

ergo-tek



# Red Dot Design Award Winner 2014



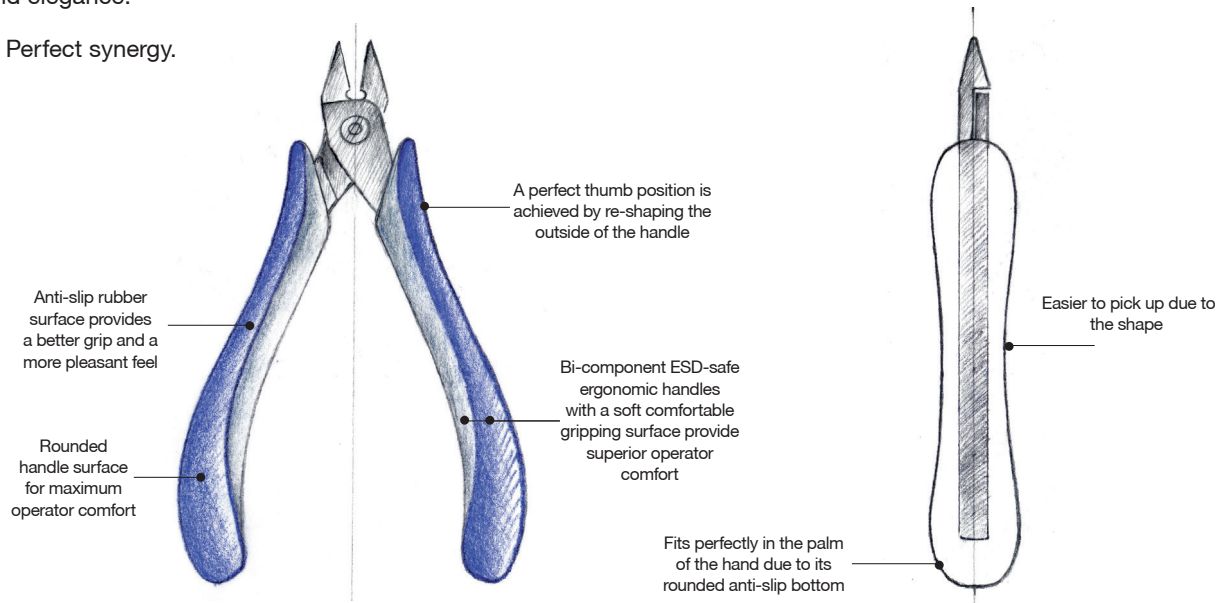
reddot design award

## Perfect synergy of Swiss precision and Italian design

Introducing Ergo-tek from Ideal-tek. New cutters and pliers handles' set a new benchmark in ergonomics. Following the User-Centered Design approach of one of the world's most respected research universities (University of Milan), over a two year period, Ideal-tek gained a full understanding of the needs, wants and frustrations of end users.

Subsequent painstaking attention to detail at every stage of the design process resulted in the creation of the ideal handles. The Swiss Precision approach provides quality, accuracy and longevity. The addition of Italian design brings beauty and elegance.

Ergo-tek. Perfect synergy.



[click here to download the Paper Abstract \(ERGO-TEK\)](#)

## Ergo-tek SLIM

### THE NEW GENERATION ERGONOMIC HANDLES.

When Ideal-tek introduced the Ergo-tek range in 2013, we set a new benchmark for the ergonomics, quality, ESD safety standards and beauty of high precision cutters and pliers.

The new lighter weight **ERGO-TEK SLIM** range is designed especially for smaller hands while providing the same ergonomic, ESD-safe and technical advantages you expect from Ideal-tek.

Upgraded features:

- Revised ergonomic handle to provide enhanced operator comfort and reduce repetitive motion injuries
- Lighter weight
- Better accessibility and visibility in confined areas

With Ergo-tek AND Ergo-tek slim, users are now able to custom fit high precision tools to their personal preference and application.

**No more, one line fits all!**

[click here to download the Paper Abstract \(ERGO-TEK SLIM\)](#)



# Handles

2-Component ESD-safe user-friendly Ergonomic handles with a soft comfortable gripping surface.

