





technology at your fingertips

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IOEC	JI-LEK	

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MORE TECHNOLOGY AT YOUR FINGERTIPS

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Company Profile

IDEAL-TEK, founded in 1965, is a Swiss company manufacturing top quality hand made tools with 40 employees, selling its products in 40 countries in 5 continents. The activities of the company are organized in two business units: manufacturer of hand tools & master distributor for high quality accessories and consumables. Our main market segments are electronics, medical device, watch industry, histology and medical instruments.

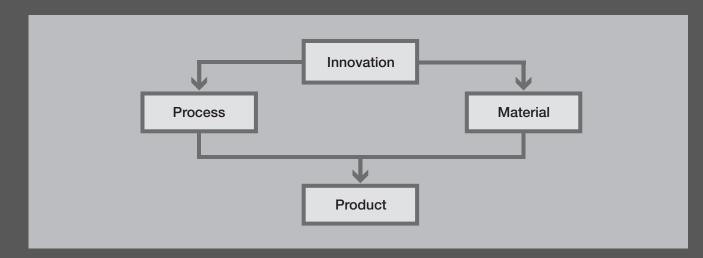
High quality is achieved by giving human resources the best possible support in terms of technology and manufacturing equipment. Certified ISO 9001 since 1994.

Our investments focus on research and development of new solutions/products and applications in order to meet our customer's increasing requirements.

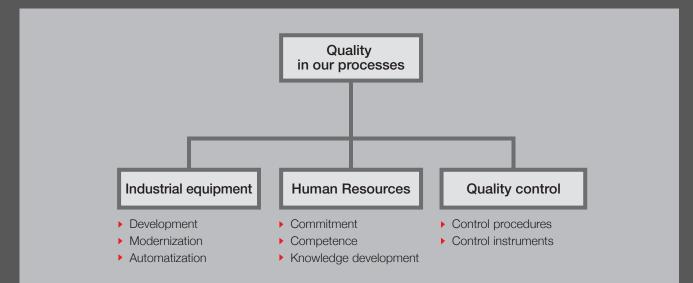
Choosing Ideal-tek means selecting a partner who fully understands the needs of customers.

Sincerely Ideal-Tek

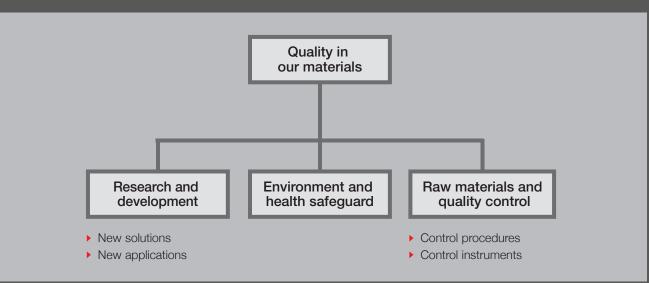
Quality concept at Ideal-tek



Quality: ISO 9001 certified since 1994



Quality: access to the highest technology







High Precision Cutters & Pliers

- High quality ball bearing steel
- 63 65 Rockwell Hardness (HRC): Pyrometer controlled inductive hardening
- All cutters available in three types of cutting blades:
 - SEMI-FLUSH, for soft and hard wire.
 - FLUSH, for very precise cutting of soft wire.
 - FULL-FLUSH, for a perfect cutting of soft wire.



- 2-Component ESD Ergonomic handles, soft comfortable gripping surface, hard plastic core.
- Dual leaf springs in blue steel.
- Matched bearing rings in order to minimize metal to metal contact and friction.
- Lap joint with screw in order to achieve a high level of strength and precision. The nut is made of hardened alloy steel to resist high cutting load. The screw is fine-pitched for perfect joint adjustment.

The Cutters

- Oval

Micro: very slim, relieved to maximize accessibility when limited space. Small: robust, slim shape, an optimum balance between durability and accessibility. Big: very strong and durable, for intensive cutting operations.

Art. No.	A [mm]	B [mm]	C [mm]	D [mm]	F [mm]	Cutting edges	Cutting capacity Cu-wire [mm]
5130	121	8	8	6.4	0.5	Semi-flush	0.2-1.2
5131	121	8	8	6.4	0.5	Flush	0.1-1.2
5132	121	8	8	6.4	0.5	Full-flush	0.1-0.8
5140	123	10	10	6.4	0.5	Semi-flush	0.2-1.2
5141	123	10	10	6.4	0.5	Flush	0.1-1.2
5142	123	10	10	6.4	0.5	Full-flush	0.1-1.0
5150	125	12.5	12.5	6.4	0.5	Semi-flush	0.3-1.6
5151	125	12.5	12.5	6.4	0.5	Flush	0.2-1.6
5152	125	12.5	12.5	6.4	0.5	Full-flush	0.2-1.2
	AN ME						

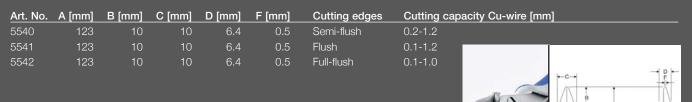
- Tapered

Micro: pointed head shape, very slim, relieved to maximize accessibility when limited space. Small: pointed head shape, slim and optimum balance between durability and accessibility. Big: robust and versatile. Pointed head shape to increase accessibility when limited space.

Art. No.	A [mm]	B [mm]	C [mm]	D [mm]	F [mm]	Cutting edges	Cutting ca	pacity Cu-wire [mm]	
5330	121	8	8	6.4	0.5	Semi-flush	0.2-1.2		
5331	121	8	8	6.4	0.5	Flush	0.1-1.2		
5332	121	8	8	6.4	0.5	Full-flush	0.1-0.8		
5340	123	10	10	6.4	0.5	Semi-flush	0.2-1.2	+-C-+	-• D • F
5341	123	10	10	6.4	0.5	Flush	0.1-1.2		Å
5342	123	10	10	6.4	0.5	Full-flush	0.1-1.0		11
5350	125	12.5	12.5	6.4	0.5	Semi-flush	0.3-1.6		A
5351	125	12.5	12.5	6.4	0.5	Flush	0.2-1.6		15
5352	125	12.5	12.5	6.4	0.5	Full-flush	0.2-1.2		and a second

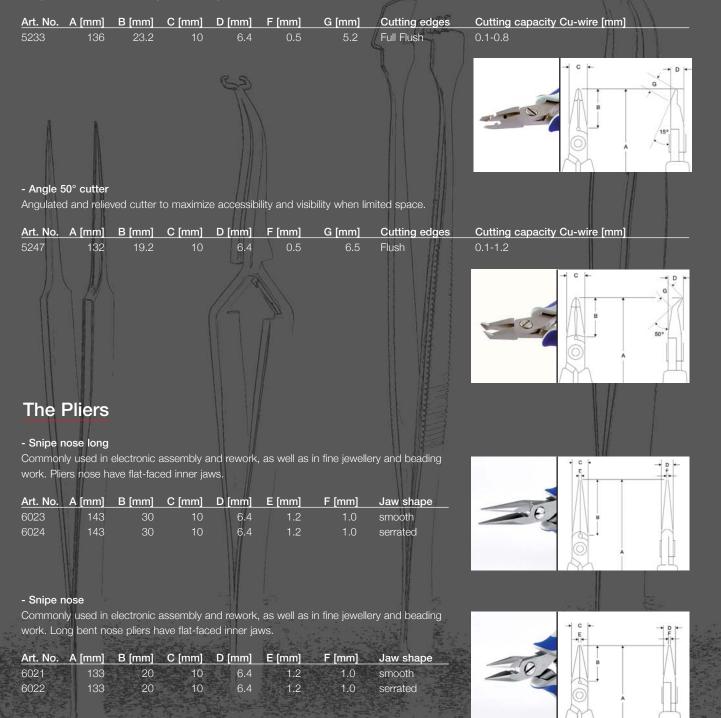
- Tapered and relieved

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



- Micro Tip 15°cutter

Long, narrow jaws. Sharp edges for cutting at the very tip. Deep relief for an exceptionally low profile.

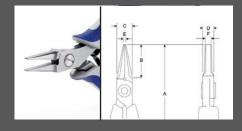


(ideal-tek

- Flat nose

Flat nose pliers feature a very fine tip, smooth jaws and inner edges.

Art. No.	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Jaw shape
6011	133	20	10	6.4	1.2	4.0	smooth



- Round nose

Round nose pliers have jaws formed by two long cones. A round nose pliers is generally used both to clamp and to form loops on leads or wire. The long jaws also provide increased access.

Art. No.	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	Jaw shape
6041	133	20	10	6.4	2.0	1.0	Very fine

Microshears

The Ideal-tek 175 is a remarkable advancement in cutter design. Carefully crafted precision cutting blades combine seamlessly with curved, palm shaped, handles to deliver effortless lead cutting and user comfort. Features:

- Comfortable, Ergonomic design
- ESD safe to protect sensitive components
- Responsive spring-back action for quick, comfortable cutting of multiple leads
- Thin profile design to reach tight areas in electronics assembly
- Available with a permanently attached safety guard to reduce the risk of lead fly-off

MOQ: 10 pcs



- Safety lead catcher
- Requires 50% less cutting effort
- Light weight. Flush-cuts off wire (copper, nickel, etc) up to 1mm diameter
- Thin profile for tight and hard-to-reach areas
- Hardened carbon steel

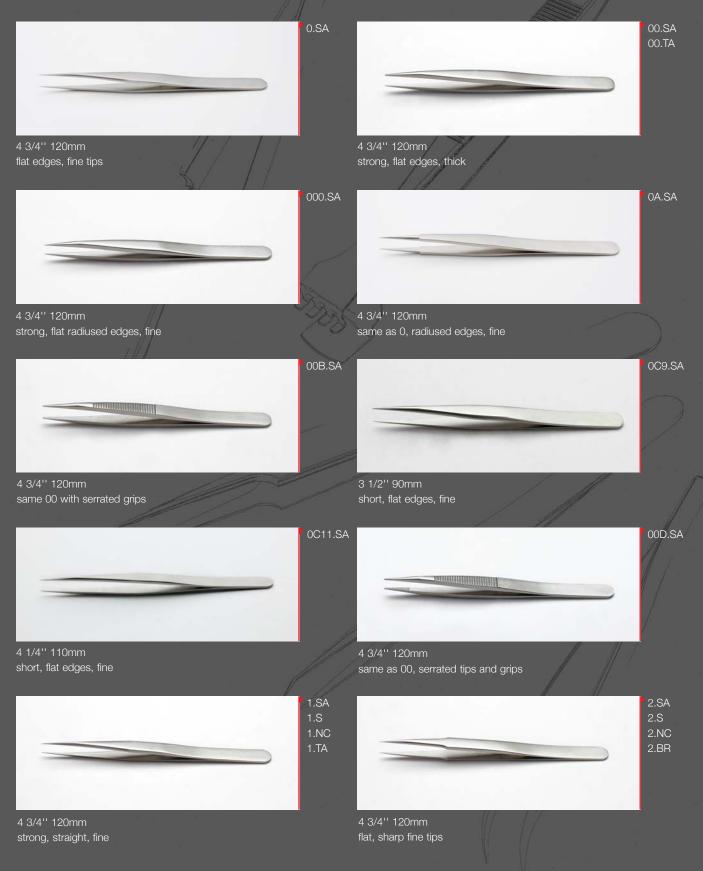




High Precision Tweezers

Handcrafted to perfect tip symmetry and balance, polished edges, superior no-scratch/antiglare satin finish. The right tweezers and material for a successful application.

