### >LINDSTRÖM®

Innovating together





### Lindström



## **Unique Tools For Every Situation**

Lindström customers are innovators, pushing the envelope, developing new technologies and building new industries. When presented with a need to prepare prototypes, insert or extract unique components, or cut proprietary hard wire, our customers turn to Lindström for Specially Engineered Tools.

Lindström has developed tools used in specialized applications for the largest names in medical device manufacturing and for small start-up companies developing new technology. Every project receives the same attention to detail for a tool that is right for the job at hand.

To make the process easy Lindström has no minimum order quantity for Specially Engineered Tools. Our tool designers and manufacturers representatives work directly with production engineers to ensure success. We thrive on solving problems with our customers.

Join our <u>www.lindstromtools.com</u> website in the Customize area to develop your product together with us. You can also contact one of our authorized distributors all over the world or Lindström manufacturers representatives to discuss your special tool requirements.

### The Lindström Design Process

The Lindström staff can design special application tools by working with "before" and "after" components, engineering drawings, or prototypes. We even build tools drawn on the back of a napkin. It's that easy!



A customer provides an idea for a specially engineered transistor tool.

Every project begins with a blank tool.

### **▶** Specially Engineered Tools



Lindström tool designer shapes the tool according to customer specifications.



Finished Transistor Forming Pliers RX 601-16 ready for delivery!

The tools featured here and on the following pages are a small sample of over 1,500 different designs that we have manufactured so far. Several handle options are available on Special Tools.



8154PSP precisely trims catheters.



331A-31 bend and cut pliers create precise two-angle bend and cuts lead the same length every time.



RX 601 forming pliers leave a STAND-OFF in wire and on LED leads.



202A cut and clench tools leave a swaged, bent lead that clenches the PCB.



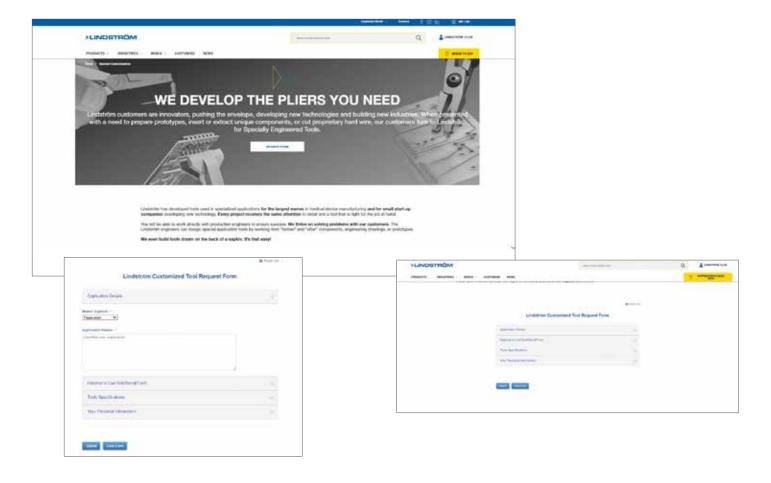
7292Ml micro-mini end cutter is used to cut a ground wire inside a mini connector.



# Develop Your Customized Precision Cutter

### WWW.LINDSTROMTOOLS.COM

The Tool Request Form allows you to customize your product live. In a few steps you will be able to send us your request and our manufacturing reps and engineering team will respond to you to discuss your needs.



### IC INSERTION/EXTRACTION TOOLS & IC CUTTERS

### IC INSERTION/EXTRACTION TOOL

### 7992

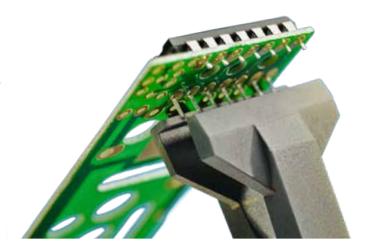
- The 7990-7993 family of insertion tools can be used for ICs or DIPs from 4 pin to 64 pin
- To order, indicate total number of pins on IC/DIP, length and width of package
- Tool length: 4.5 in. / 114.3 mm
- Picture shows 80 Series handle



### **IC CUTTER**

### **RX 501**

- IC cutters can be produced to cut up to 10 pins simultaneously
- STAND-0FF length is typically .040" (1 mm) but can vary according to specifications
- To order, indicate total number of pins on IC and STAND-OFF length. Example: For 14 pin IC, order Part no. 501-14
- Tool length: 6 in. / 152.4 mm
- Tool can be produced with RX, 80 Series or HS handles as specified by end user

