

swiss made 

 ideal-tek s.a.  
manufacturer of high precision tools and instruments

ergo-tek



ISO 9001  
BUREAU VERITAS  
Certification 

# Red Dot Design Award Winner 2014



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.

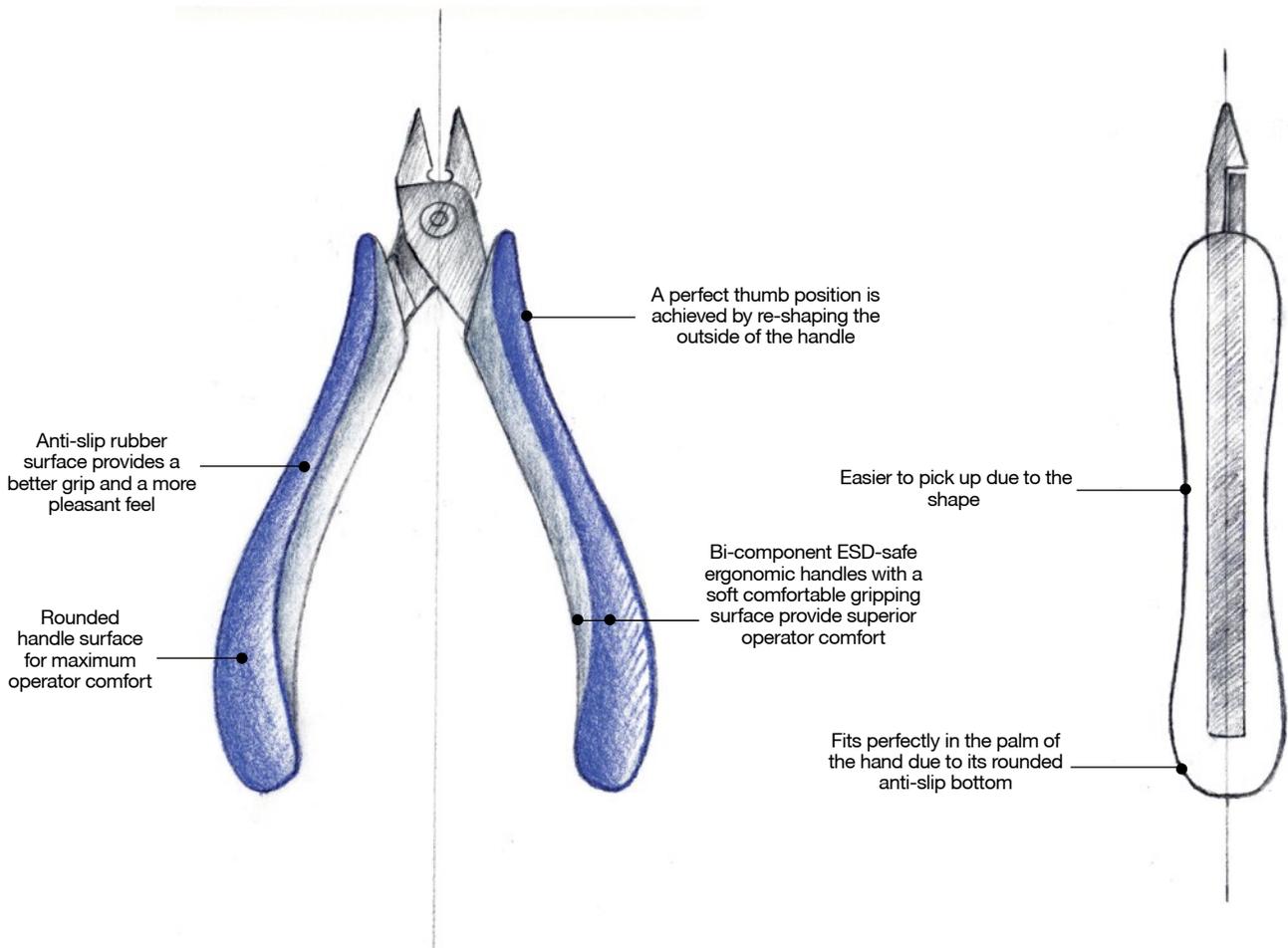
Following the User-Centered Design approach of one of the world's most respected research universities (University of Milan), over a two year period, Ideal-tek gained a full understanding of the needs, wants and frustrations of end users.

