpieces	-	Surface chamfering of pre-welded shaped steel parts	Chamfering of steel plate	Chamfering of cast molds	Chamfering of steel plate	-	-	Chamfering of columns (HB-15B)	s 29
PNEUMATIC RADIAL CHAMFERING TOOL	Chamfering of dies and machine	Chamfering of steel plate	-	-	17	2	-	-	Chamfering of steel plate	29
PORTABLE PRECISION FINISHING FILE SUPER HAND	Precision filing of flash, chamfering, sanding, groove finishing	Trimming, filing in narrow space, surface regulation	Finish filing	Precision filing of pre-painted surface, sanding	Trimming	Trimming, precision sanding of parts	Filing, superfine filing for profile correction	Filing, superfine filing for profile correction	Correction sanding of metal parts	
PORTABLE FINE FINISHING FILE MICRO AIR HAND	Precision filing of flash, chamfering, groove finishing	-		-	Trimming	Trimming, precision sanding of parts	Filing, superfine filing for profile correction	-1		
PNEUMATIC HACKSAW SUPER SAW	Cuts with small radii	Cutting of mild steel plates, aluminum, plastics and other materials	-	-	-	Cutting of body panels of automotive vehicles or shaped steel	Cutting of fiber plates. Cutting of fiber- reinforced plastic plates	-	-	
IANDY PNEUMATIC SANDER FREE SANDER	Surface sanding, rust & stain removal	Spot smoothing, corner rounding, surface smoothing	-	Sanding of pre- painted, plastered surface, water sanding	Mold correction	Paint sanding of automotive body	Sanding of plastered surface, and test piece surface	Finish sanding, curved surface sanding, sanding of router groove	Sanding of stone products and floor materials	
NEUMATIC RECIPROCATING SANDER	Plane sanding, groove sanding	Spot smoothing, surface regulation	-	Sanding of plastered surface, intermediate finish sanding	Mold correction	Paint sanding of automotive body	Synthetic resin sanding	Rough finish sanding	Inner surface sanding of channeled parts	
PNEUMATIC DUST-FREE SANDER DRBITAL SANDER	Smoothing, intermediate finish sanding	Surface smoothing of steel products, finishing of pressed products	Surface sanding of pre-welded part	Ground work sanding	Trimming, surface finishing of die-casting	Correction of grinding (finish work)	Precision finishing	Precision sanding	Surface sanding of constructed materials	
PNEUMATIC COMPACT SANDER PALM ORBITAL SANDER	Smoothing, intermediate finish sanding	Surface smoothing of steel products, finishing of pressed products	Surface sanding of pre-welded part	Ground work sanding	Trimming, surface finishing of die-casting	Correction of grinding (finish work)	Precision finishing	Precision sanding	Surface sanding of constructed materials	
NOTES ON USING TOOLS - Imp	ortant Safety In:	structions								
HI CUPLA Series										

"delvo" Electric Screwdrivers, Linear Motor Driven Free Piston Systems

# POWER TOOLS CONTENTS

38

#### PORTABLE MAGNETIC BASE AUTOMATIC DRILLING MACHINE **ATRA ACE AUTO**

### BORING







Max. plate thickness **75mm** 

# *High-performance mechanism & high-tech components*

#### **One-touch Cutter Replacement**

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

#### **Improved Bearing Bracket**

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

#### **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.

#### One-touch Cartridge-type Oil Tank (QA Series)

Our big 24oz cartridge-type oil tank makes it easy to maintain proper coolant levels. There is also an adjustable flow valve on the machine, which allows the user to control the amount of coolant that is being applied to the cutter. Everything on this tool is made to operate quickly and accurately.

#### Chip Breaker Prevents Cutter from Jamming

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

### Fail-Safe Protection

#### **Built-in Motion Sensor**

If any lateral movement or excess vibration is detected, both the drill and the feed motor stop instantly. 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.

#### **Power Failure Safety**

ATRA ACE Automatic Drills temporarily remain on the material after an interruption in power to prevent the drill from spinning off the material. This helps prevent the drill from breaking free from the material and possibly damaging the machine, cutter or even injuring the user.









### BORING

### PORTABLE MAGNETIC BASE AUTOMATIC DRILLING MACHINE **ATRA ACE** AUTO

### 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 feed handle to engage the gears.





#### **On-site hole-cutting**

On-site hole-cutting through steel plates, H-Beams, shaped bars, framework, shipbuilding, bridges, structures, steel reinforcements, construction materials and other machinery.

#### 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.

#### Step Feed

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

#### Auto-return Function (QA Series)

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 on to the next hole more quickly.

#### Limit Switch

The ATRA ACE Automatic Drills 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.

#### **Cycle Stop** (WA Series)

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 to prevent the cutter from breaking.

#### Automatic-feed Hole-cutting Procedure

• 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.



 Engage the clutch by pushing the handles in towards the drill and the motor will begin feeding automatically. Automatic-feed operation

ON Feed handles



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



 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.





Slanted hole-cutting





BORING

#### BORING

### Nitto Kohki's Atra Ace boosts productivity in the hole drilling industry.



#### Load Sensor

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

#### **Variable Automatic Feed Cycle Stop**

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

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

Creations

7

Acce	essories Included		UEA0835-0 pilot pin 5/16" x 1-3/8" DOC 3 mm allen wrench 8 mm x 10 mm combination spanner Chip guard assembly     Motor side handle Sample cutting fluid Safety chain Molded plastic carrying case	UEA0850-0 pilot pin 5/16" x 2" DOC     Motor side handle     Sample cutting fluid     Safety chain     mallen wrench     Samter     more combination     spanner     carrying case	UEA0835-0 pilot pin 5/16" x 1-3/8" DOC a mm allen wrench 4 mm allen wrench 8 mm x 10 mm combination spanner     Motor side handle Sample cutting fluid Safety chain Tool box	UEA0835-0 pilot pin 5/16" x 1-3/8" DOC UEA0850-0 pilot pin 5/16" x 2" DOC 3 mm allen wrench 4 mm allen wrench 4 mm allen wrench Sample cutting fluid Sample	UEA0835-0 pilot pin 5/16" x 1-3/8" DOC UEA0850-0 pilot pin 5/16" x 2" DOC 3 mm allen wrench 4 mm allen wrench • B mm x 10 mm combination spanner • Motor side handle • Sample cutting fluid • Safety chain • Tool box
Weight	t	lbs	44	51	41	57	57
Magne	et Dimensions	inch	3-5/8" x 8-1/2"	4" x 8"	3-1/4" x 6-13/16"	3-15/16" x 7-15/16"	3-15/16" x 7-15/16"
Magne	et Holding Power	lbs	1,583	2,200	1,498	2,200	2,200
	Depth of Cut		2" max.	3" max.	1-3/8" max.	2" max.	2" max.
Capacit	ty Hole Diameter		1-3/8" max.	2" max.	1-9/16" max.	2" max.	2-9/16" max.
Magne	t Power Consumption	W	34	75	50	75	75
	No Load Speed	rpm	950	350 / 650	750	400 / 750	400/ 750
Drill	Rated Current	Α	10.2	10.8	6.1	9	4.5
Electric	c Rated Power Consumption	W	1,100 1,150		680	1,010	1,010
Power	Source (Single Phase)		110-120 V AC 50/60Hz	110-120 V AC 50/60Hz	110-120 V AC 50/60Hz	110-120 V AC 50/60Hz	220-240 V AC 50/60Hz
Model			WA-3500	WA-5000	QA-4000	QA-5000	QA-6500





Load Detection Side mounted LED graph displays current drill status before, during and after the drilling operation. The load monitoring LEDs also offer advanced notice of worn or damaged cutters.

### PORTABLE MAGNETIC BASE AUTOMATIC DRILLING MACHINE **ATRA ACE** QUICK AUTO





#### **Auto-return Function**

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 on to the next hole more quickly.

#### BORING

**BORING** 

### Nitto Kohki's Atra Ace boosts productivity in the hole drilling industry.





- Especially designed for H.S.S. cutters • Side-lock version (UO-3500-02) available
- Uses Hi-Broach High-speed Steel Annular Cutters

#### **Specifications**

Model		U0J-3500	U0J-5500	U0-3500	M-100D	ARA-100A	
Power Source (Single Phase)		110-120 V AC 50/60Hz	110-120 V AC 50/60Hz	110-120 V AC 50/60Hz	110-120 V AC 50/60Hz	220-240 V AC 50/60Hz	
Electric Rated Power Consumption	W	680	1,150	680	390	1,800	
Drill Rated Current	A	6	10.8	6	3.7	8.2	
No Load Speed	rpm	700	350 / 650	400	1,700	110-210/330-660	
Magnet Power Consumption	W	32	50	32	35	80	
Capacity Hole Diameter		1-3/8" max.	2-3/16" max.	1-3/8" max.	3/8" max.	4" max.	
Depth of Cut		2" max.	3" max.	2" max.	4" max.	3" max.	
Twist Drill Capacity		1/2"	N/A	1/2"	3/8"	1-1/4"	
Magnet Holding Power	lbs	2,023	2,249	2,023	772	3,820	
Magnet Dimensions	inch	3-5/32" x 6-3/8"	3-3/8" x 6-11/16"	3-5/32" x 6-3/8"	4-1/8" dia.	4-5/16" x 8-5/8"	
Weight	lbs	31	40	31	18	66	
Accessories Included		UEA0835-0 pilot pin 5/16" x 1-3/8" DOC     Feed handles (3 each Feed handles (3 each Chip guard assembly Safety chain 8 mm x 10 mm combination spanner     Motor side handle     Feed handles     Gita guard assembly     Safety chain     Molded plastic     carrying case		UEA0825-0 pilot pin 5/16" x 1" DOC 3 mm allen wrench 5 mm allen wrench 5 mm allen wrench 5 mm x 10 mm combination spanner     Smallen wrench 5 mm allen wrench 5 afety chain 6 Molded plastic carrying case	<ul> <li>2.5 mm allen wrench</li> <li>7 mm x 8 mm combination spanner</li> <li>Chuck key (TP08006-0)</li> </ul>	<ul> <li>TA9A207-0 pilot pin 3° DOC</li> <li>Drift key for Morse Taper #3</li> <li>2.5 mm allen wrench</li> <li>6 mm allen wrench</li> <li>8 mm allen wrench</li> <li>Chip Guard</li> <li>Drift key for Morse Taper #3</li> <li>7 mm x 8 mm combination spanner</li> <li>Safety Chain</li> <li>Chip Guard</li> </ul>	

### PORTABLE MAGNETIC BASE **ATRA ACE MANUAL**



### ANNULAR CUTTERS & BROACH CUTTERS & BROACH HOLDERS BORING

#### T.C.T. (Tungsten Carbide Tip) cutters are far superior to conventional H.S.S. or cobalt cutters





#### JETBROACH CUTTERS are far better than twist drills:

- No dead point
- Peripheral cutting
- · Dramatically reduce cutting resistance
- Available size:
- 9/16" 4" diameter

#### **Rationalized Hole-cutting**

#### Genuine one-touch cutters

Nitto Kohki has developed the one-touch replacement system for Jetbroach carbide-tipped annular hole cutters. They are designed to be mounted and removed without the use of a tool. This reduces the time needed to replace cutters.