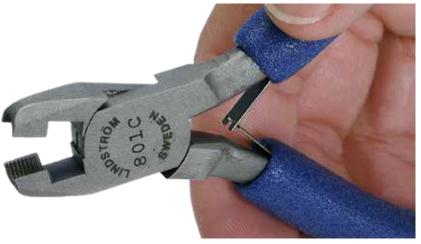


### COAXIAL CABLE CONNECTOR TOOL

### 801C

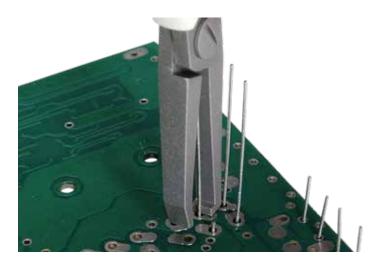
- · Reduces possibility of marred connector threads
- Tool length: 6 in. / 152.4 mm
- Picture shows ESD safe foam handle







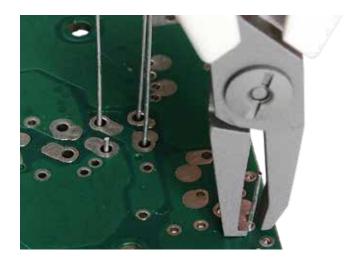
### **STAND-OFF CUTTERS**



### STRAIGHT STAND-OFF SHEAR CUTTER .075"

### 111A

- Uncut lead length capacity: 1.000" / 25.4 mm
- · Cuts leads to length as needed
- Standard length is .075" (1.9 mm) but varies according to specifications
- Cutter can be used on 16 AWG (1.295 mm) solid copper and also trims wire wrap pins
- To order other than .075" STAND-0FF, specify length (Example: For .065" STAND-0FF, order Part no. 111A-065)
- Tool length: 6 in. / 152.4 mm
- Picture shows Supreme Series handle



### STRAIGHT STAND-OFF SHEAR CUTTER .040"

### **RX112A**

- Uncut lead length capacity: .75" / 19 mm
- Anti-shock lead trimmer for use on 20 AWG (.813 mm) copper wire or smaller
- STAND-OFF is .040" (1 mm) unless otherwise specified
- To order other than .040" STAND-0FF, specify length (Example: For .030" STAND-0FF, order Part no. 112A-030)
- Tool length: 4.5 in. / 114.3 mm
- Picture shows Supreme Series handle



### **OBLIQUE STAND-OFF SHEAR CUTTER .045"**

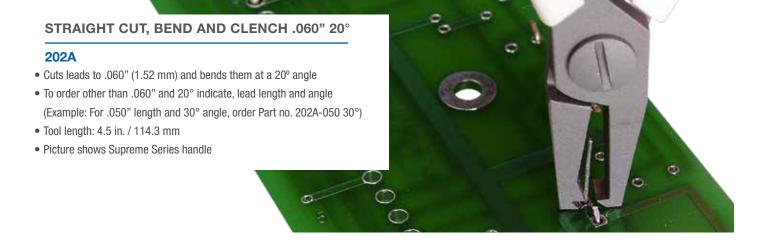
### 121/

- Similar to 111A, heavy-duty type, featuring a 45° angle to allow clearance for longer lead lengths
- STAND-0FF is .045" (1.14 mm) unless otherwise specified
- To order other than .045" STAND-OFF, specify length (Example: For .035" STAND-OFF, order Part no. 121A-035)
- Tool length: 6 in. / 152.4 mm
- Picture shows Supreme Series handle
- Tool can be produced with RX, 80 Series or HS handles as specified by end user

### **STAND-OFF CUTTERS**



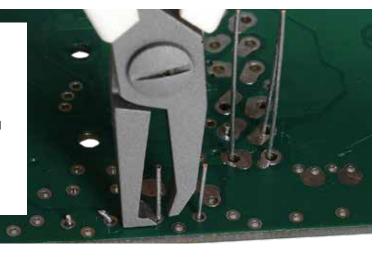
### **CUT and BEND**



### **CUT & BEND .060" 45°**

### 204B

- Bends leads at 45° then cuts, leaving a .060" (1.52 mm) STAND-OFF
- Other angles and lengths are available
- To order other than 45° and .060", indicate degree of bend required and lead length (Example: For 40° angle and .050" length, order Part no. 204B-050 40°)
- Tool length: 4.5 in. / 114.3 mm
- Picture shows Supreme Series handle



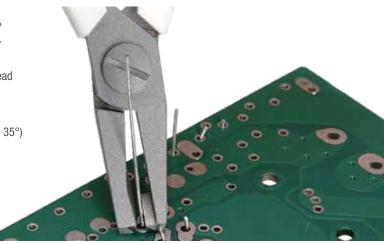


### **CUT and BEND**

OBLIQUE CUT, BEND AND CLENCH .060" 20°

### 212A

- Similar to a 202A featuring an oblique angle that offers improved lead visibility and accommodates longer leads
- To order other than .060" and 20°, indicate lead length and angle (Example: For .055" length and 35° angle, order Part no. 212A-055 35°)
- Tool length: 6 in. / 152.4 mm
- Picture shows Supreme Series handle



