



#### Contents

#### shears

- Shear Facts
  Questions and Answers
- 4 9000 Series
  Micro-Shear Flush Cutters
- 6 LX & Maxi-Shear™ Series Flush Cutters
- 8 Short Cut™ Series
  Micro-Shear® Flush Cutters
- 10 170-II Series Micro-Shear® Flush Cutters
- 12 Hand Tool Ergonomics

# wire strippers, pliers and forming tools

13

# specialty products

- 16 Rover Mask™ Temporary Solder Resist
- 17 Micro-Pneumatic™ Series Flush Cutters
- 18 Tool Kits
- 19 Wickgun™ Braid Dispensers
- 20 800 Series Dispensing Bottles
- 20 Static Control (AS) Grips
- 21 Easy Reference Chart

Xuron Corp. is one of the world's leading manufacturers of ergonomic electronics-grade hand tools for the electronics, aerospace, plastic molding, hobby, craft and jewelry industries.

Xuron sets the standard for precision, tool durability and ease of use. Unlike conventional cutting tools in which the cutting blades meet edge-to-edge (resulting in a spiked cut and eventual dulling of the tool), Xuron tools use our exclusive Micro-Shear\* blade by-pass cutting action, which ensures clean cuts and improved durability.

Xuron holds numerous domestic and international patents, including an inventor's patent for the original Micro-Shear® flush cutter and its unique cutting action.

Xuron tools are manufactured in Saco, Maine, where quality, an outstanding work ethic and flawless craftsmanship are an enduring tradition.



Hundreds of distributors worldwide offer more than 100 different Xuron hand tools and associated products.

If you're looking to work with the best, choose hand tools designed for cutting excellence, manufactured only by Xuron.





### shear facts Q&A.

- Q. Why do Micro-Shear flush cutters cut so well?
- A. The term Micro-Shear flush cutter is a registered trademark of XURON CORP, and is applied only to our products which utilize our patented, blade by-pass shear cutting action.

Conventional wire cutters utilize a compression-type cut. with the advancing cutting edges forcing the metal of the wire out of their way.

Micro-Shear flush cutters utilize a shearing cut, with the by-pass cutting edges slicing cleanly through the metal (see illustration at bottom of adjacent page).

Shear cutting greatly reduces mechanical shock delivered to the component and requires only about half the effort to cut a wire as compared to conventional compression-type wire cutters.

- Q. What's the difference between a Micro-Shear flush cutter and a conventional wire cutter?
- A. All primary cutting surfaces on our 170-II, 410 and LX Series Micro-Shear\* flush cutters are generated on high precision, three microprocessor-controlled, self diagnostic grinding equipment. The grinding on every blade is as precisely identical to that on every other blade as their computer controlled tolerances allow. It is also exactly the same type of grinding as used on such fine tools as LINDSTROM® and EREM®.

We're not suggesting any company use XURON Micro-Shear® flush cutters instead of these other great tools, but why should you sacrifice that level of quality just because your requirements call for "economically priced" tools?

- Q. Why do Micro-Shear® flush cutters last so long?
- A. XURON Micro-Shear® flush cutters ensure durability by design. Let's use a little basic physics to illustrate how:

If you generate 10 pounds of pressure on the grips of a conventional, compression-type wire cutter to cut a wire, that 10 pounds of force must be dissipated somewhere (Law of Conservation of Energy). Part of it is dissipated into the severed section of wire, which is why it sails across the room. A portion travels down the lead wire and is dissipated into the component or solder joint,



which can cause damage. The balance is dissipated into the opposing cutting edge of the cutter, which is why they get dull.

Using a Micro-Shear flush cutter requires only about half the pressure (approximately 5 pounds) to cut the same wire. Part of the force is dissipated into the severed section of the wire. But if you're using our patented lead retainer the wire won't sail across the room. Because of our shearing cut very little is dissipated into the component or solder joint; the rest is dissipated into the opposing cutting jaw. Because of our blade by-pass, edge-to-edge contact is eliminated and the life of our Micro-Shear flush cutter's precision cutting edges is extended.

- Q. What is the difference between a stamped tool and a drop-forged tool?
- A Precision stamped Micro-Shear flush cutters have more in common with precision drop-forged tools than with conventional drop-forged tools.

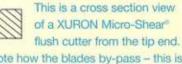
The most obvious difference is that the blank shape of a drop-forged tool is created from hot metal. A stamped tool does not require heat at this stage. Beyond this point the differentiation becomes less distinct.

In conventional drop-forging a crude, basic shape is created. With precision drop-forging a more refined shape with reference points for subsequent grinding operations is created. Conventional drop-forged tools typically then undergo hand-guided grinding operations. With precision drop-forged tools these grinding operations are usually done with computer controlled machines utilizing the reference marks on the blank.