Subsequent painstaking attention to detail at every stage of the design process resulted in the creation of the ideal handles.

Precision Swiss manufacture 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](#)

# Handles

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

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

Pyrometer controlled inductive hardening

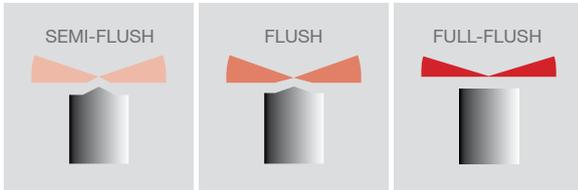
Superior no-scratch/antiglare satin finish

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



# Cutting Blades & Wire Definition

## Cutting blades definition



## Wire definition

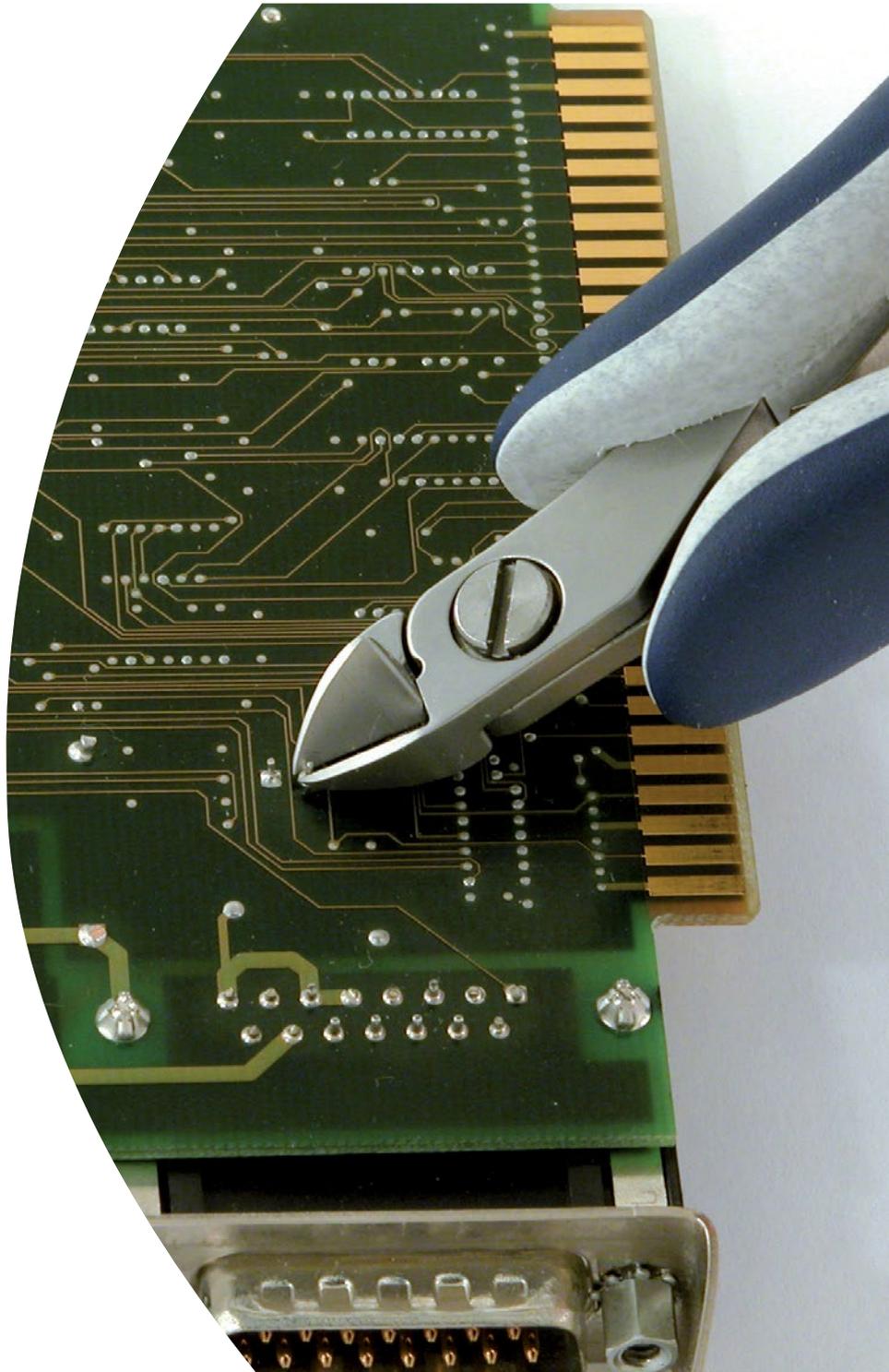
- SOFT wire, copper, aluminium, tensile strength 250 MPa
- MEDIUM-HARD wire, stainless steel wire, material 1.4301, tensile strength 800 MPa
- HARD wire, stainless steel wire, material 1.4301, tensile strength 1800 MPa

