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## Index

<b>^</b>	Duefile			-
Combany	Profile			
Sempany		 	••••••••••••••••••••••••	

### TWEEZERS

High Precision Tweezers	5
High Precision Mini Tweezers	10
High Precision Reverse Action Tweezers	11
Ergonomic ESD Cushion Grip Tweezers	12
Super Slim Tweezers	13
Flat Tip Tweezers	14
General Purpose Tweezers	15
Boley Tweezers	16
SMD Tweezers	17
Wafer Tweezers	
Component Positioning Tweezers	25
Strong Tweezers	26
Ceramic Replaceable Tip Tweezers	27
Plastic Tip Tweezers	
Plastic Replaceable Tip Tweezers	
Soft Tip Tweezers	31
Plastic Tweezers	
Materials Technical Data	

### MORE TECHNOLOGY AT YOUR FINGERTIPS

Professional Scalpels and Blades	38
Pliers and Cutters	39
Microshears and Micropliers	40
Microspatulas	40
Magic Wand	41
Vacuum Tools	41
Rework and Repair	42-44
Lead-Free Rework and Repair	45
Soldering Irons and Soldering Tools	46-47
Circuit Board Holders	48
Visual Inspection	49
Swabs	50
Solvent Dispenser	51
Keep-Clean -Step	51
SMD Components Tester	52-53

Product Index	5	4-57
How to find US	5	58

## **Company Profile**

IDEAL-TEK, founded in 1965, is a Swiss company manufacturing top quality hand-tools.

Ideal-tek's successful record is due to a number of factors: popular and high quality products, a widespread and highly effective distribution network and a collaborative, synergetic and mutually beneficial relationship with distributors and customers.

High productivity at all levels is achieved by giving human resources the best possible support in terms of technology and manufacturing equipment.

Our investments focus on

research and development of new solutions and applications in order to meet our customer's increasing requirements. Apart from a perfect tip alignment, surface finish is extremely important: the paddles or tips must have smooth edges and be highly polished and totally free of scratches or contaminations, which could damage the components and processes.

Certified ISO 9001:2000 since 1994.

Human approach and longterm personal contact have always been the subject of special attention in the company's relations with customers and suppliers.



## **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 availabe with special coatings (DC, EP, NE, TE). Please refer to technical datasheet on page 33-36 for more information. Chemical data-charts are available on www.ideal-tek.com





2AB.TA

2AB.SA

2AB.S







3mm flat touch, for holding tiny wires





extra fine tips, superior finish



as 5, bent tips for max visibility



5TTH.SA 5TTH.S

5B.SA

5B.S





4 1/2'' 115mm very fine, curved



4 1/2'' 115mm as 7, serrated tips



7.SA

7.S







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



4 1/4'' 110mm fine, serrated tips and grips



4 1/2'' 115mm

as A, extra fine, double bent tips



4 1/2'' 115mm

flat angled, fine



4 1/2'' 115mm as 7, strong



4 1/2'' 115mm as 7, flat edges



length 4 3/4" 120mm, width 0.4" 10mm strong flat for straightening wires



straight, fine tips

### 🚺 ideal-tek





51S.SA

51S.S 51S.TA

775.SA

AC.SA

AC.S

F.SA F.S F.NC



4 3/4'' 120mm very fine tips

ductivity. Please add the indication "ErgoLever" to the product code For ex. 15AGW.C ErgoLever High Precision Tweezers - 9

lever for an enhanced operator comfort and increased pro-



## **High Precision Mini Tweezers**

Fine tips without the excess bulk of long tweezers





# **High Precision Reverse Action Tweezers**

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



## **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 35.



## **Super Slim Tweezers**

Long and slender tweezers for multiple precision applications especially suitable for working near heat sources.



🚺 ideal-tek

## Flat Tip Tweezers

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



## **General Purpose Tweezers**

4 3/4'' 120mm

fine, serrated tips

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



4 3/4" 120mm flat rounded tips teflon coated



fine serrated tips



4 3/4" 120mm strong blunt precision tips serrated tips and grips



strong, fine, bent, alignment pin serrated tips and grips

475.SA

5 1/2'' 140mm

strong blunt precision serrated tips and serrated grips



6'' 150mm

strong, fine, alignment pin serrated tips and grips



5 3/4" 145mm; 0.14" 3.6mm nickel plated tweezers to hold pearls and ball bearings

## **Boley Tweezers**

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



🚺 ideal-tek

D.NP



heavy duty tweezers strong tips, rounded edges



3 3/4" 95mm cutting nickel plated tweezers rounded edges

### **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.



for positioning all flat devices at 60° angle.

for positioning all SOT packages horizontally. With flat base tips (4 mm long)



#### 4 3/4'' 120mm

for positioning and soldering 1mm wide components. tips are grooved inside



#### 4 3/4" 120mm

for positioning monolithic chips capacitors, grooved tips



SM112.SA

#### 4 3/4'' 120mm

for positioning 5 mm monolithic chip capacitors at 60°. Grooved tips



4 3/4" 120mm same as SM113 but with straight tips for vertical holding





4 3/4'' 120mm grooved straight tips. for vertical positioning of cylindrical devices (up to 1 mm diam. or more)



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



same as SM 108 but with 45° tips without anti-crush feature





#### 4 3/4" 120mm

for positioning 5 mm monolithic chip capacitors with flat base grooved tips (2 mm long)



#### 4 3/4'' 120mm

3mm long tips bent at 60° angle one forked blade lead entry





SM115.SA

SM113.SA

SM109.SA



#### 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



### 🚺 ideal-tek

### 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 0.37" 9.5mm - B 0.39" 10.0mm - C 0.10" 2.5mm D 0.15" 4.0mm - E 0.10" 2.5mm