When we manufacture precision stamped Micro-Shear flush cutters a refined shape, complete with reference points for our computer controlled grinding operations, is generated in the stamping process.

All tools, regardless of the method of manufacture, have to be heat treated. In the electronics industry return springs and cushion grips are required. The distinction between drop-forged and stamped tools is further blurred since, due to the high density areas electronics pliers are required to be able to work in, one of the more popular head configurations on drop-forged tools is the "relieved head." On these tools additional grinding operations remove head stock to reduce the tool's profile, increasing access and maneuverability. The result is a head shape very similar to our standard XURON Micro-Shear® flush cutter.

Compression cutter blades meet edge-to-edge. causing a spiked cut and an eventual dulling of the tool.



Note how the blades by-pass - this is a very important patented feature that results in a clean square cut with no spikes.

#### The ultimate shear cutter

Our 9000 Series is the culmination of 20 years of continuous development of the Micro-Shear cutter. These are the only shears made anywhere in the world rated for cutting everything from soft material less than one mil. up to 12 AWG copper wire.

1000 Series Micro-Shear\* flush cutters begin with a unique, state of the art blanking process from a tough alloyed steel. Their size and shape reflect the latest advances in enhanced ergonomics. The heat treating process is exclusive to the 9000 Series. Cutting edges are an altra durable 56-58 RC. The result is a shear unlike any other in design, capacity and durability. Static dissipative grips are optionally available.

The Long Handled (LH) variation of the 9000 Series is designed for applications where workplace ergonomics call for an extra long handled tool. They provide added everage for reduced cutting effort. Longer handles also create an extended contact area with the hand for a more secure grip and more repositioning possibilities. This decreases pressure within the hand at any given point reducing fatigue associated with repetitive motion.

The 9000 Series is the ultimate shear cutter, available only rom XURON, the company that invented the Micro-Shear\* lush cutter.

#### 9100 Oval Head Micro-Shear® Cutter

The most durable Micro-Shear" flush cutter we've ever made. Tough alloyed steel, state of the art heat treating and ultra-precise CNC grinding combine to create the ultimate shear cutter. The advanced ergonomic design, coupled with our exclusive Xuro-Rubber<sup>TM</sup> grips, Light Touch<sup>TM</sup> return spring and glare-eliminating

black finish ensure operator

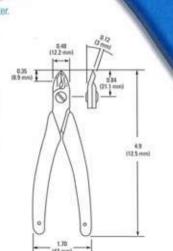
volume and large capacity

applications. Flush cuts

soft wire up to 12 AWG

(2.0 mm).

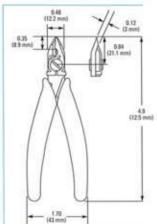
comfort, even in high



### 9100F Micro-Shear® Flush Cutter

Our 9100 with a factory installed lead retainer. Ultra low profile design provides excellent access while special no-slip mounting ensures accurate positioning on the shear, Helps prevent tlying leads and component shorting from stray leads





#### 9100LH Oval Head Micro-Shear® Flush Cutter

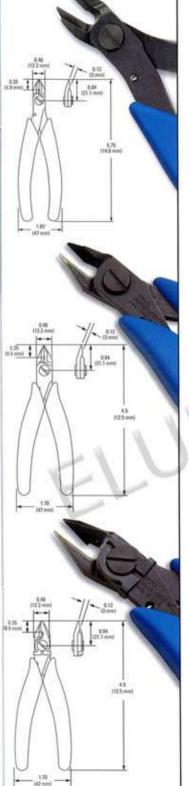
Our 9100 with extra long handles. Same tough alloyed steel, heat treating, grinding and ergonomic shape combined with added handle length and extra long Xuro-Rubber™ grips, Reduces pressure on operator's hand at any given point; offers more repositioning possibilities. Flush cuts soft wire up to 12 AWG (2.0 mm).

#### 9200 Tapered Head Micro-Shear® Flush Cutter

Tapered head version of the 9100. The same tough alloyed steel, heat treating and ultra-precise CNC grinding with a tapered head for improved access in high density areas and added precision. Tapered head design allows positioning, even on fine pitch leads. Precision-ground Micro-Shear cutting edges guarantee a clean cut. Flush cuts soft wire up to 14 AWG (1.6mm).

### 9200F Micro-Shear® Flush Cutter

Our 9200 with a factory installed lead retainer. Ultra-low profile design provides excellent access while special no-slip mounting ensures accurate positioning on the shear. Helps prevent flying leads and component shorting from stray leads.



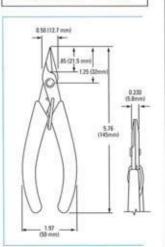


#### 9180 Keylar® Fiber Shear

Designed and manufactured specifically for cutting the Kevlar fiber strength component of fiber optic cables. Uniquely designed serrated edge prevents the fibers from sliding out the front of the shear while cutting. Cutting edges are heat treated to a hard 58-60 RC. A superior tool offering both precision cutting and exceptional tool life. Cushioned Xuro-Rubber Migrips and return spring provide both comfort and convenience.