## 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
- Fine-pitched screw for perfect joint adjustment
- 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



TECHNICAL DATA SHEET

# Oval Cutters



reddot design award

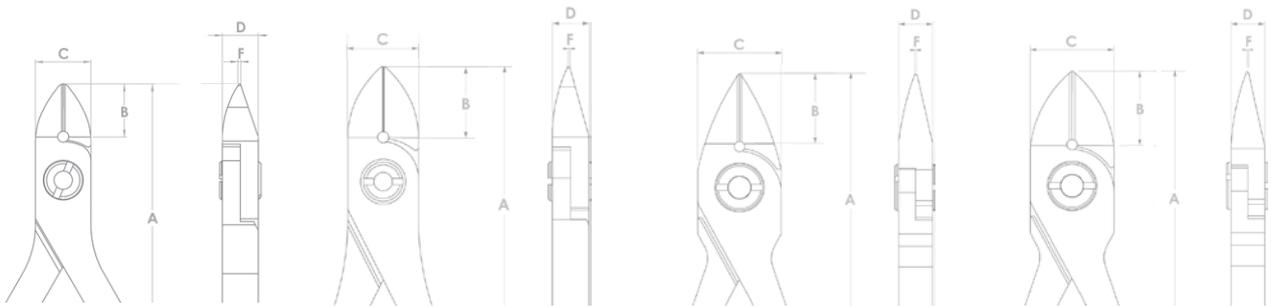


**Small** robust, slim shape, and optimum balance between durability and accessibility.

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

**Extra-Large** very strong and durable, for intensive cutting operations.

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



CUTTING CAPACITY

Art. No.	Type	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	Cutting Edges	CUTTING CAPACITY					
								Soft (mm)	Soft (AWG)	Medium (mm)	Medium (AWG)	Hard (mm)	Hard (AWG)
E5140	Small	125	10	10	6.4	0.5	Semi-Flush	0.2-1.2	32-17	0.1-1.0	38-18	0.03-0.6	48-23
E5141	Small	125	10	10	6.4	0.5	Flush	0.1-1.2	38-17	0.1-1.0	38-18	-	-
E5142	Small	125	10	10	6.4	0.5	Full-Flush	0.1-1.0	38-18	0.1-0.8	38-20	-	-
E5150	Large	125	12.5	12.5	6.4	0.5	Semi-Flush	0.3-1.6	29-14	0.1-1.3	38-16	0.03-0.7	48-21
E5151	Large	125	12.5	12.5	6.4	0.5	Flush	0.2-1.6	32-14	0.1-1.2	38-17	-	-
E5152	Large	125	12.5	12.5	6.4	0.5	Full-Flush	0.2-1.2	32-17	0.1-1.0	38-18	-	-
E5160	Extra Large	130	14	16	6.4	0.5	Semi-Flush	0.4-2.0	26-12	0.3-1.6	29-14	0.05-0.9	44-19
E5161	Extra Large	130	14	16	6.4	0.5	Flush	0.3-1.6	29-14	0.3-1.5	29-15	-	-
E5162	Extra Large	130	14	16	6.4	0.5	Full-Flush	0.3-1.6	29-14	0.3-1.1	29-17	-	-
E5160L	Extra Large Rounded	130	14	16	6.4	0.5	Semi-Flush	0.5-3.0	24-09	0.4-2.5	26-10	0.06-1.1	42-17
E5161L	Extra Large Rounded	130	14	16	6.4	0.5	Flush	0.4-2.5	26-10	0.4-2.3	26-11	-	-
E5162L	Extra Large Rounded	130	14	16	6.4	0.5	Full-Flush	0.4-2.5	26-10	0.4-2.0	26-12	-	-