2 sizes: Ergo-tek (E) and Ergo-tek slim (ES)

For every handles production lot  
Ideal-Tek performs the following tests:

- point to point resistance
- surface resistance
- decay time analysis





## Material & Hardness

High quality ball bearing steel

- 45-48 Rockwell Hardness (HRC) for pliers
- 63 Rockwell Hardness for cutters

Pyrometer controlled inductive hardening

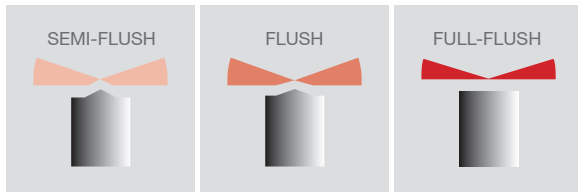
Superior no-scratch/antiglare satin finish

For every single production lot Ideal-Tek performs metallographic and hardness profile analysis.



# Cutting Blades & Wire Definition

## Cutting blades definition



## Wire definition

- SOFT wire, copper, aluminium, tensile strength 250 MPa
- MEDIUM-HARD wire, stainless steel wire, material 1.4301, tensile strength 800 MPa
- HARD wire, stainless steel wire, material 1.4301, tensile strength 1800 MPa

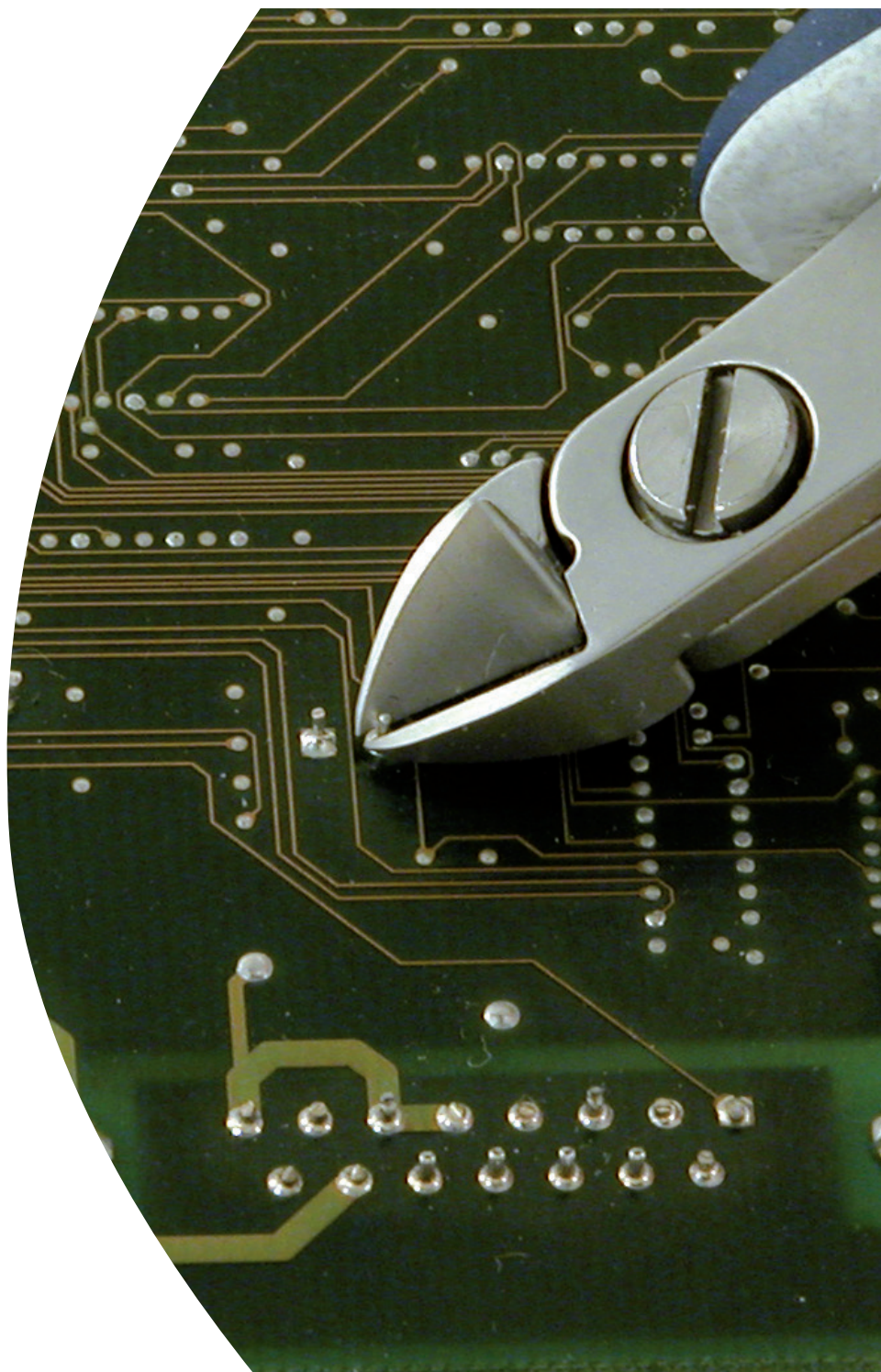
## 100% visual inspection





## More Features

- Dual leaf springs made of stainless steel
- Lap joint with screw, to achieve a high level of strength and precision
- Nuts made of hardened alloy steel to resist high cutting load