#### 9180NS (non-serrated) Shear

The same as our standard model 9180 but without the serrated edge. Designed for cutting applications where serrations are not necessary or not desired. Appropriate for cutting soft sheet metals up to 0.031" (0.8mm).

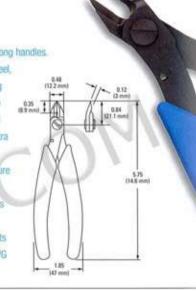




# 9200LH Tapered Head Micro-Shear® Flush Cutter

Our 9200 with extra long handles. Same tough alloyed steel, heat treating, grinding and ergonomic shape combined with added handle length and extra long Xuro-Rubber \*\*\*
grips. Reduces pressure on operator's hand at any given point. Offers more repositioning possibilities. Flush cuts soft wire up to 14 AWG

(1.6 mm).



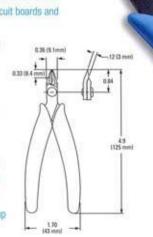
#### 9250ET (Extra Tapered) Micro Shear® Flush Cutter

Features a subminiature (Extra Tapered) head

size for access into extremely restricted areas. Ideal for ultra high density circuit boards and SMT. Design offers strength with the superior durability of all 9000 Series shears.

Ergonomically shaped, cushioned Xuro-Rubber Thi grips and our Light Touch The grips and our Light Touch Touch Tourn spring for operator comfort. Glare eliminating black finish helps reduce eye strain and enhances contrast for more precise positioning.

Cuts from less than one mil up to 18 AWG (1.02 mm).





pgraded for the 21st century, the LX Series Micro-Shear® Flush Cutters are stronger and more durable with approved cutting capacity. These mid-range flush cutters feature precision-ground, ultra-sharp cutting edges on

tool designed for maximum strength and durability. State of the art heat treating to Rockwell 55-57C ensures a rugged, precise, and extremely durable flush cutter apable of cutting soft leads up to 16 AWG (1.29 mm), Features also include ergonomic esign, non-slip Xuro-Rubber™ grips, a glare resistant bright finish and our patented, fetime warranted, Light Touch™ return spring.

X Series shears are optionally available with static control (AS) grips

#### LX Micro-Shear® Flush Cutter

Our patented Micro-Shear® cutting action combined with precision ground cutting edges, extra tough .100" thick high carbon steel blades, and an ultra slim profile for access in high density areas. Sized for smaller hands and maximum maneuverability. Flush cuts soft wire up to 16 AWG (1.29 mm).

#### LX-F Micro-Shear® Flush Cutter

Our LX with a factory installed lead retainer. Design provides a low profile and non-slip mounting. on the shear. Helps prevent flying leads and component shorting from stray leads.

## 2175 Maxi-Shear™ Flush Cutter

An extremely durable and

versatile wire cutter featuring our patented Micro-Shear cutting action. Tough enough for harnesses and cables with the precision to cut material less than 1 mil, thick or work in high density areas. Ergonomically shaped, non-slip Xuro-Rubber<sup>TM</sup> grips and a glare eliminating black finish ensure operator comfort. Non-protruding, lifetime warranted flat spring provides excellent "feel" without excessive spring tension. Flush cuts soft wire up to 12 AWG (2.05 mm).





LX-T Micro-Shear®

A special, extra tapered cutter

head with an ultra-slim tip profile

combined with the same Micro-

Shear cutting action, precision

grinding, and tough high carbon

steel blades of the standard LX.

access in highly restricted areas.

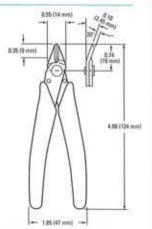
Ultra-sharp, precision tip for

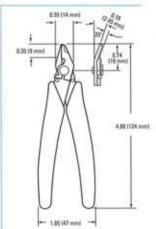
Flush cuts soft wire up to 20

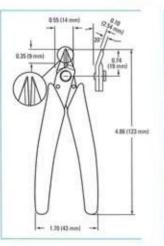
AWG (0.8 mm).

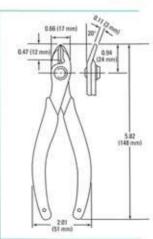
Flush Cutter











# 2175A Maxi-Shear™ Flush Cutter

available with static control (AS) grips.

Ultra flush cutting version of our 2175 for fine work and very soft. materials. Very lightly bevelled cutting edges allow for minimal blade by-pass (see diagram) ensuring the finest flush cut possible. Glare eliminating black finish and ergonomically-shaped Xuro-Rubber<sup>TM</sup> grips. Cuts soft wire up to 14 AWG (1.6 mm).