TECHNICAL DATA SHEET

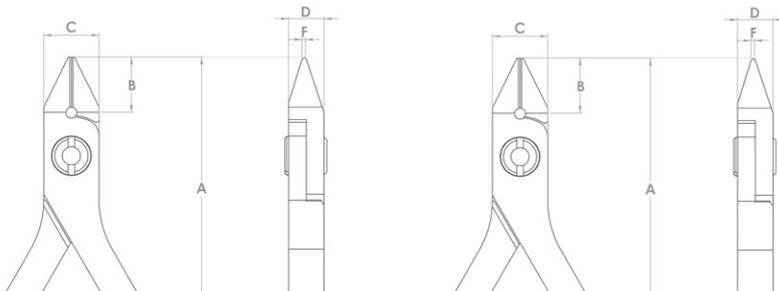
# Tapered Cutters



reddot design award

**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.



CUTTING CAPACITY

Art. No.	Type	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	Cutting Edges	CUTTING CAPACITY					
								Soft (mm)	Medium (mm)	Hard (mm)	Soft (AWG)	Medium (AWG)	Hard (AWG)
E5340	Small	125	10	10	6.4	0.5	Semi-Flush	0.2-1.2	32-17	0.1-1.0	38-18	0.03-0.6	48-23
E5341	Small	125	10	10	6.4	0.5	Flush	0.1-1.2	38-17	0.1-1.0	38-18	-	-
E5342	Small	125	10	10	6.4	0.5	Full-Flush	0.1-1.0	38-18	0.1-0.8	38-20	-	-
E5350	Large	125	12.5	12.5	6.4	0.5	Semi-Flush	0.3-1.6	29-14	0.1-1.0	38-18	0.03-0.7	48-21
E5351	Large	125	12.5	12.5	6.4	0.5	Flush	0.2-1.6	32-14	0.1-1.2	38-17	-	-
E5352	Large	125	12.5	12.5	6.4	0.5	Full-Flush	0.2-1.2	32-17	0.1-1.0	38-18	-	-

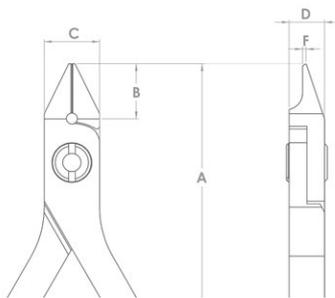
TECHNICAL DATA SHEET

# Tapered & Relieved Cutters



reddot design award

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



CUTTING CAPACITY

Art. No.	Type	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	Cutting Edges	CUTTING CAPACITY					
								Soft (mm)	Soft (AWG)	Medium (mm)	Medium (AWG)	Hard (mm)	Hard (AWG)
E5540	Small	125	10	10	6.4	0.5	Semi-Flush	0.2-1.2	32-17	0.1-1.0	38-18	-	-
E5541	Small	125	10	10	6.4	0.5	Flush	0.1-1.2	38-17	0.1-0.4	38-26	-	-
E5542	Small	125	10	10	6.4	0.5	Full-Flush	0.1-0.8	38-20	0.1-0.4	38-26	-	-

TECHNICAL DATA SHEET

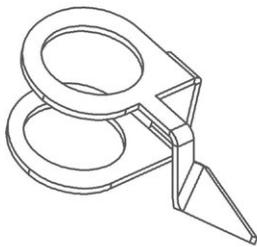
# Wire Lead Catcher



reddot design award

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
WLC125	Large	100 pcs • for cutters with box joint of 12.5 mm

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

TECHNICAL DATA SHEET

# Oblique Head Cutters



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



**A** - Oblique Head Narrow



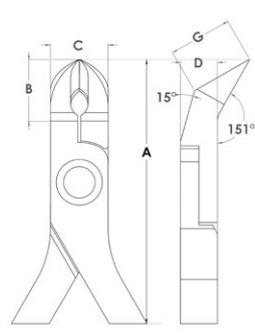
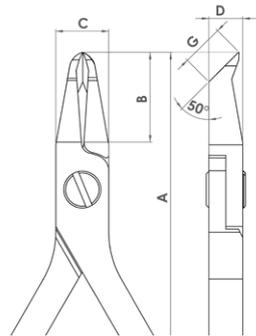
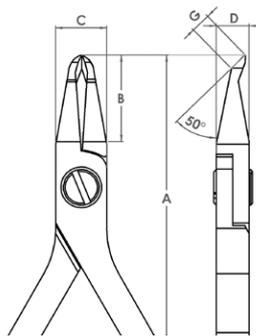
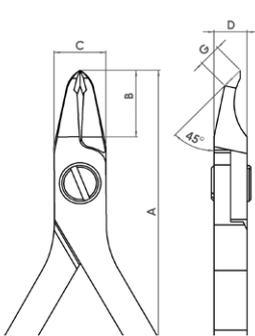
**B** - Oblique Head Small



