WIRE CUTTING ROBOTICS AUTOMATION DE-GATING GATE CUTTING LEAD FORMING CRIMPING AEROSPACE ASSEMBLY HYDRAULIC COLD WELDING

CUSTOMIZABLE PNEUMATIC TOOLS TO PROVIDE SOLUTIONS



E L E C T R I C A L I N D U S T R I A L P L A S T I C S

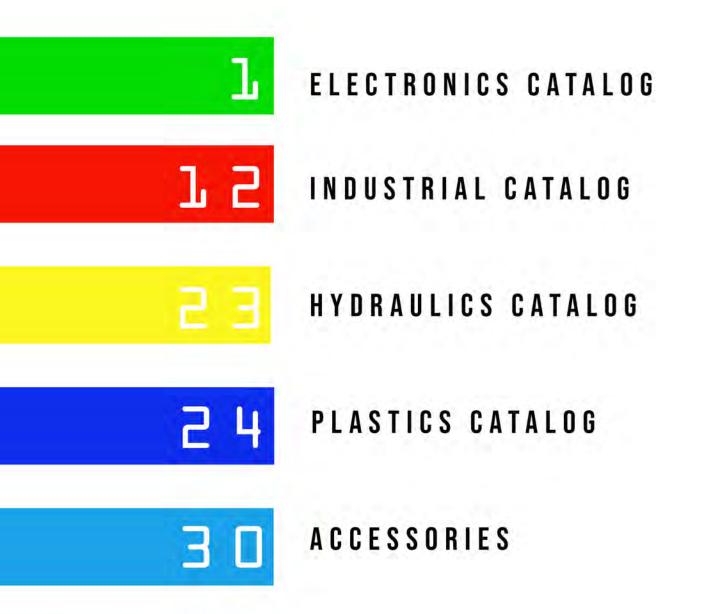
We understand the part our products play in your day to day success. We are committed to being the best resource for your ergonomic needs with our prompt, responsive service in helping you get the right tool for the job.

Our products are customizable to fit your needs. Our engineers work closely with our customers to provide innovative solutions that improve production times and reduce injury in the workplace.

Please **CONTACT US** for application specifications and tool recommendations.

SIMONDS INC. 248 ELM STREET SOUTHBRIDGE MA 01550 508.764.3235 FAX 508.765.5125 SALES@SIMONDS-INC.COM WWW.SIMONDS-INC.COM





FOR A DISTRIBUTOR NEAR YOU PLEASE VISIT OUR WEBSITE WWW.SIMONDS-INC.COM



Simonds Inc. has been a family owned and operated business for three generations. We have been proudly manufacturing ergonomic tools for aerospace, injection molding, and the automotive industries for over fifty years.

Located in Southbridge Massachusetts, Simonds manufactures specially designed tools. These tools meet the demanding and intricate specifications that our customers need. They substantially reduce injury related to repetitive motion, while improving production and reliability.

Here at Simonds we strive to provide comfort and safety for the operator. Our engineers work closely with our customers to assess challenges within manufacturing industries and provide viable and ergonomic solutions to optimize production.

Our engineers and sales team are available for consulting Mon-Fri 9:00am - 5:00pm EST.

# WARRANTY

Simonds power packs are warrantied to be free from defects in materials and workmanship for a period of one year, barring alterations, abuse, or misuse. All products returned for warranty repair must be sent to Simonds, Inc., Southbridge, MA at end users expense, where it will be repaired or replaced at the company's discretion.

# MISSION STATEMENT

1) TO PROVIDE SAFE AND RELIABLE PNEUMATIC AND HYDRAULIC HAND TOOLS TO OUR CUSTOMERS, ASSOCIATES, AND DISTRIBUTORS.

2) TO PROVIDE ADVANCED SOLUTIONS TO THE CUTTING, CRIMPING, AND D-GATING CHALLENGES WITHIN THE INDUSTRIES.

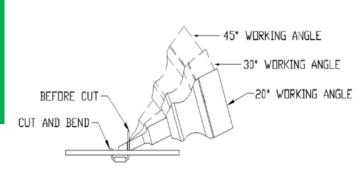
3) TO INCREASE PRODUCTION AND DECREASE INJURY BY PROVIDING TOOLS WITH ERGONOMIC DESIGNS AND ADVANCED ENGINEERING.



# ELECTRONICS

# WIRE CUTTING LEAD FORMING WIRE CRIMPING

SIMONDS INC. 248 ELM STREET SOUTHBRIDGE MA 01550 508.764.3235 FAX 508.765.5125 SALES@SIMONDS-INC.COM WWW.SIMONDS-INC.COM



#### **Cut and Bend Tool**

This air-powered cut and bend tool cuts components on P.C. boards 1/16" above the surface and bends them over tight to the board.

- Seven interchangeable cut and bend heads available for different diameter components with 20°, 30° or 45° working angles
- Heads are made from hardened tool steel
- Easily replaceable
- Four heads available for shorter layover (1/32" max. layover) in 20°, 30° and 45° angles Maximum inlet air pressure is 80 psi.
- Special bend only models are also available

# Consult factory for details. Cut and Bend Heads are sold separate from power packs.

BP-1		
LENGTH	5.5"	
WEIGHT	8 oz.	
DIAMETER	1.25" (31.75 mm)	
MATERIAL	Aluminum	

CUT AND BEND HEADS		
PRODUCT NUMBER	WIRE SIZE	WORK ANGLE
4H-20	0.010-0.028	20°
4H-30	0.010-0.028	30°
4H-45	0.010-0.028	45°
4H4-20	0.020-0.038	20°
4H4-30	0.020-0.038	30°
4H4-45	0.020-0.038	45°
4HG-20	0.030-0.050	20°



\*Power Pack only



\* The 4H tip is for light duty only.



\* The 4H4 tip is slightly larger for heavy duty only.

SHORT LAYOVER CUT AND BEND HEADS		
PRODUCT NUMBER	WIRE SIZE	WORK ANGLE
4H4-20-SL	0.010-0.038	20°
4H4-30-SL	0.010-0.038	30°
4H4-45-SL	0.010-0.038	45°
<b>4HG-20-AR</b> 0.030-0.050 20°		20°

1

\*Shown with optional jaw sets



This miniature power pack is for use with the cutting, crimping and bending jaws. A built-in adjusting screw controls the opening of the jaw sets.

MSP-1   MSP-1F	(foot model)
LENGTH	5"
WEIGHT	11 oz
DIAMETER	1.25" (31.75 mm)
CFM @ 30 STROKES MIN.	0.03 cfm
CLOSING FORCE @ 80 PSI	** Up to 100 lbs.
MATERIAL	Aluminum

SQUEEZE PLIERS MODEL SM-50	•	•	
MAX AIR PRESSURE 5.516 BAR (80 PSI)	•	•	

The SM-50 is used with PGC-1.5 Jaws only.

SQUEEZE PLIERS MODEL SM-55

SM-50 Robotic/Automation		
LENGTH	3.72" (94.49 mm)	
WEIGHT	4 oz.	
DIAMETER	1.25" (31.75 mm)	
CFM @ 30 STROKES MIN.	0.03 cfm	
CLOSING FORCE @ 80 PSI	** Up to 56 lbs.	
MATERIAL	Aluminum	

SM-55 Robotic/Automation		
LENGTH	5.02" (127.5 mm)	
WEIGHT	7.2 oz.	
DIAMETER	1.25" (31.75 mm)	
CFM @ 30 STROKES MIN.	0.09 cfm	
CLOSING FORCE @ 80 PSI	** Up to 112 lbs.	
MATERIAL	Aluminum	

\*\* Closing force depends upon jaws used and Cam position. Call for more information.

# **OPTIONAL JAW SETS for MSP pg 4**

ACCESSORIES pg 30 (Bench Stands, Tool Balancers, Safety Guards,

and Foot Switches)

\*\*\*Jaws Sold Separately\*\*\*

The SM-55 is used with PGC-1.5 Jaws only.

\*\*\*5' Hoses included with Power Packs\*\*\*

2

# **PNEUMATIC POWER PACKS**

\*Shown with optional jaw sets



A built-in adjusting screw controls the opening of the jaw sets.