35S.SA

39FG.SA



A 0.47'' 12mm - B 0.51'' 13mm - D 0.10'' 2.5mm



A 0.14" 29.0mm - B 0.20" 5.5mm - D 0.12" 3.0mm

36AP.SA



A 0.24'' 6.0mm - B 0.27'' 7.0mm - E 0.08'' 2.0mm



A 0.30" 7,8mm - B 0.24" 6.0mm - E 0.24" 6.0mm



A 0.37'' 9.5mm - B 0.43'' 11.0mm D 0.15'' 4.0mm - E 0.10'' 2.5mm



A 0.47" 12.0mm - B 0.39" 10.5mm D 0.15" 4.0mm - E 0.10" 2.5mm



A 0.25" 6.5mm - B 0.33" 8.5mm D 0.20" 5.5mm - E 0.09" 2.4mm



A 0.37'' 9.5mm - B 0.23'' 8.5mm D 0.20'' 5.5mm - E 0.09'' 2.4mm



A 1.1" 28.0mm - B 0.47" 12.0mm D 0.20" 5.0mm - E 0.20" 5.0mm



A 0.25'' 6.5mm - B 0.33'' 8.5mm D 0.14'' 3.5mm - E 0.10'' 2.5mm



A 0.25" 6.5mm - B 0.33" 8.5mm D 0.14" 3.5mm - E 0.10" 2.5mm



A 0.25'' 6.5mm - B 0.33'' 8.5mm D 0.14'' 3.5mm - E 0.10'' 2.5mm

42W.SA





A 0.20" 5.0mm - B 0.05" 1.3mm - E 0.05" 1.3mm



## **Components Positioning Tweezers**

Designed specifically to hold delicate components firmly and safely.



## **Strong Tweezers**

Comfortable and precision handling of electronic components for soldering operations. Available in straight or bent (Suffix B) version and various lengths. For very firm hold available in stainless steel (SA) or nickel plated (NP).

7314.SA

7314.NP



6 1/2'' 165mm Desoldering tweezers Strong blunt serrated tips



6 1/2'' 165mm Desoldering tweezers Strong blunt, bent serrated tips





6'' 155mm

reverse action desoldering tweezers bent tips, to remove 14-16 pin DIP/IC



6'' 155mm reverse action desoldering tweezers straight tips, to remove 14-16 pin DIP/IC



7314B.SA 7314B.NP



5 1/2" 140mm Very strong blunt bent tips serrated tips and grips

Part number	Dimensio	ns
7312, 7312B	4 3/4''	120mm
7313, 7313B	5''	130mm
7314, 7314B	5 1/2''	140mm
7316, 7316B	6 1/4''	160mm
7318, 7318B	7 1/4''	180mm
7320, 7320B	7 3/4''	200mm
7325, 7325B	9 3/4''	250mm
7330, 7330B	12''	300mm

## 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. PATENT PENDING NO. 1750/97, Alignable replaceable tips.



## **Plastic Tip Tweezers**

The largest and the most precise plastic tweezers range all over the world. 20 years of experience in high engineering plastic materials. Choose the right tweezers with the right material for your success in your application. Technical data are available on pages 33-36 or on www.ideal-tek.com for more information and chemical data-charts. For A, B, C dimensions refer to scheme on page 29.







A 5" 130mm - B 0.09" 2.2mm - C 0.09" 2.2mm



A 5'' 130mm - B 0.4'' 10mm - C 0.07'' 1.8mm



269CF.SA

269LC.SA

269SV.SA



A 5'' 130mm - B 0.025'' 0.6mm - C 0.04'' 1.0mm



A 5" 130mm - B 0.12" 3.0mm - C 0.07" 1.8mm

## **Plastic Replaceable Tip Tweezers**

The largest and the most precise plastic tweezers range all over the world. 20 years of experience in high engineering plastic materials. Choose the right tweezers with the right material for your success in your application. Technical data are available on pages 33-36 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.





#### Replaceable Tip Sets Part Numbers

	00	2AB	2A	2WF	4WF	5	7	242	242B	246	249	259
CF	A00CF	A2ABCF	A2ACF			A5CF	A7CF	A242CF	A242BCF	A246CF	A249CF	A259CF
СР	A00CP	A2ABCP	A2ACP	A2WFCP	A4WFCP	A5CP	A7CP	A242CP	A242BCP	A246CP	A249CP	A259CP
LC	A00LC	A2ABLC	A2ALC			A5LC	A7LR	A242LC	A242BLC	A246LC	A249LC	A259LC
sv	A00SV	A2ABSV	A2ASV			A5SV	A7SV	A242SV	A242BSV	A246SV	A249SV	A259SV

## Soft Tip Tweezers

Carbofib soft tweezers, scratched proof specifically designed to handle sensitive parts.



() ideal-tek

## **Plastic Tweezers**

High precision plastic tweezers available in four different meterials for various applications.



## **Material Specifications**

### METALS

#### Nonferrous alloy type BR

- Brass (CuZn37)
- ¬ copper-zinc alloy
- non-magnetizable
- ¬ good to excellent corrosion resistance; all copper alloys resist corrosion by fresh water and steam
- 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, AlSI 1060)
- ¬ contains from 0,57 to 0,65 wt% carbon
- magnetizable
- ¬ 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, jewelers applications.

#### Nonferrous alloy type N

- Nickel silver 65-18 (CuNi18Zn20)
- copper-nickel-zinc alloy
- non-magnetizable
- $\neg$  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
- good cold workability (forming)
- typical applications include handling of scratch-sensitive parts in electronic, micro-mechanical and jewellery applications

#### Superalloy NC

- ¬ Ni-Cr-Mo superalloy
- ¬ excellent strength from room temperature to 800°C
- $\neg$  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.

### Nonferrous alloy type PB

- Phosphor bronze (CuSn8P)
- copper-tin alloy
- non-magnetizable
- ¬ good to excellent corrosion resistance; all copper alloys resist corrosion by fresh water and steam
- good cold workability (forming)
- generally it is utilized when, in addition to corrosion resistance, good tensile properties are required
- typical applications include tweezers for handling scratch-sensitive mechanical parts, watch components, magnets

### 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, jewelers 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, jewelers and laboratory and medical applications in moderately aggressive chemical environments

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### Nonferrous alloy type TA

- Titanium Grade 1 (unalloyed titanium)
- engineering materials with extraordinary combination of properties: relatively low density (4.5 g/cm<sup>3</sup>), good mechanical properties and a very high melting point that allows the use at high temperatures (1600°F, 870°C)
- 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 CP

- 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 and aggressive agents, excellent resistance to thermal ageing.
- ¬ ESD safe material, low surface resistivity (10<sup>6</sup> Ohm)
- typical applications include handling of components in cleaning/chemical/assembly processes also at high temperatures (soldering).