- · Carbide tips for faster cutting
- · Single pass cutting, no pilot hole required
- Annular part does all the work so small cutting resistance reduces drilling time
- · Cutting of slanted, elongated and edge holes is now possible
- Fractional and metric cutter sizes to suit wide range of applications
- Produces little slag and few chips for easy disposal
- Can also be fitted to and used with previous Atra Ace models using a hexagon socket set-screw
- Improved concentricity extends cutter life! One-touch system consisting of three balls inside the arbor body produces a self-centering effect during cutting to improve cutter performance and life

#### •Self-centering effect mechanism to extend cutter life



Note: When holding with a hexagon socket set-screw for fitting to previous Atra Ace models, be sure to tighten not to a dimple but to the flat area (arrow).



#### INDUSTRIAL ARBOR



#### **COMBINATION ON HOLDERS AND CUTTERS\***

Jetbroach Holder	Part #	Overall Length of Holder (mm)	Up to 35mm Thick Pilot Pin	Up to 50mm Thick Pilot Pin	Up to 75mm Thick Pilot Pin
A BHM-02035 (MT #2)	TB00390-0	163	UEA0835-0		
B BHM-03050 (MT #3)	TB00392-0	182	UEA0835-0	UEA0850-0	
C BHM-13075 (MT #3)	TB00352-0	248			TA9A207-0
D BHM-14075 (MT #4)	TB00354-0	232			TA9A207-0
E BHOR8-00050 (R-8)	TB05943-0		UEA0835-0	UEA0850-0	
F BHR8-00050 (R-8)	TB05891-0		UEA0835-0	UEA0850-0	

\*All holders use side-lock shank except for E - #BHOR8-00050, which uses one-touch shank

#### **Standard Accessories**

	Α	в	С	D	Е	F		Α	в	С	D	Е	F
Pilot Pin UEA0835-0	•	٠			•		Hex Wrench key 6	•	•				•
Pilot Pin TA9A207-0			•	٠			Hex Wrench key 8			•	•		

### FEED & SPEED

#### A guide to the selection of circumferential cutting speeds:

	feet/min	m/min
Stainless Steel	65 - 131	20 - 40
Mild Steel	98 - 164	30 - 50
Cast Iron	98 - 164	30 - 50
Brass	164 - 229	50 - 70
Aluminum	229 - 295	70 - 90

Test Drilling is very often the only way to determine the machinability of difficult materials.

#### Recommended Feed: 0.001"-0.004"/rev. (0.02~0.1 mm/rev.)





#### **Optional Accessories**

Jetbroach **Cutter Coolant** (1 gal.) TP00234-0



- Nitto's Carbide Cool & Lube maximizes Jetbroach drilling performance and tool life.
- · Economical dilution ratio of 10:1 (water:coolant)
- · Also available in 55 gallon drum (part # UEACL55-0)

### BORING ANNULAR CUTTERS BROACH CUTTERS & BROACH HOLDERS

		FRACTIONA	L - Inch size					MET	RIC - mm s	ize		
JETBRO <i>A</i>	ACH					JETBROA	CH			JETBROA	CH	
	r		e-touch Side-lo 1" shank)	ock Type		One-touch Side-lock Type (3/4" shank) Side-lock Type						
Diameter	Decimal	1-3/8" DOC	2" DOC	3" DOC	4" DOC	Diameter	Decimal	1-3/8" DOC	2" DOC	Diameter	Decimal	3" DOC
9/16"	.563	TK01160*	TK01162**	-	-	17.5	0.689	TK00301	TK00380	50	1.969	TJ17709
5/8"	.625	TK01161*	TK01163**	-	-	18	0.709	TK00302	TK00381	51	2.008	TJ16651
11/16"	.687	TK00517	TK00559	TK01037	_	18.5	0.728	TK00303	-	52	2.047	TJ16652
3/4"	.750	TK00518	TK00560	TK00981	_	19	0.748	TK00304	TK00382	53	2.087	TJ16653
13/16"	.812	TK00519	TK00561	TK00982	TK00955	19.5 20	0.767	TK00305 TK00306	TK00383	<u>54</u> 55	2.126	TJ16654
7/8"	.875	TK00519	TK00562	TK00982		20	0.787	TK00306 TK00307	TK00384 TK00385	55	2.165	TJ16655 TJ16656
					TK00956	20.5	0.807	TK00307	TK00385	57	2.205	TJ16657
15/16"	.937	TK00521	TK00563	TK00984	TK01056	21.5	0.846	TK00308	TK00387	58	2.244	TJ16658
1"	1.000	TK00522	TK00564	TK00985	TK00958	22	0.866	TK00310	TK00388	59	2.323	TJ16659
1-1/16"	1.062	TK00523	TK00567	TK00986	TK01058	22.5	0.885	TK00311	TK00389	60	2.362	TJ16660
1-1/8"	1.125	TK00554	TK00568	TK00987	TK00960	23	0.905	TK00312	TK00390	61	2.402	TJ16661
1-3/16"	1.187	TK00555	TK00565	TK00988	TK00947	23.5	0.925	TK00313	TK00391	62	2.441	TJ16662
1-1/4"	1.250	TK00524	TK00569	TK00989	_	24	0.945	TK00314	TK00392	63	2.480	TJ16663
1-5/16"	1.312	TK00525	TK00570	TK00990	_	24.5	0.965	TK00315	TK00393	64	2.520	TJ16664
1-3/8"	1.375	TK00526	TK00571	TK00991	_	25	0.984	TK00316	TK00394	65	2.559	TJ16665
1-7/16"	1.437	TK00520	TK00571	TK00991		26	1.023	TK00317	TK00395	66	2.598	TJ16666
	-				-	26.5	1.043	TK00318	TK00396	67	2.638	TJ16667
1-1/2"	1.500	TK00642	TK00573	TK00993	-	27	1.063	TK00319	TK00397	68	2.677	TJ16668
1-9/16"	1.562	TK00643	TK00574	TK00994	-	28	1.102	TK00320	TK00398	69	2.717	TJ16669
1-5/8"	1.625	-	TK00575	TK00995	-	29	1.141	TK00321	TK00399	70	2.756	TJ16670
1-11/16"	1.687	-	TK00576	TK00996	-	30	1.181	TK00322	TK00400	71	2.795	TJ16671
1-3/4"	1.750	-	TK00577	TK00997	-	31 32	1.220	TK00323 TK00324	TK00401 TK00402	72 73	2.835 2.874	TJ16672 TJ16673
1-13/16"	1.812	_	TK00578	TK00998	_	32	1.259	TK00324 TK00325	TK00402 TK00403	73	2.874	TJ16673
1-7/8"	1.875	_	TK00579	TK00999	_	33	1.338	TK00325	TK00403	74	2.913	TJ16675
1-15/16"	1.937	-	TK00580	TK01000	_	35	1.378	TK00328	TK00405	76	2.992	TJ16676
2"	2.000		TK00581	TK01000	_	36	1.417	TK00602	TK00406	77	3.031	TJ16677
		-				37	1.456	TK00603	TK00407	78	3.071	TJ16678
2-1/16"	2.062	-	TK00644	TK01002	-	38	1.496	TK00604	TK00408	79	3.110	TJ16679
2-1/8"	2.125	-	TK00645	TK01094	-	39	1.535	TK00605	TK00409	80	3.150	TJ16680
2-3/16"	2.187	-	TK00646	TK01095	-	40	1.575	TK00606	TK00410	81	3.189	TJ16681
2-1/4"	2.250	-	TK00647	-	-	41	1.614	-	TK00411	82	3.228	TJ16682
2-5/16"	2.312	-	TK00648	-	-	42	1.654	_	TK00412	83	3.268	TJ16683
2-3/8"	2.375	-	TK00649	-	-	43	1.693	-	TK00413	84	3.307	TJ16684
2-7/16"	2.437	-	TK00650	-	-	44	1.732	-	TK00414	85	3.346	TJ16685
2-1/2"	2.500	-	TK00651	_	-	45 46	1.772	-	TK00415 TK00416	86	3.386	TJ16686
2-9/16"	2.562	-	TK00652	-	_	46	1.811	-	TK00416 TK00417	87 88	3.425 3.465	TJ16687 TJ16688
Pilot Pin	L.OOL	UEA0835		UEA0875		47	1.850	_	TK00417 TK00418	89	3.405	TJ16689
		UEA0835	UEA0850	UEAU8/5	UEA0800	40	1.929	-	TK00418 TK00419	90	3.543	TJ16690
		utters are 1" DO				50	1.969	_	TK00420	90	3.583	TJ16691
		TK01161 uses U TK01163 uses U				51	2.008	-	TK00442	92	3.622	TJ16692
Exception 0	1 INU1162 &	INUI 103 USES U		JI USE IN QA S	beries)	52	2.047	-	TK00443	93	3.661	TJ16693
		011 /11:0				53	2.087	-	TK00444	94	3.701	TJ16694

HI-BROA	HI-BROACH (High Speed Steel)										
¥	One-touch Side-lock Type (3/4" shank)										
Diameter	Decimal	1" DOC	2" DOC								
7/16"	.437	UK00799*	UK00803*								
1/2"	.500	UK00796*	UK00804*								
9/16"	.562	TK00582**	TK00805 <sup>†</sup>								
5/8"	.625	TK00583**	TK00806 <sup>†</sup>								
11/16"	.687	TK00584	TK00808 <sup>†</sup>								
3/4"	.750	TK00585	TK00809								
13/16"	.812	TK00586	TK00810								
7/8"	.875	TK00587	TK00811								
15/16"	.937	TK00588	TK00812								
1"	1.000	TK00589	TK00813								
1-1/16"	1.062	TK00590	TK00814								
1-1/8"	1.125	TK00591	TK00815								
1-3/16"	1.187	TK00592	TK00816								
1-1/4"	1.250	TK00593	TK00817								
1-5/16"	1.312	TK00594	TK00818								
1-3/8"	1.375	TK00595	TK00819								
Pilot Pin		UEA0825	UEA0850								

2.205 2.244 56 57 58 2.283 59 2.323 60 2.362 2.402 61 62 2.441 63 2.480 64 2.520 65 2.559 Pilot Pin

> Hi-Broach metric sizes available upon request.