SP-01P   SP-01PF	(Foot Operated)
LENGTH	5.5"
WEIGHT	11 oz
DIAMETER	1.5"
CFM @ 30 STROKES/MIN	.041 cfm
CLOSING FORCE @ 80 PSI	** Up to 575 lbs.
САМ	Piston Style
MATERIAL	Aluminum



Our foot model (shown here) includes two 5' hoses.

SP-02P   SP-02PF (Foot Operated)	
LENGTH	5.5"
WEIGHT	13 oz
DIAMETER	1.75"
CFM @ 30 STROKES/MIN	.045 cfm
CLOSING FORCE @ 80 PSI	** Up to 850 lbs.
САМ	Piston Style
MATERIAL	Aluminum

SM-100 Robotic/Automation		
LENGTH	4.8"	
WEIGHT	12 oz	
DIAMETER	1.75"	
CFM @ 30 STROKES/MIN	.041 cfm	
CLOSING FORCE @ 80 PSI	** Up to 575 lbs.	
САМ	Piston Style	
MATERIAL	Aluminum	

\*\* Closing force depends upon jaws used and Cam position. Call for more information.

# OPTIONAL JAW SETS pg 5-6 ACCESSORIES pg 30

\*\*\*Jaws Sold Separately\*\*\*

The **SM-100** is designed to use the same jaws as the **SP-01P** and the **SP-02P** power packs. It fits most robotic and automatic

needs.

\*\*\*5' Hoses included with Power Packs\*\*\*

Simonds

# JAW SETS FOR MSP-1

All jaws are secured in the housing by a shouldered pivot screw with recessed hex head and can be reversed to facilitate right or left-handed use. Jaw sets are removable for repeated re-sharpening. "CH" indicates case hardened jaw sets. Jaws identified by the suffix "SR" do not include the crimp feature. As with all Simonds jaw sets, they may be factory re-sharpened for extended life and lower production costs.

# Cut and Crimp Style (SMCC and MVCC)

- These jaws shear soft wire at a specified "rise" distance above the working surface and flatten the rise so it is mechanically secure before soldering.
- Special order on "rise" can be furnished to cut and rise distances from 0.030 to 0.060 inch (0.076 to 1.522 mm)

SMCC-1SR and SMCC-2SR made as specials only.



SMCC-1	SMCC-1   SMCC-1SR	
Max. Soft Wire	0.03" (0.76 mm)	
Rise	0.03" (0.76 mm)	
Angle	35°	
Length of Cut	0.09" (2.2 mm)	
Max. Tip Opening	0.11" (2.7 mm)	

**MVCC-1** 



Max. Tip Opening	0.13" (3.3 mm)
Length of Cut	0.09" (2.2 mm)
Angle	90°
Rise	0.03"(0.76 mm)
Max. Soft Wire	0.03" (0.76 mm)

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SMCC-2	SMCC-2SR
Max. Soft Wire	0.03" (0.76 mm <b>)</b>
Rise	0.03" (0.76 mm)
Angle	35°
Length of Cut	0.25" (6.4 mm)
Max. Tip Opening	0.12" (3 mm)

# MFS-1CH

#### Filament Shears

For cutting fine wire, nickel ribbon or soft wire of any metal up to 0.09" diameter (2.4 mm). Max. tip opening 0.16" (4 mm)



#### MSJ-1 Blank Jaws (unhardened)

For use as holding pliers or can be machined and hardened to suit special requirements. Jaws are 0.25" thick (6.4 mm). Max. tip opening 0.16" (4 mm)

# Cut and Bend Type (MCB)

 These jaws are interchangeable in the MSP-1 tool. For shear only MCB-SR with standard or selected height is available.

#### MCB-1SR AND MCC-2SR made as specials only.

MCB	-SR
Max. Wire	0.03" (0.76 mm)
Cut Height	0.04" (1.01 mm)
Variable Height	0.03" to 0.12"
MCB-1	MCB-2
Max. Wire MCB-1	0.02" (0.50 mm)
Cut Height	0.04" (1.1 mm)
Layover	0.05" (1.27 mm)
Max. Wire MCB-2	0.01" to 0.30"
Cut Height	0.06" (1.5 mm)

# Dyke-Type (MCD)

These jaws are for cutting wires flush or semi-flush.



MCD-1CH	MCD-11CH
Max. Soft Wire	0.03" (0.76 mm)
Semi-Flush Rise	0.007" (0.1 mm)
Angle	15°
Length of Cut	0.43" (10.92 mm)
Max. Tip Opening	0.15" (3.81 mm)



MCD-2CH   MCD-21CH	
Max. Soft Wire	0.30" (0.76 mm)
Semi-Flush Rise	0.007" (0.1 mm)
Angle	35°
Length of Cut	0.31" (8 mm)
Max. Tip Opening	0.15" (3.81 mm)

# OPTIONAL POWER PACKS pg 3 ACCESSORIES pg 30

4	

# JAW SETS FOR SP-01P | SP-01PF | SP-02P | SP-02PF

All jaws are secured in the housing by a shouldered pivot screw with recessed hex head and can be reversed to facilitate right or left-handed use. Jaw sets are removable for repeated re-sharpening. "CH" indicates case hardened jaw sets. Jaws identified by the suffix "SR" do not include the crimp feature. As with all Simonds jaw sets, they may be factory re-sharpened for extended life and lower production costs.

#### Cut and Crimp Style Jaws

These jaws shear soft wire at a specified "rise" distance above the working surface and flatten the rise so it is mechanically secure before soldering.

• Special order on "SR" can be furnished to cut and rise distances from 0.03" to 0.06" (0.76 to 1.5 mm)

MCC-1SR AND MCC-2SR made as specials only.



CC-1	
Max. Soft Wire 0.05" (1.27 mm)	
Rise	0.04" (1.1 mm)
Angle	45°
Length of Cut	0.37" (9.39 mm)
Max. Tip Opening	0.15" (3.81 mm)



MCC-2	MCC-2SR
Max. Soft Wire	0.03" (0.76 mm)
Rise	0.03" (0.76 mm)
Angle	90°
Length of Cut	0.12" (3.04 mm)
Max. Tip Opening	0.25" (6.35 mm)



MCC-1	MCC-1SR
Max. Soft Wire	0.03" (0.76 mm)
Rise	0.03" (0.76 mm)
Angle	45°
Length of Cut	0.12" (3.04 mm)
Max. Tip Opening	0.20" (5.08 mm)



HCC-1	
0.06" (1.52 mm)	
0.04" (1.02 mm)	
45°	
0.19" (4.8 mm)	
0.10" (2 mm)	



SJ-1A

For use as holding pliers or can be machined to suit special requirements for cutting, crimping or holding. Jaws are 0.30" (7.62 mm) thick. Max. tip opening 0.39" (9.90 mm)

### Dyke Type Jaws

These jaws are for cutting wires flush or semi-flush.

• "CH" indicates case hardened jaw sets



CD1-CH   C	D-11CH
Max. Soft Wire	0.06" (1.5 mm)
Semi-Flush Cut-CD-1CH	.007" (0.18 mm)
Flush Cut-CD-11	.007" (0.18 mm)
Angle	45°
Length of Cut	0.43" (11 mm)
Max. Tip Opening	0.20" (5 mm)



CD-3CH   CD-31CH	
Max. Wire	0.05" (1.2 mm)
Semi-Flush Cut-CD-3CH	.007" (0.18 mm)
Flush Cut—CD-31CH	.007" (0.18 mm)
Angle	15°
Length of Cut	0.83" (21 mm)
Max. Tip Opening	0.30" (7.63 mm)



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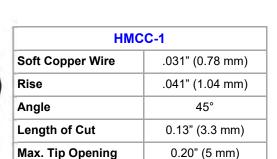
CD-4CH		
Max. Soft Wire	0.08" (2 mm)	
Center Cut		
Angle	N/A	
Length of Cut	0.50" (12.7 mm)	
Max. Tip Opening	0.19" (4.8 mm)	



CD-7		
Max. Soft Wire	0.05" (1.2 MM)	
Semi-Flush Cut 0.007" (0.18 m		
Angle	15°	
Length of Cut	0.83" (21 mm)	
Max. Tip Opening	0.30" (7.63 mm)	