### Engineering plastic type DG/DL

- POM/GF30 acetal resin reinforced with 30 wt% glass fibre
- good tensile and flexural strength, fatigue and creep resistance
- 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

### Engineering plastic type LC

- PPS/GF30 polyphenylene sulphide reinforced with 30 wt% glass fibre
- very hard, rigid, high tensile and flexural strength, creep resistance
- high heat capability (230-260°C), good dimension stability, low thermal linear expansion coefficient
- excellent chemical resistance (organic solvent, oils, grease, fuels, acids and alkalis); not resistant only to hydrochloric acid and oxidizing agents, excellent resistance to thermal ageing, very low moisture absorption
- ESD safe material, low surface resistivity (10<sup>4</sup>-10<sup>5</sup> Ohm)
   microwave transparent
- typical applications include handling of components in soldering and cleaning/chemical processes also at high temperature

### Engineering plastic type LR

- **PPS/GF30** polyphenylene sulphide reinforced with 30 wt% glass fibre
- very hard, rigid, high tensile and flexural strength, creep resistance
- high heat capability (230-260°C), good dimension stability, low thermal linear expansion coefficient
- excellent chemical resistance (organic solvent, oils, grease, fuels, acids and alkalis); not resistant only to hydrochloric acid and oxidizing agents, excellent resistance to thermal ageing, very low moisture absorption
   insulating
- microwave transparent
- typical applications include soldering processes, handling of components in cleaning/chemical processes.

#### High performance plastic type SV

- **PVDF** polyvinylidene fluoride carbon fibre reinforced
- 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 acid) 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 material, (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

### COATINGS

#### Engineering coating 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 (10<sup>8</sup>-10<sup>o</sup> Ohm), ESD-safe material!
- typical applications include ESD-safe handles, floor and work surface mats

#### High-performance coating type DC

- DC Diamond-like carbon coating
- High hardness (up to 80 GPa)
- High adhesion to the metallic substrate
  - ¬ Black colour
  - Low thickness (2 microns), high elasticity
  - Extremely high wear and abrasion resistance (protects fine tip tweezers from wearing).
  - No particulate shedding (no contamination of the handled components).
  - Chemically inert up to 350°C.
  - Bio-compatible (maintain cell integrity, no inflammatory response), no contamination of biological tissue with metal particles.
  - Electrically conductive. ESD safe coating (no dust attraction, no fire or explosion risk).

#### Engineering coating type EP

- 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 > 10<sup>12</sup> 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 NE

- 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 10<sup>5</sup>-10<sup>6</sup> 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 TE

- TE is a solvent-based liquid Teflon<sup>®</sup> coating is formulated with special blends of fluoropolymers and other high-performance resins to improve toughness and abrasion resistance.
- ¬ Substances will permanently adhere to a Teflon<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> has high dielectric strength, low dissipation factor, and very high surface resistivity.
- Many Teflon<sup>®</sup> industrial coatings withstand severe temperature extremes without loss of physical properties.
   Teflon<sup>®</sup> industrial coatings may 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.

#### Industrial coating type NP

- This pure nickel coating is generally used to improve the resistance of tools made of carbon steel. The coating is deposited by electroplating technique.
- Mechanical properties
   This coating is hard and elastic and has a very good resistance to mechanical stress.
   Thickness : 20-30 microns
   Hardness: 200-500 Vickers
   Tensile Strength: 70-140 kg/mm2
   Elongation: 25-35%
   Wear and abrasion resistance:

Improved resistance to wear and abrasion.

- Aging
   Superior aging and oxidation resistance.
- Chemical resistance
   Superior corrosion resistance to saltwater, alkalies and organic acids



## **Professional Scalpels and Blades**

The Professional Range of blades and handles are 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.



## **Pliers and Cutters**

Ultra-slender and light weight for easy use in hard-to-reach areas. Precision cutting edges. Anatomically shaped. Non slip PVC handles. Heat treatment with precise hardness tests. Lifetime return spring. Black-burnished for vision comfort.





Flush cutter with extra sharp cutting edges for very delicate work.



Tip flush cutter, cutting angle 60° for use in dense areas.





Flush cutter, reverse cutting edges, cutting angle 48°.



Flush cutter, cutting angle 50°.



Long nose plier, rounded off external edges, smooth jaws.



45° angle, smooth jaws.





Ultra-light plier for use in dense and delicate areas, non-serrated.



C-20

🚺 ideal-tek

C-2048

P-500

P-504

## **Microsheares and Micropliers**

170-II Series shears offer numerous ergonomic enhancements in a "popularly priced" tool. Principal among them is our effort reducing Micro-Shear® cutting action. Their shearing cut requires only about half the effort to cut a wire as that required by a conventional compression type cutter. They feature advanced ergonomic shape grips, a glare eliminating black finish, light weight and our patented, life-time warranted, Light Touch<sup>™</sup> return spring. Manufactured from high carbon steel, their Rockwell hardness is a durable 54-56C. They are optionally available with static control (AS) grips.



Flush-cuts off wire (copper,nickel etc) up to 1 mm diameter. Thin profile for tight and hard-to-reach areas. Hardened carbon steel.



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.



Same as 175, ESD Safe



475CC

Combination cutter/short nose plier. Multi-use combination plier is a hard wire cutter as well as a short nose plier. One single tool for cutting and positioning. Full shear cutter for up to 12 AWG (1.8 mm) copper wire or 20 AWG (0.8mm) music wire. High precision plier can literally hold a human hair.

## **Microspatulas**

This handy tools can be used to apply lubricants to small moving parts. They can be also used as miniature spatulas for the applications of adhesives in the assembly of electronic components.



Microspatulas blue, 0.014" 0.3 mm Microspatulas green, 0.022" 0.5 mm Microspatulas red, 0.033" 0.8 mm Microspatulas black, 0.008" 0.2 mm





From left to right: blue, green, red, black

## Magic Wand

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.TypeMPT1.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

## 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

### Art. No.

P-830 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 always the right tool in hand.