- Perfect symmetry



## Free Test & Maintenance

The application engineering of the Ideal-Tek factory will conduct test cutting and cutting evaluations at no charge upon the receipt of test wire samples.

We also provide free cutter model recommendations.

In order to preserve your cutters perfectly efficient keep a thin oil film on the tips head.



[click here to see the maintenance \(VIDEO\)](#)

## Head Shape & Available models

### CUTTERS

- Oval
- Tapered
- Tapered & Relieved
- Wire Lead Catchers
- Special

### PLIERS

- Snipe Nose
- Flat & Round Nose





# Oval Cutters



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**Micro** robust, very slim, oval to maximize accessibility

**Small** robust, slim shape, and optimum balance between durability and accessibility.

**Large** strong and durable, for intensive cutting operations.

**Extra-Large Rounded** extremely strong and durable with rounded head, for intensive cutting operations.



5130-32



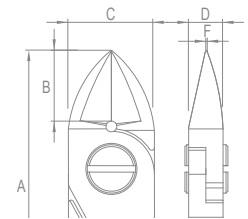
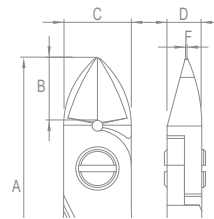
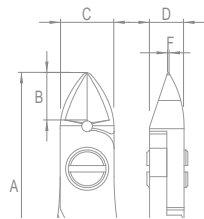
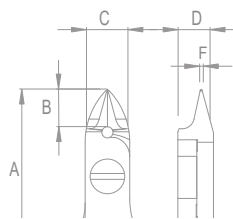
5140-41-42