#### 2175B Maxi-Shear™ Flush Cutter

Semi-flush cutting version of our 2175. A more pronounced bevel on the cutting edges (see diagram) allows for heavier cutting or extended wear where flush or ultra flush cuts are not required. Non-slip, ergonomically shaped Xuro-Rubber™ grips and a glare eliminating black finish for operator comfort. Semi-flush cuts on soft wire up to 12 AWG (2.05 mm).



#### 2193 Music Wire Shear

The 2175 Maxi-Shear™ Series flush cutters are manufactured from the highest grade, 0.125" high carbon steel.

grips. Most important, all 2175 Maxi-Shear™ flush cutters utilize our patented Micro-Shear® cutting action. This

They feature our lifetime warranted, Light Touch™ return spring and ergonomically-shaped, non-slip Xuro-Rubber™

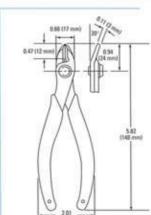
means less cutting effort, less fatigue, and fewer fatigue-related injuries and complaints. Maxi-Shears™ are optionally

Large, full by-pass shear designed specifically for cutting music wire and other types of hardened wire. Shearing cut combined with high mechanical advantage make cutting iron, hardened and tempered steel wire up to 12.AWG (2.05mm) seem effortless. Cushioned Xurp-Rubber™ grips and our Light Touch<sup>TM</sup> return spring for operator comfort. Cuts music wire up to 0.040" diameter.

#### 2193F Music Wire Shear

Our 2193 with self-adjusting clamping fixtures which hold the material being cut perpendicular to the cutter jaws. Greatly simplifies cutting process while adding significantly to both the precision of the cut and cutting capacity. Gives square ended cuts on both the cut and off-cut sides. Cuts music wire up to 0.060",



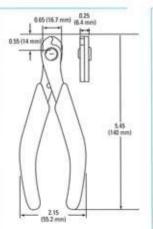


### 2175F Maxi-Shear™ Flush Cutter

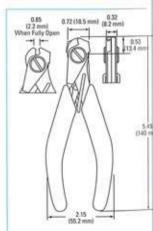
Our 2175 with a factoryinstalled lead retainer. Clip is permanently installed for non-slip positioning. Low profile design for good sight lines and accessibility. Helps prevent flying leads and component shorting from stray leads.













ort-Cut™ Series shears feature an ergonomically-enhanced size and shape. Hand grip dimensions are optimized to size and shape of the human hand. Their unique shape and Xuro-Rubber™ grips provide a secure "fit" in the operator's id resulting in more precise control.

ort-Cut™ Series shears feature a glare eliminating black finish for operator comfort and enhanced contrast ween the component lead and tool and our patented, lifetime warranted, Light Touch™ return spring,

O Micro-Shear® Flush Cutter premium grade version of our world ous 170-II Micro-Shear® Flush Cutter ize and shape are optimized for work in density areas. The patented Micro-Shear e by-pass reduces both cutting t and mechanical shock (impact) smitted to the component. High on steel blades are precision and to ultra sharp cutting edges. mique, state of the art heatfing process yields a Rockwell iness of 55-57C. The result is a th, precise, durable flush cutter able of reliably and economically ing soft wire up to 18AWG

Static dissipative grips are optionally available.

#### 410F Micro-Shear® **Flush Cutters**

Our 410 with a factory-installed lead retainer. Design provides a low profile and non-slip mounting on the shear. Helps prevent flying leads and component shorting from stray leads. Cuts soft wire up to 18 AWG

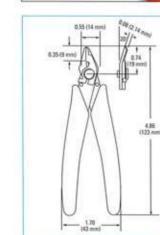
# 410T Micro-Shear® Flush Cutter

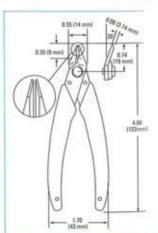
Our 410 shear with ultra sharp

precision tips and an extra thin tip profile. Provides the ultimate in maneuverability and operator control: allows work in areas other tools cannot evenlenter. Ideal for SMD or high density areas. Due to the low mass of the cutter head, care should be exercised to avoid overstressing the fips. Maximum cutting capacity is 22 AWG (0.64mm) soft wire.