Art. No.	Iype		THE REAL PROPERTY AND ADDRESS OF THE PARTY
UVO000000	Vacuum tweezer set including:1Vampire b 1 45°angled metal needle, 1 conductive rul cup 6mm 1 conductive rubber cup 9 mm	ody, 1 conductive met ober cup 4mm, 1 con 1 lubricant kit	al straight needle, ductive rubber
UVO000100	Spare replacement kit for Vampire Classic, needle, 1 45°angled conductive metal nee	including: 1 straight of dle, 1 conductive rubl	conductive metal per cup 4mm, 1 conductive rubber cup 6mm,1 conductive rubber cup 9mm
UVO000610	Spare ESD 4 mm cups	111/00000000	
UVO000620 UVO000630 UVO000810 UVO000820	Spare ESD 6 mm cups Spare ESD 9 mm cups Straight needle with ESD 4 mm cup Straight needle with ESD 6 mm cup	UVO000930 UVO0001000	45° needle with ESD 9 mm cup Vacuum set including: 1 Vampire body, 1 High Power conductive straight tip 9mm, 1 High Power conductive angled tip 9mm, 1 conductive straight metal needle, 1 conductive rubber cup 4mm, 1 conductive rubber cup 6mm, 1 lubricant kit
UVO000830 UVO000910 UVO000920	Straight needle with ESD 9 mm cup 45° needle with ESD 9 mm cup 45° needle with ESD 9 mm cup	UVO0001100	1 High Power conductive straight tip 9mm, 1 High Power conductive angled tip 9mm, 1 conductive straight metal needle, 1 conductive rubber cup 4mm, 1 conductive rubber cup 6mm





## **Rework and Repair**

### Soder Wick<sup>®</sup> Desoldering Braid

Soder-Wick<sup>®</sup>, 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<sup>®</sup> 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 ups the cleaning process, or eliminates it entirely.

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

Туре	Lenght [m
0,8mm White	1.5m
1,5mm Yellow	1.5m
2,0mm Green	1.5m
2,8mm Blue	1.5m
3,7mm Brown	1.5m
5,3mm Red	1.5m
1,5mm Yellow	30.5m
2,0mm Green	30.5m
2,8mm Blue	30.5m
	Type 0,8mm White 1,5mm Yellow 2,0mm Green 2,8mm Blue 3,7mm Brown 5,3mm Red 1,5mm Yellow 2,0mm Green 2,8mm Blue

### 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	Content		
ES1620E	aerosol	200 ml		

## Freeze-It<sup>®</sup> 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.	Туре	Content
ES835BE	BrushClean <sup>™</sup> System	200 ml
	Labor 1	









### Flux-Off<sup>®</sup> 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

Art. No.

ES6200E

- Leaves no residue
- Removes flux from hard to reach areas

**Type** aerosol Content 400 ml



(ideal-tek

### 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 Flu	x Dispensing Pen	9.0 g



### CircuitWorks® Flux Remover Pen

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.

CW9200

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.	Туре	Content
CW2200STP	Standard Tip	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<sup>®</sup> Gold Gard<sup>™</sup> Pen

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

Content .0 g .0 g

- 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.	Conte	ent
CW7400	8.5 g	





### 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

Art.	No.	
CW	2100	

Туре	150	
Adhesive		
Hardener		



### Chemask<sup>®</sup>

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<sup>®</sup> 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

			2.00.0
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<sup>®</sup> 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<sup>®</sup> 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 also be 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-OffÉ Lead-Free Flux Remover
- RoHS Compliant

Art.

No.	Туре	
		· · · · · · · · · · · · · · · · · · ·

CW8400 Lead-free flux dispensing pen



### Chemask<sup>®</sup> LF Solder Masking Agent

The high temperature peelable temporary mask ideal for lead free applications

Content

9,0 g

- 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	Content
CLF8E	squeeze bottle	240 ml



### CircuitWorks<sup>®</sup> 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.	Туре	Content
CW9400	Lead-free flux removing pen	8,0 g
-	Lister has been by Ca	



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## **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.TypeKit Pro PiezoPro Piezo with Tips PPT-6; PPT-9; PPT-10; PPT-11; PPT12Pro PiezoSingle Iron with Tip PPT-6Pro Piezo TipsPT-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<br/>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



Art. No.	lype
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

### Technic Iron

- Portable butan powered soldering iron
- Adjustable from 10 to 60 watts
- Rapid refill (10 sec)
- Auto switch-off
- Built-in ignitor
- Excellent build quality

Length: 170 mm Weight: 60 g Operating time: 60 min Max. temperature: 450 °C Gas type: Gas lighter fuel



 
 Art. No.
 Type

 MK1-T
 Single Soldering Iron with Tip CT24

 Technic Tips
 CT10: Tip oblique 1.0 mm, CT24: Tip oblique 2.4 mm, CT32: Tip oblique 3.2 mm, CT48: Tip oblique 4.8 mm, CT70: Knife tip

### 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

#### Applications

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



Gas Torch





- Mini Desoldering Pump
- Sturdy all metal high precision Swiss tool.
- Completely corrosion free.
- Heat resistant 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 nec-

essary.

- "Anatomic" design and size for effortless use.

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

#### Art. No. Туре

190	Mini Desoldering Pump with Teflon Tip T2	7
190-T27	Replaceable Teflon Tip	
190-ATA	Replaceable antistatic Tip	



### **Soldering Aid Tools**

Made of special steel to which solder will not adhere. Hexagonal plastic handles.

Length 17.5 cm

Fork: Wire twisting and easy unwinding and removal

Brush: Stainless steel. Cleans connections before soldering Hook and spike: Extraction tools. Spike for cleaning holes or marking PC boards. Knife and scraper: Removes surplus solder. Cutting and reparing

Art. No.	Туре
FB	Fork + Brush
HS	Hook + Spike
KS	Knife + Scraper
FB-HS-KS	3 Pieces Kit

## **PCSS and PCSA Circuit Board Holders**

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.