All High Precision Tweezers are available in different materials (SA, S, NC, N, TA, BR) and also available in special coatings (EP, NE, TE). Please refer to technical datasheet on pages 31-33 for more information. Chemical datacharts are available on www.ideal-tek.com



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2AB.SA

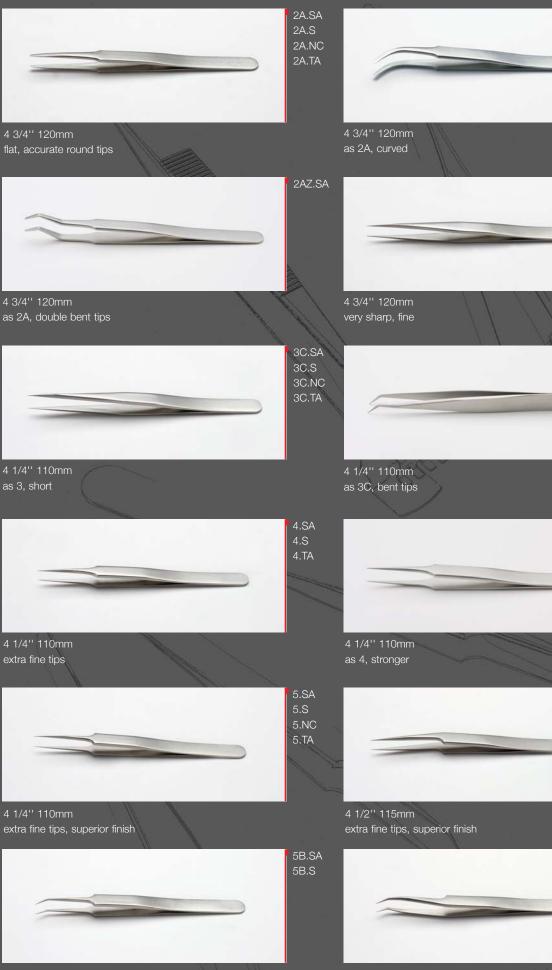
2AB.TA

3.SA

3CB.SA

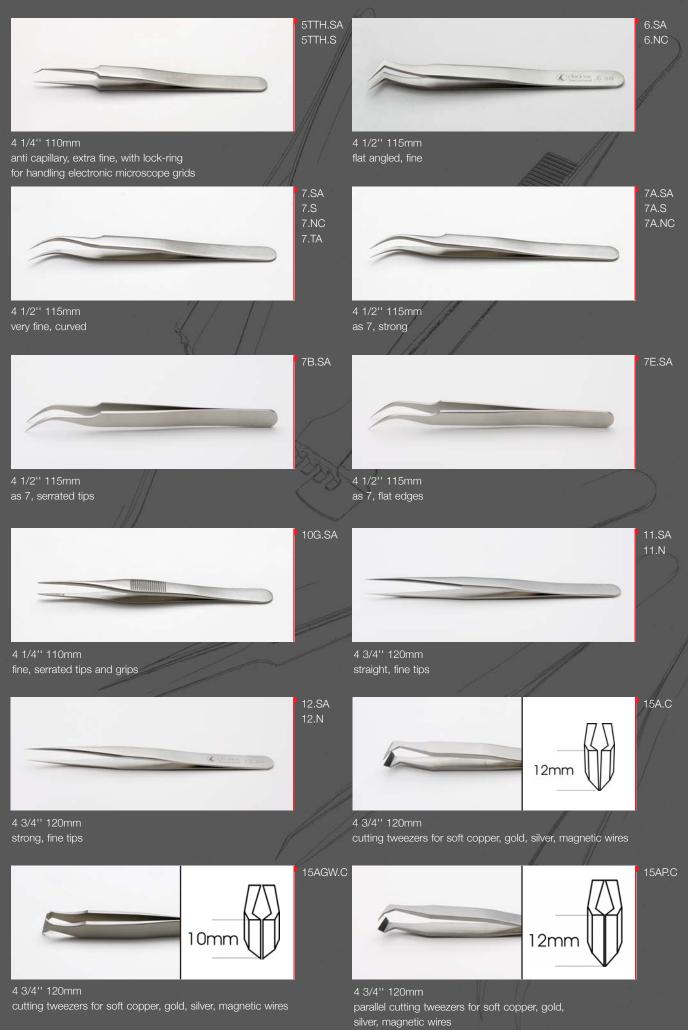
5A.SA 5A.S 5A.NC 5A.TA

5C.SA



4 1/2" 115mm as 5A, extra fine, double bent ti

High Precision Tweezers - 11



152.S





4 3/4'' 120mm rounded edges cutting tweezers for soft copper, gold, silver, magnetic wires



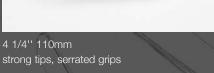


strong, sharp, fine tips



4 3/4'' 120mm as 2A, crush proof, smooth action







4 3/4'' 120mm as 2A, flat and squared tips







3 3/4'' 98mm

15ASW.C

52A.SA

precision miniature cutting tweezers



as 5A, bent tips for max visibility



6 1/8'' 155mm

Fine, bent tips ESD epoxy coated handles



4 3/4'' 125mm

precision brass tweezers anti-sparking



5 1/2" 140mm very fine bent tips



high precision tweezers set 00, 2A, 3C, 5, 7 top quality hard/foam wallet

K5HP.SA K5HP.S K5HP.TA

High Precision Mini Tweezers

Fine tips without the excess bulk of long tweezers. Fine tips in anti-acid/anti-magnetic stainless steel (SA).



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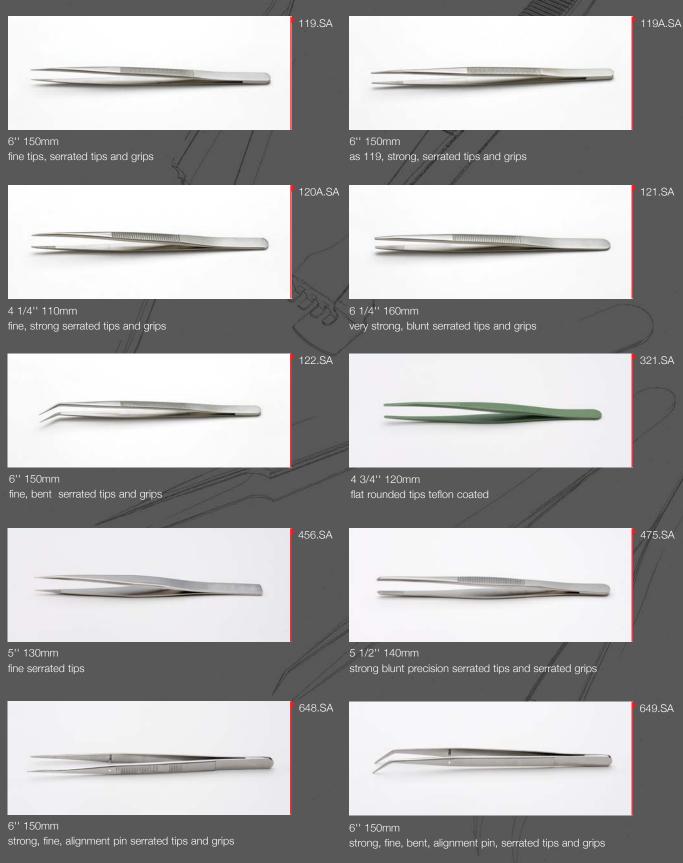
High Precision Reverse Action Tweezers

Specially intended for applications where a high precise self-closing action is required (e.g. microscopy). Fine tips in anti-acid/anti-magnetic stainless steel (SA).



General Purpose Tweezers

Handcrafted to perfect tip symmetry and balance, polished edges, superior no-scratch/antiglare satin finish The right tweezers and material for a successful application.



MM.SA

Boley Tweezers

Ergonomic, general purpose tweezers available in different materials for specific applications.



5" 130mm general purpose straight fine tips



5" 130mm general purpose strong fine tips

Ceramic Replaceable Tip Tweezers

Zirconia ceramic precision tips (MZ). Surface resistivity 10E12 Ohm. Contamination free, high temperature (1500°C) wear and solder resistant. Stainless steel (SA) handles. Alignable replaceable tips system: PATENT PENDING NO. 1750/97.

