

Precision Tools
FOR ELECTRONIC DEVICES

Weller
Erem



Precision Tools for Electronic Device Manufacturing



**Swiss
Made**

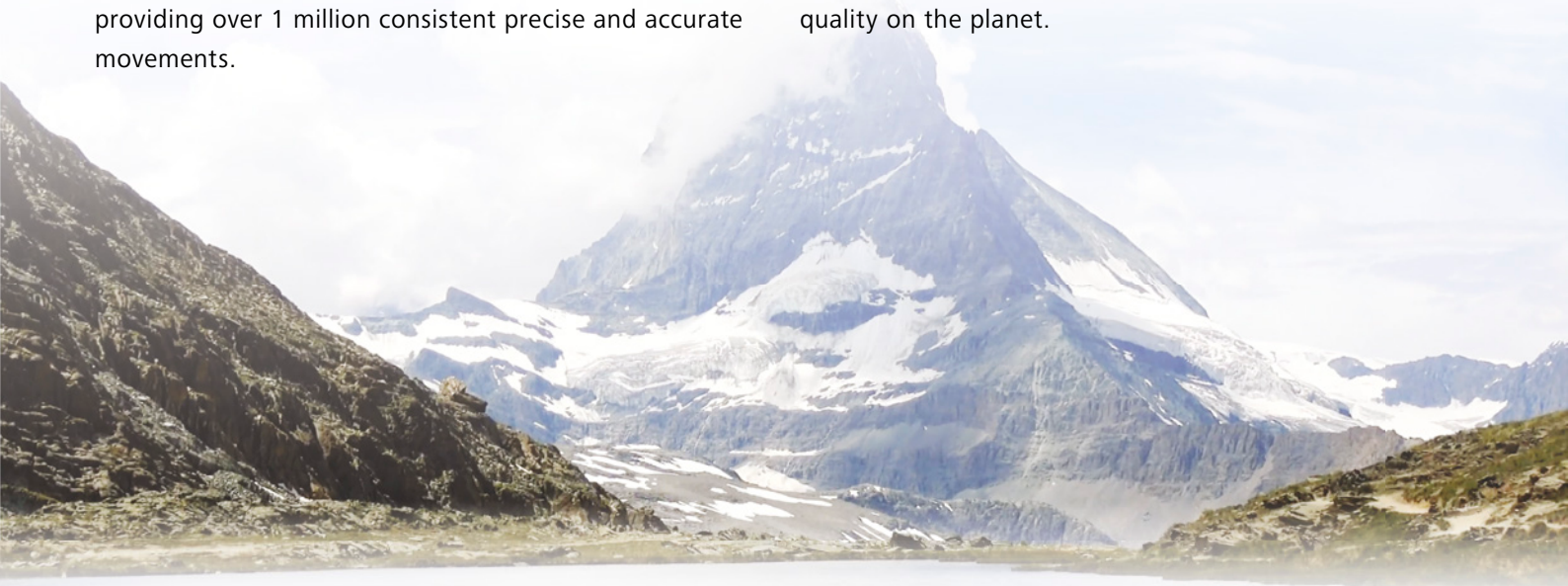
weller-tools.com

FEEL THE DIFFERENCE

THE PROVEN CHOICE. EVERY TIME.

Manufactured with uncompromising Swiss quality, and created especially for electronics applications, Weller Erem® tools are built to last. The signature high-performance cutters set the industry standard by providing over 1 million consistent precise and accurate movements.

With state-of-the-art advanced features like Magic Spring™, High-Precision Screw Joint, and Maximum Opening Stop Technology, Weller Erem Precision Tools provide the longest durability, highest precision and best quality on the planet.



Swiss
Made

Weller Erem products are made and manufactured with uncompromising Swiss quality, created to be strong, durable, sharp and precise