		C BOBBO CONTRACTOR
Art. No.	Туре	CE MILES . O
PCSS-0	210x220 mm	
PCSS-1	280x290 mm	
PCSS-2	520x280 mm	
PCSS-4	520x410 mm	
PCSA-0	210x220 mm (ESD safe Foam)	Ethannes Channes
PCSA-1	280x290 mm (ESD safe Foam)	
PCSA-2	520x280 mm (ESD safe Foam)	
PCSA-4	520x410 mm (ESD safe Foam)	
PCSS-0.2	Replaceable Foam	
PCSS-1.2	Replaceable Foam	
PCSS-2.2	Replaceable Foam	
PCSS-4.2	Replaceable Foam	
PCSA-0.2	Replaceable Foam (ESD safe)	
PCSA-1.2	Replaceable Foam (ESD safe)	
PCSA-2.2	Replaceable Foam (ESD safe)	
PCSA-4.2	Replaceable Foam (ESD safe)	
BS-PCSS-0	Replaceable Splint	
BS-PCSS-1	Replaceable Splint	
BS-PCSS-2	Replaceable Splint	
BS-PCSS-4	Replaceable Splint	

### Adjustable PCB Bench Support

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 workbench. Dimensions: 300x120x120mm Maximum board length: 250mm

PC Board not included

 Art. No.
 Type

 PC-40
 PCB Bench Support 300x120x120mm

## **Visual Inspection**



802.01

Plastic case. Lens Ø 24mm Highest quality 10x Magnifier with mm scale



#### 812.01

8008

Plastic case. Lens Ø 24mm Highest quality 8x Magnifier



Plastic case Lens Ø 24mm Highest quality 8x Magnifier with mm scale

M1210

ALCRON

818.01



8005-26D 7.7x 8005-20D 6x 8005-16D 5x 8005-13D 4.4x 8005-11D 3.8x 8005-10D 3.5x 8005-8D 3x Watchmaker's loupe, 23.5mm

single lens



M1207

Control Watchmaker's loupe, double lense 16mm and 23.5mm lenses. 12x, 5x Magnifier



Vinile Case Lenght Ø 25mm 4 lenses fully coated Highest quality 7x Magnifier with mm and iches scale



Small mirrors designed for optical inspection of the hidden corners or of the bottom side of components on boards. Typical application is the verification of solder joints and contacts. Designed for usage in connection with illuminated lenses and magnifiers.

Art. No.	Туре	- El	5
EMR	Kit with handle and 1 Square mirror	-probe (9.5 m	nm) straight
	needle, Side Small rectangular mirror-p	orobe (9.5 x 3	mm) 45°
	angled needle, T-Large rectangular mir	ror-probe	
	(19 x 5 mm) 45° angled needle		
EMR1001001	Kit with handle and 1 Square mirror-prob	e (9.5 mm) stra	aight needle
EMR1001002	Kit with handle and Side Small recta	angular mirror	-probe
	(9.5 x 3 mm) 45° angled needle		
EMR1001013	Kit with handle and T-Large rectang	gular mirror-pr	obe
	(19 x 5 mm) 45° angled needle		
EMR HT	Same as EMR but engineered for high te	emperature resi	istance (NEW)
EMR2001001	Kit with handle and 1 Square mirror-prob	e (9.5 mm) stra	aight needle
EMR2001002	Kit with handle and Side Small recta	angular mirroi	-probe
	(9.5 x 3.0 mm) 45° angled needle		
EMR2001013	Kit with handle and T-Large rectang	gular mirror-p	robe
	(19.0 x 5.0 mm) 45° angled needle		



Vinile Case Lenght Ø 19mm 3 lenses fully coated Highest quality 10x Magnifier with mm and iches scale



- Gives unparalleled sharp and brilliant vision with wide field of view with 30 x magnification.

- Unique built-in light and easy focussing system. Uses two standard 1.5 V batteries.

- A must for inspection of PC boards and miniature parts.

#### Art. No.

Alcron	Microscope 30X
Alcron Scale	Front case with mm sca

Туре

Ideal-Tek, Electronic Catalogue - 49

## 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 of any style of swab. These swabs are free of adhesives or binders that could contaminate your process. Fiberless construction does not generate particles.

andle Material:	polypropylene
ead material:	polyurethane for
ale units:	1 bag of 125 s
	1 box of 20 ba

am wabs

#### 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 c
Handle width:	0.10″	2.4 m
Head length:	0.39″	9.9 m
Head thickness:	0.11″	2.7 m
Head width:	0.13″	3.3 n

#### IT48040 Micro flexible

		Contraction of the local data
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

### 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 flexible
Head material:	knit or non-woven polyester
Sale 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

	The state of the second se
2.7"	6.9 cm
0.09″	2.3 mm
0.48″	12.1 mm
0.06″	1.6 mm
0.12″	3.0 mm
	2.7" 0.09" 0.48" 0.06" 0.12"

#### 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.

Handle Material:	nylon	
Head material:	polyurethane foam	
Sale units:	1 bag of 125 swabs	

1 box of 20 bags

#### IT21050 Medium pointed

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

## Solvent Dispenser

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 10E<sup>7</sup> to 10E<sup>9</sup>.





Туре
ESD Fluid Dispenser 120ml
ESD Anti-Splash Fluid Dispenser 120ml
ESD Fluid Dispenser 180ml
ESD Anti-Splash Fluid Dispenser 180ml
ESD Fluid Dispenser 240ml
ESD Anti-Splash Fluid Dispenser 240ml

## Keep-Clean-Step

#### Save Time, Money and Your Floor

At least 80% of all dirt entering a building is brought in by foot or wheeled traffic. Good Manufacturing Practice (GMP) and quality assurance require floor contamination control.

- Contamination in the workplace affects product yield, productivity, product quality and cost

- Traffic borne contaminants can quickly degrade performance and finish of ESD floors

Preventing the contamination from entering the workplace is the most effective and least expensive method of contamination control. The specifically formulated adhesive applied to each disposable sheet of the KSC Mat aggressively removes and traps 95% of dirt particles from shoes and wheels, preventing the spread of particles throughout manufacturing facilities. The monthly floor maintenance costs easily drop by more than 50%.

Traditionally, adhesive contamination control mats have been anchored to the floor by adhesive. While this works well on concrete and similar surfaces, it has been a limiting factor as to where adhesive mats could be used. The KSC Mat can be used on any surface with no concern of adhesive transfer to carpeted or finished floor surfaces. Our patent-

pending frame system is the perfect solution for using adhesive mats on carpets, hardwoods, tiles or any other finished floor surface.