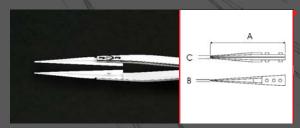
AA.SA



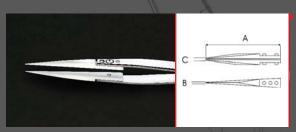
A 1.4" 35mm - B 0.08" 2.0mm - C 0.02" 0.6mm replaceable tips set code: A2MZ



A 1.7'' 43.5mm - B 0.02'' 0.6mm - C 0.02'' 0.6mm replaceable tips set code: A7MZ

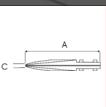


A 1.2" 30mm - B 0.011" 0.3mm - C 0.011" 0.3mm replaceable tips set code: A71MZ



A 1.3" 33mm - B 0.011" 0.3mm - C 0.02" 0.6mm replaceable tips set code: A73MZ





A 1.2" 30mm - B 0.007" 0.2mm - C 0.016" 0.4mm replaceable tips set code: A72MZ



A 1.6'' 40mm - B 0.019'' 0.5mm - C 0.019'' 0.5mm replaceable tips set code: A74MZ

4MZ.SA

7MZ.SA

72MZ.SA

Plastic Tip Tweezers

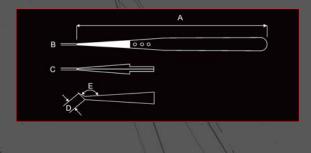
The largest and the most precise plastic tweezers range all over the world. 30 years of experience in high engineering plastic materials. Choose the right tweezers in the right material for your success in your application. Technical data are available on page 32 or on www.ideal-tek.com for more information and chemical data-charts. For A, B, C dimensions refer to scheme on page 19.



Plastic Replaceable Tip Tweezers

The largest and the most precise plastic tweezers range all over the world. 30 years of experience in high engineering plastic materials. Choose the right tweezers in the right material for your success in your application. Technical data are available on page 32 or on www.ideal-tek.com for more information and chemical data charts. Replaceable kits come with 2 tips and 3 screws. The easiest and most precise replacement system available into the tweezers market.





00CFR.SA 00CPR.SA 00SVR.SA



A 5'' 130mm - B 0.07'' 1.8mm - C 0.04'' 1.0mm



A 5'' 130mm - B 0.04'' 1.0mm - C 0.08'' 2.0mm

A 5'' 130mm - B 0.07'' 1.8mm - C 0.04'' 1.0mm



A 5" 130mm - B 0.07" 1.8mm - C 0.04" 1.0mm



A 0.25" 6.6mm - B 0.41" 10.5mm - C 0.08" 2.0mm D 0.14" 3.5mm - E 0.18" 4.5mm



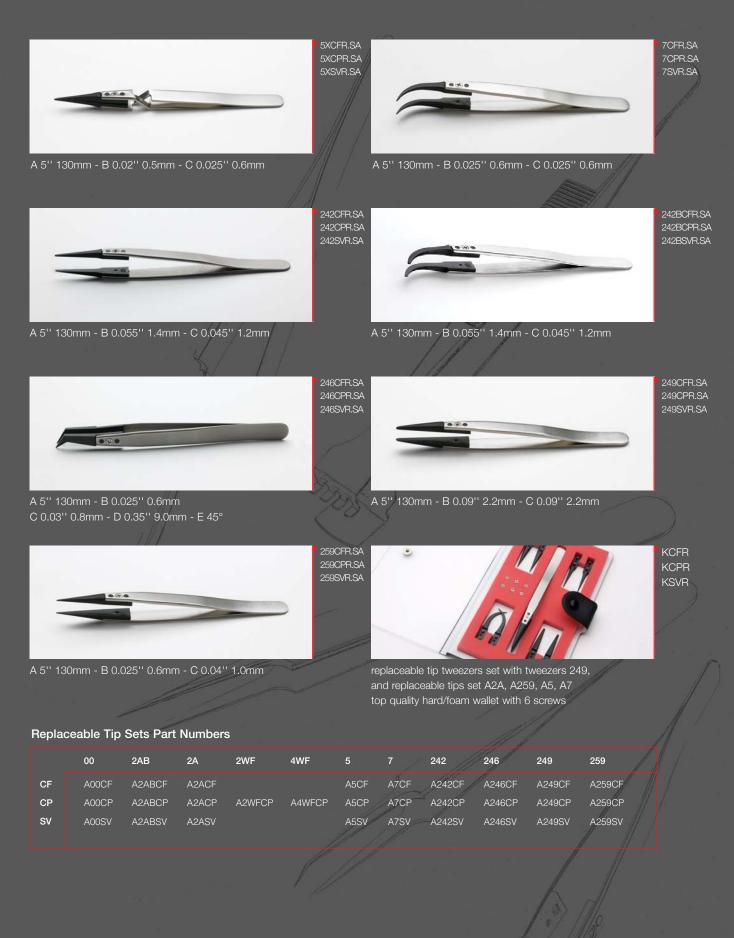
A 0.47" 12mm - B 0.41" 10.5mm - C 0.08" 2.0mm D 0.14" 3.5mm - E 0.18" 4.5mm



A 5'' 130mm - B 0.02'' 0.5mm - C 0.025''0.6mm

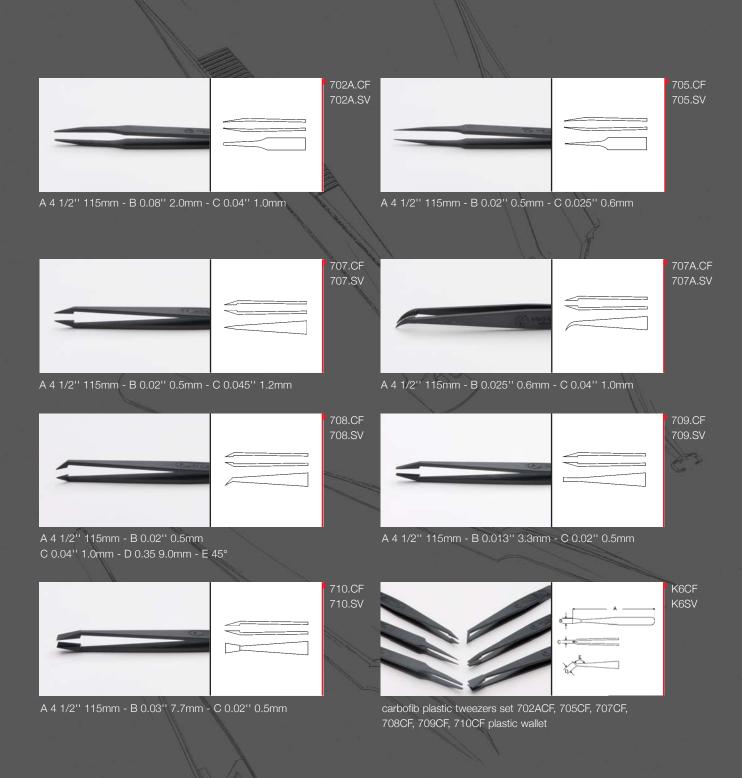
2ACFR.SA 2ACPR.SA 2ASVR.SA





Plastic Tweezers

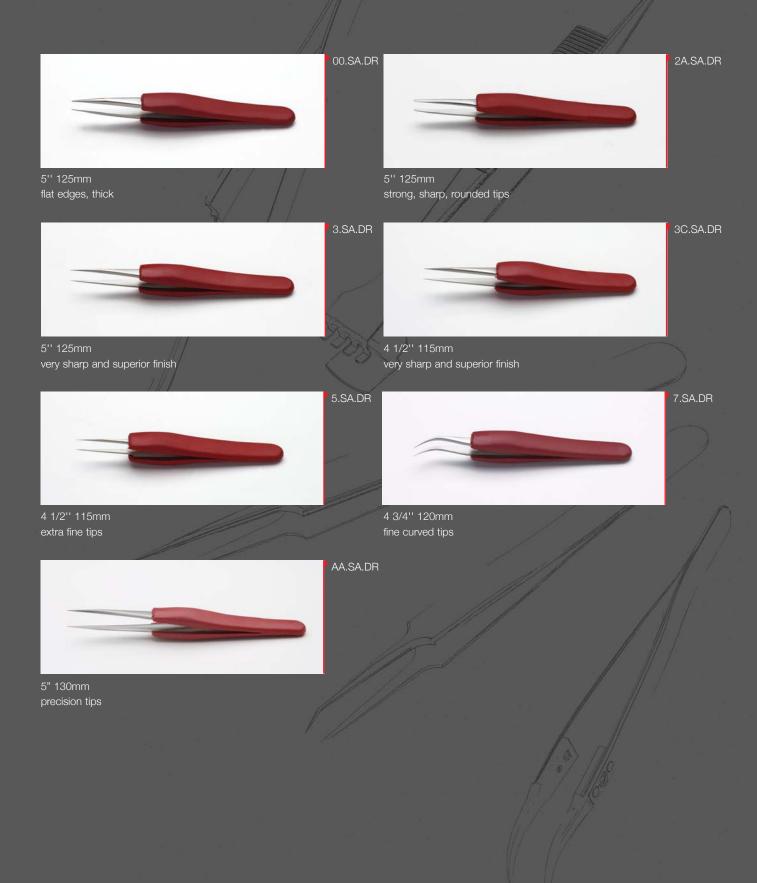
High precision plastic tweezers available in four different materials for various applications. Technical data are available on page 32 or on www.ideal-tek.com for more information and chemical data charts.



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Ergonomic ESD Cushion Grip Tweezers

Anti-magnetic precision tweezers with soft ESD ergonomic cushion grips (resistivity 10E8) for an enhanced operator comfort. For more information on our ESD Ergonomic Handle (DR) see page 33.



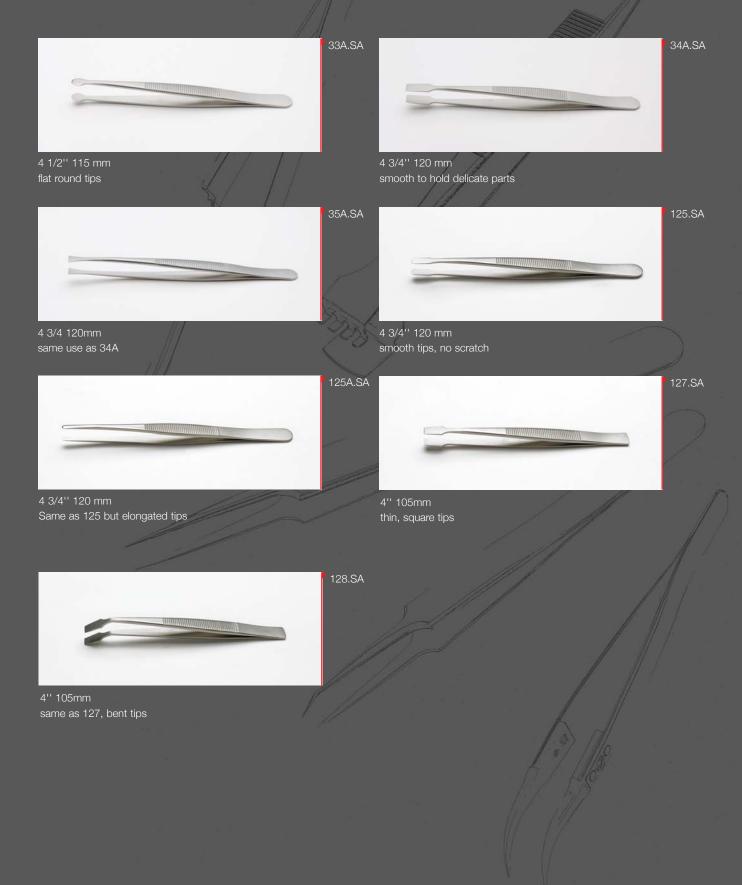
Ergonomic ESD Foam Grip Tweezers

Anti-magnetic precision tweezers with soft ESD ergonomic foam grips (resistivity 10E8) for an enhanced operator comfort. For more information on our ESD Ergonomic Handle (DN) see page 33.