54

55

2.126

2.165

\_

\_

\_

\_

\_

\_

\_

UEA0835

TK00445

TK00446

TK00447

TK00448

TK00449

TK00450

TK00451

TK00607

TK00608

TK00609

TK00610

TK00611

UEA0850

95

96

97

98

99

100

Pilot Pin

3.740

3.780

3.819

3.858

3.898

3.937

TJ16695

TJ16696 TJ16697

TJ16698

TJ16999

TJ16700

TA9A207

\* UK number cutter comes with pilot pin \*\* Exception of TK00582 & TK00583 uses UEA0625 † Exception of TK00805, TK00806 & TK00808 uses UEA0650

### PORTABLE DOUBLE-ACTING **SELFER ACE**

### **Double-acting hydraulic system allows** automatic and inching (manual mode) operation.



PUNCHING



\* 1" and 1-1/16" punch requires the use of a split lock nut (UHA9936-0) and reduces the maximum thickness to 9/16"

and see that a data of some states

#### **Spacifications**

Specifications	In case of mild steel maximum pu	nching thickness must be decided	a based on the equation of 0.8 x punching diar	neter. For details see the instruction manual.
Model		HS11-1624	HS07-1624	HS06-1322
Max. Throat Depth		4-5/16"	2-3/4"	2-3/8"
Hole Making Time	Pu	nching Time 11.8 sec.	Punching Time 11.8 sec.	Punching Time 7.9 sec.
	Re	turning Time 5.7 sec.	Returning Time 5.7 sec.	Returning Time 3.4 sec.
Allowable Max. Pressure		10,000 psi	10,000 psi	10,000 psi
Weight		66 lbs.	56 lbs.	45 lbs.
Accessories Included		3	sembly • Spanner • Spanner 12 • Sub l	, , ,

• Tool Box • 22 mm Punch & Die mounted on machine • 4mm Allen Wrench • 5mm Allen Wrench

and on the equation of 0.9 v nunching

#### **Optional Accessories**



UHA9936-0 Split Lock Nut for 1" and 1-1/16" Punch



TA99037-0 Lock Nut Assembly for 25 mm Punch



Part #TW-40 Spring Balancer for HS11/HS07



Part #TW-30 Spring Balancer for HS06



Part #TB02142-0 Hook Clamp Assembly



Part #TB02141-0 Foot Switch Relay Assembly



Model	HPD-05
Power Source (Single Phase)	110-120V AC
Max. Output Pressure	10,000 psi
Output At No Load	1.53 qt/min
Output AT 10,000 psi	0.7 qt/min
Motor	0.4 kw 4p
Reservoir Capacity	4.26 qt
Discharge Port	Rc 3/8 (PT 3/8")
Weight	63 lbs.

230V available upon request

### PUNCHING



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



15'

(381mm)



\* 1" and 1-1/16" punch requires the use of a split lock nut (UHA9936-0) and reduces the maximum thickness to 9/16"

Specifications	In case of mild steel maximum punching	) thickness must be decide	ed based on the equation of 0.8 x punching	g diameter. For details see the instruction man
Model	Н	A11-1624	HA07-1624	HA06-1322
Max. Throat Depth		4-5/16"	2-3/4"	2-3/8"
Hole Making Time	Punchir	ıg Time 16.5 sec.	Punching Time 16.5 sec.	Punching Time 10.5 sec.
	Return	iing Time 1 sec.	Returning Time 1 sec.	Returning Time 1 sec.
Allowable Max. Pressure	1	10,000 psi	10,000 psi	10,000 psi
Weight		78 lbs.	63 lbs.	47 lbs.
Accessories Included		, ,	• Sub Handle Assembly • Tool Box machine • 4mm Allen Wrench	

#### **Optional Accessories**



UHA9936-0 Split Lock Nut for 1" and 1-1/16" Punch



TA99037-0 Lock Nut Assembly for 25 mm Punch



Part #TW-40 Spring Balancer for HA11/HA07



Spring Balancer for HA06



Part #TA96342-0 Hook Clamp Assembly



Part #TA94386-0 Foot Switch Assembly

HYDRAUL	IC PUMP for HA Type
Single-Acting	
	12.76" (324mm) 14.96" (380mm)

#### **Specifications**

opeenneatione	
Model	SC-05
Power Source (Single Phase)	110-120V AC
Max. Output Pressure	10,000 psi
Output At No Load	1.28 qt/min
Output At 10,000 psi	0.59 qt/min
Motor	0.4 kw 4p
Reservoir Capacity	4.26 qt
Discharge Port	Rc 3/8 (PT 3/8")
Weight	60 lbs.

#### 230V available upon request

### ELECTRICALLY OPERATED HANDY SELFER

### PUNCHING

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

# HANDY SELFER







Max. Punching Diameter: 13/16 Max. Punching Thickness: 1/4" Max. Output: 17 tons

Custom shape and size punches and dies available upon request

#### **Specifications**

-	
Model	E55-0619
Power Source (Single Phase)	110-120V AC 50/60 Hz
Rated Power Consumption	670 W
Rated Current	7.0 A
Max. Punching Diameter	13/16"
Max. Punching Thickness	1/4"
Max. Throat Depth	2-3/16"
Punching Time	2 sec.
Weight	31 lbs
Accessories Included	3 mm / 4 mm / 5 mm Allen Wrench     Stand Assembly     EL Punch 18 / EL Die 18B / EL Die 18A     Mounted on Machine     Spanner 10 x 12

#### **Selection of Dies**

Application	Type of Die	Plate	Thickness
мррпсанон	The of Die	Mild Steel	Stainless Steel
For thin sheets	A	1/16" — 1/8"	Max. 1/8"
For thick sheets	В	5/32" – 1/4"	Max. 5/32"
For channel iron	С	9/32" - 5/16"	N.A.

#### **Optional Accessories**



Foot Switch Assembly TB00799-0

# **PUNCHES & DIES**

### Punches & Dies for SELFER Puncher

For HS and HA Series SELFER ACE FRACTIONAL - Inch Round Size					
Diameter	Decimal	Punch	Die		
5/16"	0.313	UHP0516	UHD0516		
3/8"	0.375	UHP0308	UHD0308		
7/16"	0.438	UHP0716	UHD0716		
1/2"	0.500	UHP0102	UHD0102		
9/16"	0.563	UHP0916	UHD0916		
5/8"	0.625	UHP0508	UHD0508		
11/16"	0.688	UHP1116	UHD1116		
3/4"	0.750	UHP0304	UHD0304		
13/16"	0.813	UHP1316	UHD1316		
7/8"	0.875	UHP0708	UHD0708		
15/16"	0.938	UHP1516	UHD1516		
**1"	1.000	UHP0101	UHD0101		
**1-1/16"	1.063	UHP1716	UHD1716		



16.5 D Dies

D Punch

D Dies

16.5



For HS and HA Series SELFER ACE					
METRIC - mm Round Size					
Diameter	Decimal	Punch	Die		
8	0.315	TJ10778	TJ10779		
9	0.354	TJ11088	TJ11089		
10	0.394	TJ06700	TJ06701		
11	0.433	TJ06698	TJ06699		
12	0.472	TJ06696	TJ06697		
13	0.512	TJ06694	TJ06695		
14	0.551	TJ06692	TJ06693		
14.5	0.571	TJ06611	TJ06612		
15	0.591	TJ06690	TJ06691		
16	0.630	TJ06688	TJ06689		
17	0.669	TJ06686	TJ06687		
17.5	0.689	TJ06609	TJ06610		
18	0.709	TJ06684	TJ06685		
18.5	0.728	TJ08578	TJ08579		
19	0.748	TJ06682	TJ06683		
20	0.787	TJ06680	TJ06681		
20.5	0.807	TJ06607	TJ06608		
21	0.827	TJ06678	TJ06679		
21.5	0.846	TJ07979	TJ07980		
22	0.866	TJ06676	TJ06677		
22.5	0.886	TJ09552	TJ09553		
23	0.906	TJ06674	TJ06675		
23.5	0.925	TJ06566	TJ06569		
24	0.945	TJ07748	TJ07749		
*25	0.984	TJ10061	TJ10062		
*25 mm reau	ires part # TA	99037 oversized	lock nut		



*25 m	nm requires	part #	TA99037	oversized	lock nut

For HS and HA Series SELFER ACE					
METRIC - mm Oblong Size					
Size	Decimal	Punch	Die	Jig	
16 x 8	0.630 x 0.315	TJ13229	TJ13238	TK00455	
18 x 9	0.709 x 0.354	TJ13230	TJ13239	TK00456	
20 x 10	0.787 x 0.394	TJ13231	TJ13240	TK00457	
20 x 14	0.787 x 0.551	TJ14973	TJ14974	TK00469	
22 x 11	0.866 x 0.433	TJ13232	TJ13241	TK00458	
22 x 14	0.866 x 0.551	TJ13262	TJ13263	TK00464	
24 x 12	0.945 x 0.472	TJ13233	TJ13242	TK00459	
*25 x 9	0.984 x 0.354	TJ13234	TJ13243	TK00460	
*25 x 12	0.984 x 0.472	TJ13235	TJ13244	TK00461	
*25 x 14	0.984 x 0.551	TJ13236	TJ13245	TK00462	
*25 x 18	0.984 x 0.709	TJ13237	TJ13246	TK00463	
*25 mm size	requires part # TA9903	37 oversized lock	nut		