- Silicon-free adhesive
- Non-skid bottom surface anchors frame securely to any floor surface
- Soft rubber finish will not scratch or damage floor finish
- Top surface allows for ease of replacing mat refills
- Numbered adhesive sheets are removed at regular intervals to insure constant level of contamination control
- Portability of frame allows easy placement and removal around construction sites
- 65 x 40 cm (25" x 16") size frame, 60 x 36 cm (24" x 14") size mat
- Lightweight frame is easily picked up and replaced during routine mopping

#### Applications for the Sticky Adhesive Mat

Manufacturing Plants	Medical Offices	Warehouses
Office Buildings	Dental Offices	Laboratories
Hospitals	Print Shops	Schools
Construction Trailers	Computer Rooms	Food Packaging Plant
Health/Fitness Clubs	Machine Shops	Automobile Dealership

Sale units: KCS1: Keep Clean Step (1 frame + 30 adhesive layers) KCS1R: 1 refill kit (4 mats of 30 layers)







## **SMD Components Tester**

### Smart Tweezers<sup>™</sup>

Smart Tweezers<sup>™</sup> 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 Devices

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<sup>™</sup> 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<sup>™</sup> greatly simplifies testing and troubleshooting process.



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



#### Wide Spectrum of Functior

Smart Tweezers<sup>™</sup> 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.

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 $499m$ H ( $1\mu$ H $-4\mu$ H in manual mode)
Accuracy Specifications	Resistance:	Range:	10 Ohm - 5 MOhm
		Accuracy:	1% + 0.02 in the range 10 Ohm - 5 MOhm
		Test Frequency:	1kHz
	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
	Inductance:	Range:	10μH - 499mH
		Accuracy:	$3\% + 0.4\mu H^{**}$ **Typical offset 1.4µH for 0402 size component
		Resolution:	0.1µH in the range 1µH - 100µH
		Test Frequency:	10kHz   <1mH 1kHz   >1mH 100Hz   <10mH

Art. No.	Туре
ST-1	Smart Tweezers Set (whit standard tips)
ST-AD-T	Standard replaceable Tips
ST-AD-THP	High precision replaceable Tips
Calibration service ava	ilable

# Product Index

#### WEEZERS

0.S5	
0.SA5	
0.TA5	
00.S5	
00.SA5	
00.SA.DR12	
00.TA5	
000.S5	
000.SA5	
00B.SA5	
00CF.SA28	
00CFR.SA29	
00CPR.SA29	
00D.S5	
00D.SA5	
00D.TA5	
00LC.SA	
00LCR SA 29	
005V/SA 28	
005V.B/X20	
003VN.3A27	
0011 C 5	
001154 5	
0C11.SA	
009.5	
0C9.SA5	
0C9.1A5	
1.NC5	
1.S5	
1.SA5	
1.TA5	
10G.SA7	
11.N7	
11.SA7	
119.SA15	
119A.SA15	
12.N8	
12.SA8	
120A.SA15	
121.SA15	
121M.SA15	
122.SA15	
123.SA15	
124.SA15	
125.SA14	
125A SA 14	
126 SA 14	
127.SA 14	
128 SA14	
120.3A14	
14ACWC 0	
14AGW.C8	
1525	
152.58	
15A.C	

15AFW.C8
15AGW.C8
15AGWHM.SA8
15AGW.DR12
15ANW.C8
15AP.C8
15ASW.C8
2.BR5
2.NC5
2.S5
2.SA5
2.TA5
231.SA15
242CFR.SA30
242CPR.SA30
242LCR.SA30
242SVR.SA 30
242BCFR SA 30
242BCPR SA 30
242BLCR SA 30
242BSVR SA 30
242D3VR.3A30
246CPR_SA20
$240 \text{ CPR.3A} \dots 30$
$240 LCK.SA \dots 30$
2403VR.SA
240CF.SA28
249CF.SA29
249CFR.SA
249CPR.SA
249LC.SA
249LCR.SA
2495V.SA
2495VR.SA
250CF.SA29
251.SA
252.SA
203.SA31
254.SA
255.SA
256.SA
257.SA
258.SA
259CF.SA
259CFR.SA
259CPR.SA
259LC.SA
259LCR.SA30
259SV.SA29
259SVR.SA30
269CF.SA29
269LC.SA29
269SV.SA29
27.S9
07 SA 9

_ /.0/(2)	υ
29D.SA20	6
2A.NC	6
2A.S	6
2A.SA	6
2A.SA.DR12	2
2A.TA	6
2ABLC.SA2	8
2ABSV.SA2	8
2AB.S	6
2AB.SA	6
2AB.TA	6
2ABCF.SA2	8
ABCFR.SA	9
PARCPR SA 2	9
	ģ
2ABECR.SA2	ģ
2ADSVIN.SA2	2 0
	0
	70
2ALC.SA	ð
2ALUR.SA	7
	/
2ASV.SA28	8
2ASVR.SA2	9
2AX.SAT	1
2AXCFR.SA30	ບ -
2AXCPR.SA	ບ -
2AXLCR.SA30	0
2AXSVR.SA30	0
2AZ.SA	6
2CF.SA2	8
2LC.SA2	8
2SV.SA2	8
2W.SA19	9
2WF.SA19	9
	9
2WFG.SA1	9
2WFG.SA1 2WFG.SA1 2WL.SA1	9 9 9
2WFG.SA1' 2WLSA1' 3.NC	9 9 9 6
2WFG.SA1 2WL.SA1 3.NC 3.S	9 9 6 6
2WFG.SA1 2WL.SA1 3.NC 3.S	9 9 6 6
2WFG.SA1 2WL.SA	9 9 9 6 6 2
2WFG.SA	9966626
2WFG.SA1 2WFG.SA1 2WL.SA1 3.NC	999666266
2WFG.SA	9 9 6 6 6 6 6 6 6
2WFG.SA	9 9 6 6 6 6 6 5 5
2WFG.SA	9 9 6 6 6 6 6 6 5 4
2WFG.SA	9 9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
2WFG.SA       1'         2WL.SA       1'         3.NC       1'         3.SA       1'         3.SA.DR       1'         30.SA       2'         30.SA       2'         30.SA       1'         30.SA       2'         30.SA       2'         30.SA       2'         30D.SA       2'         3321.SA       1'         33A.SA       1'         34A.SA       1'         35A.SA       1'	9 9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
2WFG.SA       11         2WFG.SA       12         2WL.SA       12         3.NC       12         3.SA       12         3.SA.DR       12         3.TA       12         30.SA       20         30.SA       21         33A.SA       14         34A.SA       14         35A.SA       14	9 9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
2WFG.SA       11         2WFG.SA       11         2WL.SA       12         3.NC       13         3.S.       14         3.SA.DR       12         3.SA.DR       12         3.SA.DR       12         30.SA       12         30.SA       14         30.SA       14         34A.SA       14         35AP.SA       14         35AP.SA       14	99666266544001
2WFG.SA       11         2WFG.SA       11         2WL.SA       11         3.NC       13         3.SA.DR       12         3.SA.DR       12         3.SA.DR       12         3.SA.DR       12         30.SA       12         30.SA       14         30.SA       14         30.SA       14         33A.SA       14         35A.SA       14         35A.SA <td>99966626665444011</td>	99966626665444011
2WFG.SA       11         2WFG.SA       11         2WL.SA       11         3.NC       13         3.SA       14         3.SA.DR       12         30.SA       20         30.SA       21         30D.SA       21         33A.SA       14         35A.SA       14         35A.SA       14         35A.SA       14         35A.SA       14         35A.SA       14         35A.SA       20         35A.SA       21         36A.SA       21         36A.SA       21         37.S.SA       22         36A.SA       23         37.S.SA       24	9966626665440111
2WFG.SA       11         2WFG.SA       11         2WL.SA       11         3.NC       13         3.SA       13         3.SA.DR       12         3.SA.DR       12         3.SA.DR       12         3.SA.SA       14         30.SA       20         321.SA       14         33A.SA       14         35A.SA       14         35A.SA       14         35A.SA       14         35A.SA       20         35A.SA       14         35A.SA       14         35A.SA       14         35A.SA       20         35A.SA       21         36A.P.SA       22         375.SA       23         386.G.SA       24	996662666544401111