Xuro-Rubber<sup>TM</sup>

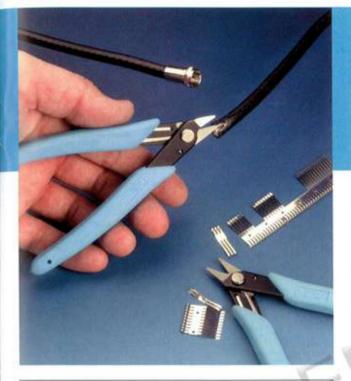
grips and light

soft wire up to

20 AWG (0.8 mm).

weight for operator

comfort. Flush cuts



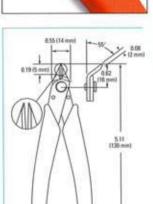
#### 420T Angled Micro-Shear® Flush Cutter

Our 420 shear with ultra sharp precision tips and an extra thin tip profile. Provides the ultimate in maneuverability and operator control: allows work in areas other tools cannot even enter. Ideal for SMD or high density areas. Due to the low mass of the cutter head, care should be exercised to avoid overstressing the tips. Maximum cutting capacity is 22 AWG (0.64 mm) soft wire:

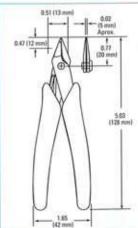
#### 440 Mini-Shear

An ultra precise scissor, cuts fine or delicate items with a clean, square edge. Cushion grip, Xuro-Rubber<sup>TM</sup> handles and our Light Touch™ return spring replace conventional finger loops for increased comfort and precision. This innovative design is especially advantageous for users with arthritic hands. Rated for cutting soft metals up to 0.005".

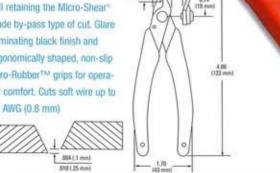












OA Micro-Shear®

ra flush cutting version of our 410, for

ow for minimal blade by-pass

e diagram) ensuring the

est flush cut possible white

e work. Very lightly bevelled cutting edges

ush Cutter



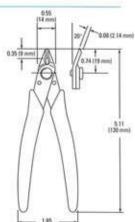
#### 170-II Micro-Shear® Flush Cutter

Our world famous, patented original Micro-Shear flush cutter sets the standard imitators can't meet. We invented it. We perfected t. We were awarded the patent U.S. Pat. 3774301).

Shear cutting greatly reduces cutting effort while providing the shear cut desirable in electronics assembly work. Less cutting effort means fewer fatigue related injuries and complaints.

The ergonomically shaped, nonslip Xuro-Rubber<sup>YM</sup> grips, glare eliminating black finish and light weight ensure operator comfort. Ultra slim profile increases access in high density areas. Flush cuts soft wire up to 18 AWG (1.0 mm).





#### 170-IIA Full Flush Cutting Micro-Shear® Flush Cutter

The 170-RA is an ultra flush cutting version of our 170-II, for fine work. Very lightly bevelled cutting edges allow for minimal blade by-pass (see diagram) ensuring the finest flush cut possible while still retaining the Micro-Shear® blade by-pass type of cut, Glare eliminating black finish and ergonomically shaped, non-slip Xuro-Rubber™ grips ensure operator comfort. Cuts soft wire up to 20 AWG (0.8mm). The 170-IIA is a good choice for plastics de-gating.





0.00 (2.14 mm)

170-II Series shears offer numerous ergonomic enhancements in an "economically priced" tool. Their effort-reducing Micro-Shear\* cutting action requires only about half the effort to cut a wire as that required by conventional compression-type cutters. The 170-II Series feature advanced ergonomic shape, Xuro-Rubber™ grips, a glare eliminating black finish, light weight and our patented, lifetime warranted, Light Touch™

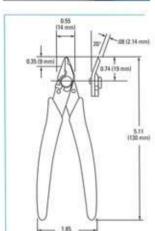
#### 170-IIF Micro-Shear® Flush Cutter

The 170-IIF features a low profile, non-stip, factory-installed lead retainer to help prevent flying leads and component shorting from stray leads.

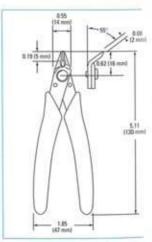
#### 280-II Angled Micro-Shear® Flush Cutter

The 280-II allows easier cutting in difficult areas. A 55° angled head provides excellent sight lines when used in either the vertical or horizontal position. A slim profile increases accessibility to hard to reach surfaces. Light weight, glare eliminating black finish, non-slip Xuro-Rubber (1) grips ensure operator comfort. Flush cuts soft wire up to 20 AWG (0.8 mm).







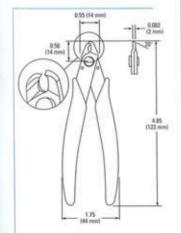




#### 635 Shear Rise Cutter

The 635 Shear Rise Cutter combines a full flush, shear cut and a 0.035" stand off in one cut. It's ideal for manufacturers who need both a stand off and a full flush: cut. Glare eliminating black finish, ultra light weight and ergonomically-shaped, non-slip Xuro-Rubber<sup>1M</sup> grips ensure operator comfort. High carbon steel guarantees durability. Full flush cuts on soft wire up to 20 AWG (0.8 mm).