### **Punches & Dies for HANDY SELFER**

FRACTIONA	FRACTIONAL - Inch Round Size					
Diameter	Decimal	Punch	"A" Die	"B" Die	"C" Die	
1/4	0.250	E5P0104-0	E5D0104-A	E5D0104-B	-	
5/16	0.313	E5P0516-0	E5D0516-A	E5D0516-B	_	
3/8	0.375	E5P0308-0	E5D0308-A	E5D0308-B	E5D0308-C	
7/16	0.438	E5P0716-0	E5D0716-A	E5D0716-B	E5D0716-C	
1/2	0.500	E5P0102-0	E5D0102-A	E5D0102-B	E5D0102-C	
9/16	0.563	E5P0916-0	E5D0916-A	E5D0916-B	E5D0916-C	
5/8	0.625	E5P0508-0	E5D0508-A	E5D0508-B	E5D0508-C	
11/16	0.688	E5P1116-0	E5D1116-A	E5D1116-B	-	
3/4	0.750	E5P0304-0	E5D0304-A	E5D0304-B	_	
13/16 0.813 E5P1316-0 E5D1316-A E5D1316-B –						

"C" Die for 9/32" thru 5/16" mild steel/C-channel

METRIC - mm Round Size					
Diameter	Decimal	Punch	"A" Die	"B" Die	"C" Die
6	0.236	TK00193	TK00208	TK00222	-
6.5	0.256	TK00194	TK00209	TK00223	_
8	0.315	TK00195	TK00210	TK00224	-
8.5	0.335	TK00196	TK00211	TK00225	-
10	0.394	TK00197	TK00212	TK00226	TK00235
11	0.433	TK00198	TK00213	TK00227	TK00236
12	0.472	TK00199	TK00214	TK00228	TK00237
13	0.512	TK00200	TK00215	TK00229	TK00238
14	0.551	TK00201	TK00216	TK00230	TK00239
15	0.591	TK00202	TK00217	TK00231	TK00240
16	0.630	TK00203	TK00218	TK00232	TK00241
17	0.669	TK00204	TK00219	TK00233	-
18	0.709	TK00205	TK00220	TK00234	_
18.5	0.728	TK00278	TK00279	TK00280	-
19	0.748	TK00180	TK00181	TK00182	-

"B" Die for 5/32" thru 1/4" mild steel "C" Die for 9/32" thru 5/16" mild steel/C-channel

METRIC - m	nm Oblong Size			
Size	Decimal	Punch	"A" Die	"B" Die
10 x 6.5	0.394 x 0.256	TK00242	TK00254	TK00266
13 x 6.5	0.512 x 0.256	TK00243	TK00255	TK00267
13 x 8.5	0.512 x 0.335	TK00244	TK00256	TK00268
13.5 x 9	0.531 x 0.354	TK00245	TK00257	TK00269
15 x 10	0.591 x 0.394	TK00246	TK00258	TK00270
16.5 x 11	0.650 x 0.433	TK00247	TK00259	TK00271
17 x 8.5	0.669 x 0.335	TK00248	TK00260	TK00272
18 x 9	0.709 x 0.354	TK00249	TK00261	TK00273
18 x 12	0.709 x 0.472	TK00250	TK00262	TK00274
19.5 x 13	0.768 x 0.512	TK00251	TK00263	TK00275
20 x 10	0.787 x 0.394	TK00252	TK00264	TK00276
21 x 14	0.827 x 0.551	TK00253	TK00265	TK00277

"B" Die for 5/32" thru 1/4" mild steel



22.5 Side face of EL Dies Type A, B & C

Custom shape and size punches and dies for SELFER ACE, SELFER, and HANDY SELFER available upon request.

### PORTABLE BEVELING TOOLS **BEVELER**

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



#### **Features**

- Ideal for plate, pipe, and tube beveling for welding preparation
- Bevels angles 15° to 45°
- Bevels depth up to 5/8" (15 mm) at 45° angle using multiple passes
- Bevels approximately 3' to 4' per minute
- High speed cutting action minimizes material hardening

Chamfering steel plates



**Chamfering I-beams** 



#### **Specifications**

Model	HB-15B
Power Supply	115V AC, 50/60 Hz
Rated Power Consumption	910 W
Rated Current	10.5 A
No Load Speed	3,340 RPM
Chamfering Capacity (Mild Steel)	5/8" (15 mm) Depth at 45° Angle
Chamfer Angle	15° – 45°
Power Cord	13.1 feet (4 meters)
Weight	33 lbs
Accessories Included	<ul> <li>4 mm Allen Wrench</li> <li>5 mm Allen Wrench</li> <li>6 mm Allen Wrench</li> <li>Hook Spanner 25-28</li> <li>Spanner 24 mm x 27 mm</li> <li>3mm T Wrench</li> <li>Roller Bracket Assembly</li> <li>2 Sets of Cutting Tips, Comes with One Set Mounted (12 pieces/set)</li> </ul>
Optional Accessories	<ul> <li>TA9A728 Pipe and Tube Beveling Attachment Capacity 7-7/8" to 32" inches O.D.</li> <li>TA9A093 Cutting Tips (12 pieces/set)</li> </ul>

#### Chamfer angle and width

Chamfer	HB- Mild Ste	15B	Chamfer	X	
Angle $\alpha$	X	Y		. a /	
45°	15	15	↓¥		Straight
30°	9	15.5	]		
15°	4	15.4			

### Tigon Spring Balancers and Retractors TIGON

# **Spring Balancers**

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

Capacities ranging from 1.1 - 154.3 lbs. (0.5 - 70 kg.)

Model	Capa	city	Stro	ke	Wei	ght
Model	lbs.	kg	feet	m	lbs.	kg
TW-00	1.1-3.3	0.5-1.5	1.64	0.5	0.4	0.2
TW-0	1.1-3.3	0.5-1.5	3.28	1.0	1.1	0.5
TW-3	2.2-6.6	1.0-3.0	4.27	1.3	3.1	1.4
TW-5	5.5-11.0	2.5-5.0	4.27	1.3	3.3	1.5
TW-9	9.9-19.8	4.5-9.0	4.27	1.3	7.5	3.4
TW-15	19.8–33.1	9.0-15.0	4.27	1.3	8.4	3.8
TW-22	33.1-48.5	15.0-22.0	4.92	1.5	15.9	7.2
TW-30	48.5-66.1	22.0-30.0	4.92	1.5	16.8	7.6
TW-40	66.1-88.2	30.0-40.0	4.92	1.5	21.6	9.8
TW-50	88.2-110.3	40.0-50.0	4.92	1.5	22.9	10.4
TW-60	110.3-132.3	50.0-60.0	4.92	1.5	25.6	11.6
TW-70	132.3-154.3	60.0-70.0	4.92	1.5	26.0	11.8



# **Hose Reel Balancers**

Incorporates both balancer and hose reel

Model	Capacity		Stro	ke	Wei	ght	Hose Dian	neter (mm)
MOUEI	lbs.	kg	feet	m	lbs.	kg	I.D.	0.D.
HW-0	1.1-3.3	0.5-1.5	4.27	1.3	3.5	1.6	6.5	10
HW-3	3.3-6.6	1.5-3.0	4.27	1.3	3.8	1.7	6.5	10
HW-5	6.6-11.0	3.0-5.0	4.27	1.3	4.0	1.8	6.5	10



# Retractors

Handy knob for easy tension adjustment

Model	Capacity		Stroke		Weight	
Wouer	lbs.	kg	feet	m	lbs.	kg
RW-0	1.1-3.3	0.5-1.5	6.56	2.0	1.1	0.5
RW-3	2.2-6.6	1.0-3.0	6.56	2.0	1.5	0.7
RW-5	5.5-11.0	2.5-5.0	6.56	2.0	2.0	0.9



Model	Capa	city	Stroke		Weight	
Model	lbs.	kg	feet	m	lbs.	kg
TW-06R	0.4-1.3	0.2-0.6	4.92	1.5	0.66	0.3
TW-1R	1.1-3.3	0.5-1.5	4.92	1.5	0.66	0.3



### NEEDLE SCALER JET CHISEL

# **JET CHISEL**

# Powerful scaling with multiple needles



#### **Features**

- 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 ensures trouble-free performance.



#### 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.

#### Fully Automatic System

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.



### AJC-16 Slim Model



# JT-20 Medium-Duty Model





Model	AJC-16	JT-20	JEX-20
Air Pressure	85 PSI	85 PSI	85 PSI
Air Consumption	2.6 CFM	7.1 CFM	7.1 CFM
Strokes per Minute	6,000 SPM	4,000 SPM	4,000 SPM
Standard Needles with Machine	3 pieces of 3 mm x 180 mm	12 pieces of 3 mm x 180 mm	12 pieces of 3 mm x 180 mm
Optional Needle Size	N/A	29 pieces of 2 mm x 180 mm	29 pieces of 2 mm x 180 mm
Hose Size	3/8" ID	3/8" ID	3/8"ID
Weight	2.2 lbs.	5.3 lbs.	6.1 lbs
Accessories Included	<ul> <li>Threaded Adapter PT3/8" x NPT3/8"</li> <li>Hose Nipple PT3/8" x 3/8"</li> </ul>	<ul> <li>Threaded Adapter PT3/8" x NPT3/8"</li> <li>Hose Nipple PT3/8" x 3/8"</li> </ul>	<ul> <li>Threaded Adapter PT3/8" x NPT3/8"</li> <li>Hose Nipple PT3/8" x 3/8"</li> </ul>