5150-51-52



5160L-61L-62L



## CUTTING CAPACITY

| Art. No. | Type                | A               | B                | C                | D               | F               | Cutting Edges | Soft<br>(mm/Inch) (AWG)      |       | Medium<br>(mm/Inch) (AWG)    |       | Hard<br>(mm/Inch) (AWG)      |       |
|----------|---------------------|-----------------|------------------|------------------|-----------------|-----------------|---------------|------------------------------|-------|------------------------------|-------|------------------------------|-------|
| ES5130   | Micro               | 120 mm<br>5.04" | 7 mm<br>0.28"    | 8 mm<br>0.32"    | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Semi-Flush    | 0.2-1.0 mm<br>0.008"- 0.04"  | 32-18 | 0.4 mm<br>0.02"              | 26    | -                            | -     |
| ES5132   | Micro               | 120 mm<br>5.04" | 7 mm<br>0.28"    | 8 mm<br>0.32"    | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Full-Flush    | 0.1-0.8 mm<br>0.004"- 0.03"  | 38-20 | 0.1 mm<br>0.004"             | 38    | -                            | -     |
| ES5140   | Small               | 120 mm<br>5.04" | 10 mm<br>0.39"   | 10 mm<br>0.39"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Semi-Flush    | 0.2-1.2 mm<br>0.008"- 0.05"  | 32-17 | 0.1-1.0 mm<br>0.004"- 0.04"  | 38-18 | 0.03-0.6 mm<br>0.001"- 0.02" | 48-23 |
| ES5141   | Small               | 120 mm<br>5.04" | 10 mm<br>0.39"   | 10 mm<br>0.39"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Flush         | 0.1-1.2 mm<br>0.004"- 0.05"  | 38-17 | 0.1-1.0 mm<br>0.004"- 0.04"  | 38-18 | -                            | -     |
| ES5142   | Small               | 120 mm<br>5.04" | 10 mm<br>0.39"   | 10 mm<br>0.39"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Full-Flush    | 0.1-1.0 mm<br>0.004"- 0.04"  | 38-18 | 0.1-0.8 mm<br>0.004"- 0.03"  | 38-20 | -                            | -     |
| ES5150   | Large               | 120 mm<br>5.04" | 12.5 mm<br>0.49" | 12.5 mm<br>0.49" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Semi-Flush    | 0.3-1.6 mm<br>0.012"- 0.06"  | 29-14 | 0.1-1.3 mm<br>0.004"- 0.05"  | 38-16 | 0.03-0.7 mm<br>0.001"- 0.03" | 48-21 |
| ES5151   | Large               | 120 mm<br>5.04" | 12.5 mm<br>0.49" | 12.5 mm<br>0.49" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Flush         | 0.2-1.6 mm<br>0.008"- 0.06"  | 32-14 | 0.1-1.2 mm<br>0.004"- 0.047" | 38-17 | -                            | -     |
| ES5152   | Large               | 120 mm<br>5.04" | 12.5 mm<br>0.49" | 12.5 mm<br>0.49" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Full-Flush    | 0.2-1.2 mm<br>0.008"- 0.047" | 32-17 | 0.1-1.0 mm<br>0.004"- 0.04"  | 38-18 | -                            | -     |
| ES5160L  | Extra Large Rounded | 125 mm<br>4.92" | 14 mm<br>0.55"   | 16 mm<br>0.63"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Semi-Flush    | 0.5-3.0 mm<br>0.019"- 0.12"  | 24-09 | 0.4-2.5 mm<br>0.015"- 0.10"  | 26-10 | 0.03-1.1 mm<br>0.001"- 0.04" | 42-17 |
| ES5161L  | Extra Large Rounded | 125 mm<br>4.92" | 14 mm<br>0.55"   | 16 mm<br>0.63"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Flush         | 0.4-2.5 mm<br>0.015"- 0.10"  | 26-10 | 0.4-2.3 mm<br>0.015"- 0.09"  | 26-11 | -                            | -     |
| ES5162L  | Extra Large Rounded | 125 mm<br>4.92" | 14 mm<br>0.55"   | 16 mm<br>0.63"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Full-Flush    | 0.4-2.5 mm<br>0.015"- 0.10"  | 26-10 | 0.4-2.0 mm<br>0.015"- 0.08"  | 26-12 | -                            | -     |

# Tapered Cutters



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**Small** pointed head shape, slim and optimum balance between durability and accessibility.

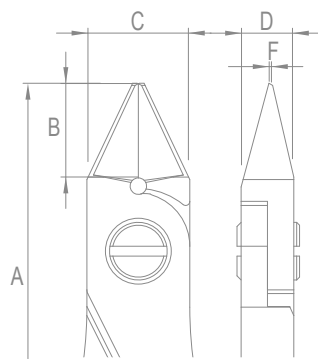
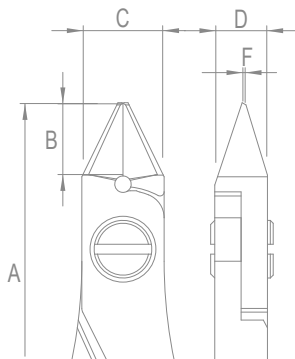
**Large** robust and versatile, pointed head shape to increase accessibility when limited space.