Flat Tip Tweezers

Smooth scratch proof tips usefull tips for handling electronic sensitive parts.



SMD Tweezers

Smooth handling and positioning of all SMD components. Different tips and angles for specific jobs. Satin antiglare finish and ergonomic design. Modifications or special models available on request. Available as reverse action model.



Grooved tips

with flat base grooved tips (2 mm long)





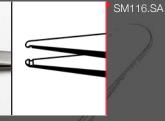
4 3/4'' 120mm

grooved tips at 30° angle for holding and positioning cylindrical devices (up to 1 mm diam.)





4 3/4" 120mm for positioning SOT packages at 30° angle



K5SMD.SA

2WF.SA

4 3/4'' 120mm

grooved straight tips. for vertical positioning of cylindrical devices (up to 1 mm diam. or more)

SM117.SA

2W.SA

SMD precision tweezers set SM103, SM107, SM108, SM111, SM115 top quality hard/foam wallet

Wafer Tweezers

Especially designed for use with delicate (very fragile) wafer, glass wafer,.... Very firm yet anti-crush/anti-crack grip. Very smooth surface to satin finish (non glare). Teflon coating, plastic tips as well as special design to user's specifications are available.



A 0.25'' 6.5mm - B 0.2'' 5.0mm C 0.10'' 2.5mm - D 0.15'' 4.0mm



A 0.25'' 6.5mm - B 0.25'' 9.0mm - C 0.10'' 2.5mm -D 0.15'' 4.0mm - E 0.10'' 2.5mm



A 0.25'' 6.6mm - B 0.41'' 10.5mm - C 0.08'' 2.0mm -D 0.14'' 3.5mm - E 0.18'' 4.5mm. Replaceable tips set code: A2WFCP



A 0.37'' 9.5mm - B 0.39'' 10.0mm - C 0.10'' 2.5mm D 0.15'' 4.0mm - E 0.10'' 2.5mm

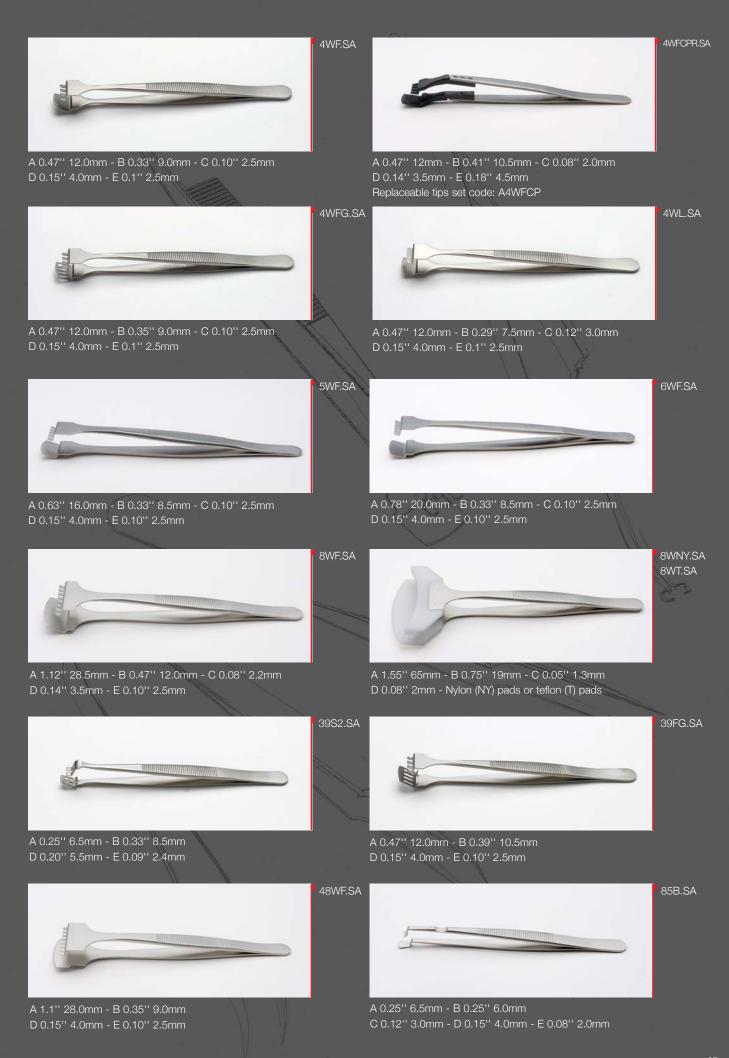


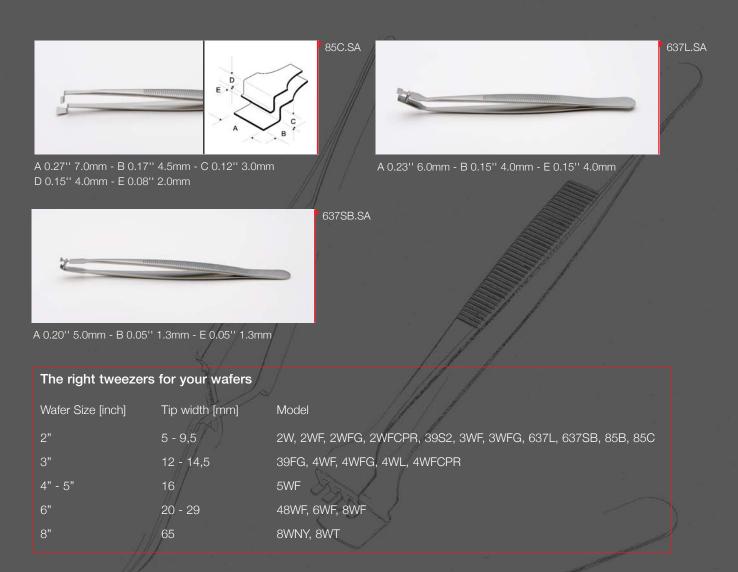
A 0.25'' 6.5mm - B 0.35'' 9.0mm - C 0.10'' 2.5mm D 0.15'' 4.0mm - E 0.10'' 2.5mm



A 0.37'' 9.5mm - B 0.39'' 10.0mm - C 0.10'' 2.5mm D 0.15'' 4.0mm - E 0.10'' 2.5mm

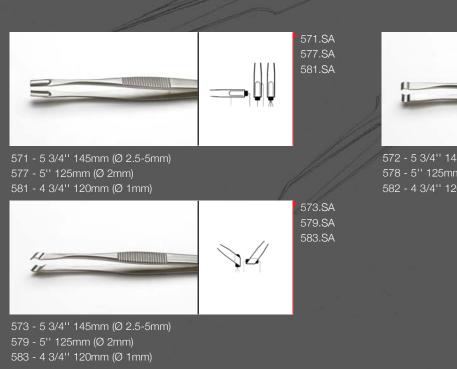






Components Positioning Tweezers

Specifically designed to hold delicate components firmly and safely.

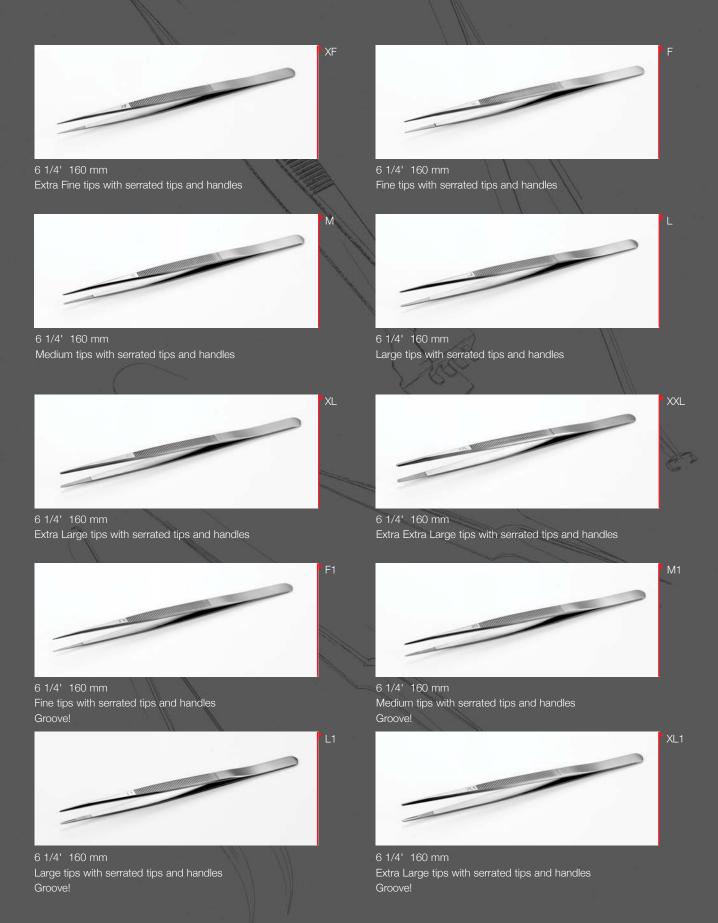




572 - 5 3/4'' 145mm (Ø 2.5-5mm) 578 - 5'' 125mm (Ø 2mm) 582 - 4 3/4'' 120mm (Ø 1mm) 572.SA 578.SA 582.SA

Jewellery Tweezers

Ideal-tek Jewellery tweezers Swiss Hand Made for diamonds and precious stones. 2 complete lines of high precision tweezers made of carbon steel with matt finishing or black chrome (suffix -ZN; ex.: FR-ZN). In our product range our customer can choose special tips with groove (suffix 1) or with locking system (suffix R) or both (suffix R1).