Air Consumption	5.3 CFM	9.5 CFM	12.4 CFM	15.2 CFM
Strokes per Minute	4,000 SPM	4,000 SPM	4,500 SPM	3,700 SPM
Standard Needles with Machine	29 pieces of 2 mm x 180 mm	23 pieces of 3 mm x 180 mm	28 pieces of 3 mm x 180 mm	28 pieces of 3 mm x 180 mm
Optional Needle Size	N/A	53 pieces of 2 mm x 180 mm	66 pieces of 2 mm x 180 mm	66 pieces of 2 mm x 180 mm
		12 pieces of 4 mm x 180 mm	14 pieces of 4 mm x 180 mm	14 pieces of 4 mm x 180 mm
Hose Size	3/8" I.D.	3/8" I.D.	3/8" I.D.	3/8" I.D.
Weight	3.1 lbs.	6.1 lbs.	7.7 lbs.	6.8 lbs.
Accessories Included	•Threaded Adapter PT3/8" x NPT3/8" •Hose Nipple PT3/8" x 3/8".	Threaded Adapter PT3/8" x NPT3/8"     Hose Nipple PT3/8" x 3/8".     6mm Allen Wrench	Threaded Adapter PT3/8" x NPT3/8"     Hose Nipple PT3/8" x 3/8".     TP01462 Needle Supporter 4mm     14 pieces of 4mm x 180mm Needles     6mm Allen Wrench	• Threaded Adapter PT3/8" x NPT3/8" • Hose Nipple PT3/8" x 3/8". • TP01462 Needle Supporter 4mm • 14 pieces of 4mm x 180mm Needles

### Electric Needle Scaler EJC-32A



#### Overload protection

- Powerful 300 watt double insulated motor
- Extended length, slim barrel design
- Adjustable front handle for operator comfort and convenience

#### **Specifications**

Model	EJC-32A		
Power Supply	115 V AC, 50/60 Hz	230 V AC, 50/60 Hz	
Rated Power Consumption	300 watts	300 watts	
Rated Current	2.8 A 1.4 A		
Rated Duty Cycle	30 minutes		
Strokes per Minute	3,000 SPM		
Standard Needles with Machine	15 pieces of 3 mm x 180 mm		
<b>Optional Needle Size</b>	32 pieces of 2	mm x 180 mm	
Power Cord Length	6-1/2 feet (5 meters)		
Weight	9.9 lbs.	(4.5 kg)	

#### **Optional Needles**



PN	Description
TA98780	Needle 2 mm × 150 mm (100 pcs./set)
TA98781	Needle 2 mm × 180 mm (100 pcs./set)
TA98782	Needle 3 mm × 180 mm (100 pcs./set)
TA98783	Needle 4 mm × 180 mm (50 pcs./set)

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

Anti-sparking beryllium copper and stainless steel needles available upon request. Consult factory before ordering.

PN	Description	Model
TP00338	Needle Supporter 2 mm	JT-20,
TP00337	Needle Supporter 3 mm	JEX-20
TQ05210	Needle Supporter 2 mm	AJC-16
TQ04554	Needle Supporter 3 mm	AJU-10
TP00290	Needle Supporter 2 mm	JC-16
TP02244	Needle Supporter 2 mm	
TP02245	Needle Supporter 3 mm	JEX-24
TP14992	Needle Supporter 4 mm	
TP01499	Needle Supporter 2 mm	
TP01461	Needle Supporter 3 mm	JEX-28, JEX-2800A
TP01462	Needle Supporter 4 mm	
TP16475	Needle Supporter 2 mm	
TP16301	Needle Supporter 3 mm	EJC-32A

### PNEUMATIC SCALER SUPER KELEN

### **SUPER KELEN** Industrial and shipboard pneumatic scalers



#### **Features**

- 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 4-1/2' in length for extended reach applications and operator convenience
- Tool-less chisel installation and removal



#### **Specifications**

Model	S-250	S-500	S-1000
Air Pressure	85 PSI	85 PSI	85 PSI
Air Consumption	9.5 CFM	9.5 CFM	9.5 CFM
Strokes per Minute	2,500 SPM	2,500 SPM	2,500 SPM
Shank Size	1/2" Square	1/2" Square	1/2" Square
Hose Size	3/8" ID	3/8" ID	3/8" ID
Weight	9.0 lbs.	10.4 lbs	13.4 lbs.
Accessories Included	Scraper #2005     Threaded Adapter M16 x NPT3/8"	<ul> <li>Scraper #2005</li> <li>Threaded Adapter M16 x NPT3/8"</li> </ul>	<ul> <li>Scraper #2005</li> <li>Threaded Adapter M16 x NPT3/8"</li> </ul>

#### **Optional Chisels**



PN	Description	Qty
TP03645	2001 Scraper 2-3/8" (60 mm)	1 pc.
TP03646	2002 Scraper 1-1/2" (38 mm)	1 pc.
TP03647	2003 Blank Chisel	1 pc.
TP04010	2004 Concave Scraper 2-3/8" (60 mm)	1 pc.
TP04552	2005 Bend Scraper 1-1/2" (38 mm)	1 pc.
TP04553	2006 Concave Bend Scraper 2-3/8" (60 mm)	1 pc.
TP04554	2007 Bend Scraper 2-3/8" (60 mm)	1 pc.

### SCALING

### **AIR CHIPPER** Removes weld splatter quickly and easily



#### **Features**

- · Ideal tool for quickly and efficiently removing weld splatter, 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, tool will not activate unless contacting work surface, "ACH-16" only





Specifications						
Model	ACH-16	CH-24				
Air Pressure	85 PSI	85 PSI				
Air Consumption	5.3 CFM	7.1 CFM				
Strokes per Minute	6,000 SPM	4,000 SPM				
Shank Size	27/64" (10.5 mm) Round	1/2" Square				
Hose Size	3/8" ID	3/8" ID				
Weight	2.2 lbs.	3.7 lbs.				
	• TQ03431 - Flat Chisel	• TP15166 - Curved Flat Chisel				
Accessories Included	<ul> <li>Hose Nipple PT3/8" x 3/8"</li> <li>Threaded Adapter PT3/8" x NPT3/8"</li> </ul>	<ul> <li>Hose Nipple PT3/8" x 3/8"</li> <li>Threaded Adapter PT3/8" x NPT3/8"</li> </ul>				



#### ACH-16 Chisels

PN	Description	Qty
TQ03431	Flat Chisel 3/4" x 4-3/4" (20 mm x 120 mm)	1 pc.
TQ03453	Curved Flat Chisel 3/4" x 4-3/4" (20 mm x 120 mm)	1 pc.
TQ03549	Flat Chisel 7/16" x 4-3/4" (11 mm x 120 mm)	1 pc.
TQ03452	Flat Chisel 3/4" x 7-1/16" (20 mm x 180 mm)	1 pc.

#### **CH-24** Chisels

PN	Description	Qty
TP15234	Straight Flat Chisel 1/2" x 6-1/2" (12.7 mm x 165 mm)	1 pc.
TP15233	Flat Chisel 1" x 6-1/8"(25 mm x 155 mm)	1 pc.
TP15166	Curved Flat Chisel 1" x 6-1/8" (25 mm x 155 mm)	1 pc.

### PNEUMATIC GRINDER **MYTON**

# MYTON Heavy-duty gri

### Heavy-duty grinders for tough applications

#### **Features**

- Ideal for industrial and production grinding applications
- Variable Speed Control
- Side exhaust with noise reduction system
- Locking throttle lever helps prevent accidental start-up
- Great power/weight ratio
- Insulated handle for operator convenience and comfort
- Push button spindle lock for changing wheels (MLG-40, MLG-50, MLG-70)







### MLG-50 Depressed center wheel 5"

9.37" (238 mm)

CE

4.02"

(102 mm)

### MLG-70 Depressed center wheel 7"



#### **Specifications**

opcomoations					
Model	MLG-25	MLG-40	MAGW-40	MLG-50	MLG-70
Air Pressure	85 PSI	85 PSI	85 PSI	85 PSI	85 PSI
Air Consumption (No Load)	14.8 CFM	15.9 CFM	24.0 CFM	24.7 CFM	24.7 CFM
Air Consumption (Load)*		32.1 CFM	29.0 CFM	38.8 CFM	38.8 CFM
Free Speed	19,000 RPM	13,000 RPM	13,000 RPM	11,000 RPM	7,600 RPM
Grinding Wheel Diameter	2-1/4" max.	4" max.	4" max.	5" max.	7" max.
Spindle OD Size	3/8"	5/8"	5/8"	7/8"	7/8"
Horsepower	0.29 HP	0.97 HP	0.78 HP	1.50 HP	1.50 HP
Hose Size	1/4" ID	3/8" ID	3/8" ID	3/8" ID	3/8" ID
Weight	1.3 lbs.	3.3 lbs.	3.4 lbs.	5.4 lbs.	5.4 lbs.
Accessories Included	<ul> <li>Threaded Adapter PT1/4" x NPT1/4"</li> <li>5 mm Allen Wrench</li> <li>19 mm Spanner</li> <li>80 grit Grinding Disc</li> </ul>	<ul> <li>Threaded Adapter PT3/8" × NPT3/8"</li> <li>5 mm Allen Wrench</li> <li>6 mm Allen Wrench</li> </ul>	<ul> <li>Threaded Adapter PT3/8" x NPT3/8"</li> <li>6 mm Allen Wrench</li> <li>17 mm Spanner</li> </ul>	<ul> <li>Threaded Adapter PT3/8" × NPT3/8"</li> <li>4 &amp; 6 mm Allen Wrenches</li> <li>Spanner Wrench</li> <li>Side Handle Assembly</li> <li>Wheel Guard Assembly</li> </ul>	<ul> <li>Threaded Adapter PT3/8" x NPT3/8"</li> <li>6 mm Allen Wrench</li> <li>8 mm Allen Wrench</li> <li>Side Handle Assembly</li> <li>Wheel Guard Assembly</li> </ul>

\*Governed models

Available Side Handles: MLG-40 (#TB08265), MAGW-40 (#TQ01051), MLG-50 (#TB08265 or #TB09680), MLG-70 (#TB08265 or #TB09680)

### **GRINDING & SANDING**

### **MYTON** Angle Sanders



#### **Features**

- Ideal for sanding and/or polishing on metal, aluminum,wood, plastic and many other materials
- Variable Speed Control
- Side exhaust with noise reduction system
- Locking throttle lever helps prevent accidental start-up
- Compact and lightweight design for working in confined spaces
- Great power/weight ratio
- Insulated handle for operator comfort and convenience
- Uses twist lock sanding discs for quick installation and removal (MLS-20)