391.SA23
39FG.SA21
39S2.SA21
39S3.SA21
3C.NC
3C.S
3C.SA6
3C.SA.DR12
3C.TA
3CB.S
3CB.SA
3CCF.SA28
3CF.SA28
3CI.SA6
3CI.TA6
3CLC.SA
3CSV.SA
3F.S
3F.SA
3I C. SA 28
3SV SA 28
3W/SA 10
3WFSA 10
3WFG SA 10
3WI SA 10
3V CA 11
4 NC
4.NC
4.5
4.5A
4.1Α <i>1</i> 1\ <i>N</i> /SΔ 21
41W.SA21 Λ2\M SΔ 21
42W.SA21
42VVI.SA21
42WI G.SA2
43VV.SA22
43WF.SA22
43WFG.SA22
444VV.SA23
44VV.SA22
44WF.SA
44WFG.SA22
456.SA
45W.SA22
45WF.SA22
46W.SA22
46WF.SA22
46WFG.SA22
4/5.SA16
4/5Y32.SA9
18\N/ESA 21
40WI.SA22
4A.S
4A.SA
4A.S

4WFCPR.SA20	5WF.SA
4WFG.SA20	5WL.SA
4WL.SA20	5X.SA
4X.SA11	5XCF.SA
5.NC6	5XCFR.SA
5.S6	5XCPR.SA
5.SA6	5XLC.SA
5.SA.DR12	5XLCR.SA
5.TA6	5XSV.SA
51S.S9	5XSVR.SA
51S.SA8	6.NC
51S.TA8	6.S
52A.S9	6.SA
52A.TA9	6.TA
52A.SA9	60.SA
55A.SA25	600M.SA
55AX.SA25	61A.SA
55WFL.SA23	637L.SA
56A.SA25	637S.SA
56AX.SA25	637SB.SA
56WFL.SA23	640B.SA
571.SA25	647.S
572.SA25	647.SA
573.SA25	648.S
577.SA25	648.SA
578.SA25	649.S
579.SA25	649.SA
581.SA25	64A.SA
582.SA25	65A.NC
583.SA25	65A.S
58A.SA25	65A.SA
58WFL.SA23	65A.TA
59A.SA25	666A.SA
5A.NC6	667.SA
5A.S6	6WF.SA
5A.SA6	6WL.SA
5A.TA6	7.NC
5AX.SA11	7.S
5B.S7	7.SA
5B.SA7	7.SA.DR
5C.NC7	7.TA
5C.S7	702A.CF
5C.SA7	702A.DG
5C.TA7	702A.LR
5CF.SA28	702A.SV
5CFR.SA	705.CF
5CPR.SA30	705.DG
5LC.SA28	705.LR
5LCR.SA	705.SV
5SV.SA28	707.CF
5SVR.SA	707.DG
5TTH.S7	707.LR
5TTH.SA7	707.SV
5TTHX.SA11	707A.CF

20	707A.DG32
20	707A.LR32
11	707A.SV32
28	708.CF32
30	708.DG32
30	708.LR32
28	708.SV32
30	709.CF32
28	709.DG32
30	709.LR32
7	709.SV32
7	710.CF32
/	/10.DG32
/	/10.LR32
13	/10.SV32
23	/1MZ.SA2/
25	72MZ.SA27
23	7312.SA26
23	7312B.SA26
23	7313.SA26
24	7313B.SA26
16	7314.NP26
16	7314.SA26
16	7314B.NP26
16	7314B.SA26
10 14	7310.SA20
IO 10	7310B.SA20
13 12	7318.SA20
13	7310D.3A20
13	7320.3A20
13	7320D.SA20
	7325B SA 26
24 24	7320 SA20
20	7330R SA 26
20	73M7 SA 27
7	74M7 SA 27
7	775 SA 9
7	7A N 7
12	7A.S7
7	7A.SA7
32	7B.S7
32	7B.SA7
32	7B.TA7
32	7CF.SA28
32	7CFR.SA30
32	7CPR.SA30
32	7E.S7
32	7E.SA7
32	7LC.SA28
32	7LCR.SA30
32	7MZ.SA27
32	7SV.SA28
32	7SVR.SA

7X.SA11
8.S7
8.SA7
8.TA7
85B.SA23
85C.SA23
8WF.SA20
8WNY.SA20
8WT.SA20
96.SA23
A.S9
A.SA9
A00CF31
A00CP31
A00LC
A00SV
A242CF31
A242CP31
A242LC
A242SV
A242BCF
A242BCP
A242BLC
A242BSV
A246CF
A246CP
A240LC31
A2403V31
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Δ249CP31 Δ249CP31
Δ2496031
A259CF31
A259CP31
A259I C31
A259SV31
A2ABCE 31
A2ABCP 31
A2ABLC 31
A2ABSV 31
A2ACF 31
A2ACP
A2ALC
A2ASV
A2WFCP
A4WFCP
A5CF31
A5CP31
A5LC
A5SV
A7CF31
A7CP31
A7LC31
Δ7SV 31