🚺 ideal-tek



6 1/4' 160 mm

Extra Extra Large tips with serrated tips and handles
Groove! ______



6 174' 160 mm Medium tips with serrated tips and handles Locking system



6 1/4' 160 mm Extra Large tips with serrated tips and handles Locking system



6 174' 160 mm Large tips with serrated tips and handles Groove & Locking system



6 1/4' 160 mm Fine tips with serrated tips and handles Locking system



6 1/4' 160 mm

Large tips with serrated tips and handles Locking system



6 1/4' 160 mm

LR1

Medium tips with serrated tips and handles Groove & Locking system



XLR1

6 1/4' 160 mm Extra Large tips with serrated tips and handles Groove & Locking system

Material Technical Data Sheet

METALS

Nonferrous allow type BF

- Brass (CuZn37)
 copper-zinc alloy
- ¬ non-magnetizable
- ¬ good to excellent corrosion resistance; all copper alloys resist corrosion by fresh water and steam
- \neg excellent cold workability (forming)
- generally it is utilized when high mechanical properties are not required
- typical applications include tweezers for handling scratch-sensitive mechanical parts, watch components, magnets

Carbon steel type C

- Carbon steel (Material number 1.1221, Ck60, AISI 1060)
- \neg contains from 0,57 to 0,65 wt% carbon
- magn<u>etizable</u>
- ¬ will be hardened by heat treatment, max. hardness 57 HRC
- ¬ poor resistance to corrosion
- used where strength and/or hardness are of primary concern.
- typical applications include tweezers and cutting tools for the electronic industry, watch-makers, jewellers applications

Nonferrous alloy type N

- ¬ Nickel silver 65-18 (CuNi18Zn20)
- copper-nickel-zinc alloy
- ¬ non-magnetizable
- ¬ soft and elastic
- all copper alloys resist corrosion by fresh water and steam. Copper nickels provide superior resistance to saltwater corrosion, have high resistance to alkalies and organic acids, but have poor resistance to inorganic acids
- typical applications include handling of scratch-sensitive parts in electronic, micro-mechanical and jewellery applications

Superalloy NC

- Ni-Cr-Mo superalloy
- ¬ excellent/resistance to room temperature up to 800°C
- six times harder than antimagnetic stainless steel
- resistant to fatigue, very high shape retention
- fully non-magnetic
- excellent corrosion resistance to most chemicals, salts and acids
- typical applications include non-magnetic tools for electronic and watch industry applications and for laboratory and medical applications in aggressive chemical environments

Stainless steel type S

- Martensitic higher carbon steel (Material number 1.4034, DIN X46Cr13, AISI number 420)
- ¬ contains from 12.5 to 14.5 wt% chromium
- magnetizable
- can be hardened by heat treatment, forming should be done in the annealed condition
- ¬ less resistant to corrosion than the austenitic or ferritic grades
- used where strength and/or hardness are of primary concern and where the environment is relatively mild from a corrosive standpoint.
- typical applications include tweezers and cutting tools for the electronic industry, watch-makers, jewellers and laboratory and medical applications in mild aggressive chemical environments

Stainless steel type SA

- low carbon austenitic steel (Material number 1.4435, DIN X2CrNiMo18-14-3, AISI number 316L)
- contains from 16.5 to 18.5 wt% chromium and has important quantities of nickel and molybdenum as additional alloying elements
- non-magnetizable
- good corrosion resistance to most chemicals, salts and acids
- generally used where corrosion resistance and toughness are primary requirements
- typical applications include tweezers for the electronic industry, watch-makers, jewellers and laboratory and medical applications in moderately aggressive chemical environments

Nonferrous alloy type

- Titanium Grade 1 (unalloyed titanium)
- engineering materials with extraordinary combination of properties: relatively low density (4.5 g/cm³), good mechanical properties and a very high melting point that allows the use at high temperatures (1600°F, 870°C)
- \neg good corrosion resistance at room temperature to air,
- marine and a variety of industrial environments
- ¬ good cold formability, high ductility
- ¬ fully non-magnetic
- ¬ generally it is used when in addition to the corrosion resistance, high strength-to-weight ratio is required
- ¬ bio-compatible (maintain cell integrity, no inflammatory response)
- ¬ typical applications include handling of components in cleaning/chemical processes also at high temperature, histology, biology, medicine, surgery

PLASTICS

Engineering plastic type CF

- PA66/CF30 polyamide 66 reinforced with 30 wt% carbon fibre
- ¬ heat stabilized
- very high rigidity, excellent tensile and flexural strength, fatigue and creep resistance
- ¬ low friction, self lubricating properties, excellent wear and abrasion resistance
- ¬ good heat capability
- good chemical resistance (oils, grease, fuels, non polar solvents); not resistant to strong acids, alkalis and hot water or steam
- ¬ ESD safe material, (avoids dust attraction, sparks generation, ignition sources)
- very low coefficient of linear thermal expansion
- typical applications include handling of sensitive components and devices (electronic components, micromechanical parts, glass and ceramic substrates, capillary, etc.)

High-performance plastic type Cl

- PEEK/CF30 polyetheretherketone reinforced with 30 wt% carbon fibre
- ¬ very hard, rigid, high tensile and flexural strength, very high wear resistance
- ¬ high heat capability (260-300°C), good dimension stability, low thermal linear expansion coefficient
- ¬ excellent resistance to chemicals, aggressive agents and to thermal ageing
- ¬ **ESD safe** material, low surface resistivity (10^₅ Ohm)
- typical applications include handling of components in cleaning/chemical/assembly processes also at high temperatures (soldering)

Engineering plastic type DG/D

- ¬ POM/GF30 acetal resin reinforced with 30 wt% glass fibre
- ¬ good tensile and flexural strength, fatigue and creep resistance
- \neg low friction, good wear and abrasion resistance
- ¬ low moisture absorption
- good chemical resistance (oils, grease, fuels, organic solvents); not resistant to strong acids, alkalis and oxidizing agents; good hydrolytic resistance (hot water)
- insulating
- ¬ typical applications include handling of very scratch sensitive components

ligh performance plastic type S

- PVDF polyvinylidene fluoride carbon fibre reinforced
- \neg excellent mechanical strength and toughness
- ¬ smooth surface
- ¬ heat stabilized, high heat capability, continuous use temperature up to 150°C
- high purity (clean room and medical devices approved, low extraction value)
- excellent chemical resistance to most aggressive substances (mineral and organic acids) and solvents (hydrocarbons, alcohols, halogenated), resistant to halogens
- outstanding resistance to hydrofluoric acid (40% conc., 90°C), nitric acid (50% conc., 90°C), hydrochloric acid (36% conc., 90°C)
- ¬ high abrasion resistant
- resistant to UV and nuclear radiation (sterilisation)
- ¬ ESD safe (avoids dust attraction, sparks generation, ignition sources)
- typical applications include handling of very scratchand contamination-sensitive components, cleaning and etching processes

CERAMICS

Advanced Ceramic type MZ

- Zirconia Toughened Alumina (ZTA)
- ¬ a superior combination of high strength (from zirconia) and high hardness (from alumina)
- ¬ relatively low density
- no open porosity
- very hard surface, good abrasion and wear resistance
- good flexural strength and fracture toughness
- excellent thermal properties and high temperature stability
- extreme corrosion resistance, nearly chemically inert
- electrically insulative
- typically applications includes soldering processes, handling of components during thermal and chemical processes. Generally used when very rigid tips are required

ESD GRIPS & COATINGS

Engineering grip type DR

- ¬ NBR vulcanized nitrile rubber
- very soft and elastic, good tear resistance
- ¬ outstanding abrasion/wear resistance (improved lifetime)
- good chemical resistance (oils, grease, fuels, acid, detergents and soaps); good hydrolytic resistance (hot water)
- ¬ electrically static dissipative, low surface resistivity (10⁸ Ohm), ESD-safe material!
- typical applications include ESD-safe handles, floor and work surface mats

Engineering grip type DN

- ¬ PVC FOAM
- ¬ very soft and elastic, good tear resistance
- very good abrasion/wear resistance (improved lifetime)
- good chemical resistance (oils, grease, fuels, acids, detergents and soaps, alcohols)
- electrically static dissipative, ESD-safe material!
- typical applications include ESD-safe handles, floor and work surface mats

Engineering coating type EF

- ¬ EP polyester epoxy coating comprise essentially polyester and epoxy resins
- ¬ Impact resistant surface with excellent flow; good elasticity
- Can operate continuously at temperatures up to 120°C.
- ¬ This coating provides an insulating coating with surface resistance > 10¹² Ohm
- ¬ Good resistance to many diluted acids and alkalis.
 Contact with organic solvents is possible conditionally and for short term. Resistance should be investigated for the case in question
- Typical applications include tweezers handles (better grip, high comfort)

Engineering coating type N

- NE polyester epoxy coating comprise essentially polyester and epoxy resins, plus the electrically conductive additives
- Impact resistant surface with excellent flow; good elasticity
- Can operate continuously at temperatures up to 120°C
- ¬ This coating provides a ESD Safe coating with surface resistance 10⁵-10⁶ Ohm