# OPTIONAL POWER PACKS pg 3 ACCESSORIES pg 30

# JAW SETS FOR SP-01P | SP-01PF | SP-02P | SP-02PF





PC-311F		
PC Tab Cutter	0.05" (1.27 mm)	
Flush Cut		
Angle	25°	
Length of Cut	0.45" (11.45 mm)	
Max. Tip Opening	0.26" (6.60 mm)	



#### FS-1CH | FS-1-CARBIDE

FS-1: Filament shears for cutting fine wire, nickel ribbon or soft wire of any metal up to 0.13" diameter (3.3 mm). Jaws are 0.75" (19 mm) long. Maximum tip opening 0.21" (5.3 mm)

FS-1-CARBIDE: Has a Carbide Cutting Edge



#### 01X-566

Carbide serrated cutting edge, filament shears for cutting fine wire, nickel ribbon, or soft wire of any metal up to 0.13" diameter (3.3 mm). Jaws

Length of Cut	.15" (4 mm)
Max. Tip Opening	.34 "(8.3 mm)



01X-163		
Soft Wire Center Cut	.093"	
Angle	0°	
Length of Cut	1.09"	
Max. Tip Opening	0.38" (5 mm)	



01X-667		
Serrated Gripping Jaws		
Length of Cut	1.09"	
Max. Tip Opening	0.5"	

# **OPTIONAL POWER PACKS pg 3**

ACCESSORIES pg 30

# **CRIMPING TOOLS**

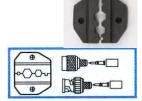
#### UC-90 Universal Crimp Tool Outfit

Used for processing connectors in applications such as COAX, Stranded Wire, Hex-style and Open/Closed Barrel. It can accommodate optional power packs up to our **SP-008F** for added crimping pressures.

- SP-004F power pack
- UC-9 universal crimp jaw with housing
- Bench stand
- Foot-switch

#### • Two Hoses

Fourteen optional, interchangeable crimping die sets (shown below) are available. The optional locater shelf (UC-L) is available to assist in uniform crimping.

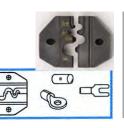


# UC-50-1

RRG-59, RG-6 and 8281 50 and 75 OHM cables (Hex 0.324 [8.23 mm], 0.255 [6.48 mm], 0.068 [1.73 mm] 0.042 [1.07 mm])

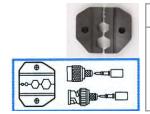


#### \*\*\*Dies sold separate\*\*\*



#### UC-50-6

22-8 AWG (.3mm2—8 mm2) Non-Insulated Terminals



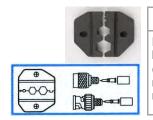
#### UC-50-2

RG-58, RG-59/62, BNC/TNC Coax Connectors. (Hex, 0.255 [6.48 mm], 0.213 [5.41 mm], 0.068 [1.73 mm])



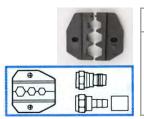
#### UC-L

Optional **Locator Shelf** to assist in uniform crimping and safety.



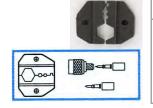
#### UC-50-3

RG-58, RG-174 and RG-8218 for both 50 and 75 OHM cables (Hex 0.213 [5.41 mm], 0.178 [4.52 mm], 0.068 [1.73 mm], 0.042 [1.07 mm]) [1.07mm])



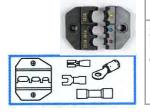
#### UC-50-7

Type CATV RG-59, RG-6 Connectors, (Hex 0.350 [8.89 mm], 0.320 [8.13], 0.255 [6.48



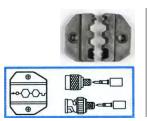
#### UC-50-4

N-Series and RG-8/11 Connectors. (Hex 0.429 [10.90 mm], 0.100 [2.54 mm], 0.80 [2.03 mm])



UC-50-8

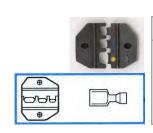
22-10 AWG (0.324 mm2 -5.261 mm2) insulated terminals/color coded nests.



#### UC-50-5

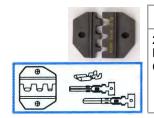
Plenum and Non-Plenum Thin wire Cables.

RG-58 and 59 (Hex 0.213 [5.41 mm], 0.190 [4.83 mm], 0.068 [1.73 mm], 0.042 [1.07 mm])



#### UC-50-9

Fully insulated quick disconnect terminals with thinner wire barrels. 22-10 AWG (0.324 mm<sub>2</sub>–5.261 mm<sub>2</sub>)



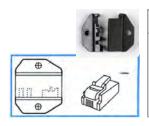
#### UC-50-10

22-12 AWG (0.324 mm2–3.3 mm2) Non Insulated Open Barrel Connectors. Commercial Type



#### UC-50-17

Pin Terminal Non-insulated AWG. 22-20/18-16/14-12/10-6 DIN 0.5/0.75/1.0/1.5/2.5/4/6/10/16mm<sup>2</sup>

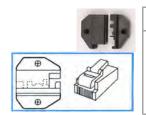


#### UC-50-12 Universal RJ-11 Die for two, four, and six position modular plugs.



#### UC-50-18

Non-insulated Open Barrel AWG 20-18 / 16-14 / 12-10 DIN 0.5-1/1.5-2.5/4-6mm<sup>2</sup>



#### UC-50-13

RJ-45 Die for eight position die set for keyed or non-keyed modular plugs (excluding AMP)



UC-50-15
Universal Crimp Guard



#### UC-50-19

Non-insulated Terminal AWG 20-18 / 16-14 / 12-10 / 8 DIN 1.5/2.5/6/10mm<sup>2</sup> JIS 1.25/2.0.5.5/10mm<sup>2</sup>



# UC-50-20 Insulated Flag Terminal AWG 22-

18 / 16-14 DIN 0.5/ 1.5-2.5mm<sup>2</sup>



# **CRIMPING** TOOLS



#### CM-3

**The CM-3** (Shown with optional CM-3-3 insert) secures solder-less terminals to solid or stranded, bare or insulated wire, to meet most requirements of several MIL specifications.

- Fits on SP-002 to SP-005 Power Packs (based on power required for crimp)
- Durable aluminum housing with hardened tool steel jaws
- Optional inserts can handle from 22 to 8 AWG wire.
- Most crimping performed with "F" style power packs (consult your distributor)

CM-3 Jaw and Housing

Power Pack	SP-002	SP-003	SP-004	SP-005
Force lbs.	1800	2000	2400	3500
Force kgs.	815	910	1090	1590

Inlet air pressure of 80 psi will develop approximately the crimping forces shown using the corresponding power pack.



CMX-99 Insert	
Wire Gauge	14 to 22
Terminal Bare Wire	YES
Insulated Wire	



CM3-2 Insert	
Wire Gauge	12 to 16
Terminal Bare Wire	N/A
Insulated Wire	



CM3-3 Insert		
Wire Gauge	8 to 16	
Terminal Bare Wire	N/A	
Insulated Wire		

Children of

CM3-4 Insert		
Wire Gauge	Wire Cap	
Terminal Bare Wire	N/A	
Insulated Wire	14 to 22	



#### COAX CABLE STRIPPING TOOL

#### For 0.54" diameter cable, 1 7/16" strip

This is just one of the tools that we make special for a specific company or problem. This tool is designed to remove the copper sheathing that is under the plastic coating and over the coax insulation. The tool slides the scored copper off with ease, reducing operator fatigue.

Made to Order Special Only



*Simonds Inc.* has made guards for some of our tools as specials. Above is a **SG-3** made for the **B-38/B-32** jaws. There is also available SG-1 and SG-2 retractable guards.

Consult with factory for your guard needs.

All Simonds jaws can be factory re-sharpened for longer life and reduced production costs. Special jaws may be manufactured for special operations. Consult your local distributor.

# **COMPONENT LEAD PROCESSORS**

#### CLP-274



#### **Component Lead Processor**

The Model 274 is a semi-automatic lead processing tool.

- Optional interchangeable dies (shown below)
- Can process up to 1200 pieces an hour
- Operates at 40-60 psi using foot switch (included)

**Forming dies:** feature our lock-in capability, allowing the component to be spaced-off the P.C. board and locked-in, eliminating the need for swaging or trace-pads.

**<u>Trimming dies</u>**: cut off to various lengths.

Complete unit is 3" high x 5 3/4" long x 3 1/2" wide and weighs 1 pound. Die sets are oil-hardened tool steel 1" wide x 2" long.