### 670 Cut and Crimp Tool

The 670 Cut and Crimp Tool features a slim profile (0.085") that allows accessibility in high density areas and provides excellent sight lines for precise positioning. Swaged leads are firmly attached to p.c.b., while freshly exposed lead material enhances solderability. High carbon steel quarantees durability. Ultra light weight, glare eliminating black finish and ergonomically shaped, non-slip Xuro-Rubber» grips ensure operator comfort. Cuts and crimps soft wire up to 20 AWG (0.8 mm). Best results are achieved when the diameter of the hole on the p.c.b is not larger than 2.5 times the diameter of the wire being cut/crimped.

# 670HD Heavy Duty Cut and Crimp Tool

The 670HD offers the same great features as our 670 Cut and Crimp tool in a heavy-duty configuration. A larger head (0.115") simplifies positioning and heavy-duty construction provides extended tool life and larger wire capacity, Light weight, glare-eliminating black finish and ergonomically-shaped, non-slip Xuro-Rubber™ grips ensure operator comfort. Cuts and crimps soft wire up to 16 AWG (1.27 mm). Best results are achieved when the diameter of the hole on the p.c.b is not larger than 2.5 times the diameter of the wire being cut/crimped.

### 8500 BioShear® Flush Cutter

Bio-Shear flush cutters incorporate the popular curved grip design with all the ergonomic features of our standard 170-II. Grip design keeps the knuckles of the operator's hand in a straighter line and prevents the hand from completely closing, reducing the amount of effort expended while delaying fatigue. Heat treated to 54-56RC for lasting durability. Please designate either 8500L(left) or 8500R(right).

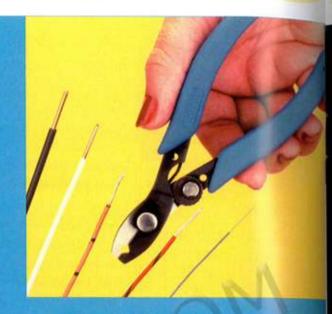
# and tool ergonomics Q&A.

- What are ergonomic hand tools?
- All hand tools, by definition, are ergonomic, otherwise you wouldn't be able to do any work with them. What's really important are the ergonomic enhancements that have been (or can be) made to your tools. Let's examine several different aspects:
- 1. Force The amount of force required to use a tool includes the force necessary to overcome resistance in joints and any return spring(s) in addition to the force actually required to cut, grasp or bend. XURON manufactures only Micro-Shear\* wire cutters. Their patented shearing cut requires about half the force required by a conventional compression-style cutter to cut wire. High precision screw and post joints on the 9000 Series reduce internal friction and our return springs provide lively action with low operating pressure.
- 2. Comfort -A number of factors determine if a hand tool is comfortable: the shape of the grip and its size. the amount of contact surface with the hand and the contour of the contact surface, the resiliency of the grip material, and the overall weight of the tool; all influence whether the tool will be comfortable in your hand. The comfort of the tool should be apparent the moment it's picked up. Comfort should also be assessed after extended use.

Micro-Shear Flush Cutter grips feature broad, flat contact surfaces molded from Xuro-Rubber™. The grips on the 9000LH tools traverse the width of the hand, helping to eliminate pressure points while reducing pressure at any given point. Grip spread in the closed position is under 2", a comfortable dimension for most hand sizes. Weight is very low, ranging from 1,9 oz. for a 170-II to 2.7 oz. for a 9000LH Series shear.

3. Visual - Reflective surfaces cause glare, which promotes eye strain and fatigue. Positioning, especially in dense areas or under adverse lighting conditions, is troublesome and fatiguing if there is poor contrast between the tool and the workpiece.

XURON tools feature a non-glare bright finish or a



glare-eliminating black finish, giving you the option of selecting the appropriate finish for the work.

- 4. Auditory High sound levels in the workplace are another important fatigue factor. XURON 590 Micro-Pneumatics™ help reduce workplace noise levels with their guiet operation (<60 DbA).
- Q. Will hand tools with ergonomic enhancements eliminate cumulative trauma disorders (CTD), such as carpel tunnel syndrome?
- A. No. No hand tool, regardless of ergonomic enhancement is capable of being a "magic bullet" and eliminating possible cumulative trauma disorders. The enemy is still the repetitive nature of the work and fatigue. With ergonomically-enhanced hand tools fatigue is postponed and trauma is reduced. The goal is to postpone fatigue to the point where a rest period occurs before the tool user fatigues.

For the estimated 20% of the population that is predisposed to CTD, no hand-operated tool is going to eliminate the problem. Assessing the work and the people doing the work is essential in choosing appropriate tools. Some form of automation, such as a pneumatic tool, is indicated in high volume. repetitive motion work situations.

XURON's new wire strippers are designed for simplicity, functionality and durability. Each model features a unique thumb-adjustable cam that can be set without the need for additional tools. For added versatility, a built-in full by-pass shear cutter is designed into each tool.

XURON Tweezer Nose™ and Xuro-Grip™ pliers deliver high precision at reasonable cost. Primary design criteria are precision, ergonomics and durability.