Just like a Swiss watch

**Highest-quality tools
and craftsmanship**

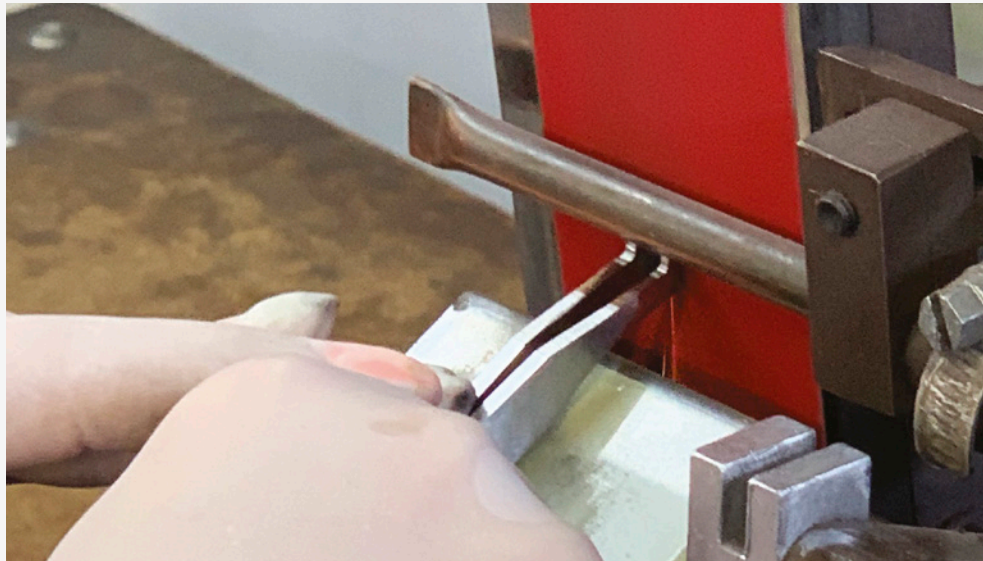


Weller Erem is a leader in the development and production of high-precision, top-quality precision tools (side and tip cutters, pliers and tweezers). Founded in Geneva, Switzerland in 1963, Weller Erem precision tools are the result of ongoing product development and innovation to meet customer demands and the requirements of modern manufacturing techniques.

Custom-made

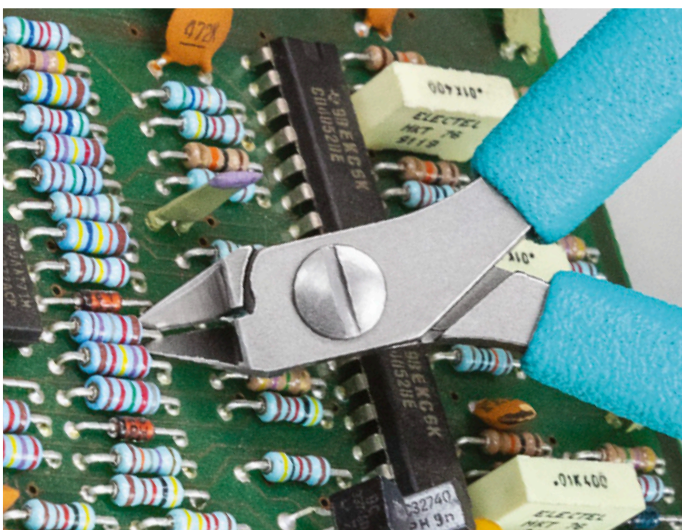
**Have a problem? We have
the solution with our ability
to quickly manufacture the
custom tool you need.**

With an estimated 2-week turnaround time, Weller Erem will customize any of our precision tools to meet your applications needs.



Cutters for electronics applications

A simple method to remove SMD ICs is to cut each of the individual leads to remove the device and then reflow the joint with a soldering iron and remove the component lead from the board. The solder left on the board can then be removed with a desoldering tool or desolder braid and a new component fitted. The 670EP and 670EPF have fine pointed tapered and relieved heads that are able to fit between individual leads and cut them without causing damage to the printed circuit.



Weller
Erem

THE PERFECT CUT

Strong, sharp and precise - every time

Cutter Electronics Applications: Remove Fine Pitch SMD ICs | Light engineering and Dental Applications

+ Precision

Experience precise cuts from the high-precision screw joint that enables a smooth action with no jaw overlap

+ Hardening Grade

Cutting blades are hardened to Rockwell 63-65 HRC by an induction heating process for exceptionally long service life

+ 1 Million Movements

Magic Spring™ design enables maximum durability with constant spring force movements

+ Comfort, Security and Grip

Ergonomically-shaped handles provide superior comfort and fatigue-free handling with our Maximum Opening Stop Technology



ESD Safe

Made from ESD-safe material to prevent damage to sensitive components



Swiss
Made

Cut shape

Three blade options, including Weller Erem's exclusive Super Full Flush cut.