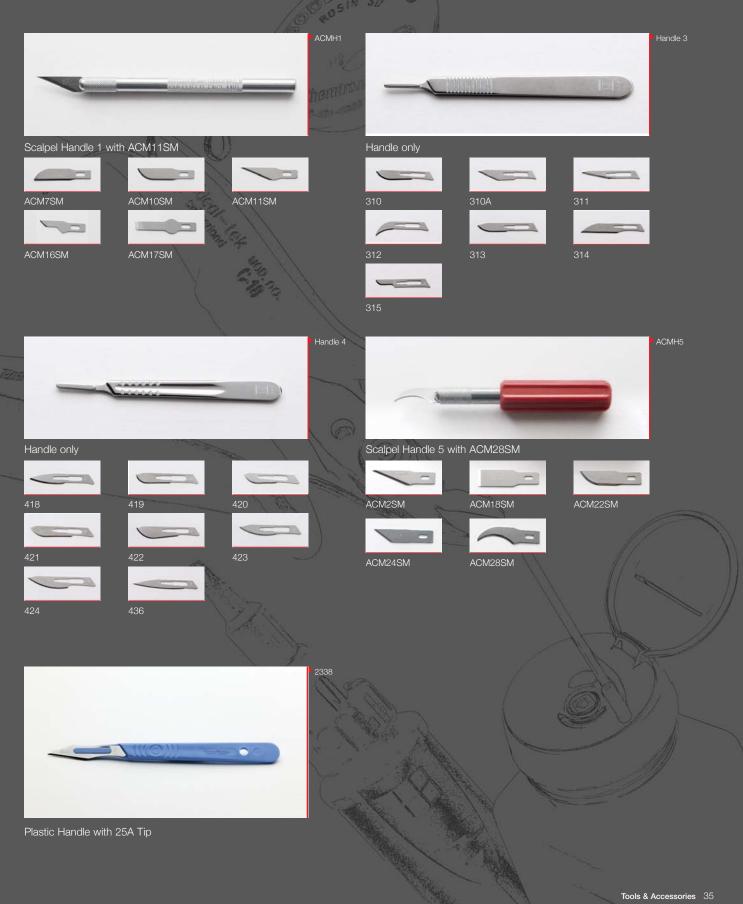
- Good resistance to many diluted acids and alkalis.
 Contact with organic solvents is possible conditionally and for short term. Resistance should be investigated for the case in question
- Typical applications include tweezers handles (better grip, high comfort)
- ¬ TE is a solvent-based liquid Teflon[®] coating formulated with special blends of fluoropolymers and other highperformance resins to improve toughness and abrasion resistance
- Substances will permanently adhere to a Teflon[®] finish. Although tacky materials may show some adhesion, almost all substances release easily
- ¬ The coefficient of friction of this Teflon coating is generally in the range of 0.20 to 0.25, depending on the load, sliding speed, and particular Teflon[®] coating used.
- Since surfaces coated with Teflon® are both oleophobic and hydrophobic, they are not readily wetted. Cleanup is easier and more thorough - in many cases, surfaces are self-cleaning
- ¬ Can operate continuously at temperatures up to 150°C and can be used for intermittent service up to 200°C.
- Over a wide range of frequencies, Teflon[®] has high dielectric strength, low dissipation factor, and very high surface resistivity
- Many Teflon[®] industrial coatings withstand severe temperature extremes without loss of physical properties.
 Teflon[®] industrial coatings may be used at temperatures as low as -270°C/-454°F
- TE is normally unaffected by mild chemical environments. It has good resistance to diluted acids, diluted and concentrated alkalis and organic solvents
- Typical applications include tweezers for the handling of very scratch-sensitive components or wafers



Professional Scalpels and Blades

The Professional Range of blades and handles is produced with Craft 'Professionals' and enthusiasts in mind. They are used in a variety of different industries from Mold Cutting and Jewellery Manufacture to Printing and Artwork.

The handles are supplied carded. Spare Parts in a packet of 5 blades in a retail pack form.



Vacuum Tools

Pocket Vacuum Syringe

Complete with three rubber suction cups (Ø 2mm,4mm,7mm). Will replace traditional tweezers to hold components with smooth and delicate surface (anti-scratch). Ideal for SMD positioning and vertical handling of components in crowded and hard to reach areas.

May be used with all pick-up probes.

Туре

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P-	8.	RC)	

Pocket Vacuum Syringe with three suction cups

Vampire Vacuum Pick-Up

Vampire is the new battery-free hand held vacuum pick-up pen designed for the safe pick-up of SMD components during assembly, test and rework processes. With fountain-pen dimensions, Vampire grabs, lifts and places components in complete safety, aided by a powerful internal piston and a full ESD protection. A complete choice of tips designed for any size of SMD component helps the operator to have the right tool in hand.



Art. No.	Туре		here and the second sec	
UVO000000	Vacuum tweezer set including: 1 Vampire bo	ody, 1 conductive me	tal straight needle,	
	1 45° angled metal needle, 1 conductive rub		ductive rubber	19 19
	cup 6mm, 1 conductive rubber cup 9 mm,		NV	
UVO000100	Spare replacement kit for Vampire Classic, i	0 0		
	needle, 1 45°angled conductive metal need	le, 1 conductive rubb	er cup 4mm, 1 conductive rubb	er cup 6mm,1 conductive rubber cup 9mm
UVO000610	Spare ESD 4 mm cups			- COL 3 2000 0-
UVO000620	Spare ESD 6 mm cups			MERIX Frank
UVO000630	Spare ESD 9 mm cups	Vacuum Vampir		
UVO000810	Straight needle with ESD 4 mm cup	UVO0001000		ire body, 1 High Power conductive straight
UVO000820	Straight needle with ESD 6 mm cup	1110		ictive angled tip 9mm, 1 conductive straight ober cup 4mm, 1 conductive rubber cup
UVO000830	Straight needle with ESD 9 mm cup	1194	6mm, 1 lubricant kit	
UVO000910	45° needle with ESD 9 mm cup	UVO0001100		aht tip 9mm, 1 High Power conductive
UVO000920	45° needle with ESD 9 mm cup	the second	angled tip 9mm, 1 conductive	straight metal needle, 1 conductive rubber
UVO000930	45° needle with ESD 9 mm cup	1 1000	cup 4mm, 1 conductive rubbe	er cup 6mm, 1 lubricant kit

Wafer Vampire

The Wafer Vampire is unique in design, being both battery free and cordless. The Wafer Vampire is designed for handling wafer or solar panels up to 300 mm diameter. Clean room admissible no particulation, no ion contamination, lightweight and totally portable. No exposed metals.

e cup Ø 20mm one cup Ø 20mm n silicone cup Ø 20mm

Art. No.	Туре
UWO000100	Body Only
UWO000200	Straight Probe 150mm; with silicone
UWO000300	20° angled Probe 150mm; with silic
UWO000400	"S" double bent Probe 150mm; with



🜔 ideal-tek

Rework and Repair

Soder Wick[®] Desoldering Braid

Soder-Wick®, the world's leading brand of desoldering braid, is the fastest, cleanest and safest braid in the industry. It significantly reduces rework/repair time and minimizes the risk of heat damage to the board. Its geometrically precise weave design allows for maximum capillary action and solder capacity. Soder-Wick® desoldering braid optimizes heat transfer through the braid and into the solder joint, resulting in faster wicking action than any other competitive braid. Minimal flux residue on the board speeds up the cleaning process, or eliminates it entirely.

Soder-Wick[®] desoldering braid is available in various widths, lengths and flux types. Application-specific sizes allow for precision solder removal in a flash.

Art. No.	Туре	Lenght [m]
80-1-5 Rosin SD	0,8mm White	1.5m
80-2-5 Rosin SD	1,5mm Yellow	1.5m
80-3-5 Rosin SD	2,0mm Green	1.5m
80-4-5 Rosin SD	2,8mm Blue	1.5m
80-5-5 Rosin SD	3,7mm Brown	1.5m
80-6-5 Rosin SD	5,3mm Red	1.5m
50-2-100 Rosin	1,5mm Yellow	30.5m
50-3-100 Rosin	2,0mm Green	30.5m
50-4-100 Rosin	2,8mm Blue	30.5m

Ultra Jet® All-Way

The duster that sprays in any direction with the biggest blast to clean anything fast

- All-Way Spray can be sprayed in any direction without the risk of dispensing a liquid spray that can freeze or damage sensitive surfaces
- Safe on plastics
- Nonflammable
- Extra cleaning strength
- Ozone safe; CFC/HCFC free
- Ultra pure leaves no residue

Art. No.	Туре	Con		
ES1620E	aerosol	200		



Freeze-It[®] Antistat

The high-performance, pinpoint-accurate freeze spray that safely cools individual static sensitive components

- Safe on plastics
- Nonflammable Can be used on energized circuits
- Antistatic formulation ideal for use on static sensitive components
- Frost free formulation
- Isolates individual components without freezing surrounding areas

Art. No.	Туре	Content
ES1551E	aerosol	400 ml

Rosin

The plastic safe flux remover for cleaning rosin and rosin-based no-clean flux

- Safe on plastics
- Flammable Not for use on energized circuits
- Ozone safe; CFC/HCFC free
- Dries fast
- Leaves no residue
- Removes flux from hard to reach areas

Art. No.TypeES835BEBrush

BrushClean™ System

Content 200 ml









Flux-Off[®] VZ

- The first non-ozone depleting, nonflammable flux remover safe for use on plastics
- Safe on plastics
- Nonflammable Can be used on energized circuits
- Ozone safe; CFC/HCFC free
- Cleans type R, RMA, RA, and no-clean fluxes
- Dries fast
- Leaves no residi
- Removes flux from hard to reach areas

Art. No. ES6200E Type aerosc Content 400 ml



CircuitWorks[®] Flux Dispensing Pen

The pen for applying flux with precision and control

- Chisel tip marker provides exact delivery of flux to surface
- Easily removed with appropriate Flux Remover Pen or Flux-Off® flux remover

Art. No.	Туре	Content
CW8200	Rosin Flux Dispensing Pen	9.0 g





The pen for precise removal of flux from printed circuit boards

- Completely removes flux in seconds
- Spot cleans tight tolerance areas on circuit boards
- Marker dispenser provides controlled and exact application
 Dries fast

Art. No.

Type Rosin Flux Remover Pen Content 8.0 g



CircuitWorks® Conductive Pen

The pen dispenser for drawing highly conductive silver traces, jumpers and shielding with precision and control

- Quickly creates conductive silver traces on most surfaces
- Valved pen tip for easy application
- Can be soldered at low temperatures
- Dries in minutes at room temperature

Art. No.