	Blank Die Se	st .	
CLP-000	Unhardened Blank Die Set / 1 each 1/32", 1/16", 3/32"		Total Die Thickness .257" $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$
	Lead Processor Trans	istor Dies	
CLP-020	Universal Transistor Trimming	.100 (2.54) Bolt Circle .200 (5.08) Bolt Circle .300 (7.62) Bolt Circle	.200″ (0.035 0 0.035 0 0 0.035
CLP-021	Trim, Stand-Off and Lock-In Die    T0 5  (2.36)  3/32" above board    (1.57)  1/16" board	.200 (5.08) Bolt Circle	.235"
CLP-022	T0 3 to T0 5 Spread, Trim and Lock-In Die  End View    (3.96)  3/32" above board  Image: Comparison of the system of the s	.200 (5.08) Bolt Circle	.325" $\Theta$ $\Theta$ $\Theta$ $\Theta$ $O40$
CLP-024	T0 3 to T0 5 Spread and Trim Die Length increments of 1/32" (.81) (9.52) 3/8" max. length	.100 (2.54) Bolt Circle .200 (5.08) Bolt Circle	.225″
	Lead Processor Trans	istor Dies	
CLP-040	Universal Capacitor Trimming Die with hole spacing in increments of .050 (1.27) from .100 (2.54) to .900 (22.86)	Any center less than 1.00 (25.4) and any length in increments of 1/32" to 3/8"	.200″ $\ominus$ .035
CLP-041	Capacitor Trim and Lock-In Die Also for resistor cut and lock-in	.025 (.66) lead diameters: 1/4"-3/8"-1/2"-5/8"-3/4" ( 6.35-9.52-12.7-15.87-19.05 ) Centers	.235" .235" .235" .043
CLP-042	Trimming of Any In-Line Leads — power transistors, S.C.R.'s and TRIAC's	Any center less than .900 (22.86)	.225" 0 Slo 0 0 0 0 0 0 0
	Lead Processor I.C	C. Dies	
CLP-060	8 Lead I.C. Square Trimming Die	.200 (5.08) Square	.225″ ••• • Hole D .035
CLP-061	8 Lead I.C. Round Trimming Die Height in 1/32" (.81) increments; Max. 3/8" (9.52)	.200 (5.08) Bolt Circle	.200″ o ooo ooo .035
CLP-062	16 Lead Dual In-Line Trimming Die* *For Uncut Opposite Corner Leads, Specify Special Blade	.100 (2.54) Centers	.093" o <sup>cocesoro</sup> o .035
CLP-064	8 Lead I.C. Spreading Die Height in 1/32" (.81) increments; Max. 3/8" (9.52) Changes bolt circle from .200 to .300	.300 (7.62) Bolt Circle	.225"
CLP-065	10 Lead I.C. Trimming Die	.300 (7.62) Bolt Circle	.225″  .035

# **COMPONENT LEAD PROCESSOR**

#### **CLP-2000**



#### **Component Lead Processor**

The CLP-2000 is a larger, more powerful version of our CLP-274. Featuring our SP-002 power pack, which delivers 176 lbs. of thrust.

- Full 1 1/2" stroke
- Designed for semi-automatic parts processing, can trim up to 1000 pieces per hour
- Recommended air pressure is 60-80 psi
- Operated by foot switch (included)
- Interchangeable steel die sets (sold separately)
- Dies are oil hardened tool steel 1 3/4" wide x 5 1/4" long

Standard trimming dies are shown below. Special made die sets and larger units (up to 7" width) are available upon request, and can be used with larger power packs. **Contact Simonds engineering department for quote.** 

	Blaik Die Sei		
CLP-2001	Unhardened Blank Die Set / 1 each 1/16", 3/32", 1/8"	Total Die Thick- ness .280″ ⊖ ⊖ ⊖ ⊗	
	Lead Processor Transi	stor Dies	
CLP-2002	Universal Transistor Trimming	.100 ( 2.54) Bolt Circle .200 ( 5.08) Bolt Circle .300 ( 7.62) Bolt Circle .400 (10.00) Bolt Circle	
CLP-2003	Spread and Trim Die Length increments of $\frac{1}{16''}$ (1.57) to a maximum of $\frac{3}{6''}$ (9.52) length.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
	Lead Processor Capacitor Dies		
CLP-2004	Universal Capacitor Trimming Die with hole spacing in increments of .050 (1.27) $1.27$ $1.57$ MIN.	Hole diamter .0035" Any center less than 4.00" (100.00) and any lead diameter less than .045" (1.13) $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$ $\bigcirc$	
CLP-2005	Trimming of any in-line lead: diodes, TRIAC's, S.C.R.'s, etc.	Any center less than 4.00" (100.00) slot width .062" (1.55) .186" $\begin{array}{c} \ominus \\ \circ \\ \ominus \end{array} \begin{array}{c} \ominus \\ \circ \\ \ominus \end{array} \begin{array}{c} \ominus \\ \circ \\ \odot \end{array} \begin{array}{c} \Theta \\ \circ \\ O \end{array} \begin{array}{c} Slot \\ Width \\ .062" \end{array}$	
	Lead Processor I.C. Dies		
CLP-2006	Dual In-Line Trimming Die	.100 ( 2.54) Centers .300 ( 7.62) Centers .600 (15.00) Centers 4.00" Slot Length .186" ⊖ ⊖ Slot ⊖ ⊖ ⊖ ⊖ Slot ⊖ ⊖ ○ ⊖ .62"	
	Lead Processor Connector Dies		
CLP-2007	Universal Trimming of any Connector up to 4.00" (100.00)	.100 (2.54) Centers .200 (5.08) Centers .300 (7.62) Centers .050 Pin Spacing	
CLP-2008	Specialty Connector Trimming Die for any Odd Style Connector	As requested up to 4.00" (100.00) length .093" .093" Any 000000000000000000000000000000000000	



# INDUSTRIAL

and Too

WIRE CUTTING WIRE CRIMPING AEROSPACE ASSEMBLY AUTOMOTIVE ASSEMBLY

SIMONDS INC. 248 ELM STREET SOUTHBRIDGE MA 01550 508.764.3235 FAX 508.765.5125 SALES@SIMONDS-INC.COM WWW.SIMONDS-INC.COM

# **PNEUMATIC POWER PACKS**

\*Shown with optional jaw sets



A built-in adjusting screw controls the opening of the jaw sets.

SP-01P   SP-01PF	(Foot Operated)
LENGTH	5.5"
WEIGHT	11 oz
DIAMETER	1.5"
CFM @ 30 STROKES/MIN	.041 cfm
CLOSING FORCE @ 80 PSI	** Up to 575 lbs.
САМ	Piston Style
MATERIAL	Aluminum



Our foot model (shown here) includes two 5' hoses.

SP-02P   SP-02PF (Foot Operated)	
LENGTH	5.5"
WEIGHT	13 oz
DIAMETER	1.75"
CFM @ 30 STROKES/MIN	.045 cfm
CLOSING FORCE @ 80 PSI	** Up to 850 lbs.
САМ	Piston Style
MATERIAL	Aluminum

SM-100 Robotic/Automation	
LENGTH 4.8"	
WEIGHT	12 oz
DIAMETER	1.75"
CFM @ 30 STROKES/MIN	.041 cfm
CLOSING FORCE @ 80 PSI	** Up to 575 lbs.
САМ	Piston Style
MATERIAL	Aluminum

\*\* Closing force depends upon jaws used and Cam position. Call for more information.

# OPTIONAL JAW SETS pg 14-15 ACCESSORIES pg 30

\*\*\*Jaws Sold Separately\*\*\*

The **SM-100** is designed to use the same jaws as the **SP-01P** and the **SP-02P** power packs. It fits most robotic and automatic

needs.