5340-41-42



5350-51-52



## CUTTING CAPACITY

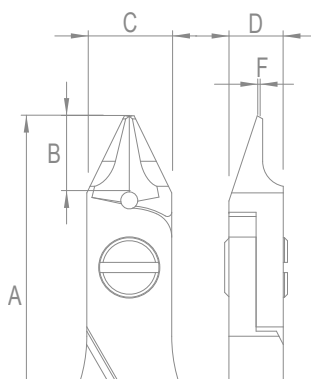
| Art. No. | Type  | A               | B                | C                | D               | F               | Cutting Edges | Soft                          |       | Medium                        |       | Hard                          |       |
|----------|-------|-----------------|------------------|------------------|-----------------|-----------------|---------------|-------------------------------|-------|-------------------------------|-------|-------------------------------|-------|
|          |       |                 |                  |                  |                 |                 |               | (mm/Inch)                     | (AWG) | (mm/Inch)                     | (AWG) | (mm/Inch)                     | (AWG) |
| ES5340   | Small | 120 mm<br>5.04" | 10 mm<br>0.39"   | 10 mm<br>0.39"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Semi-Flush    | 0.2-1.2 mm<br>0.008" - 0.05"  | 32-17 | 0.1-1.0 mm<br>0.004" - 0.04"  | 38-18 | 0.03-0.6 mm<br>0.001" - 0.02" | 48-23 |
| ES5341   | Small | 120 mm<br>5.04" | 10 mm<br>0.39"   | 10 mm<br>0.39"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Flush         | 0.1-1.2 mm<br>0.004" - 0.05"  | 38-17 | 0.1-1.0 mm<br>0.004" - 0.04"  | 38-18 | -                             | -     |
| ES5342   | Small | 120 mm<br>5.04" | 10 mm<br>0.39"   | 10 mm<br>0.39"   | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Full-Flush    | 0.1-1.0 mm<br>0.004" - 0.04"  | 38-18 | 0.1-0.8 mm<br>0.004" - 0.03"  | 38-20 | -                             | -     |
| ES5350   | Large | 120 mm<br>5.04" | 12.5 mm<br>0.49" | 12.5 mm<br>0.49" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Semi-Flush    | 0.3-1.6 mm<br>0.012" - 0.06"  | 29-14 | 0.1-1.2 mm<br>0.004" - 0.047" | 38-17 | 0.03-0.7 mm<br>0.001" - 0.03" | 48-21 |
| ES5351   | Large | 120 mm<br>5.04" | 12.5 mm<br>0.49" | 12.5 mm<br>0.49" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Flush         | 0.2-1.6 mm<br>0.008" - 0.06"  | 32-14 | 0.1-1.1 mm<br>0.004" - 0.04"  | 38-18 | -                             | -     |
| ES5352   | Large | 120 mm<br>5.04" | 12.5 mm<br>0.49" | 12.5 mm<br>0.49" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Full-Flush    | 0.2-1.2 mm<br>0.008" - 0.047" | 32-17 | 0.1-1.0 mm<br>0.004" - 0.04"  | 38-18 | -                             | -     |

# Tapered & Relieved Cutters



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**Small** pointed head shape and deep relief for a very low profile to maximize accessibility when limited space.



