



Special tools

IC AND SMD TOOLS, FIBER-OPTIC TOOLS,
VACUUM MICROMANIPULATOR



IC and SMD tools

IC and SMD tools with precise fine adjustment for inserting, extracting, straightening and cutting IC and SMD components



Fibre optic tools

High-precision tools for optical fibers for professional stripping, suitable for cutting Kevlar® silks, Vectran™-sheathed wires, etc.



Vacuum micromanipulator

Vacuum system for precise handling of tiny SMD components and silicon wafers, suitable for assembly and laboratory work

Side cutters and tip cutters

Pliers

Tweezers

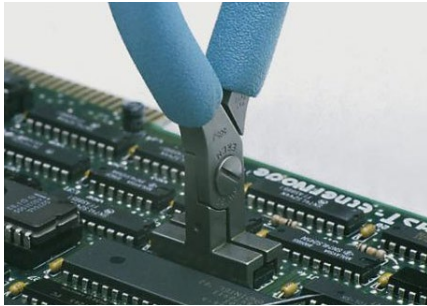
Special tools

Kits

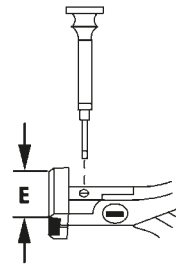


IC and SMD tools

Inserting and extracting 14-16 Pins



4.724 Inch / 120 mm



- IC and SMD tools for inserting, extracting, straightening and cutting IC and SMD components
- Non-reflecting surface
- ESD-safe
- One screwdriver included for fine adjustments.

Model				E		Width	
				Inch	mm	Inch	mm
505C	505C	505BGC	505BG	0.787	20	0.3	7.62
	14-16	28	28				
	.300	.300	.600				
505BG				1.417	36	0.591	15

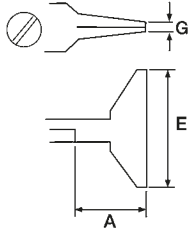


Pliers for straightening



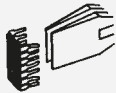
 5.118 Inch / 130 mm

 4.232 / 120 g



- IC and SMD tools for inserting, extracting, straightening and cutting IC and SMD components
- Non-reflecting surface
- ESD-safe
- Practical straightening tool, suitable for straightening contacts, DIL/IC connections.
- Up to 16 connections possible.

Model	A		E		G	
	Inch	mm	Inch	mm	Inch	mm
808G	0.906	23	1.653	42	0.039	1



Tip cutter – straight short relieved head




 4.331 Inch / 110 mm

 1.693 oz. / 48 g

- Suitable for cutting SMD and micro-package contacts.
- High-precision tip cutter

- For connections of SMD micro-packages up to 0.25 mm / .010 inch, also for pitches smaller than 1/20".
- For μ pitches below 0.5 mm / .019 inch, you will need the 670EPF

Model	Cut	B		C		D	
		Inch	mm	Inch	mm	Inch	mm
670EP	 Flush	0.354	9	0.354	9	0.236	6

Side cutters and tip cutters

Pliers

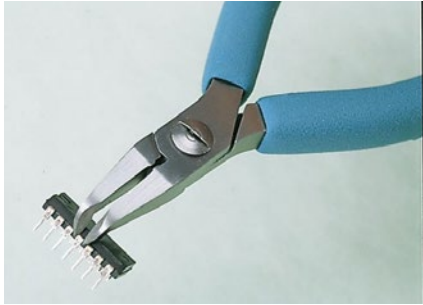
Tweezers

Special tools

Kits



Tip cutter – angled narrow head



4.528 Inch / 115 mm

2.399 oz. / 68 g

- High precision tip cutter, bent.
- Practical rework tool.
- For cutting DIL contacts directly on the component.
- Ideal for densely printed boards.
- Non-reflecting surface
- ESD-safe
- One screwdriver included for fine adjustments.

Model	Cut	B		C		D			
		Inch	mm	Inch	mm	Inch	mm		
593AE	 Flush	0.157	4	0.433	11	0.256	6.5	1.024	26

3900KC

Kit for SMD work

Order No. 3900KC

- For SMD assembly and repair applications.
- 6-piece tool kit with monitored discharging ESD handles.
- Special tool steel, non-reflecting surface, resharpenable (cutter).
- High-quality precision tweezers, non-magnetic.
- In an ESD-safe plastic case.