Type Standard Tip Content 8.5 g





CircuitWorks® Overcoat Pen

- The pen dispenser for precise application of a tough protective acrylic conformal coating
- Protects Conductive Pen (CW2200) traces
- Repairs permanent solder mask
- Protects against shorting, arcing, abrasion and moisture
- Dries in minutes at room temperatures

Art. No.	Туре	Content
CW3300G	Green	4.9 g



CircuitWorks[®] Gold Gard[™] Pen

The pen for cleaning and lubricating gold and other noble metal contacts and connectors

- Cleans and leaves protective lubricant in one step
- Extends the life of noble metal contacts
- Chisel tip marker for exact delivery of solvent to surface
- Safe on most plastics

Art. No.	
CW7400	

1.	5	Content
	6.90	8.5 g
	1997 Q	

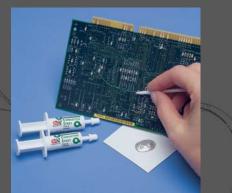


CircuitWorks® Conductive Epoxy

The conveniently-packaged epoxy for precision repairs and high-strength conductive bonding

- Conductive silver epoxy provides excellent electrical conductivity
- High-strength conductive bonding
- Repairs defective traces and creates jumpers to board
- Quick solderless electronic connections

<u>Art. No.</u> CW2400 **Type** Adhesive Hardener <u>Content</u> 7.0 g 7.0 g



Chemask®

The fast curing, peelable temporary solder masking agent

- Dries tack-free in 30 minutes
- Easy to use just peel off dried mask
- Latex material is compatible with flux systems and stable with cleaning solvents

Art. No.	Туре	Content
CM8E	liquid squeeze bottle	250 ml



Lead-Free Rework and Repair



Soder-Wick[®] Lead-Free SD Desoldering Braid

The fastest, safest de-soldering braid specifically for use with Lead-Free applications

- Engineered specifically for high temperature, Lead-Free solders
- Transfers heat to the solder joint more quickly and efficiently than conventional desoldering braids
- Specifically designed for all Lead-Free solders, can also be used with Tin/Lead solders
- Soder-Wick® Lead-Free packaged in ESD-safe static dissipative bobbins
- Minimizes the risk of damage associated with static electricity
- Non-corrosive ultra high purity no-clean flux
- Will not leave ionic contamination on the boards
- Especially effective at removing residual solder from SMT pads
- **RoHS** Compliant
- Patent Pending

Art.No	Туре	Width [mm]	Lenght [m]
40-1-5	Nr. 1	0,8	1,5
40-2-5	Nr. 2	1,5	1,5
40-3-5	Nr. 3	2,0	1,5
40-4-5	Nr. 4	2,8	1,5

Flux-Off[®] Lead-Free Flux Remover

The powerful flux remover for high temperature, Lead-Free flux removal

- Engineered for removing high temperature, lead free flux
- Can also be used to remove Tin/Lead fluxes
- Flammable
- Ozone safe
- Evaporates quickly without leaving residue
- **RoHS** Compliant

Art. No.	Туре	Content
ES897BE	Flux-Off Lead-Free	170 g

CircuitWorks[®] Lead-Free Flux **Dispensing Pen**

The pen for applying Lead-Free flux with precision and control

- Applies a noncorrosive, halide free, no clean flux for high temperature, Lead-Free application
- Can be also used to for Tin/Lead fluxes
- Flux meets Bellcore TR-N-NWT-000078 and IPC SF-818 for Surface Insulation Resistance
- Flux meets ANSI / IPC J-STD-004, Type ROL0
- Easily removed with Lead-Free Flux Remover Pen, or Flux-Off Lead-Free Flux Remover
- **RoHS** Compliant

Art. No.	Туре	Content
CW8400	Lead-free flux dispensing pen	9,0 g

LEAD-FREE FLUX DEPENSING PEN

Chemask[®] LF Solder Masking Agent

The high temperature peelable temporary mask ideal for lead free applications

- Formulated for use with Lead-Free applications
- Can also be used with Tin/Lead solders
- Usable within five minutes of application with preheat cycles
- Provides short-term high temperature protection
- **RoHS** compliant

Art. No.	Туре	Conter
CLF8E	squeeze bottle	240 ml



CircuitWorks[®] Lead-Free Flux Removing Pen

The pen for removing Lead-Free flux with precision and control Completely removes lead free flux residues in seconds

- Can also be used to remove Tin/Lead fluxes
- Marker dispenser provides controlled and exact application Dries fast
- **RoHS** Compliant

Art. No. Type CW9400

M LEAD-FREE FLUX REMOVER PEN

Lead-free flux removing pen

Content 8,0 g









12.

Soldering Irons and Soldering Tools

Pro Piezo Iron

Ultra-compact and anatomic design

- With or without flame (patent catalytic)
- Cordless, gas powered (butane power)
- Continued operating time 1 hour
- Adjustable power from 10 to 60 watts
- All weather turbo flame

Length: 178 mm Weight: 75 g Operating time: 90 min Max. temperature: 580 °C

Art. No.

Туре Kit Pro Piezo Pro Piezo with Tips PPT-6; PPT-9; PPT-10; PPT-11; PPT12 Pro Piezo Single Iron with Tip PPT-6 Pro Piezo Tips PT-1: 1.0 oblique, PPT-2: 2.4 oblique, PPT-3: 3.2 oblique, PPT-4: 4.8 oblique, PPT-5: 1.0 flat, PPT-6: 2.4 flat, PPT-7: 3.2 flat

PPT-8: 4.8 flat, PPT-9: Hot Blow, PPT-10: Knife Tip, PPT-11: Deflector, PPT-12: Flame

Professional Iron

- Total portability
- Refill in 10 sec.
- Auto-switch-off
- Long life iron plated soldering tips
- Gas torch, hot air and hot knife tips
- Adjustable power from 10 to 60 watts - High material quality

Length: 177 mm Weight: 60 g

Operating time: 90 min Tip temperature: 450°C Gas type: Gas lighter fuel

Entidement Actionative Referator Buse Chalumeau Buse à Air Chaud à Flux Concentré Couteau Thermique	MODE D'EMPL D'EMPL Constants State F4 Constants	OI Example Constant and the second a
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Art. No.	Туре
MK2S	Single Soldering Iron with Tip CX24
MK2K-B	Kit with Tips CX24, CX90, CX81, CX70 in blister package
MK2K-C	Kit with Tips CX24, CX90, CX81, CX70 in carton package
Professional Tips	CX10: Tip oblique 1,0 mm, CX24: Tip oblique 2.4 mm, CX32: Tip oblique 3.2 mm, CX48: Tip oblique
	4.8 mm, CX70: Knife Tip, CX81: Hot Blow, CX90: Flame

Gas Torch

Technical Data

- Powerful robust flame 1300 °C (adjustable, wind resistant, antiflare)
- Lightweight, compact and ergonomic grip
- Childproof ignition
- Removable safety stand
- Fuel level window

Art. No. Type

Gas Torch

Applications

- Shrink tubing
- Automotive repair
- Industrial maintenance
- Welding
- Paint stripping
- Plastic fusing
- Dental work - Jewellery
- Culinary

Magic Wand (MPT probes)

Ideal Tek's new line of multy purpose tool for electronics, chemistry and watch making. Magic Wand can be used as: probe for lead-free soldering operations, positioning aid tool for assembly operations, spatula for applying adhesives, dosing chemicals in labs, stirring rod for the preparations of adhesives, solutions,..., scraper to remove solder masking agents, rubber latex, adhesive coatings.

Magic Wand is available in two different ESD-safe high performance plastics:

 CP: high performance PEEK reinforced with carbon fibre, very high chemical resistance, very high temperature resistance (up to 300°C), most appropriate for lead-free soldering applications even at the high temperatures needed for lead-free alloys and for applications with chemicals (except strong acids).



2. SV: high performance PVDF (Teflon like material) reinforced with carbon fibre, smooth surface, extremely high acid resistance, most appropriate for scratch-sensitive components or for applications with acids

Art. No. Type

MPT1.CP / MPT1.SVfine tip and flat strong tipMPT2.CP / MPT2.SVcurved fine tip and flat strong tipMPT3.CP / MPT3.SVflat large fine tip and flat fine sharp tipMPT123.CP / MPT123.SV3 pcs kit

Desoldering Pump 190

- Sturdy all metal high precision Swiss tool.
- Completely corrosion free.
- Heat resistant ESD Teflon noozle. Easy and fast replacement.
- The noozle is cleared of any solid solder each time the tool is re-loaded.
- Unique pull-spring mechanism for strongest but muffled and recoilless sucking action.
- A protective shield keeps tin residues out of spring spiral. No cleaning or maintenance
- is necessary. - "Anatomic" design and size for effortless use.

Length : 19 cm = 7 1/2" (including tip) Weight: 70 g

Art. No.	Туре	A.
190	Mini Desoldering Pump with ESD Teflon Ti	р Т27
190-ATA	Replaceable ESD Teflon Tip	

Desoldering Pump COND-77

Metal ESD desoldering pump. Designed expressely for E.P.A: applications, features full conductivity from the body to the screw tip.

Lenght: 19.5 cm Weight: 55 g 7.7 cm3

Art. No.

COND-77 ESD desolderin 4KC-1 ESD replaceabl





2011 1 404 2016505 805



PCSA and PC-40 Circuit Boards Holders (ESD)

The circuit board holder PCSS and PCSA Series are the perfect support for the assembly and soldering/de-soldering processes of circuit boards. The holder can be easily demounted in single parts and reassembled in different combinations.

For technical information please visit www.ideal-tek.com.

Art. No.	Туре
PCSA-1	280x290 mm (ESD safe Foam)
PCSA-2	520x280 mm (ESD safe Foam)
	đ
PCSA-1.2	Replaceable Foam (ESD safe)
PCSA-2.2	Replaceable Foam (ESD safe)
BS-PCSA-1	Replaceable Splint
BS-PCSA-2	Replaceable Splint
A CONTRACTOR	A MA
And I	



PC-40 is the new practical desk adjustable repair stand, dedicated to all rework operations. 360° rotation of the board; PC-40 may be installed on any work-bench. Dimensions: 300x120x120mm

Maximum board length: 250mm

PC Board not included

 Art. No.
 Type

 PC-40
 PCB Bench Support 300x120x120mm



Solvent Dispenser (ESD)

ESD-Safe Polyethylene Solvent Dispenser 120-180-240 ml. These dispensers have no stopper or cap to remove. Just touch the dispensing dish with a brush, cloth or other applicator and solvent is brought to the surface the instant it is needed. Stainless steel valves seal contents in bottle until used, preventing spills, dripping and escaping fumes from endangering the technician. Fluid pumped into the dish doesn't drip back into the bottle, keeping stored liquids uncontaminated. Bottles are available in a variety of sizes. Made of static dissipative plastic. Surface resistivity of 10E⁷ to 10E⁹.