MAS-40 Abrasive disc 4"



opoonnoutiono				
Model		MLS-20	MAS-40	
Air Pressure		85 PSI	85 PSI	
Air Consumption (No load)		14.9 CFM	15.9 CFM	
Free Speed		19,000 RPM	13,700 RPM	
Sanding Disc Diameter		1", 1-1/2" or 2"	4" max.	
Chuck Size		1/4"	N/A	
Hose Size		1/4" ID	3/8" ID	
Weight	1.3 lbs.		2.0 lbs.	
		aded Adapter PT1/4" x NPT1/4" pieces of 14 mm Spanners • Threaded Adapter PT1/4" x NPT • Hose Barb NPT1/4" x 3/8" • 6 mm Allen Wrench • 17 mm Spanner		
Optional Accessories (MAS-40)         • TA91354 Side Handle         • TQ00392 Adapter				

### PNEUMATIC DIE GRINDER AIR SONIC

# **AIR SONIC**



#### **Features**

- Ideal for most deburring, finishing and grinding applications
- Precision machined with heavy-duty spindle (L-25B) and support bearings (L-35C)
- Rear exhaust with noise reduction system
- Suitable for industrial and production applications
- Locking throttle lever helps prevent accidental start-up
- Accepts most stone-type and rotary carbide burrs with 1/4" shanks









#### **Specifications**

25

Model	L-25B	L-35C		
Mouel	L-2JB	L-330		
Air Pressure	85 PSI	85 PSI		
Air Consumption	14.1 CFM	12.4 CFM		
Free Speed	27,000 RPM	37,500 RPM		
Chuck Size	1/4"	1/4"		
Hose Size	1/4"	1/4"		
Weight (without hose)	1.3 lbs.	1.0 lbs.		
	• 1/8" Chuck Sleeve • Air Hose	• 1/8" Chuck Sleeve • Air Hose		
Accessories Included	Sample Grinding Stone     Spanner Wrench (14 mm)	• Sample Grinding Stone • Spanner Wrench (14 mm)		
Optional Accessory	• 3/16" Chuck Sleeve	• 3/16" Chuck Sleeve		

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

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



#### **Features**

- Smooth high speed rotation and low vibration enables precision grinding
- Step-less speed change from 0 to 56,500 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-55		
Air Pressure		85 PSI		
Air Consumption		6.0 CFM		
Free Speed		56,500 RPM		
Chuck Size		1/8"		
Hose Size		1/4"		
Weight (without hose)		0.55 lbs.		
Accessories Included	Sample Grinding Stone     Spanner Wrench (9 mm)     Spanner Wrench (7 mm)			

\* Stone type bits: Must be safety approved to operate at or above 56,500 RPM

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

### **ADR-100**



AIR DRILL



#### **Specifications**

**ADR-65** 

Model	ADR-65	ADR-100
Air Pressure	85 PSI	85 PSI
Air Consumption (no load)	19.5 CFM	23.7 CFM
Free Speed	2,900 RPM	2,000 RPM
Chuck Size	1/4" (6.5 mm) max.	3/8" (10 mm) max.
Hose Size	3/8"	3/8"
Weight (without hose)	1.76 lbs.	2.42 lbs.
Accessories Included	<ul> <li>1/4" (65 mm) Drill Chuck</li> <li>Chuck Key</li> <li>Threaded Adapter PT3/8" x NPT3/8"</li> </ul>	<ul> <li>3/8" (10 mm) Drill Chuck</li> <li>Chuck Key</li> <li>Threaded Adapter PT3/8" x NPT3/8"</li> </ul>

#### Features

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

#### Reversible

Change rotation direction by turning the valve as indicated.



#### BELTON Rear exhaust system

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

• Lightweight materials for reduced user fatigue • High-performance motor improves work output • Throttle safety lever to prevent accidental start-ups

360° guard rotation to suit most applications

• Directable rear exhaust system

• Locking arm for quick belt changes

Adjustable speed control

### **B-10CL**



### **B-30CL**

Offset bracket assembly for sanding contoured surfaces





9.80" (249 mm)-

Model	B-10CL	B-20CL	B-30CL
Air Pressure	85 PSI	85 PSI	85 PSI
Air Consumption	14.2 CFM	17.0 CFM	29.1 CFM
Motor Free Speed	17,000 RPM	18,000 RPM	15,000 RPM
Belt Speed	3,470 FPM	9,086 FPM	7,577 FPM
Belt Size	3/8" x 13" (10 mm x 330 mm)	3/4" x 20-1/2" (20 mm x 520 mm)	1-3/16" x 21-1/4" (30 mm x 540 mm)
Hose Size	1/4"	1/4"	1/4"
Weight (without hose)	2.7 lbs.	2.9 lbs.	5.3 lbs.
Vibration Levels m/s <sup>2</sup> (ISO20463)	1.21	1.32	0.56 at Grip 1.88 at Side Handle
Accessories Included	<ul> <li>Assortment of Sample Belts: 1 each of #60 mounted on tool plus 1 each of #60, #80, #100 and #120</li> <li>Threaded Adapter PT1/4" x NPT1/4"</li> <li>2 mm Allen Wrench</li> <li>4 mm Allen Wrench</li> </ul>	<ul> <li>Assortment of Sample Belts: 1 each of #60 mounted on tool plus 1 each of #60, #80, #100 and #120</li> <li>Threaded Adapter PT1/4" x NPT1/4"</li> <li>2.5 mm Allen Wrench</li> <li>Convex Shoe</li> <li>Silencer Sub Assembly</li> </ul>	<ul> <li>Assortment of Sample Belts: 1 each of #60 mounted on tool plus 1 each of #60, #80, #100 and #120</li> <li>Threaded Adapter PT1/4" x NPT1/4"</li> <li>5 mm Allen Wrench</li> <li>Side Handle Assembly</li> <li>Silencer Sub Assembly</li> </ul>

#### **Optional Parts**

No.	PN	Description
1	TB09997	Offset Bracket 10 Ass'y for <i>B-10CL</i>
2	TB10192	Offset Bracket 20 Ass'y for <b>B-20CL</b>
3	TB08150	Offset Bracket 30 Ass'y for <b>B-30CL</b>
4	TB09938	Finger Pad Ass'y for <b>B-20CL</b>
5	TB09996	Bracket 6 Ass'y for <b>B10-CL</b>
6	TP14770	Shoe 6 for <i>B-10CL</i>
7	TB10160	Idle Pulley Bracket A Ass'y for <i>B-20CL</i>
8	TB10191	Convex Shoe for <b>B-20CL</b>



### **Sanding Belts for BELTON Sanders**

B-10CL/BB-10A 3/8" x 13" or 10 mm x 330 mm Belt B-20CL 3//" x 20-1/2" or 20 mm x 520 mm Belt

3/6 X 13 UI TU IIIII X 330 IIIIII BEIL		3/4 X 20-1/		520 mm beit	
Part #	Belt Grit	Qty	Part #	Belt Grit	Qty
@U40001	#40	20 pcs./set	TP01941	#40	20 pcs./set
TP12438	#60	20 pcs./set	TP01936	#60	20 pcs./set
TP12439	#80	20 pcs./set	TP01942	#80	20 pcs./set
TP12440	#100	20 pcs./set	TP01943	#100	20 pcs./set
TP12441	#120	20 pcs./set	TP01944	#120	20 pcs./set
@U40002	#150	20 pcs./set	@U40004	#150	20 pcs./set
TP12543	#180	20 pcs./set	TP02002	#180	20 pcs./set

#### B-30CL

3/16" x 2 <sup>-</sup>	1" or 30	mm x 540	mm Belt

Part #	Belt Grit	Qty			
TP04074	#40	20 pcs./set			
TP04084	#60	20 pcs./set			
TP04085	#80	20 pcs./set			
TP04086	#100	20 pcs./set			
TP04078	#120	20 pcs./set			
@U40006	#150	20 pcs./set			
TP04511	#180	20 pcs./set			

### SANDING

# **BABY BELTON**



#### **Features**

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

### **BB-10A**



#### **Specifications**

•		
Model	BB-10A	
Air Pressure	85 PSI	
Air Consumption	8.8 CFM	
Motor Free Speed	16,000 RPM	
Belt Speed	3,800 FPM	
Belt Size	3/8" x 13" (10 mm x 330 mm)	
Hose Size	1/4"	
Weight (without hose)	1.3 lbs.	
Accessories Included	<ul> <li>Assortment of Sample Belts, 1 Each of #100, #120, #180, and #240 grit</li> <li>1.5 mm Allen Wrench</li> </ul>	

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



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





Forward



Reverse

# ELECTRIC Beveling Tool



Accessories Included	<ul> <li>4 mm Allen Wrench</li> <li>Straight Cutting Tip</li> <li>(2) Hex. Nut M8</li> <li>(2) Hex. Socket Set Screws 8 mm x 25 mm</li> <li>(3) Pan Head Screws 5 mm x 10 mm</li> <li>Torx 15 (T-15) Spanner Wrench</li> <li>Chip Collector Box Assembly</li> <li>Spare Carbon Brush Assembly (1 Set)</li> </ul>
----------------------	--

### PNEUMATIC Beveling Tool MINI BEVELER AMB-0307



Accessories Included	Threaded Adapter PT3/8" x NPT 3/8"     3 mm Allen Wrench     4 mm Allen Wrench     Straight Cutting Tip     (2) Hex. Nut M8     (2) Hex. Socket Set Screw 8 mm x 25 mm     Torx 15 (T-15) Spanner Wrench
----------------------	--

#### Bevel angle, width and radius

#### Features

- Lightweight design for portable edge beveling applications
- Ideal for beveling plate, outer pipe, tube and other profiles
- Designed to bevel stainless steel and carbon steel
- Adjustable to bevel angle from 15° to 45°
- Uses an indexable carbide insert
- Bevel depth up to 9/32" at 45°
- Outer edge pipe beveling > 12" (300 mm) minimum diameter
- Built-in chip collection box (EMB-0307B)
- Operates on single phase 230V (EMB-0307B)
- Powerful 1-1/2 horsepower double insulated motor (EMB-0307B)
- Quick release base allows easy access to cutting tip (EMB-0307B).