## CUTTING CAPACITY

| Art. No. | Type  | A               | B              | C              | D               | F               | Cutting Edges | Soft                         |       | Medium                        |       | Hard      |       |
|----------|-------|-----------------|----------------|----------------|-----------------|-----------------|---------------|------------------------------|-------|-------------------------------|-------|-----------|-------|
|          |       |                 |                |                |                 |                 |               | (mm/Inch)                    | (AWG) | (mm/Inch)                     | (AWG) | (mm/Inch) | (AWG) |
| ES5540   | Small | 120 mm<br>5.04" | 10 mm<br>0.39" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Semi-Flush    | 0.2-1.2 mm<br>0.008" - 0.05" | 32-17 | 0.1-1.0 mm<br>0.004" - 0.04"  | 38-18 | -         | -     |
| ES5541   | Small | 120 mm<br>5.04" | 10 mm<br>0.39" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Flush         | 0.1-1.2 mm<br>0.004" - 0.05" | 38-17 | 0.1-0.4 mm<br>0.004" - 0.015" | 38-26 | -         | -     |
| ES5542   | Small | 120 mm<br>5.04" | 10 mm<br>0.39" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 0.5 mm<br>0.02" | Full-Flush    | 0.1-0.8 mm<br>0.004" - 0.03" | 38-20 | 0.1-0.4 mm<br>0.004" - 0.015" | 38-26 | -         | -     |



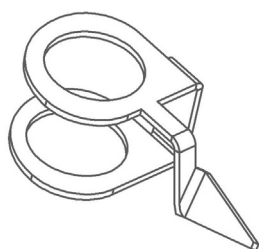
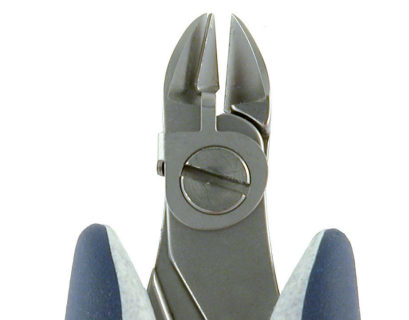
# Wire Lead Catcher



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Wire Lead Catcher, made of stainless steel AISI 304, for our high precision cutters with 10mm box or 12,5mm box.

**Wire Lead Catcher fits Oval, Tapered and Tapered & Relieved cutters only.**



| Art. No. | Type  | Description                                             |
|----------|-------|---------------------------------------------------------|
| WLC100   | Small | 100 pcs • for cutters with box joint of 10 mm (0.39")   |
| WLC125   | Large | 100 pcs • for cutters with box joint of 12.5 mm (0.49") |

[click here to see the plug&play system \(VIDEO\)](#)

# Oblique Head Cutters

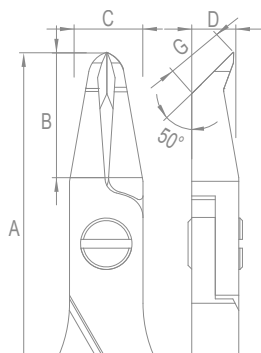


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- A. Angulated cutters to maximize accessibility and visibility when limited space.
- B. Angulated and robust.