Semi-flush

- Leaves a pyramidal tip at the end of the wire
- For standard jobs where the final shape does not play a significant role
- For both soft copper wires and very hard wires, such as stainless steel



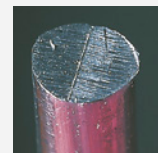
Flush

- Leaves a much smaller tip at the end of the wire when compared to a Semi-Flush cut – without reducing the cutting ability
- The cutting edges are finer than on semi-flush cutters
- Effort exerted when cutting is less and the load on the component is reduced
- Flush wire ends reduce the effort needed to fit components on printed-circuit boards



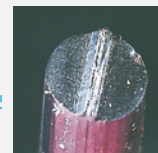
Super Full Flush

- Provides absolutely flush wire ends, only offered from Weller Erem
- No rework is needed
- Cuts are absolutely precision-ground and sharpened
- Effort exerted when cutting is minimal, as is the load on the component caused by the cut
- Soldering tags in soldering-bath procedures are prevented



Weller Erem

VS



Competitor



THE PERFECT COMBINATION

Precision, design, symmetry and balance

Tweezer Electronics Applications: Microelectronics, Jewellerymaking and Watchmaking Applications

+ Comfort

Ergonomically-shaped handles provide superior comfort and fatigue-free handling

+ Wide Range

Weller has a wide range of tweezers made from various material and tips, for the right application

+ Precision

Superior symmetrically pointed tips



ESD Safe

Made from ESD-safe material to prevent damage to sensitive components

BUILT TO LAST

Longest lasting durability on the planet

Pliers Electronics Applications: For Miniature and standard electronics | Forming, Bending, Laying and Feeding in Wires

+ 1 Million Movements

Magic Spring™ design enables maximum durability with constant spring force movements

+ Comfort, Security and Grip

Ergonomically-shaped handles provide superior comfort and fatigue-free handling with our Maximum Opening Stop Technology

+ Precision

Experience precise cuts from the high-precision screw joint that enables a smooth action with no jaw overlap



ESD Safe

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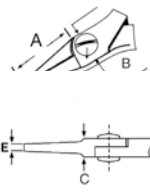
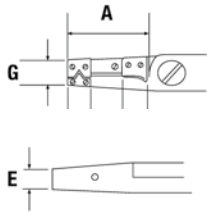
CUTTERS

Model	Cut	Description	Key Applications	Dimensions				Micro-Electronics	SMD	Carbide	Microscope	Head Size
				A (in / mm)	B (in / mm)	C (in / mm)	D (in / mm)					
TOP SELLER 776E 	 Full Flush	• Tip cutter – pointed relieved head • This is the narrowest head shape • The underside is relieved and facilitates optimum access even to extremely hard-to-reach areas.	General - for all cutting applications with easy access	0.354	0.354	0.236	0.630	✓	✓		✓	SMALL
				9	9	6	16					
886E 	 Full Flush	• Side cutter - tapered head • Jaws have straight edges and taper to a point. Head shape allows access to difficult-to-reach areas in comparison to the same size oval head cutter	Hard and tough components	0.590	0.531	0.284	0.827	✓	✓			MAXI
				15.00	13.5	7.2	21					
2622NB 	 Full Flush	• Side cutter – pointed relieved head • This is the narrowest head shape • The underside is relieved and facilitates optimum access even to extremely hard-to-reach areas	Micro & Standard electronics	0.236	0.354	0.236	0.630	✓	✓			SMALL
				6	9	6	16					
539EREC 	 Full Flush	• Distance cutter with patented receptacle • Prevents residual wire contamination	Micro & Standard electronics, PCB	0.472	0.433	0.236	0.728	✓	✓			MEDIUM
				12	11	6	18.5					
580E15A 	 Full Flush	• Distance cutter, variable cutting length from 1.2 mm to 6 mm/ 0.47 to .236 inch • Special tool steel, ESD-safe, Variable cutting length (= V) • Protective stop screw	Micro electronics, PCB, SMD, for cutting wires to the right length and for fixing components	4.921	0.433	0.236	1.142	✓	✓		✓	MED
				125	11	6	29					
TOP SELLER 522N 	 Full Flush	• Side cutter - oval head • This is the most widely used head shape • Fits for all cutting applications where easy access is given • It is robust and offers the highest cutting capacity	General - for all cutting applications with easy access	0.472	0.433	0.236	0.748	✓	✓		✓	MEDIUM
				12	11	6	19					
612N 	 Semi-Flush	• Side cutter – oval head • This is the most widely used head shape • Fits for all cutting applications where easy access is given	General - for all cutting applications with easy access	0.394	0.354	0.236	0.669	✓	✓		✓	SMALL
				10	9	6	17					
512N 	 Semi-Flush	• Side cutter - oval head • This is the most widely used head shape • Fits for all cutting applications where easy access is given • It is robust and offers the highest cutting capacity	General - for all cutting applications with easy access	0.472	0.433	0.236	0.748	✓	✓		✓	MED
				12	11	6	19					
2412E 	 Semi-Flush	• Side cutter – oval head • This is the most widely used head shape • Fits for all cutting applications where easy access is given • It is robust and offers the highest cutting capacity • The ergonomic handles and the special materials ensure a soft feel, operating comfort and safety	General - for all cutting applications with easy access	0.472	0.433	0.236	0.748	✓	✓		✓	MED
				12	11	6	19					
T622N 	 Full Flush	• Side cutter – oval head • Most widely used head shape • Fits for all cutting applications where easy access is given • It is robust and size for size offers the highest cutting capacity	Micro & Fine electronic	0.394	0.354	0.236	0.669	✓	✓		✓	MICRO
				10	9	6	17					