#### Specifications - EMB-0307B

•	
Power Supply	220 V - 240 V A/C, 50/60 Hz
Rated Power Consumption	1010 W
Rated Current	4.6 A
Rated Duty Cycle	Continuous
Capacity (Mild Steel)	Up to 5/16" (7 mm) Bevel or 1/16" (2mm), 1/8" (3 mm), 5/32" (4 mm) Radius
Capacity (Stainless Steel)	Up to 1/8" (3mm) Bevel or 1/16" (2 mm), 1/8" (3 mm), 5/32" (4 mm) Radius
Bevel Angle	15 - 45 Degrees
Power Cord Length	13.1 Feet (4 Meters)
Weight	8.6 lbs. (3.9 kg)

#### **Specifications - AMB-0307**

Air Pressure	85 PSI
Air Consumption	31.8 CFM
Capacity (Stainless Steel)	Up to 5/16" (7 mm) Bevel or 1/16" (2mm), 1/8" (3 mm), 5/32" (4 mm) Radius
Capacity (Mild Steel)	Up to 1/8" (3mm) Bevel or 1/16" (2 mm), 1/8" (3 mm), 5/32" (4 mm) Radius
Bevel Angle	15 - 45 Degrees
Weight	6.4 lbs. (2.9 kg)

#### Available Cutting Tips for EMB-0307B and AMB-0307

Part #	Description
TV7A019	Straight Tip (2 pcs./set)
TV7A020	1/16" (2 mm) Radius Tip (2 pcs./set)
TV7A021	1/8" (3 mm ) Radius Tip (2 pcs./set)
TV7A022	5/32" (4 mm) Radius Tip (2 pcs./set)

Γ	٨٠٠٠	EMB-0307B				AMB-0307							
	Angle $\alpha$	Stainle	ss Stee	el(mm)	Milo	l Steel(ı	mm)	Stainle	ss Stee	el(mm)	Mild	Steel(I	nm)
	~	Α	В	C	Α	В	С	A	В	C	А	В	C
ſ	45°	3	3	4.2	7	7	9.9	3	3	4.2	7	7	9.9
ſ	30°	2.2	3.8	4.4	3.8	6.6	7.6	2.2	3.8	4.4	4	7	8.1
	15°	1	3.8	3.9	1.5	5.6	5.8	1	3.8	3.9	2.2	8	8.3

### **Pneumatic Radial Chamfering Tool** R **CB-01**



Accessories Included	<ul> <li>Indexable Insert: 2 pcs. (Installed)</li> <li>Indexable Insert Set Screw: 2 pcs. (Installed)</li> <li>Indexable Insert Set Screw: 2 pcs. (Extra Supply)</li> <li>2 mm Allen Wrench</li> <li>Torx 6 (T- 6F) Wrench for Insert Set Screw</li> <li>Threaded Adapter PT 1/4" x NPT 1/4"</li> </ul>		
Optional Accessories	TB09140: Guide Plate 78 Assembly     TB09143: Plate Assembly for Straight Edge Use     (Must use with TB09140 Guide Plate 78 Assembly		
Available Cutting Tins CB-01			

#### Available Cutting Tips CB-01

Part #	Description
TV7A030	Cutting Tip (2 pcs./set) for Mild Steel (1 mm capacity)
TV7A031	Cutting Tip (2 pcs./set) for Stainless Steel (0.5 mm capacity)

#### **Pneumatic Radial Chamfering Tool r Be** R F



Accessories Included	Threaded adapter PT1/4" x NPT1/4     Straight Cutting Tip     Hook Spanner     Cutting Depth Adjustment Gauge     Torx 9 (T-9) Spanner Wrench     Protective Can
Accessories Included	Hook Spanner     Cutting Depth Adjustment Gauge     Torx 9 (T-9) Spanner Wrench

#### Available Cutting Tips CB-02

Part #	Description
TV7A010	Straight Tip (2 pcs./set)
TV7A011	1/16" (2 mm) Radius Tip (2 pcs./set)

#### **Features**

- Lightweight and compact for beveling and chamfering applications
- Uniquely designed to chamfer circular, elliptical and straight line profiles
- Chamfers exterior and/or interior edges
- Chamfer widths up to .04" (1mm) for CB-01/5/64" (2mm) for CB-02 at 45°
- Optional attachment PN#TB02437 available for chamfering and/or beveling thin materials (CB-02)
- Uses indexable carbide insert

#### **Specifications CB-01**

Air Pressure	85 PSI	
Air Consumption	5.3 CFM	
No Load Speed	28,000 RPM	
Chamfering Capacity (Mild Steel)	Up to .039" (1 mm) Chamfer	
Chamfering Capacity (Stainless Steel)	Up to .020" (0.5 mm) Chamfer	
Chamfer Angle	45	
Minimum Plate Thickness	.059" (1.5 mm) Maximum chamfer capacity is reduced to 0.5 mm when plate thickness is 1.5 mm	
Minimum Radius	.118" (3 mm Radius)	
Minimum Hole Diameter	.268" (6.8 mm) Diameter Hole	
Weight	1.1 lbs. (0.5 kg)	

#### **Specifications CB-02**

-	
Air Pressure	85 PSI
Air Consumption	14.1 CFM
Chamfering Capacity (Mild Steel)	Up to 5/64" (2 mm) Chamfer or 1/16" (2 mm) Radius
Chamfer Angle	45°
Weight	4.0 lbs. (1.8 kg)

#### Chamfer angle, width and radius

Model	Chamfer	Mild Stee	Mild Steel (mm)			
WOUEI	Angle $lpha$	X	Y	Chamfer	X	
CB-01	45°	1	1	Υ	- ~	
CB-02	45°	2	2			Straight
		Stainless S	Steel (mm)			
CB-01	45°	0.5	0.5			
			1			
Moc	lel	CB-02				

Model	CB-02	Radius		
Material	Mild Steel		Round	
Radius(mm)	2		1	

#### Chamfering range of operation



### PORTABLE PRECISION FINISHING FILE **SUPER HAND**

# **SUPER HAND** Fast, efficient filing, sanding and deburring tools

### SH-100A



#### **Features**

- Eliminates time consuming manual hand-filing operations
- Ideal for industrial and 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

### **ASH-900**



Weight reduced by half for comfortable operation over long periods of time (compared to SH-100A)

#### **Optional Accessories**

For Super Hand SH-100A , ASH-800 & ASH-900

PN	Description
TA9A222	SF-10 Rat Tail File (5 pcs./set)
TA9A223	SF-11 Triangular Taper File (5 pcs./set)
TA9A224	SF-12 Half Rounded File (5 pcs./set)
TA9A225	SF-13 Flat Bastard File (5 pcs./set)
TA91752	Rubber Pad Ass'y for SH-100A
TA94625	Chuck Assembly for SH-100A
TB04319	Sanding Pad Ass'y for ASH-800/ASH-900

#### SF-10 Rat Tail File

SF-11 Triangular Taper File

SF-12 Half Round File

SF-13 Flat Bastard File

Chuck Ass'y for SH-100A

(use with TA91752)

**TA94625** 

#### Specifications

•		
Model	SH-100A	ASH-900
Air Pressure	85 PSI	85 PSI
Air Consumption (No load)	8.5 CFM	7.1 CFM
Stroke Speed	3,700 SPM	6,300 SPM
Stroke Length	9 mm	9 mm
File Shank Size	6.3 mm	5.0 mm
Weight	2.4 lbs.	1.1 lbs.

Accessories Included	Threaded Adapter PT1/4" x NPT1/4" 3 mm Allen Wrench SF-10 Rat Tail File SF-11 Triangular Taper File SE 10 Half Bound File	<b>v</b> 1
	SF-12 Half Round File     SF-13 Flat Bastard File	SF-12 Half Round File     SF-13 Flat Bastard File

TA91752 Rubber Pad Ass'y for SH-100A



#### TBO4319 Sanding Pad Ass'y for ASH-800/ASH-900



# **SUPER HAND LIGHT**

Lightweight, ultra-low vibration filer for aluminum die cast and machined parts filing

### SHL-40



#### LF-10 Rat Tail File

LF-11 Triangular Taper File

LF-12 Half Round File

#### LF-13 Flat File

#### Specifications

Model	SHL-40	
Air Pressure	85 PSI	
Air Consumption (No load)	2.5 CFM	
Stroke Speed	9,000 SPM	
Stroke Length	4 mm	
File Shank Size	3 mm	
Weight	0.88 lbs. (0.4 kg)	
Accessories Included • LF-13 Flat File • 2 mm Allen Wrench • Threaded Adapter PT 1/4" x NPT 1/4		

#### **Optional Accessories**

PN	Description
TB09652	LF-10 Rat Tail File (3 pcs./set)
TB09654	LF-11 Triangular Taper File (3 pcs./set)
TB09653	LF-12 Half Round File (3 pcs./set)
TB09651	LF-13 Flat File (3 pcs./set)

### PNEUMATIC FINISHING FILE MICRO AIR HAND PNEUMATIC SUPER SAW

#### Lightweight, ultra-low vibration filer MICRO AIR HAND for polishing and lapping operations



#### Diamond files (5pcs/set)

FILING CUTTING



# MAH-05/MAH-16



#### **Specifications**

Model		MAH-05	MAH-16
Air Pressure		85 PSI	85 PSI
Air Consumption (No Io	oad)	2.5 CFM	2.5 CFM
Stroke Speed		22,000 SPM	11,000 SPM
Stroke Length		0.5 mm	2.2 mm
File Shank Size		3 mm	3 mm
Weight		0.8 lbs.	0.8 lbs.
Accessories Included	• Threaded Adapter PT1/4"x NPT1/4"     • Flat End File     • 2 mm Allen Wrench     • Round End File		
Vice Holder (PN TB07506) This holder can be used for polishing and lapping			

ounting examples

applications by mounting ceramic stones, etc (Max size: Thickness 3.2 mm × Width 20 mm)