### **CUT and FORM**

### **CUT AND FORM - UP TO 16 AWG**

### 331A

- Cuts leads and forms dogleg on solid copper as large as 16 AGW (1.295 mm)
- To order, furnish component or rough drawing indicating lead length, radii, diameter and bend locations
- Tool length: 6 in. / 152.4 mm
- Picture shows Supreme Series handle



### **CUT AND FORM - UP TO 16 AWG**

### 341A

- · Cuts leads to length and forms stress relief on
- component leads up to 16 AWG (1.9 mm) solid copper
- To order, furnish component or rough drawing indicating lead length, radii, diameter and bend location
- Tool length: 6 in. / 152.4 mm
- Picture shows Supreme Series handle



### **LEADFORMERS**

### **FLAT PACK LEADFORMER**

### 304D

- Cuts and forms multi-lead flat packs
- To order, indicate length from component body to bend, angle of bend and length of tail
- Tool length: 6 in. / 152.4 mm
- Picture shows RX Series handle



### **LEADFORMER - STRESS RELIEF UP TO 16 AWG**

### 601A

- Forms leads for stress relief up to 16 AWG (1.9 mm) solid copper
- To order, indicate lead length (minimum/maximum) from component body to P.C. board and lead diameter
- Tool length: 6 in. / 152.4 mm
- Picture shows Supreme Series handle



### 45° OBLIQUE LEADFORMER - UNLIMITED LENGTH

### 614A

- Adds stress relief to leads in high density board population applications
- · Allows unlimited lead length forming with high visibility
- To order, indicate lead length (minimum/maximum) from component body to P.C. board and lead diameter
- Tool length: 6 in. / 152.4 mm
- Picture shows Supreme Series handle





### **PERFORMANCE SPECIFIC CUTTERS**

### CUTTER

### **RX 8140PS**

- Made for hard wire applications
- Medical device manufacturing of pacemakers, coils, stents, catheters
- PS cutting edge technology available on many different models and 8130-8160 sizes
- · Picture shows RX Series handle



### **CUTTER**

### **RX 8140PSF**

- Made for hard wire applications
- Medical device manufacturing of pacemakers, coils, stents, catheters
- PSF cutting edge technology available on many different models and 8130-8160 sizes
- · Picture shows RX Series handle





### PERFORMANCE SPECIFIC CUTTERS

## EUTTER 8160PS • Made for hard wire applications • Medical device manufacturing of pacemakers, coils, stents, catheters • PS cutting edge technology available on many different models and 8130-8160 sizes • Picture shows 80 Series handle

### **CUTTERS**



### **CUSTOM FORMING PLIERS**

### **CUSTOM LEADFORMER**

### **RX 601-16**

- Specially engineered leadforming pliers
- Turns 5 equal-length leads into 3 long and 2 short leads
- Typically used on transistors
- Picture shows RX Series handle



For more than forty years, Lindström cutters have been used to manufacture pacemakers, stents, catheters, guidewires and more. Lindström's technological improvements are driven by our customer's applications that demand reliable, precise and versatile tools. Lindström launching a range of cutters that perform to the specifications of manufacturers using a wide variety of hard materials such as platinum, nitinol, stainless steel, titanium, as well as proprietary meshes and weaves.





### **Designed to Cut Guidewires, Catheters & Fine Trimming of Stents**

### 7154TC Carbide Insert Cutter

Lindström introduces a specially engineered diagonal cutter for hard wire applications. This new Tungsten Carbide Cutter is designed to provide consistent, precise flush "Tip Cuts" on guidewires, catheters and fine trimming of stents.



- Carbide Insert Cutters suitable for hard wire materials such as Nitinol, Stainless Steel and Titanium
- High performance alloy steel material provides strength and reliability
- Precision screw joint minimizes friction while maximizing cutting edge and tip alignment
- ESD Safe, comfortable synthetic handles with return spring for smooth operation
- Polished, natural finish provides protection against oxidation
- Cutting capacity hard wire from 0.10 mm to 0.40 mm / 0.004 in 0.016 in = > 0.2 mm 0.008 in, in the tip
- 8154PSP designed for soft materials





Part No.			A mm / in	B mm / in	C mm / in	D mm / in	F mm/in	Soft Wire Cap. mm / in	Hard Wire Cap. mm / in	Head Size
7154TC	Tapered	Flush	112.5 / 4.43	13.0 / 0.51	12.5 / 0.49	6.0 / 0.24	2.0 / 0.08	0.1-0.9 / 0.004-0.03	0.1-0.2 / 0.004-0.01	M
8154PSP	Tapered	Flush	112.5 / 4.43	13.0 / 0.51	12.5 / 0.49	6.0 / 0.24	2.0 / 0.08	0.2-1.6 / 0.01-0.06	-	M

M = Medium

Improper use may cause the breakage of the Carbide inserts. Handle with care