CUTTERS			Key Applications	Dimensions				Micro-Electronics	SMD	Carbide	Microscope	Head Size
Model	Cut	Description		A (in / mm)	B (in / mm)	C (in / mm)	D (in / mm)					
2422E	 Full Flush	- Side cutter - oval head - Offers the highest cutting capacity - Most widely used head shape - Fits all cutting applications where easy access is given - The ergonomic handles and the special materials ensure a soft feel, operating comfort and safety	Micro electronics	0.748	0.433	0.236	0.748	✓		✓		MED
				12	11	6	19					
599FO	 Semi-Flush	- Fibre optic tools - High precision for optical fibres - special tool steel - Side cutter, suitable for cutting Kevlar® silks - Avoid any other application than cutting Kevlar silks to avoid damaging the tool	Stainless Steel Coil Wires, Kevlar®, Vectran™ Braided Wires, Fiber Optics	0.472	0.433	0.24	0.748	✓			✓	MED
				12	11	6	19					
2482E	 Flush	- Side Cutters and Tip Cutters - Tip cutter - angled narrow head - The angled head allows precise cuts at different working angles - Suitable for working on printed-circuit boards, component connections, can be used in both 90° and 180° applications - Ergonomic handle and special materials ensure a soft feel, operating comfort and safety	General - for all cutting application with limited access, SMD	0.236	0.433	0.236	1.024	✓	✓		✓	MED
				6	11	6	26					
2403E	 Flush	- Tip cutter - angled wide robust head - Oval shape. 30° - Similar to 503E, but with ergonomic handles - The angled head provides for precise cuts at different working angles - The ergonomic handles and special materials ensure a soft feel, operating comfort and safety	Electronic, Microelectronic, Wires, PCB boards	0.354	0.433	0.236	0.787	✓	✓		✓	MED
				9	11	6	20					
599T	 Semi-Flush	- Side cutter - oval head - hard metal blades - Fits for all cutting applications where easy access is given - This is the most widely used head shape - It is robust and size for size offers the highest cutting capacity	Carbide, Wire, Boards, Fine & Standard electronic	0.748	0.433	0.236	0.748	✓	✓	✓		MED
				19	11	6	19					
503ET	 Semi-Flush	- Tip cutter - angled wide head - Tungsten-carbide cutters - The angled head provides for precise cuts at different working angles	Hard and tough wires e.g. piano wire, nickle and diode leads	4.331	0.433	0.236	0.795	✓	✓	✓		MED
				9.6	11	6	20.2					
1500BSF	 Flush	- Pneumatic side cutter and tip cutter. Requires 4 - 6 bar oil-free clean compressed air - Pneumatic cutter - Handy, light and precise - Extremely versatile thanks to a selection of different cutting heads - Easily interchangeable cutting heads - Suitable for cutting conventional components, soft metals or small plastic parts - Pneumatic-cutter housing	Hard and tough wires e.g. piano wire, nickle and diode leads					✓	✓			

 The items listed are the most popular Weller Erem products for the electronic's industry.