XURON wire strippers, pliers and forming tools feature advanced ergonomic designs, Xuro-Rubber™ cushion grips, light weight, a glareeliminating black finish and our Light Touch™ return spring. All are optionally available with static control (AS) grips.

# new

#### 501 Wire Stripper/Cutter

A simple, yet highly effective wire stripper. Manufactured from .100" thick high carbon steel, the 501 is designed to cut and strip all wire sizes from 10-26 AWG (2.59-0.405mm). Thumb adjustable cam is quickly and easily set to the desired size, requiring no additional tools and no need to know the exact diameter of the wire. Can be used for both solid and stranded wire. Light weight, Xuro-Rubber™ grips and Light Touch<sup>TM</sup> return spring combine for operator comfort and ease of use.

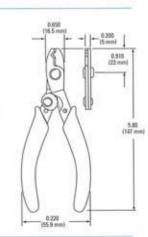
# new

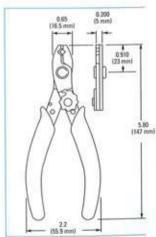
#### 505/505ST Wire Stripper/Cutter

Similar in design to the model 501, but with the added benefit of having wire gauge markings on the cam and a handy closure "hook" that keeps the tool in a closed position when not In use. Model 505 is designed for solid wire from 12-26 AWG (2.05m-,405), model 505ST for stranded wire. Both models feature Xuron's Light Touch<sup>TM</sup> return spring and cushioned, non-slip Xuro-Rubber™ grips.





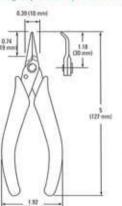






#### 50 Tweezer Nose™ Plier

e 450 is an ultra-precise needlenose plier pable of grasping and holding wire less than mil thick with the strength for wire forming. ads "popping" free, tip mis-alignment and ade crossover will be a memory once you vitch to our Tweezer NoseTM pliers. Radiused lges protect lead wires. Light weight and our itented, non-protruding, Light Touch™ return ring help ensure operator comfort.



# new 450BN Bent Nose Plier

Strong and precise plier blades angled to 45° for improved sight lines when working In tight areas or with small parts. Plier tips are perfectly aligned and capable of picking up a human hair or forming and holding wire. Glare-eliminating black finish, non-slip Xuro-Rubber™ grips... and Light Touch™ return spring combine to ensure operator comfort even during periods of extended use.

The model 450 is also

perpedicular-to-the-jaw

serrations for extra holding

available with fine,

power (model 450S).

The model 475

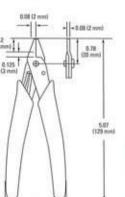
is also available

(Model 475S).

with fine, perpedicular-

to-the-jaw serrations for extra holding power

# 75 Xuro-Grip™ Short Nose Plier gh carbon steel for strength and an extraim profile to allow access in high density eas. The strength to crimp a lead wire with the ecision to grasp and hold a human hair. Plier atures a glare-eliminating black finish. gonomically-shaped, non-slip Xuro-Rubber™ ips and light weight for operator comfort.



# 475C Combination Shear/Short Nose Plier

A true multi-purpose tool, combines a full by-pass shear with a precise short nose plier. Extra strong, high carbon steel plier has the power to grip and the precision to hold a human hair. Shear cuts everything from small wires up to 12 AWG (2.05mm) copper wire.

#### 485 Xuro-Grip™ Long Nose Plier

A true "electronics production long nose plier" is what we had in mind when we designed the 485. Engineers and production managers told us traditional drop-forged designs were too bulky and lacked the sensitive "feel" required for precision electronic assembly. Our 485 performs where the competition failed, 485 features a thin profile for access in high density areas, radiused outside edges, ergonomically-shaped, nonslip Xuro-Rubber™ grips, a glare-eliminating black finish and light weight for operator comfort. The model 485 is also available with fine, perpendicular-to-thejaw serrations for extra holding power (Model 485S).

### new

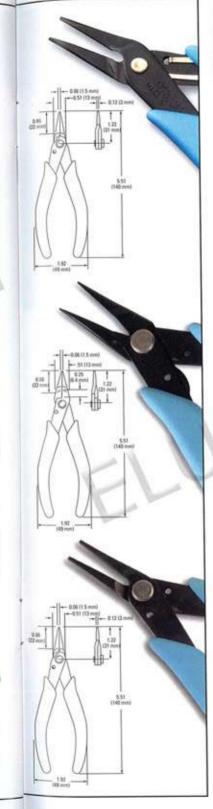
### 485C Combination Shear/Long Nose Plier

The combined benefits of a full by-pass shear cutter and a precision electronics long nose plier in one tool. Heat-treated, durable, high carbon steel blades allow a cutting range from the smallest wire up to 12 AWG (2.05mm) copper wire. Plier blades are tapered for access into restricted work areas and have radiused outside edges for forming wire without damage or scarring, Non-protruding Light Touch<sup>TM</sup> return spring speeds work while cushioned, non-slip Xuro-Rubber™ grips provide comfort.