AA.NP16
AA.S16
AA.SA16
AA.SA.DR12
AA.TA16
AC.S9
AC.SA9
AM.BR9
D.NP17
F.NC9
F.S9
F.SA
GG.NP16
GG SA 16
ЦS 10
н sa 10
KOHP.S
K5HP.NC7
K5HP.IA/
K5SMD.SA18
K6CF32
K6SV32
KCFR30
KCPR30
KSVR30
M-00D.S10
M-00D.SA10
M-2.SA10
M-2.S10
M-2A.S10
M-2A.SA10
M-3.S10
M-3.SA10
M-4 S 10
M-4 SA 10
M-5 S 10
M-5 SA 10
MACS 10
MACSA 10
MUDS 10
M-HD.S10
M-HD.SA10
MM.NP16
MM.SA16
NN.NP16
NN.SA16
PB.NP16
RR.NP17
RR.SA17
S.S9
S.SA9
SM100.SA17
SM101.SA17
SM102 SA 17

SIVI 1035A17
SM104.SA17
SM105.SA17
SM106.SA17
SM107.SA17
SM108.SA18
SM109.SA18
SM110.SA18
SM111.SA18
SM112.SA18
SM113. SA18
SM114. SA18
SM115. SA18
SM116. SA18
SM117. SA18
SP4T.SA24
SP5T.SA24
SP6T.SA24
SS.NC13
SS.S13
SS.SA13
SS.TA13
SS6.SA13
SS6.TA13
SSF.NC13
SSF.SA13
SCI SA 12

#### PROFESSIONAL SCALPELS AND

#### BLADES

2338
310
310A38
311
31238
31338
314
31538
418
419
420
421
422
423
424
436
ACM10SM38
ACM11SM38
ACM16SM38
ACM17SM38
ACM18SM38
ACM22SM

ACIVIZ4SIVI
ACM28SM38
ACM2SM
ACM7SM38
ACMH138
ACMH538
HANDLE 338
HANDLE 438

#### PLIERS

### 

C-20	39
C-2030	39
C-2048	39
C-2050	39
P-500	39
P-502	39
P-504	39

#### MICROSHEARES

#### MICROSPATULAS

BNRV	.40
BLACK	.40
RED	.40
GREEN	.40
BLUE	.40

#### MAGIC WAND

MPT1.CP4	1
MPT2.CP4	1
MPT3.CP4	1
MPT1.SV4	1
MPT2.SV4	1
MPT3.SV4	1
MPT123.CP4	1
MPT123.SV4	1

#### VACUUM TOOLS

P-830	41
UVO000000	41
UVO000100	41
UVO000610	41

 UVO000620
 .....41

 UVO000630
 .....41

 UVO000810
 .....41

 UVO000820
 .....41

 UVO000830
 .....41

 UVO000910
 .....41

 UVO000920
 .....41

 UVO000920
 .....41

 UVO000920
 .....41

 UVO000920
 .....41

 UVO000920
 .....41

 UVO0009100
 .....41

 UVO000100
 .....41

#### REWORK

#### AND REPAIR

80-1-542
80-2-542
80-3-542
80-4-542
80-5-542
80-6-542
50-2-10042
50-3-10042
50-4-10042
ES1620E42
ES1551E42
ES835BE42
ES6200E43
CW820043
CW920043
CW2200STP43
CW3300G44
CW740044
CW240044
CM8E44

### LEAD-FREE REWOR

40-1-5	45
40-2-5	45
40-3-5	45
40-4-5	45
ES897BE	45
CW8400	45
CW9400	45
CLF8E	45

#### SOLDERING IRONS AND SOLDERING TOOLS

Kit Pro Piezo4	6
Pro Piezo4	6
Pro Piezo Tips4	6
PPT-14	6

PPT-246
PPT-346
PPT-446
PPT-546
PPT-646
PPT-746
PPT-846
PPT-946
PPT-1046
PPT-1146
PPT-1246
MK2S46
MK2K-B46
MK2K-C46
CX1046
CX2446
CX3246
CX4846
CX7046
CX8146
СХ9046
MK1T46
CT1046
CT2446
CT3246
CT4846
CT7046
GT22047
19047
190-T2747
190-ATA47
FB47
HS47
KS47
FB-HS-KS47

PCSS A	ND PCSA
CIRCUIT	BOARD

..48

D	2	Ċ	C	$\cap$	

PCSS-1		48
PCSS-2		48
PCSS-4		48
PCSA-0		48
PCSA-1		48
PCSA-2		48
PCSA-4		48
PCSS-0	.2	48
PCSS-1	.2	48
PCSS-2	.2	48
PCSS-4	.2	48
PCSA-0	.2	48
PCSA-1	.2	48

PCSA-2.2	.48
PCSA-4.2	.48
BS-PCSS-0	.48
BS-PCSS-1	.48
BS-PCSS-2	.48
BS-PCSS-4	.48
DC 10	10

#### VISUAL INSPECTION

802.0149
812.0149
818.0149
8005-26D49
8005-20D49
8005-16D49
8005-13D49
8005-11D49
8005-10D49
8005-8D49
800849
M120749
M121049
EMR49
EMR100100149
EMR100100249
EMR100101349
EMR HT49
EMR200100149
EMR200100249
EMR200101349
ALCRON49
ALCRON SCALE49

#### SWABS

IT4105050
IT4407050
IT4804050
IT3804050
IT3814050
IT3854050
IT2105050

#### SOLVENT DISPENSER

TDS12	.51
TDS12AS	.51
TDS18	.51
TDS18AS	.51
TDS24	.51
TDS24AS	.51

#### KEEP-CLEAN-STEP

KCS1.....51 KCS1R......51

### SMD COMPONENTS TESTER ST-1 ......52-53

ST-1 ......52-53 ST-AD-T ......52-53 ST-AD-THP ....52-53 Calibration Service .......52-53

## How to find us



Passing close to Altdorf Passing close to Amsteg Passing close to Bellinzona 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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