CUTTERS			Key Applications	Dimensions				Micro-Electronics	SMD	Carbide	Microscope	Head Size
Model	Cut	Description		A (in / mm)	B (in / mm)	C (in / mm)	D (in / mm)					
E147A	 Semi-Flush	- Side cutter with compound action - For cutting hard wires with minimal effort	Guide Wires, Stents, Catheters, Single/ Multiple Filers, Lateral/ Internal Cuts, Electronic applications	0.394	0.630	0.295	0.630	✓	✓	✓		MAXI
				10	16	7.5	16					
884EPCM		- Side cutter flush cut, for PCB separation only - Side cutter, suitable for cutting printed-circuit boards - Side cutter flush cut, for PCB separation only	Micro & Standard electronics	0.591	0.078			✓				MAXI
				1.5	2.0							
505C		- IC and SMD tools for inserting, extracting, straightening and cutting IC and SMD components - Inserting and extracting 14-16 pins - Non-reflecting surface - ESD-safe	Micro & Standard electronics, SMD rework	4.724	0.433			✓	✓			MED
				120	11							

PLIERS		Key Applications	Dimensions						Micro-Electronics	SMD	Carbide	Microscope	Head Size
MODEL	DESCRIPTION		A (in / mm)	B (in / mm)	C (in / mm)	D (in / mm)	E (in / mm)	G (in / mm)					
2443P		• Round nose pliers with very precise, smooth jaws • Pliers for miniature and standard electronics • Optimized ergonomically shaped handles for increased comfort • Non-reflecting surface, ESD-safe • Suitable for bending wires Fine and Standard electronic, bending wire	5.748	0.433	0.236	1.594	0.031	0.063	✓	✓			MEDIUM
			146	11	6	40.5	0.8	1.6					
2442P		• Flat nose pliers • Pliers for miniature and standard electronics • Optimized ergonomically shaped handles for increased comfort • Non-reflecting surface, ESD-safe • Suitable for gripping flat workpieces • With smooth jaws and precision-machined edges Miniature and standard electronics	1.307	0.433	0.236	1.594	0.134	0.047	✓	✓		✓	MEDIUM
			33.2	11	6	40.5	3.4	1.2					
531E		• Flat nose pliers with replaceable nylon jaws • Non-reflecting surface, ESD-safe, high grade tool steel • Nylon jaws prevent nicking and scratching Forming and handling components while preventing scratching and nicking for miniature and standard electronics	0.91	0.43	0.24		0.2	0.12	 A = Jaw length B = Head width C = head thickness E = Width of tips G = Total height of both tips				
			23	11	6		5	3					
552S		Wire Stripper: • Suitable for all types of insulation, Teflon®, Tefzel and optical fibres • Unlimited stripping length thanks to side stripping • Suitable for simple and precise stripping of optical fibres • Non-reflecting surface • Robust, high-precision tools for use in electronics and aeronautical engineering • The required diameter is set by means of screws • Screwdriver and key are included • Interchangeable blades • ESD-safe • Unique precision for damage-free stripping of fine wires All Types of Insulation, Teflon, Tefzel and optical fibers.					0.433	0.354	 A = Jaw length B = Width of tips C = Depth of interchangeable blade E = Total height of both tips G = Length of cutting blade				
							11	9					
2411PD		• Needle nose pliers with very precise and rounded jaws • Non-reflecting surface, ESD-safe • Inside serrated jaws for better grip For miniature and standard electronics application	1.307	0.433	0.236	5.291	0.039	0.047	✓	✓		✓	MEDIUM
			33.2	11	6	150	1	1.2					