\*\*\*5' Hoses included with Power Packs\*\*\*

Simonds

# JAW SETS FOR SP-01P | SP-01PF | SP-02P | SP-02PF | SM-100



#### SJ-1A

For use as holding pliers or can be machined to suit special requirements for cutting, crimping or holding. Jaws are 0.30" (7.62 mm) thick. Max. tip opening 0.39" (9.90 mm)



CD-4CH	
Max. Soft Wire	0.08" (2 mm)
Center Cut	
Angle	N/A
Length of Cut	0.50" (12.7 mm)
Max. Tip Opening	0.19" (4.8 mm)



PGC-2CH	
Plastics Only	Soft
Type of Cut	Flush Cut
Angle	Straight Cutter
Length of Cut	1" (25 mm)
Max. Tip Opening	0.44" (11.18 mm)



CD1-CH   CD-11CH	
Max. Soft Wire	0.06" (1.5 mm)
Semi-Flush Cut-CD-1CH	.007" (0.18 mm)
Flush Cut-CD-11	.007" (0.18 mm)
Angle	45°
Length of Cut	0.43" (11 mm)
Max. Tip Opening	0.20" (5 mm)



CD-3CH   CD-31CH	
Max. Wire	0.05" (1.2 mm)
Semi-Flush Cut-CD-3CH	.007" (0.18 mm)
Flush Cut—CD-31CH	.007" (0.18 mm)
Angle	15°
Length of Cut	0.83" (21 mm)
Max. Tip Opening	0.30" (7.63 mm)



CD-6		
Plastic Only	0 .187" (4.75 mm)	
Full Flush Cut	Tapered Outside Edge	
Angle	15°	
Length of Cut	0.875" (22.22 mm)	
Max. Tip Opening	0.484" (12.25 mm)	



CD-7	
Max. Soft Wire	0.05" (1.2 MM)
Semi-Flush Cut	0.007" (0.18 mm)
Angle	15°
Length of Cut	0.83" (21 mm)
Max. Tip Opening	0.30" (7.63 mm)

# OPTIONAL POWER PACKS pg 13 ACCESSORIES pg 30

# JAW SETS FOR SP-01P | SP-01PF | SP-02P | SP-02PF | SM-100



#### FS-1CH | FS-1-CARBIDE

FS-1: Filament shears for cutting fine wire, nickel ribbon, or soft wire of any metal up to 0.13" diameter (3.3 mm). Jaws are 0.75" (19 mm) long. Maximum tip opening 0.21" (5.3 mm)

FS-1-CARBIDE: Has a Carbide Cutting Edge



#### 01X-566

Carbide Serrated Cutting edge, filament shears for cutting fine wire, nickel ribbon or soft wire of any metal up to 0.13" diameter (3.3 mm).

Length of Cut	.15" (4 mm)
Max. Tip Opening	.34 "(8.3 mm)



HMCC-1			
Soft Copper Wire	.031" (0.78 mm)		
Rise .041" (1.04 mm			
Angle	45°		
Length of Cut	0.13" (3.3 mm)		
Max. Tip Opening	0.20" (5 mm)		



PC-311F			
<b>PC Tab Cutter</b> 0.05" (1.27 mm)			
Flush Cut			
Angle	25°		
Length of Cut	0.45" (11.45 mm)		
Max. Tip Opening	0.26" (6.60 mm)		



01X-163					
Soft Wire Center Cut .093"					
Angle	0°				
Length of Cut	1.09"				
Max. Tip Opening	0.38" (5 mm)				



01X-677				
Gripping Jaws				
Length of Cut 1.09"				
Max. Tip Opening	0.5"			

# OPTIONAL POWER PACKS pg 13 ACCESSORIES pg 30

# **PNEUMATIC SINGLE STAGE POWER PACKS**

- Power Packs available in hand or foot-switch activated models. 1/8" ports.
- 5' air hose assembly included. 1/8 & 1/4 NPT fittings.
- Standard cam (25-H) installed on all power packs unless otherwise specified.



SP-002F SHOWN







\*\*\*Jaws Sold Separately\*\*\*

\*\*\* 5' Hoses included with Power Packs\*\*\*

# **OPTIONAL JAW SETS pg 18-19**

# ACCESSORIES pg 30

(Bench Stands, Tool Balancers, Safety Guards, and Foot Switches)

SP-002   SP-002F (Foot Operated)		
LENGTH	4" (100.00 mm)	
WEIGHT	1 lb.	
DIAMETER	1.72" (43.75 mm)	
CFM @ 30 STROKES/MIN 0.09 cfm		
CLOSING FORCE @ 80 PSI ** Up to 1120 lbs		
САМ	Hexagon	
MATERIAL	Aluminum	

SP-003   SP-003F (Foot Operated)			
LENGTH	4" (100.00 mm)		
WEIGHT	1 lb. 7 oz.		
<b>DIAMETER</b> 2.22" (56.25 m			
CFM @ 30 STROKES/MIN 0.16 cfm			
CLOSING FORCE @ 80 PSI ** Up to 2000 lbs			
CAM	Hexagon		
MATERIAL	Aluminum		

SP-004   SP-004F (Foot Operated)			
LENGTH 4" (100.00 mm)			
WEIGHT	1 lb. 8 oz.		
DIAMETER	2.46" (62.50 mm)		
CFM @ 30 STROKES/MIN	0.20 cfm		
CLOSING FORCE @ 80 PSI	** Up to 2400 lbs.		
CAM	Hexagon		
MATERIAL	Aluminum		

SP-006   SP-006F (Foot Operated)			
LENGTH 4" (100.00 mm			
WEIGHT	1 lb. 8 oz.		
DIAMETER	2.46" (62.50 mm)		
CFM @ 30 STROKES/MIN	0.20 cfm		
CLOSING FORCE @ 80 PSI	** Up to 2400 lbs.		
CAM	Hexagon		
MATERIAL Aluminum			

\*\* Closing force depends upon jaws used and Cam position. Call for more information.

# **PNEUMATIC DOUBLE STAGE POWER PACKS**

# **OUR MOST POWERFUL SERIES OF POWER PACKS**

- Two stage air cylinder
- Ergonomically designed
- Available in hand and foot-switch activated models. 1/8" ports
- 5' air hose assembly(s) included. 1/8 &1/4 NPT fittings.





SP-002.5   SP-002.5F (Foot Operated)			
LENGTH	5.75"		
WEIGHT	1.5 lbs.		
DIAMETER	2.0"		
CFM @ 30 STROKES/MIN .3 cfm			
CLOSING FORCE @ 80 PSI ** Up to 2400 lb			
CAM	Hexagon		
MATERIAL	Aluminum		

SP-005   SP-005F (Foot Operated)		
LENGTH	5.63" ( 142.87 mm)	
WEIGHT	2 lbs. 2 lbs.	
<b>DIAMETER</b> 2.5" (63.5 mm		
CFM @ 30 STROKES/MIN 0.35 cfm		
CLOSING FORCE @ 80 PSI ** Up to 3500 lbs.		
САМ	Hexagon	
MATERIAL	Aluminum	



SP-008   SP-008F (Foot Operated)			
LENGTH 5.63" ( 142.87 mm			
WEIGHT	2 lbs. 2 oz.		
<b>DIAMETER</b> 2.5" (63.5 mm)			
CFM @ 30 STROKES/MIN 0.35 cfm			
CLOSING FORCE @ 80 PSI ** Up to 4000 lbs			
CAM	Hexagon		
MATERIAL Aluminum			

\*\* Closing force depends upon jaws used and Cam position. Call for more information.

# OPTIONAL JAW SETS pg 18-19 ACCESSORIES pg 30

(Bench Stands, Tool Balancers, Safety Guards, and Foot Switches)

\*\*\*Jaws Sold Separately\*\*\*

\*\*\* 5' Hoses included with Power Packs\*\*\*

# JAW AND HOUSING ASSEMBLIES

# FOR SP-002 THROUGH SP-008 POWER PACKS

- Hand and foot activated models.
- Lightweight aluminum housing.
- Jaws can easily be reversed in the housing to permit either right-hand or left-hand operation.

All jaws are made of hardened tool steel. As with all Simonds jaws, special tools can be engineered and manufactured upon request.

**B-Series** Jaws are hardened and ground for semi-flush cutting of mild wire up to 0.25". Cutting edges are parallel with axis of housing actuator.