Art. No.	Туре	$\sum_{i=1}^{n}$	1. 1.
TDS12	ESD Fluid Dispenser 120ml		
TDS12AS	ESD Anti-Splash Fluid Dispenser	120ml	
TDS18	ESD Fluid Dispenser 180ml		
TDS18AS	ESD Anti-Splash Fluid Dispenser	180ml	
TDS24	ESD Fluid Dispenser 240ml		
TDS24AS	ESD Anti-Splash Fluid Dispenser	240ml	



TSD12A

Visual Inspection

Alcron Microscope

- Microscope 30 x
- Gives unparalleled sharp and brilliant vision with wide field of view with 30 x magnification.
- Unique built-in light and easy focusing system. Uses two standard 1.5 V batteries.
- A must for inspection of PC boards and miniature parts.

Art. No.	Туре
Alcron	Microscope 30X
Alcron Scale	Front case with mm scale





Studied and designed for professional use, Dino-Lite is a very compact range of microscope which allow the users all high standard shootings (pictures and videos) even in real time and has a zoom feature that may magnify a picture up to 500X. Measurement's features such as lines, angles, diameters and radius, calibration as well are available on 400 series.

All Dino-Lite digital microscopes are sold with Rack Amita (-A) or professional rack AM35B (-X) or professional rack AM36B (-Y). All racks are also sold as spare parts in single packaging.

Art. No.	Туре
AM413T5-X	Magnification up to 500X; with rack AM35B
AM413T-A	The best seller; with rack Amita
AM413T-X	The best seller; with rack AM35B
AM413TL-A	Can be used with a distance up to 14.4 cm;
	with rack Amita
AM413TL-X	Can be used with a distance up to 14.4 cm;
	with rack AM35B
AM413ZT-A	With polarized filter; with rack Amita
AM413ZT-X	With polarized filter; with rack AM35B
AM413TFVW-A	4 white-light LED & 4UV LED; with rack Amita
AM413TFVW-X	4 white-light LED & 4UV LED; with rack AM35B
AMK412-C200	With LCD monitor. Your perfect portable solution
AD413TLMA-X	Mirror angle scope; with rack AM35B
AM313PLUS-X	Lower resolution vs. 400 series but with great
THE STATE	features @ competitive price; with rack AM35B



For more information and full range of Dino-Lite microscopes please visit:

www.ideal-tek.com/category-51

Swabs

Sealed foam swabs

Economical general purpose swabs. Best solvent retention.

The most cost-effective swabs for general purpose applications. 100 ppi reticulated medical grade foam provides excellent particle entrapment. The open cell structure gives the best solvent holding ability to any style of swab. These swabs are free of adhesives or binders that could contaminate your process. Fiberless construction does not generate particles.

Handle Material:polypropyleneHead material:polyurethane foamSale units:1 bag of 125 swabs / 1 box of 20 bags

IT41050 Small

	~	
Swab length:	2.8"	7.2 cm
Handle width:	0.10"	2.6 mm
Head length:	0.40"	10.2 mm
Head thickness:	0.13"	3.3 mm
Head width:	0.14"	3.5 mm

IT44070 Small pointed

Swab length:	3.2"	8.0 cm
Handle width:	0.10"	2.4 mm
Head length:	0.39"	9.9 mm
Head thickness:	0.11"	2.7 mm
Head width:	0.13"	3.3 mm

IT48040 Micro flexible

Swab length:	2.8"	7.2 cm
Handle width:	0.10"	2.6 mm
Head length:	0.40"	10.2 mm
Head thickness:	0.13"	3.3 mm
Head width:	0.14"	3.5 mm

🕡 ideal-tek

Sealed polyester swabs

Very clean and durable all-purpose swabs.

An exceptionally clean swab produced by Coventry's proprietary process of thermoforming and welding the swab head. Featuring either knit or nonwoven fabric heads, these swabs are acid and solvent resistant. Sealed edges build in high strength with no loose fibers or particulates. They are ideal for tough scrubbing around raised shapes. Cleanroom process gives you the lowest ionic, non-volatile residue and particle contaminants.

Handle Material:polypropylene flexibleHead material:knit or non-woven polyesterSale units:1 bag of 125 swabs / 1 box of 20 bags

IT38040 Micro polyester knitted

Swab length:	2.7"	6.9 cm	
Handle width:	0.09"	2.3 mm	
Head length:	0.44"	11.2 mm	
Head thickness:	0.09"	2.4 mm	
Head width:	0.12"	3.0 mm	

IT38140 Mini polyester knitted

) cm
3 mm
mm
6 mm
) mm

IT38540 Mini polyester non woven

Swab length:	2.7"	6.9 cm
Handle width:	0.09"	2.3 mm
Head length:	0.46"	11.7 mm
Head thickness:	0.04"	1.0 mm
Head width:	0.12"	// 3.0 mm

Wrapped foam swabs

Durable wrapped foam swabs designed for precise applications. Our wrapped foam swabs provide good particle entrapment and work well as solvent applicators. The small tips on many of the styles allow use in very tight tolerance areas. With the most durable head of any foam swabs, wrapped foam delivers superior abrasion resistance for removal of tough contaminants. Wicking action pulls solvent from surfaces. The small tip allows use in very tight tolerance areas, while the pointed end works especially as pick.

nylon
polyurethane foam
1 bag of 125 swabs
1 box of 20 bags

IT21050 Medium pointed

	1 m	13mm
Swab length:	2.8"	7.1 cm
Handle width:	0.10"	2.5 mm
Head length:	1.08"	27.5 mm
Head thickness:	0.14"	3.6 mm
Head width:	0.14"	3.6 mm
	de la compañía de la	

SMD Components Tester

Smart Tweezers™

Smart Tweezers[™] is a handheld LCR meter of a new concept. It provides a perfect solution for testing and identification of Surface Mount Devices as well as troubleshooting of complex electronic systems.

Its unique mechanical and electronic design combines a pair of precise gold-plated tweezers and a digital LCR meter in compact, lightweight,



battery powered instrument. The probe is able to measure resistance, capacitance, inductance and voltage with high accuracy and automatic component recognition.

Testing Surface Mount Device

Surface mount devices are usually tiny and without wire leads, making it more difficult to test and identify SMD than conventional components.

Smart TweezersTM gives users an easy way to sort and evaluate loose components and to perform on-board measurements and debugging.

Precise gold-plated tweezers are able pick and reliably contact even the smallest SMD components and take measurements from already mounted devices. The probe can also be used to test conventional components with wire leads too short to insert into the test terminals.

Fully Automatic Measurements

Smart Tweezers™ automatically determines type of the component (resistance/capacitance/inductance) and selects proper range for high accuracy measurements.

Unit's display clearly indicates the type of the component, measurement result and test conditions.

Lightweight and Ergonomic

The integrated measurement head allow the operator to use one hand and focus attention on the tested component and on the job at hand. Sorting, testing and troubleshooting become more efficient and cost effective.

- Built-in high-precision LCR probe
- Convenient one-hand operation
- Ideal for Surface Mount Devices
- Automatic component recognition
- Automatic test range selection
- Precise tips for small-size devices
- Manual and voltage test modes
- Portable and ergonomic design



Smart Tweezers[™] greatly simplifies testing and troubleshooting process.



Resistance, capacitance and inductance can be measured with automatic selection of the test parameters and range.

()ideal-tek



Smart Tweezers™ has dual mode voltmeter function. In AUTO mode, the DC voltage is measured. In TRACE mode waveform of the AC signal is shown.

Every test function have a manual mode when where is a need to measure a specific circuit parameter-L, C, R or voltage. Navigation and mode selection are performed using a Jog Dial button.

The unit has a continuity detector with the beeper sound for resistance reading below threshold.

		1.7	
Physical Specifications		Operating Temperature:	0 °C to +55 °C
		Battery Type:	3 x 1.5V LR44 Alkaline or Air Zinc
		Battery Life (continuous):	: 80 Hours Alkaline, 240 hours Zinc Air (typical)
		Size:	14.0 x 2.5 x 3.0 cm (3.94 x 0.9 x 1.5 in)
		Weight:	53 grams (0.11lb)
Basic Specifications		Measured Parameters:	C+R (ESR), L+R, R
		Measuring Frequencies:	100Hz, 1 kHz, 10kHz
		Measurement rate:	4, 2, 1, 0.5 times per second (default 1)
		DC Voltage:	0 to 800 mV (up to 8V with manual setting)
		Resistance:	0.1 to 5 MOhm
		Capacitance:	1 pF to 4999 F (1pF - 5pF in manual mode)
		Inductance:	$1\mu H$ to $499mH$ ($1\mu H$ - $4\mu H$ in manual mode)
Accuracy Specifications F	Resistance:	Range:	10 Ohm - 5 MOhm
		Accuracy:	1% + 0.02 in the range 10 Ohm - 5 MOhm
		Test Frequency:	1kHz
C	Capacitance:	Range:	20pF - 4999µF
		Accuracy:	3% + 1.7pF* *Typical offset 1.6pF for 0402 size component
		Resolution:	0.1pF in the range 1pF- 100pF
		st Frequency:	1kHz C >1000pF, 10kHz C <1000pF, 100Hz C >1µF
li li	nductance:	Range:	10μH - 499mH
		Accuracy:	3% + $0.4\mu H^{\star\star}$ $^{\star\star}Typical offset 1.4\mu H for 0402 size component$
		Resolution:	0.1μH in the range 1μH - 100μH
		Test Frequency:	10kHz L <1mH, 1kHz L >1mH, 100Hz L <10mH

A NI-	T		
Art. No.	Туре	AV ASSA	
ST-1	Smart Tweezers Set (with standard tip	s)	
ST-IT-T	Standard replaceable Tips		
ST-IT-THP	High precision replaceable Tips	Let a start the second	
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Directions



Passing close to Lugano

Take the exit towards: Exit 53 Chiasso At Bisio, At the roundabout, take the 1st exit. Continue along: Via San Gottardo. Arrive in Balerna. Continue along: Via San Gottardo.

Destination: Balerna, Via San Gottardo 99a.



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