TWEEZERS

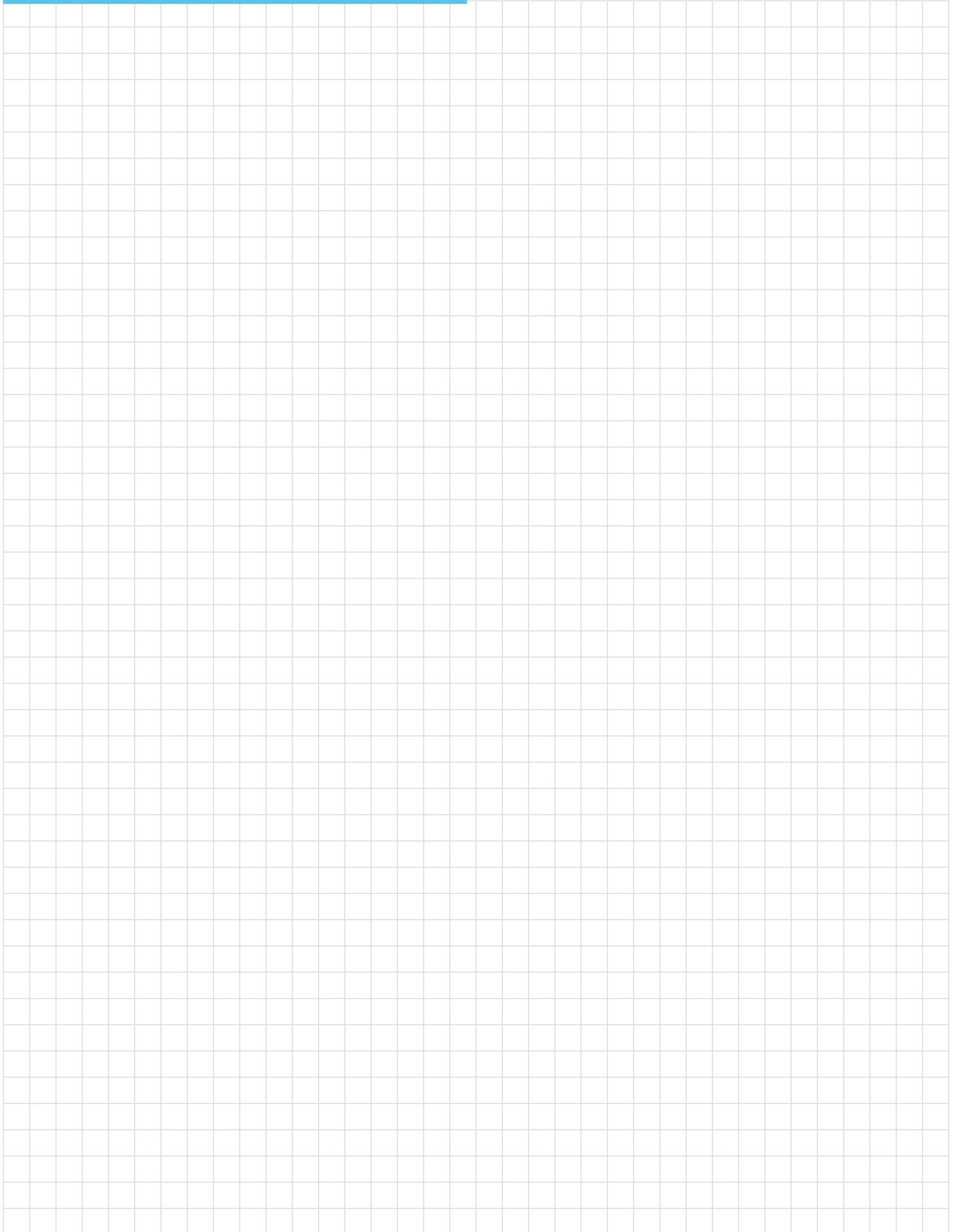
Model	Shape	Description	Key Applications	Length (in/mm)	Weight (oz/g)	Micro-Electronics	SMD	Microscope	Various Electronic	Material	Head Size
15AGW		- Cutting tweezers with narrow oblique head - Hardened cutting edges for long service life - Suitable for cutting fine, soft wires and small components	Designed for cutting fine soft wires up to dia. 0.25 mm/.010 in. and small components	4.528	0.74		✓		✓	Carbon Steel	0.216 narrowed to a pt
				115	21						
B15AGS		- Black cutting tweezers with narrow oblique head. For soft wires up to dia. 0.25 mm/.010 inch - Hardened cutting edges for long service life	Cutting fine, soft wires and small components	4.528	0.741	✓	✓	✓	✓	Carbon Steel	
				115	21						
3SA		- Suitable for delicate standard applications and precision work on small components or wires - Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant	General purpose use in microelectronics, medical and laboratories	4.724	0.49		✓		✓	Stainless Steel	Fine Point
				120	14						
102ACAX		SMD tweezers, angled 45°, with pointed tips for vertical application, and reverse clamping action for easy holding	SMD with different designs (chip, MELFs, mini MELFs)	0.010	0.49	✓	✓	✓	✓	Stainless Steel	Fine Point
				0.25	14						
E2ASA		- Precision tweezers with flat rounded tips for gripping, small components. Tip width 2 mm/.078 inch - Special stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant	Standard gripping applications and assembly jobs on printed-circuit boards, e.g. in the goldsmith and jewelry industries	4.843	0.564	✓	✓	✓	✓	Stainless Steel	
				123	16						
E3CSA		- Ergonomic precision tweezers with long, straight and pointed tips, e.g. for assembly jobs on printed-circuit boards - Thermally insulated, soft foam handles, ESD-safe	Standard gripping applications and assembly jobs on printed-circuit boards, e.g. in the goldsmith and jewelry industries	4.724	0.582	✓	✓	✓	✓	Stainless Steel	
				120	17						
E7SA		- Precision tweezers, curved, relieved, with pointed tips - Bent shape facilitates access to confined spaces - Special stainless steel, nonmagnetic, non-rusting, acid-proof, heat-resistant	For applications in biology, medicine, laboratory technology and microelectronics	4.724	0.53		✓		✓	Stainless Steel	Very Fine
				120	15						
EOOSA		- Precision tweezers with pointed tips. Very robust. Suitable for standard applications, e.g. for assembly in electronics - Special stainless steel, non-magnetic, non-rusting, acid-proof, heat-resistant	General purpose use in microelectronics, medical and laboratories Suitable for delicate standard applications and precision work on small components or wires	4.724	0.71		✓		✓	Stainless Steel	Fine Point