B-SERIES—STRAIGHT CUTTING JAWS					
Catalog No.	B-31CH	B-32CH	B-33CH	B-35	B-38
Housing Length	4.18" (106.25 mm)				
Overall Length	5.90" (149.9 mm)	5.29" (134.4 mm)	5.90" (149.9 mm)	4.92" (125 mm)	5.29" (149.9 mm)
Weight	1 lb. 8 oz.	1 lb. 6 oz.	1 lb. 8 oz.	1 lb. 6 oz.	1 lb. 6 oz.
Diameter	1.72" (43.69 mm)				
Length of Cut	1.6" (40.64 mm)	1.04" (26.42 mm)	1.6" (40.64 mm)	0.75" (19.10 mm)	0.93" (23.62 mm)
Max. Opening	0.68" (17.27 mm)	0.49" (12.45 mm)	0.68" (17.27 mm)	0.31" (7.91 mm)	0.38" (9.53 mm)
Cutting Edge	Side Cut	Side Cut	Center Cut	Center Cut	Side Cut

**D-Series** Semi-flush cutter, set at an angle of 25° or 45° **to allow** access to vertical screws, wires, etc.





D-SERIES—DIAGONAL CUTTING JAWS

Catalog No.	D-31\ D-31CH	D-33	D-4-D2
Housing Length	4.18" (106.23 mm)	4.18" (106.23 mm)	4.18" (106.23 mm)
Overall Length	4.68" (118.75 mm)	4.68" (118.75 mm)	4.68" (118.75 mm)
Weight	1 lb. 5 oz.	1 lb. 5 oz.	1 lb. 5 oz.
Diameter	1.72" (43.69 mm)	1.72" (43.69 mm)	1.72" (43.69 mm)
Length of Cut	0.43" (10.92 mm)	0.86" (21.84 mm)	0.74" (18.75 mm)
Max. Opening	0.31" (7.81 mm)	0.62" (15.63 mm)	0.43" (10.94 mm)
Angle	45°	25°	25°



# POWER PACKS pg 16-17 ACCESSORIES pg 30

# JAW AND HOUSING ASSEMBLIES

# FOR SP-002 THROUGH SP-008 POWER PACKS

All of Simonds jaws are designed to perform for extended periods on the production line, and built to handle the toughest assignment. Replacement jaws may be ordered separate from housing. **Consult your distributor.** 

Simonds team of engineers can design and manufacture jaws that more specifically meet the needs of your production line.



# A-3 JAW AND HOUSING

These jaws, made of unhardened tool steel can be used as holding pliers or can be machined to meet special requirements for holding or cutting.

# 4

Housing Length	4.18" (106.25 mm)
Overall Length	7" (177.8
Weight	2 lb. 2 oz.
Diameter	1.72" (43.69 mm)
Length of Cut	N/A
Maximum Opening	5/8" Copper Cable
Maximum Opening	0.44" (11.18 mm)

**SA-2000 CABLE CUTTER** 

POWER PACKS pg 16-17 ACCESSORIES pg 30

(Bench Stands, Tool Balancers, Safety Guards, and Foot Switches)

**E-Series** These jaws are designed to cut rubber hose, plastic tubing with a brass anvil on one side and cutting jaw on the other



E-SERIES CABLE CUTTING JAWS				
Catalog No.	E-3	E-4		
Housing Length	4.18" (106.25 mm)	4.18" (106.25 mm)		
Overall Length	5.9" (149.9 mm)	6.89" (175 mm)		
Weight	1 lb. 6 oz.	1 lb. 8 oz.		
Diameter	1.72" (43.69 mm)	1.72" (43.69 mm)		
Length of Cut	1.48" (37.5 mm)	2.72" (69.05 mm)		
Maximum Opening	0.44" (11.18 mm)	1" (25.4 mm)		
Angle	45°	25°		

P- Series For plastic cutting ONLY. Cutting of steel will damage these blades. For more plastic gate cutting tools refer to our page 27.

Angle





45°

P-SERIES PLASTIC GATE CUTTING JAWS



F-SERIES FLASTIC GATE CUTTING JAWS					
Catalog No.	PGC-4CH	PGC-4-30	PGC-4-45	PGC-4-60	PGC-4-90
Housing Length	4.18" (106.25 mm)				
Overall Length	5.41" (137.5 mm)	6.26" (168.3 mm)	6.26" (168.3 mm)	6.03" (153.4 mm)	5.56" (141.2 mm)
Weight	1 lb. 5 oz.	1 lb. 6 oz.	1 lb. 6 oz.	1 lb. 5 oz.	1 lb. 6 oz.
Diameter	1.72" (43.75 mm)				
Length of Cut	0.86" (21.88 mm)	1.16 " (29.62 mm)	1.12" (28.49 mm)	1.15" (29.25 mm)	1.16" (29.50 mm)
Maximum Open	0.62" (15.63 mm)	0.82" (20.83 mm)	0.70" (18.02 m)	0.65" (16.65 mm)	0.51" (12.93 mm)
Cutting Angle	25°	30°	45°	60°	90°

All of Simonds Inc. tools are made to exacting standards by skilled crafts men. In-house engineers can design jaws to meet your needs on the production line.

# SPECIALITY TOOLS

#### \*\*\* PLEASE CONTACT FACTORY FOR A COMPLETE LISTING OF PTX SPECIALTY TOOLS

# **SR-100 SNAP RING TOOL**

Jaw opening adjustment screw is located at rear of the power pack. Jaw sets are hardened tool steel and feature vertical 45° or 90° tips (optional) for hard to reach into areas. <u>Power Packs Range</u>: **MSP-1** to **SP-002** <u>Snap Ring Size:</u> 1/4" diameter to 6" diameter.

# Contact factory representative for a complete list of models.





# **HOSE CLAMP TOOLS**

This series of tools feature power packs ranging from **SP-01P** to **SP-003**. These, combined with the special jaws can manipulate a wide variety of hose clamps (1/4" up to 3").

These pneumatic tools can be used for crimping clamps for automotive, RV, appliance, and HVAC production lines. Proven tools for improving production and lowering injuries due to repetitive motions.

A complete model listing and specially engineered tools are available from the factory.





# **SM-350**

Single wire clamp tool. Fits up to 2.68" clamp. **CLAMP WILL NOT TWIST.** 





**PTX-125** 

# SPECIALITY TOOLS

# \*\*\* PLEASE CONTACT FACTORY FOR A COMPLETE LISTING OF PTX SPECIALTY TOOLS

# BALL CRIMP TOOLS: BC-004 | BC-006

Used on copper and aluminum tubing. The BC Series are hand held crimping tools that push a "ball" on one side of the jaw into a "socket" located on the opposite side. This tool can lock onto the tubing, so that the ends may be silver soldered.

#### BC-004 for 1/4" tubing

BC-006 for 3/8" tubing

This series of tools features our "reverse valve" which means when the tool is "at rest", the jaws are held in the closed position. Any of the ball crimp tools are available in a foot-switch model (add suffix "F")

# PINCH OFF TOOLS: PO-004 | PO-006

Used on copper and aluminum tubing. The PO series are hand held tools that pinch off a tight seal for copper and aluminum.

PO-004 for 1/4" tubing

PO-006 for 3/8" tubing

# **CABLE CUTTER PTX-938**

Wire cutter used for large cable cutting up to 1/0 wire. Using either an **SP-008**, **SP-008F**, **SP-005**, or a **SP-005F** power pack, this tool has the power to handle the large jobs.

#### **PTX-200**

Small E-CLIP Tool.

SPECIALTY TOOLS CAN BE CUSTOMIZED TO YOUR SPECIFICATIONS. PLEASE CALL FOR MORE INFORMATION.

# **PTX-313**

Small Crimping tool

SPECIALTY TOOLS CAN BE CUSTOMIZED TO YOUR SPECIFICATIONS. PLEASE CALL FOR MORE INFORMATION.











# INDUSTRIAL

# SPECIALITY TOOLS



# **RAILCAR WHEEL TAB BENDER**

Air operated crimping tool to bend over locking tabs on axle bearing caps. Simonds has tools for cap screw size 1/2" to 1 1/4" weighing 3.2 lbs. with overall length of 9.5".

MODEL NUMBER	CAP SCREW SIZE	FREIGHT AXLE	PASSENGER AXLE CLASS	LOCOMOTIVE AXLE CLASS
RR-500	1/2"			
RR-625	5/8" & 3/4"			
RR-875	7/8"	Class D—50 Tons	E,F/EE,G	GG
RR-1000	1" & 1 1/8"	Class E-F—70-100 Tons		G
RR-1250	1 1/4"	Class G—125 Tons		
CR-875	7/8"			



# **CABLE STRIPPING TOOLS**

Custom tools are designed to remove the copper sheathing that is under the plastic coating and over the coax insulation and slides the copper jacket off with ease. This helps to reduce fatigue.