# new

#### 485FN Flat Nose Plier

A flat nose (duck bill) version of our Model 485 Long Nose Plier, Flat, smooth blades are perfect for wire bending or forming operations. As with all Xuron pliers, the 485FN features a glare eliminating black finish, ergonomically shaped Xuro-Rubber<sup>TM</sup> grips, and light weight for operator comfort.



#### 488 Round Nose Plier

Traditional double-round design with an innovative difference. Conventional round tip transitions to an elliptical shape along the length of the blades. This design allows for more forming possibilities and exceptional tip strength, Ideal for forming or looping of very fine wires in precision work. Xuro-Rubber<sup>TM</sup> grips and light weight ensure operator comfort.



489 Combination Tip Plier Traditional one round/one flat design offers easy coiling, forming and bending - all with one plier.



solder resist suitable for both manual and automatic dispensing. A 10 mil coating of the non-running, thixotropic (18,000-22,000 C.P.S.) jell dries in 3 hours at room temperature or 1 hour at 160°F. (71°C.). during soldering. It is exceptionally cohesive. generally peeling off in one piece, simplifying removal. Once cured, bio-degradable, non-toxic Rover Mask™ 775 can be disposed of with other common, solid wastes. It has a shelf life of one year and is suitable

for use as a

#### Rover Mask<sup>TM</sup> 775-8

This convenient 8 ounce (227g) applicator bottle features a tapered spout for easy application. Inner safety seal keeps mask fresh and prevents spillage in transit.



#### Rover Mask™ 775-1

Rover Mask\*\*\* is available in a one gallon (8.25lbs/3.75kg) bottle for refilling 8 ounce applicator bottles or for loading automatic or semi-automatic dispensing systems.

### Rover Mask™ 775-55

The most economical way to purchase Rover Mask™ 775 is in this 55 gallon drum. Sold by weight, not volume (approx. 8.25lbs/gal.).

\* Rover Mask\*\*\* -Because we couldn't call it Spot.

# 590 Micro-Pneumatic™ Flush Cutter

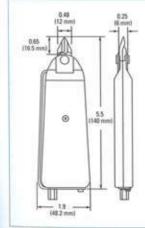
For a light weight, fast-action, ultra-quiet, pneumatic Micro-Shear® flush cutter, choose the 590. It requires only 50 p.s.i. air pressure. Flush cuts soft wires up to 16 AWG (1.27mm)

#### 590F Micro-Pneumatic™ Flush Cutter w/Lead Retainer

Our 590 is also available with a factory installed lead retainer (590F). Its design provides a low profile and non-slip mount on the cutter head that helps prevent flying lead problems that result in component shorting.

#### 590LP Low Profile Head Micro-Pneumatic™ Flush Cutter

The 590LP's relieved head and slim profile allows superior access in high density areas. Flush cuts soft wire up to 20 AWG (0.8mm):



Specifications		
Length	5.5"	(139mm)
Width	1.9*	(48.2mm)
Thickness	0.6*	(15mm)
Weigth	6 Oz.	160 grams
Length of cut	0.35"	(9.0mm)
Operating pressure	50 PSI max.	3.4 ATm
Maximum capacity	0.050	(1.27mm) soft wire

Micro-Pneumatic™ Series tools are the latest in advanced ergonomic design. Sized to fit readily in the operator's hand, they alleviate the fatigue and related CTDs (cumulative trauma disorders) associated with conventional wire cutter use. Easily actuated by light pressure with either the thumb or forefinger, 590 Micro-Pneumatic™ cutters can be quickly adapted to either right or left-handed use. Designed specifically for the manufacturing environment, the overall size of the tools allow for excellent maneuverability and access into restricted areas, a significant advantage with today's high density electronics packaging. Micro-Pneumatic™ cutters feature quiet (<60 dbA) operation and light weight (6 oz.) addressing

two important fatigue factors. The cutter heads are treated with a glareeliminating black finish for excellent contrast with the work surface and for reduced eye strain. The cutter heads feature Xuron's patented Micro-Shear\* cutting action for ultra-clean, ultra-flush cuts. Manufactured from high carbon steel and heat treated to a Rockwell hardness of 58-59C, Xuron

Micro-Pneumatic™ tools are exceptionally durable. The 590 Micro-Pneumatic™ is rated for soft wires less than 1 mil. all the way up to 16 AWG and is suitable for cutting a variety of other materials, including

plastics. The design of the 590 ensures quick and easy cutter head replacement. It operates from a dry, unlubricated 50 p.s.i. air line, consuming

operation. Micro-Pneumatic™ cutters come equipped with a six-foot air

just 0.13 cubic feet of air per minute of

supply line with a 1/8" MPT termination.