A - Oblique Head Small  
5247



## CUTTING CAPACITY

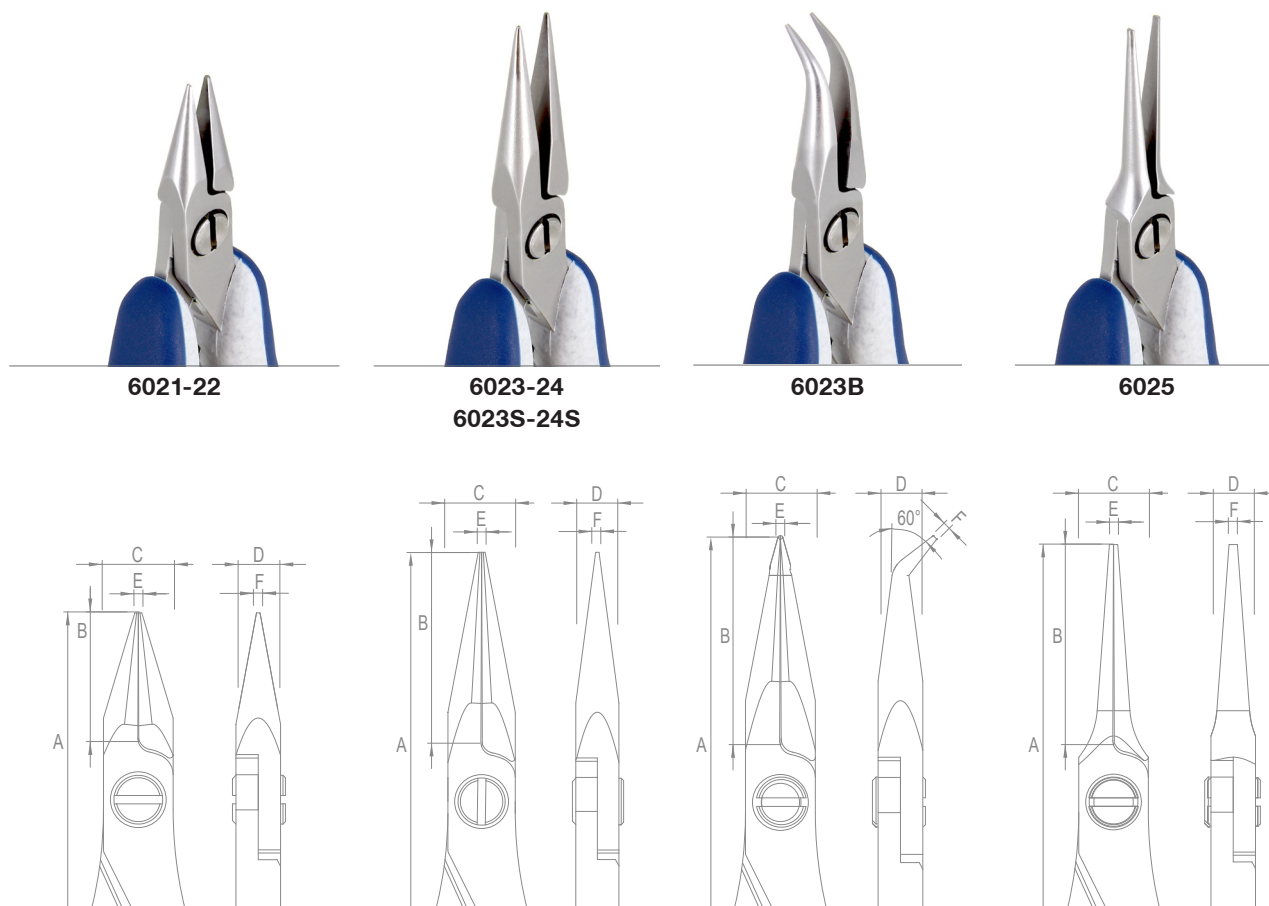
| Art. No. | Type               | A               | B              | C              | D               | G             | Cutting Edges | CUTTING CAPACITY              |       |                              |       |           |       |
|----------|--------------------|-----------------|----------------|----------------|-----------------|---------------|---------------|-------------------------------|-------|------------------------------|-------|-----------|-------|
|          |                    |                 |                |                |                 |               |               | Soft                          |       | Medium                       |       | Hard      |       |
|          |                    |                 |                |                |                 |               |               | (mm/Inch)                     | (AWG) | (mm/Inch)                    | (AWG) | (mm/Inch) | (AWG) |
| ES5247   | Oblique Head Small | 125 mm<br>4.92" | 17 mm<br>0.67" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 8 mm<br>0.31" | Full-Flush    | 0.1-1.2 mm<br>0.004" - 0.047" | 38-17 | 0.1-0.6 mm<br>0.004" - 0.02" | 38-23 | -         | -     |

# Snipe Nose Pliers



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Commonly used in electronic assembly and rework, as well as in fine jewellery