# **PLASTIC TUBE CUTTERS**

Custom tools are designed for cutting plastic tubing up to 1" diameter without distorting the tube. Jaw set consists of one "U" shaped bottom jaw to hold tubing in place.

# **PIN DRIVER SERIES**



Designed primarily for automotive door hinge pin installation and removal, features our **SP-006** or **SP-008** power packs.

Jaw sets are available for either pin installation or pin removal. Pin tools engineered for tailgate, side door, and widow hinge pin applications are also available. **Contact the factory for details.** 



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# CUSTOM WIRE CRIMP TOOLS

#### FLATTENING TOOLS

Engineered to reduce copper or aluminum tubing to a smaller diameter. Mainly used in the HVAC industry.

#### STRAP BAND TOOLS

Heavy duty, shear cutting jaw designed to cut metal strap banding up to 1". (Special) Requires A4X-720-5 (Special) cam on power pack.

# **HYDRAULIC CRIMPING TOOL**

# **HY-SERIES**



SIMONDS INC., has developed this series of hydraulic crimping outfits to produce a permanent, bilateral seal in ductile metal tubing by symmetrically collapsing, cold welding, and severing tubulation with no loss of vacuum or pressure.

- Hand guided, one step crimp/seal
- For air conditioner, refrigerator, laser tubing
- Produces quick, airtight bonds



HYDRAULIC CRIMPING TOOL					
PRODUCT NUMBERS	TUBING DIA. (x.035" WALL	ELONGATION (per side)	FLARE (razor edge)	DISTORTION (min. stub length)	
HY-125	1/8"	0.50" (1/8")	0.170"	0.125"	
HY-187	3/16"	0.50" (1/8")	0.250"	0.187"	
HY-250	1/4"	0.50" (1/8")	0.350"	0.250"	
HY-500	1/2"	0.55" (3/16")	0.750"	0.500"	



# PLASTICS

# GATE CUTTING DE-GATING ROBOTICS/AUTOMATION

SIMONDS INC. 248 ELM STREET SOUTHBRIDGE MA 01550 508.764.3235 FAX 508.765.5125 SALES@SIMONDS-INC.COM WWW.SIMONDS-INC.COM

# **PNEUMATIC POWER PACKS**



This miniature power pack is for use with the cutting, crimping and bending jaws. A built-in adjusting screw controls the opening of the jaw sets.

MSP-1   MSP-1F (Foot Operated)		
LENGTH	5"	
WEIGHT	11 oz	
DIAMETER	1.25" (31.75 mm)	
CFM @ 30 STROKES MIN.	0.03 cfm	
CLOSING FORCE @ 80 PSI	** Up to 100 lbs.	
MATERIAL	Aluminum	

	•	•	
MODEL SM-50 MAX AIR PRESSURE 5516 BAR (80 PSI)	•	•	

The SM-50 is used with the PGC-1.5 jaws only.

The SM-55 is used with the PGC-1.5 jaws only.

SQUEEZE PLIERS MODEL SM-55

SM-50 Robotic/Automation				
LENGTH 3.72" (94.49 mm)				
WEIGHT	4 oz.			
DIAMETER	1.25" (31.75 mm)			
CFM @ 30 STROKES MIN.	0.03 cfm			
CLOSING FORCE @ 80 PSI ** Up to 56 I				
MATERIAL Aluminum				

SM-55 Robotic/Automation				
LENGTH 5.02" (127.5 mm)				
WEIGHT	7.2 oz.			
DIAMETER	1.25" (31.75 mm)			
<b>CFM @ 30 STROKES MIN.</b> 0.09 cfm				
CLOSING FORCE @ 80 PSI	** Up to 112 lbs.			
MATERIAL Aluminum				

\*\* Closing force depends upon jaws used and Cam position. Call for more information.

OPTIONAL JAW SETS pg 27

ACCESSORIES pg 30

(Bench Stands, Tool Balancers, Safety Guards, and Foot Switches)

\*\*\*Jaws Sold Separately\*\*\*

\*\*\*5' Hoses included with Power Packs\*\*\*

\*Shown with optional jaw sets



A built-in adjusting screw controls the opening of the jaw sets.

SP-01P   SP-01PF	(Foot Operated)
LENGTH	5.5"
WEIGHT	11 oz
DIAMETER	1.5"
CFM @ 30 STROKES/MIN	.041 cfm
CLOSING FORCE @ 80 PSI	** Up to 575 lbs.
САМ	Piston Style
MATERIAL	Aluminum



Our foot model (shown here) includes two 5' hoses.

SP-02P   SP-02PF	(Foot Operated)
LENGTH	5.5"
WEIGHT	13 oz
DIAMETER	1.75"
CFM @ 30 STROKES/MIN	.045 cfm
CLOSING FORCE @ 80 PSI	** Up to 850 lbs.
САМ	Piston Style
MATERIAL	Aluminum

SM-100 Robotic/Automation	
LENGTH 4.8"	
WEIGHT	12 oz
DIAMETER	1.75"
CFM @ 30 STROKES/MIN	.041 cfm
CLOSING FORCE @ 80 PSI	** Up to 575 lbs.
САМ	Piston Style
MATERIAL	Aluminum

\*\* Closing force depends upon jaws used and Cam position. Call for more information.

OPTIONAL JAW SETS pg 27 ACCESSORIES pg 30

\*\*\*Jaws Sold Separately\*\*\*

The SM-100 is designed to use the same jaws as the SP-01P

and the SP-02P power packs.

\*\*\*5' Hoses included with Power Packs\*\*\*

Simonds

# JAW SETS FOR SP-01P | SP-01PF | SP-02P | SP-02PF | SM-100



PGC-2CH	
Angle	18°
Length of Cut	7/8" (22 mm)
Type of Cut	Flush
Max. Opening	31/64" (12.25 mm)



PGC-2-45	
Angle	45°
Length of Cut	5/64" (20 mm)
Type of Cut	Flush
Max. Opening	29/64" (11.48 mm)



PGC-2-60	
Angle	60°
Length of Cut	3/4" (19 mm)
Type of Cut	Flush
Max. Opening	13/32" (10.50 mm)



PGC-2-90	
Angle	90°
Length of Cut	1" (25 mm)
Type of Cut	Flush
Max. Opening	23/64" (9.06 mm)



CD-6	
Angle	15°
Length of Cut	7/8" (22 mm)
Plastics Only	Tapered Outside Edge
Max. Opening	To 0.18" (4.75 mm)

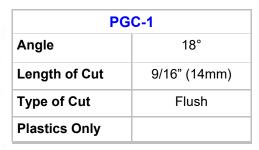


PGC-7	
Angle	Straight Cutter
Length of Cut	1" (25 mm)
Type of Cut	Flush
Max. Opening	7/16" (11.23 mm)



PGC-8	
Angle	End Cutter
Length of Cut	19/64" (7.5 mm)
Type of Cut	Flush
Max. Opening	29/64" (11.70 mm)

#### **USED WITH MSP-1 ONLY**



#### **USED WITH SM-50 AND SM-55 ONLY**

	PGC-1.5	
	Angle	0°
-	Length of Cut	7/8" (22 mm)
	Type of Cut	Flush
	Max. Opening	7/32" (5.56 mm)

# **OPTIONAL POWER PACKS pg 25-26 ACCESSORIES pg 30**

# **PNEUMATIC POWER PACKS**

- Power Packs available in hand or foot switch activated models. 1/8" ports
- 5' air hose assembly(s) included. 1/8 and 1/4 NPT fittings
- Standard cam (25-H) installed on all power packs unless otherwise specified



SP-002F SHOWN







\*\*\*Jaws Sold Separately\*\*\*

\*\*\* 5' Hoses included with Power Packs\*\*\*

# OPTIONAL JAW SETS pg 29 ACCESSORIES pg 30

(Bench Stands, Tool Balancers, Safety Guards, and Foot Switches)