**C** - Oblique Head



**D** - Oblique Head Large



CUTTING CAPACITY

Art. No.	Type	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	G (mm)	Cutting Edges	CUTTING CAPACITY					
									Soft (mm)	Medium (mm)	Hard (mm)	Soft (AWG)	Medium (AWG)	Hard (AWG)
E5245	Oblique Head Narrow	130	13	10	6.4	-	4	Full-Flush	0.1-1.2	38-17	0.1-1.0	38-18	-	-
E5246	Oblique Head Small	130	17	10	6.4	-	4	Flush	0.1-1.2	38-17	0.1-0.4	38-26	-	-
E5247	Oblique Head	130	17	10	6.4	-	8	Flush	0.1-1.2	38-17	0.1-0.6	38-23	-	-
E5250	Oblique Head Large	130	14.5	10	6.4	-	11	Flush	0.2-1.2	32-17	0.1-1.0	38-18	-	-

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# Special Cutters



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**E. - F.** Long, narrow jaws. Sharp edges for cutting at the very tip. Deep relief for an exceptionally low profile.  
**G.** Tip cutters for vertical tip cutting.



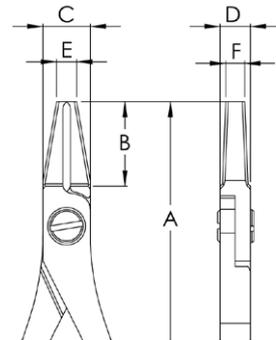
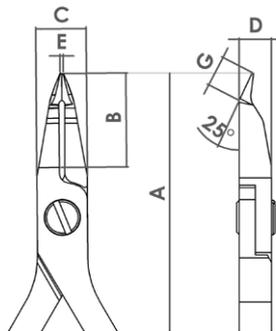
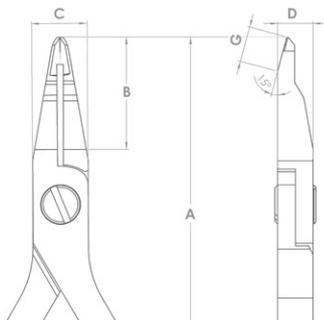
**E - Micro Tip 15°**



**F - Oblique Micro Tip**



**G - Front Cutter**



CUTTING CAPACITY

Art. No.	Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Cutting Edges	CUTTING CAPACITY					
										Soft (mm) (AWG)	Medium (mm) (AWG)	Hard (mm) (AWG)	Soft (mm) (AWG)	Medium (mm) (AWG)	Hard (mm) (AWG)
E5233	Micro Tip 15°	135	20	10	6.4	-	-	5.2	Full-Flush	0.1-0.8	38-20	0.1-0.6	38-23	-	-
E5234	Oblique Micro Tip	135	20	10	6.4	0.5	-	6	Full-Flush	0.1-0.8	38-20	0.1-0.6	38-23	-	-
E5291	Front Cutter	135	18	10	6.4	4.2	4	-	Flush	0.1-1.2	38-17	0.1-0.8	38-20	-	-