#### Special double-piston system provides low SUPER SAW vibration while improving cutting speed! **SSW-110**



#### **Optional Accessories**



Description
32 TPI for Sheet Metal, Ferrous Metal (5 blades/set)
24 TPI for Ferrous Metal, Non- Ferrous Metal (5 blades/set)
18 TPI for Wood, Plastic, Non- Ferrous Metal (5 blades/set)
14 TPI for Wood, Plastic (5 blades/set)

#### **Features**

- 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

Model	SSW-110	
Air Pressure	85 PSI	
Air Consumption (No load)	10.2 CFM	
Stroke Speed	7,000 SPM	
Stroke Length	11 mm (7/16")	
Weight	1.37 lbs.	
Accessories Included	<ul> <li>Threaded Adapter PT1/4" x NPT1/4"</li> <li>3 mm Allen Wrench</li> <li>(2) Sample 32 TPI Saw Blades</li> </ul>	

### HANDY PNEUMATIC SANDER FREE SANDER

### SANDING

# **FREE SANDER**

# Super lightweight, low-vibration design



#### **Features**

- Ideal for sanding and surface finishing on 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



(FS-100C)

#### Powerful turbine motor

Produces ultra-high speed orbits for super-fine finishing of all materials





**FS-50A** 



Model	FS-100C	FS-50A		
Air Pressure	85 PSI	85 PSI		
Air Consumption	7.1 CFM	4.9 CFM		
Free Speed	20,000 RPM	15,000 RPM		
Orbit Diameter	1/16"	3/64"		
Pad Size	4" x 4-3/8"	3" x 3-3/16"		
Paper Size	4-1/2" x 5-1/2" (1/4 Sheet)	2-3/4" x 4-1/2" (1/8 Sheet)		
Weight	1.1 lbs.	1.1 lbs.		
	• Threaded Adapter PT1/4" x NPT1/4"	• Threaded Adapter PT1/4" x NPT1/4"		
Accessories Included	Hose Sub Assembly     Sample Sanding Papers	Hose Sub Assembly     Sample Sanding Papers		

#### SANDING

### **LINE SANDER** Ideal for inline and grain sanding applications





#### **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.

#### **Features**

- Ideal for most inline and profile sanding applications
- Compact and lightweight 1.6 lb. design
- Low vibration and minimal noise output
- Suitable for sanding steel, aluminum, wood, plastic and other materials
- Available with dust collection assembly

# LS-10 CC 2.17" (55 mm)



#### **Double Piston Alignment**

Special double-action minimizes both noise and vibration.

Model	LS-10				
Air Pressure	85 PSI				
Air Consumption	3.9 CFM				
Stroke Speed	4,000 SPM				
Stroke Length	5/32"				
Pad Size	2-5/32" x 4-1/16"				
Paper Size	2-1/4" x 5-1/2" (1/8 Sheet)				
Weight	1.6 lbs.				
Accessories Included	<ul> <li>Threaded Adapter PT1/4" x NPT1/4"</li> <li>Hose Barb</li> <li>Hose Sub Assembly</li> <li>Block Pad Assembly</li> <li>Sample Sanding Papers</li> </ul>				
Optional Accessories	• TB02244: Dust Collector				

### PNEUMATIC COMPACT SANDER PALM ORBITAL SANDER

SANDING

# **ORBITAL SANDER** Heavy-duty and powerful with adjustable speed regulator



### **OSV-60A**



#### **Features**

- Powerful 3/4 horsepower dual action for tough applications
- Also available with 5" pad (OSV-50A)
- Standard with dust extraction system
- Rugged construction for reliable performance

#### **Specifications**

opoonioanono				
Model	OSV-60A			
Air Pressure	85 PSI			
Air Consumption (No load)	24.1 CFM			
Free Speed	8,500 RPM			
Orbit Diameter	3/8"			
Paper Size	6" Diameter			
Pad Type	PSA			
Horsepower	.75 HP			
Weight	4.4 lbs.			

PALM ORBITAL

**SANDER** Ergonomic lightweight design

#### Accessories Included

- Threaded Adapter PT1/4" x NPT1/4"
   Dust Collection Assembly with
   Dust Bag
- Spanner Wrench (17 mm)

#### 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.





### APS-125/150



#### For Self-Vacuum & Central Vacuum

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

#### Self-Vacuum

#### **Central Vacuum**





#### **Features**

- Compact and lightweight 1.6 lb. design
- Ergonomically designed for operator convenience and comfort
- Powerful high speed 10,000 RPM motorUltra small orbital action for high quality
- swirl-free finishes
- Available with 5" or 6" pads
- Variable speed control

#### **Applications**

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

Specifications				
Model	APS-125	APS-150		
Air Pressure	85 PSI	85 PSI		
Air Consumption	15.9 CFM	15.9 CFM		
Free Speed	10,000 RPM	10,000 RPM		
Orbit Diameter	3/16"	3/16"		
Paper Size	5" Diameter	6" Diameter		
Pad Type	PSA	PSA		
Spindle Thread	5/16"-24	5/16"-24		
Horsepower	.37 HP	.37 HP		
Weight	1.52 lbs.	1.59 lbs.		
Accessories Included	• Threaded Adapter PT1/4" x NPT1/4"     • Spanner			

# 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 (85 PSI).

### 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 co	onnection	40PH	For 1/2" hos	se	] [		For hose co	nnection	40SH	For 1/2" hose
17PH	For 1/4" hos	se 400PH	For 1/2" hos	se menter and a second s			17SH	For 1/4" hose	400SH	For 1/2" hose
20PH	For 1/4" hos	se 600PH	For 3/4" hos	se s		and the second second	20SH	For 1/4" hose	600SH	For 3/4" hose
30PH	For 3/8" hos	se 800PH	For 1" hose				30SH	For 3/8" hose	800SH	For 1" hose
For female	thread connect	ion 40PM	For Rc 1/2"				For female t	hread connection	40SM	For Rc 1/2"
10PM	For Rc 1/8"	400PM	For Rc 1/2"				10SM	For Rc 1/8"	400SM	For Rc 1/2"
20PM	For Rc 1/4"	600PM	For Rc 3/4"				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 the	read connection	DN					For male th	read connection		
20PF	For R 1/4"	400PF	For R 1/2"	2			20SF	For R 1/4"	400SF	For R 1/2"
30PF	For R 3/8"	600PF	For R 3/4"				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 th	read connection	on (parallel threa	d)		,	[	_			
20PFF	For G 1/4"						For hose co			-
							200-17SH	For 1/4" hose	200-40SH	For 1/2" hose
							200-20SH	For 1/4" hose		
0							200-30SH	For 3/8" hose		
Specifica	tions				,			thread connection		
Туре		Hi Cup		Hi Cupla 200			200-20SM	For Rc 1/4"		
Body material		1/8", 1/4", 3/8", 1/2", 3/4", 1"		Steel (chrome-plated) 1/8", 1/4", 3/8", 1/2"			200-30SM	For Rc 3/8"		
Size							200-40SM	For Rc 1/2"		
Working p		1.5 MPa		1.0 MPa				read connection		
Pressure r		2.0 MPa		1.5 MPa		2 2 2	200-20SF	For R 1/4"		
Packing m		NBR		NBR		Harris 1	200-30SF	For R 3/8"		
Working te	emp.range	-20°C - 8	B0°C	-5°C – 60°C			200-40SF	For R 1/2"		

#### **HI CUPLA ACE**



#### • Plastic Cuplas with a built-in locking mechanism!

• Pressure ratings comparable to steel Cuplas.

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

Plastic Plug P				S Hi Cupla Ace Socket			
For hose conn 20PH-PLA 30PH-PLA	ection (PH) For 1/4" hose For 3/8" hose				For hose conn HA-20SH HA-30SH	ection (SH) For 1/4" hose For 3/8" hose	
For female the 20PM-PLA 30PM-PLA	ead connection (PM) For Rc 1/4" For Rc 3/8"				HA-20SM HA-30SM	ead connection (SM) For Rc 1/4" For Rc 3/8"	
For urethane ho 50PNG-PLA 65PNG-PLA 85PNG-PLA	se with spring nut connection (PNG) For 5 ID × 8 OD hose For 6.5 ID × 10 OD hose For 8.5 ID × 12.5 OD hose				For urethane hos 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 three 20PFF-PLA	ad connection (PF) For G 1/4"		-		Hi Cupla Ace T HA-T	type (for 2 branches) 20P-PLA / HA-65S × 2	

**OTHER PRODUCT LINES** 

"delvo" Electric Screwdrivers, Linear-motor-driven Free Piston System

### **Jeivo** Professional Tools for High Technology

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



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



DLV5720/5720H/5740 Series

### Linear Motor Driven Free Piston System

MEDO USA, Inc. offers linear motor-free piston system air compressors and vacuum pumps, featuring unique, quiet, oil-free operation with high reliability and long life. This design theory uses a

resonant spring mass piston assembly energized by a pulsating magnetic field. The functionally elegant design, with only one moving part, is ideally suited for a variety of applications.



#### **About us**

Nitto Kohki U.S.A., Inc. was founded in 1969 to provide sales and service of machine tools and quick-connecting fluid couplings that are designed and manufactured by Nitto Kohki Company, Ltd. located in Tokyo, Japan. We attained a position at the forefront of the industry, pioneering the development of unique, high quality products based on the core technologies of fluid mechanics, precision engineering and, more recently, electronic engineering. Through our products, Nitto Kohki has

consistently offered customers advantages in terms of labor savings, improved working environments and efficient manufacturing.

Nitto Kohki's products fulfill vital roles in fields ranging from applications in the construction industry and the automotive industry, to high-tech engineering. We will continue to capitalize on these favorable trends and precisely meet market needs in a timely manner.





#### Nitto Kohki Worldwide

Nitto Kohki Group... a corporation rising to the challenge of creating products and building a better tomorrow by responding to the needs of today. With the incessant challenge of developing energy and labor saving technology, we will contribute to society in a variety of ways through original technology that corresponds to users' needs.



NITTO KOHKI

#### Visit nittokohki.com for live demo session videos!



Nitto Kohki U.S.A., Inc. 46 Chancellor Drive, Roselle, IL 60172 U.S.A. Phone: (630) 924-9393 Toll Free: (800) 323-8828 Fax: (630) 924-0303 info@nittokohki.com www.nittokohki.com DISTRIBUTED BY