SP-002   SP-002F (Foot Operated)	
LENGTH	4" (100.00 mm)
WEIGHT	1 lb.
DIAMETER	1.72" (43.75 mm)
CFM @ 30 STROKES/MIN	0.09 cfm
CLOSING FORCE @ 80 PSI	** Up to 1120 lbs.
САМ	Hexagon
MATERIAL	Aluminum

SP-003   SP-003F (Foot Operated)	
ENGTH	4" (100.00 mm)
WEIGHT	1 lb. 7 oz.
DIAMETER	2.22" (56.25 mm)
CFM @ 30 STROKES/MIN	0.16 cfm
CLOSING FORCE @ 80 PSI	** Up to 2000 lbs.
САМ	Hexagon
MATERIAL	Aluminum

SP-004   SP-004F (Foot Operated)	
LENGTH	4" (100.00 mm)
WEIGHT	1 lb. 8 oz.
DIAMETER	2.46" (62.50 mm)
CFM @ 30 STROKES/MIN	0.20 cfm
CLOSING FORCE @ 80 PSI	** Up to 2400 lbs.
CAM	Hexagon
MATERIAL	Aluminum

SP-002.5   SP-002.5F (Foot Operated)	
LENGTH	5.75"
WEIGHT	1.5 lbs.
DIAMETER	2.0"
CFM @ 30 STROKES/MIN	.3 cfm
CLOSING FORCE @ 80 PSI	** Up to 2400 lbs.
САМ	Hexagon
MATERIAL	Aluminum

\*\* Closing force depends upon jaws used and Cam position. Call for more information.

# JAWS AND HOUSINGS FOR SP-002 | SP-002.5 | SP-003 | SP-004

- Lightweight aluminum housing
- Jaws can easily be reversed in the housing to permit either right-hand or left-hand operation
- All jaws made of hardened tool steel

Even pressure on the jaws, created by Simonds power packs, makes cutting gates and sprues easy and clean. Combined with Simonds power packs these jaws will handle most jobs in the injection molding industry.



PGC-4CH		
HOUSING LENGTH	4 1/4" (106.25 mm)	
OVERALL LENGTH	5 7/8" (149 mm)	
WEIGHT	1 lb. 5 oz.	
DIAMETER	1 3/4"	
LENGTH OF CUT	7/8" (21.62 mm)	
MAX. OPENING	5/8" (15.85 mm)	
CUTTING ANGLE	25°	



PGC-4-30	
HOUSING LENGTH	4 1/4" (106.25 mm)
OVERALL LENGTH	6 5/8" (175 mm)
WEIGHT	1 lb. 5 oz.
DIAMETER	1 3/4"
LENGTH OF CUT	1 1/8" (28.57 mm)
MAX. OPENING	7/8" (22.48 mm)
CUTTING ANGLE	30°



PGC-4-45		
HOUSING LENGTH	4 1/4" (106.25 mm)	
OVERALL LENGTH	6 3/16" (157 mm)	
WEIGHT	1 lb. 5 oz.	
DIAMETER	1 3/4"	
LENGTH OF CUT	1 7/64" (28.12 mm)	
MAX. OPENING	11/16" (17.23 mm)	
CUTTING ANGLE	45°	



# ACCESSORIES pg 30

(Bench Stands, Tool Balancers, Safety Guards, and Foot Switches)

PGC-4-60		
HOUSING LENGTH	4 1/4" (106.25 mm)	
OVERALL LENGTH	6" (152 mm)	
WEIGHT	1 lb. 5 oz.	
DIAMETER	1 3/4"	
LENGTH OF CUT	1 5/32" (29.33 mm)	
MAX. OPENING	11/16" (17.23 mm)	
CUTTING ANGLE	60°	



PGC-4-90		
HOUSING LENGTH	4 1/4" (106.25 mm)	
OVERALL LENGTH	5 1/2" (139 mm)	
WEIGHT	1 lb. 5 oz.	
DIAMETER	1 3/4"	
LENGTH OF CUT	15/32" (29.33 mm)	
MAX. OPENING	17/32" (13.64 mm)	
CUTTING ANGLE	90°	

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F-206*		
HOUSING LENGTH	4 1/4" (106.25 mm)	
OVERALL LENGTH	5 13/32" (137 mm)	
WEIGHT	1 lb. 5 oz.	
DIAMETER	1 1/2"	
LENGTH OF CUT	3/8" (9.44 mm)	
MAX. OPENING	13/32" (10.63 mm)	
CUTTING ANGLE	End Cutter	

\*F-206 jaw set only used with the SP-002 through SP-004. This is a special order only, with longer lead times and quoted price. Replacement jaws may be purchased separate from housing. All Simonds jaws are able to be re-sharpened at the factory.

# ACCESSORIES

#### WS-2000 ERGONOMIC WORK STATION

- 36" horizontal, 180° boom
- 48" vertical column with a base that mounts easily to bench tops.
- Boom can be adjusted vertically higher or lower on the column to suit your specific application.
- Balancer trolley included
- Trolley supports up to 30 pounds.

The WS-2000 Ergonomic Work Station is a heavy duty support system for use with any of the power packs in our product line.

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Tool balancer and harness shown in picture sold separate.



Supports to weight shown

TOOL HARNESS		
TH-1	TH-2	
Use w/ SP-01P-SP-02P	Use w/SP-002- SP-008	
FOOT SWITCHES		

FOOT SWITCHES	
ITEM NUMBER	For use with all power packs with
103	"F" suffix.
107	(i.e. SP-002F)

REMOTE POWER PACK BENCH STAND		
ITEM NUMBER	USE WITH POWER PACK	
A-202-1	SP-01PF	
A-202-2	SP-02PF and SP-002F	
A-202-3	SP-003F	
A-202-4	SP-004F and SP-005F	
A-202-6	SP-006F	
A-202-8	SP-008F	

The WS-2000 and A-202 Series of work stations and bench stands are designed to be mounted on tables or work stations by either bolting through holes provided, or by using Simonds part number BC-1 bench clamp. The A-202 series of bench stands allows the tool to be rotated easily to position the tool for optimum cutting. The bench stand is further designed to be easily integrated onto robotic arms or moving work stations.



With two 1/8" npt fittings

# 5' 7' 10' 15'

With one 1/8" npt and one 1/4" npt fitting

# 5' 7' 10' 15'

# SAFETY GUARDS

SG-2	For use with SA-2000
SG-3	(shown) up to 5/32 wire
SG-4	Up to 7/32 wire
EG-1-1	For use with MSP-1
Contact a distributor for specifications.	



- EXTENTIONS
- Prevents Injury from whip back
- Relieves ergonomic issues or repetitive cutting of stiff wires.
- For use with all range of power packs

# 2.5" 10" 18" 36"









Simonds Inc. has been a family owned and operated business for three generations. We have been proudly manufacturing ergonomic tools for the aerospace, injection molding, and automotive industries for over fifty years.

Located in Southbridge Massachusetts, Simonds manufactures specially designed tools. These tools meet the demanding and intricate specifications that our customers need. They substantially reduce injury related to repetitive motion, while improving production and reliability.

Here at Simonds we strive to provide comfort and safety for the operator. Our engineers work closely with our customers to assess challenges within manufacturing industries and provide viable and ergonomic solutions to optimize production.

> Our engineers and sales team are available for consulting Mon-Fri 9:00am - 5:00pm EST.

# WARRANTY

Simonds power packs are warrantied to be free from defects in materials and workmanship for a period of one year, barring alterations, abuse or misuse. All products returned for warranty repair must be sent to Simonds Inc., Southbridge, MA at end users expense, where it will be repaired or replaced at the company's discretion.

SIMONDS INC. 248 ELM STREET SOUTHBRIDGE MA 01550 508.764.3235 FAX 508.765.5125 SALES@SIMONDS-INC.COM WWW.SIMONDS-INC.COM

#### MISSION STATEMENT

1) TO PROVIDE SAFE AND RELIABLE PNEUMATIC AND HYDRAULIC HAND TOOLS TO OUR CUSTOMERS, ASSOCIATES, AND DISTRIBUTORS.

2) TO PROVIDE ADVANCED SOLUTIONS TO THE CUTTING, CRIMPING, AND DE-GATING CHALLENGES WITHIN THE INDUSTRIES.

3) TO INCREASE PRODUCTION AND DECREASE INJURY BY PROVIDING TOOLS WITH ERGONOMIC DESIGNS AND ADVANCED ENGINEERING.