				120	30						
51SA		- Precision tweezers, curved 30°, relieved - Very pointed tips - Relieved shape at front of handle provide excellent visibility of the area to be worked on	Applications in biology, medicine, laboratory technology and microelectronics	4.528	0.42	✓	✓	✓	✓	Stainless Steel	
				115	12						
258SA		- Precision tweezers with pointed synthetic tips (PPS) and serrated finger grips for secure handling - Volume resistance 16 Ω/cm. Heat-resistant up to 250°C (480°F) - Resistant to acids and molten soldering tin. Water-repellent	Microscope, applications with acids and molten soldering tin.	4.724	0.53			✓	✓	Stainless Steel	
				120	15						
249CER		Precision tweezers with ceramic tips and serrated finger grips for secure handling. Volume resistance 16 Ω/cm. Heat-resistant up to 900°C (1500°F). Resistant to acids and molten soldering tin. Water-repellent	General purpose use in microelectronics, medical and laboratories	5.118	0.84	✓	✓	✓	✓	Stainless Steel	Very Fine
				130	24						
29W30		- Stripping tweezers with synthetic fibre handle. For wires of dia. 0.25 – 0.3 mm/.010 – .011 inch (AWG 30 – 28). - For standard and Teflon® insulation	Stripping fine wires with PVC or Teflon® insulation	4.724	0.99				✓	Stainless Steel	
				120	28						
024C		Extraction tweezers for Sub-D connectors.	Suitable for extracting contacts from the rear of a plug connector	4.724	0.53	✓	✓	✓	✓	Stainless Steel	
				120	15						
141SAP		Wafer tweezers with polyester tips for protecting Si, GaAs or Ti wafers against damage. For 4" – 6" wafers.	All Wafer applications	5.906	1.05					Stainless Steel	
				150	30						



The items listed are the most popular Weller Erem products for the electronic's industry.

Weller
Erem

Notes



#PowerfulTogether

Weller guarantees you the latest and best technology in the soldering market.

Industrial Soldering Equipment

Professionalism makes no compromises.

Weller soldering technology that is packed with precision, innovation and quality.

Filtration

Take a deep breath. Providing clean air for your workplace.

Weller filtration systems for continuous use in industrial working environments filters fumes, adhesives and particles and recirculates back clean air while keeping noise pollution to a minimum.

Precision Tools

Feel the difference. The proven choice. Every time.

Manufactured with uncompromising Swiss quality, Precision Tools are designed to be strong, durable, sharp and have the highest precision available. Weller Erem tools are built to last.



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