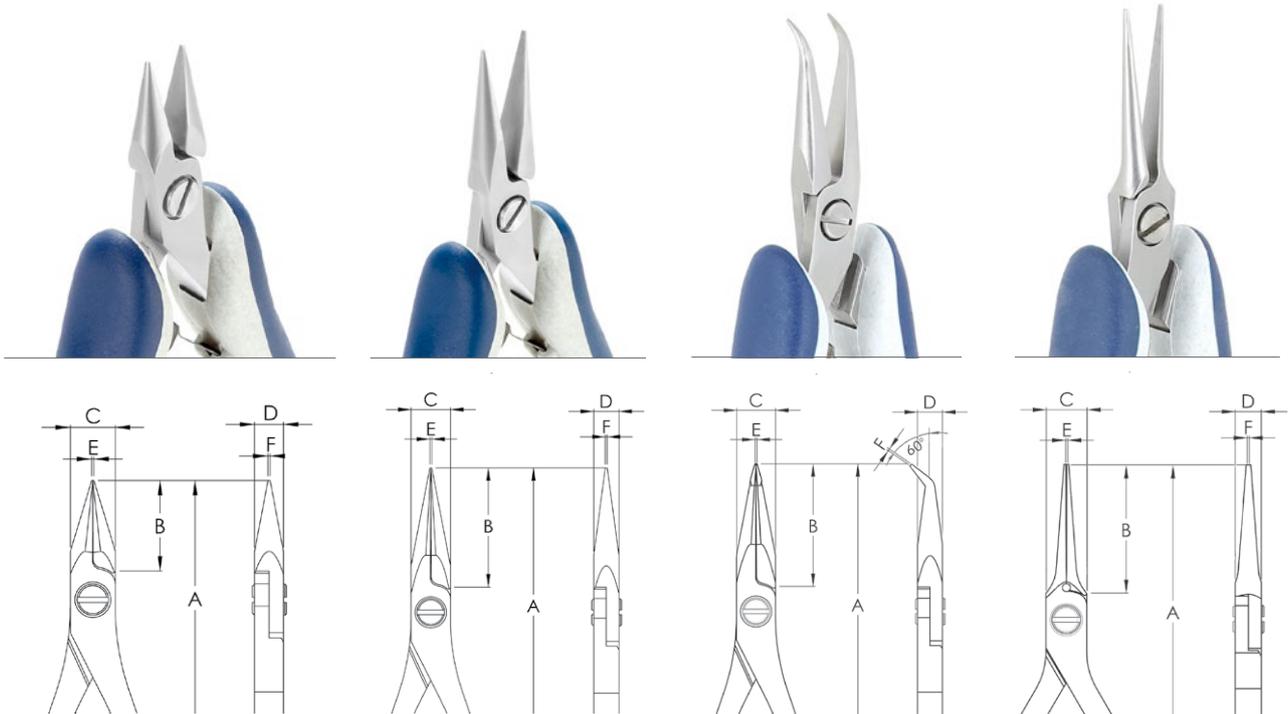
TECHNICAL DATA SHEET

# Snipe Nose Pliers



reddot design award

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



Art. No.	Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Jaw Shape
E6021	Snipe Nose	135	20	10	6.4	1	0.5	Smooth
E6022	Snipe Nose	135	20	10	6.4	1	0.5	Serrated
E6023	Snipe Nose Long	145	30	10	6.4	1	0.5	Smooth
E6023S	Snipe Nose Strong	140	28	10	6.4	1.8	1.6	Smooth
E6023B	Bent Nose	145	30	10	6.4	1	0.5	Smooth
E6024	Snipe Nose Long	145	30	10	6.4	1	0.5	Serrated
E6024S	Snipe Nose Strong	140	28	10	6.4	1.8	1.6	Serrated
E6025	Needle Nose	145	30	10	6.4	1.3	1.3	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.



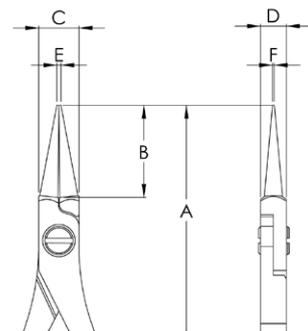
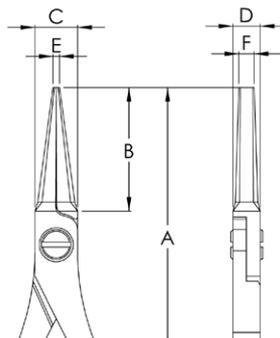
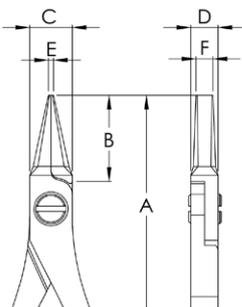
**A - Flat Nose**



**B - Flat Nose long**



**C - Round Nose**



Art. No.	Type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Jaw Shape
E6011	Flat Nose	135	20	10	6.4	1.2	4.0	Smooth
E6012	Flat Nose	135	20	10	6.4	1.2	4.0	Serrated
E6013	Flat Nose Long	145	30	10	6.4	1.5	3.6	Smooth
E6014	Flat Nose Long	145	30	10	6.4	1.5	3.6	Serrated
E6041	Round Nose	140	24	10	6.4	1.0	0.5	Smooth

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