| Art. No. | Type              | A               | B              | C              | D               | E               | F               | Jaw Shape |
|----------|-------------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------|
| ES6021   | Snipe Nose        | 130 mm<br>5.12" | 20 mm<br>0.79" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1 mm<br>0.04"   | 0.5 mm<br>0.02" | Smooth    |
| ES6022   | Snipe Nose        | 130 mm<br>5.12" | 20 mm<br>0.79" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1 mm<br>0.04"   | 0.5 mm<br>0.02" | Serrated  |
| ES6023   | Snipe Nose Long   | 140 mm<br>5.51" | 30 mm<br>1.18" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1 mm<br>0.04"   | 0.5 mm<br>0.02" | Smooth    |
| ES6023S  | Snipe Nose Strong | 135 mm<br>5.31" | 28 mm<br>1.10" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1.8 mm<br>0.07" | 1.6 mm<br>0.06" | Smooth    |
| ES6023B  | Bent Nose         | 140 mm<br>5.31" | 30 mm<br>1.18" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1 mm<br>0.04"   | 0.5 mm<br>0.02" | Smooth    |
| ES6024   | Snipe Nose Long   | 140 mm<br>5.51" | 30 mm<br>1.18" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1 mm<br>0.04"   | 0.5 mm<br>0.02" | Serrated  |
| ES6024S  | Snipe Nose Strong | 135 mm<br>5.31" | 28 mm<br>1.10" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1.8 mm<br>0.07" | 1.6 mm<br>0.06" | Serrated  |
| ES6025   | Needle Nose       | 140 mm<br>5.51" | 30 mm<br>1.18" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1.3 mm<br>0.05" | 1.3 mm<br>0.05" | Smooth    |



# TECHNICAL DATA SHEET

## Flat & Round Nose Pliers



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**A. - B.** Flat nose pliers feature a very fine tip, smooth or serrated jaws and inner edges.

**C.** Round nose pliers have jaws formed by two cones. A round nose pliers is generally used both to clamp and to form loops on leads or wire.



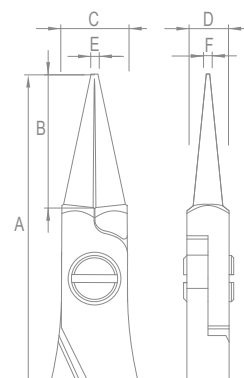
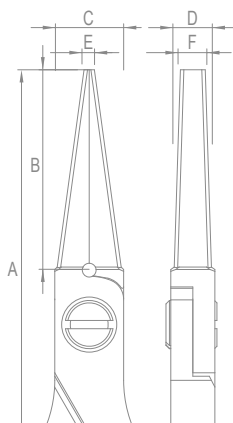
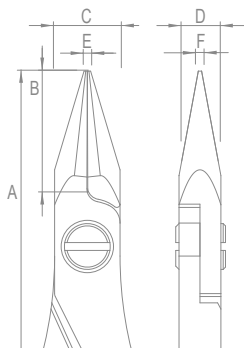
**A - Flat Nose  
6011-12**



**B - Flat Nose long  
6013-14**



**C - Round Nose  
6041**



| Art. No. | Type           | A               | B              | C              | D               | E               | F               | Jaw Shape |
|----------|----------------|-----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------|
| ES6011   | Flat Nose      | 130 mm<br>5.12" | 20 mm<br>0.79" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1.2 mm<br>0.05" | 4 mm<br>0.16"   | Smooth    |
| ES6012   | Flat Nose      | 130 mm<br>5.12" | 20 mm<br>0.79" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1.2 mm<br>0.05" | 4 mm<br>0.16"   | Serrated  |
| ES6013   | Flat Nose Long | 140 mm<br>5.31" | 30 mm<br>1.18" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1.5 mm<br>0.06" | 3.6 mm<br>0.14" | Smooth    |
| ES6014   | Flat Nose Long | 140 mm<br>5.31" | 30 mm<br>1.18" | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1.5 mm<br>0.06" | 3.6 mm<br>0.14" | Serrated  |
| ES6041   | Round Nose     | 135 mm<br>5.31" | 24             | 10 mm<br>0.39" | 6.4 mm<br>0.25" | 1 mm<br>0.04"   | 0.5 mm<br>0.02" | Smooth    |

## Contacts

### **Mail address**

Ideal-tek SA · p.o. box 17  
6830 Chiasso · Switzerland

### **Shipping address**

Ideal-tek SA · via Motta 4  
6828 Balerna · Switzerland

**Phone** +41 91 683 32 29

**Fax** +41 91 683 03 71

**E-mail** [info@ideal-tek.com](mailto:info@ideal-tek.com)

**Web** [www.ideal-tek.com](http://www.ideal-tek.com)