Scope of supply	Model	Description
	102ACA	SMD tweezers, angled 45°, with pointed application.
	103ACA	SMD tweezers, angled 45°, with slightly wider tips for vertical application.
	150SAMB	SMD tweezers, angled 40°, with round tips, dia. 1.2 – 2.5 mm/ .047 – .098 Inch. Serrated finger grips for secure handling.
	150SAMF	SMD tweezers with round, very narrow tips, dia. 1.2 – 2.5 mm/ .047 – .098 Inch. Serrated finger grips for secure handling. For gripping cylindrical components, mini MELFs, etc.
	51SA	Precision tweezers, curved 30°, relieved. Very pointed tips. Relieved shape at front of handle provides excellent visibility of the area to be worked on.
	670EP	Tip cutter – straight short relieved head



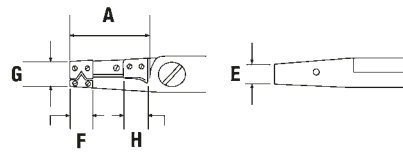
High-precision tools for optical fibers

Side stripping 0.06 mm - 0.6 mm .002 Inch - .023 Inch (AWG 42 - 24)



 4.724 Inch / 120 mm

 2.82 / 80 g

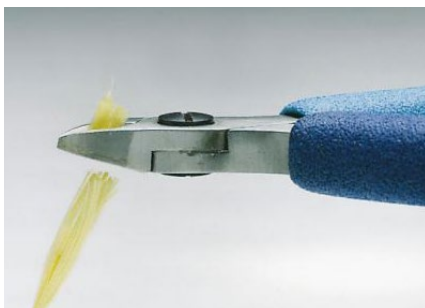


A = Jaw length
 E = Width of tips
 F = Depth of interchangeable blade
 G = Total height of both tips
 H = Length of cutting blade

- 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.
- 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

Model	A		E		F		G		H		Wire diameter	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm
552S	0.82	21	0.26	6.5	0.264	6.7	0.43	11	0.354	9	0,002 - 0,024	0,06 - 0,6

Special applications: Kevlar® silks



 4.528 Inch / 115 mm

 2.36 oz. / 67 g

- Side cutter, suitable for cutting Kevlar® silks.
- Side cutter, suitable for cutting Kevlar® silks, Vectran™-sheathed wires, optical fibres and small stainless wires.

Model	Cut	B		C		D			
		Inch	mm	Inch	mm	Inch	mm		
599F0		0.472	12	0.433	11	0.256	6.5	0.748	19

Side cutters and tip cutters

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Special applications: Special tool steel



 **4.528 Inch / 115 mm**

 **2.36 oz. / 67 g**

- Side cutter for cutting Kevlar® silks, Vectran™-sheated wires, optical fibres and small stainless wires.
- Side cutter with cutting edges made from tungsten carbide.

Model	Cut	B		B		C		D	
		Inch	mm	Inch	mm	Inch	mm	Inch	mm
599TF0	 Semi Flush	0.472	12	0.413	10.5	0.256	6.5	0.748	19



Vacuum micromanipulator

Handle for vacuum micromanipulator



 **5.512 Inch / 140 mm**

 **1.235 oz. / 35 g**



- Ergonomic handle with axial switch, serrated finger grip for secure handling. Ergonomic shape reduces hand and wrist fatigue.
- Easy picking up of components or silicone wafers
- Immediate set-down/release of parts

- Full 360° rotating system
- Direct axial switch for vacuum
- ESD-safe
- Professional vacuum system for precise handling of tiny SMD components and silicon wafers
- Suitable for assembly and laboratory work

Model	Diameter	
	Inch	mm
3000ESD	0.394	10


Insert for 3000ESD housing - Adapters

Vacuum micromanipulator

Model		Length		Weight		Description
		Inch	mm	oz.	g	
3200		0.984	25	0.529	15	Stainless-steel adapter, rotatable through 360°, straight suction tip for direct working or as an adapter for suction tips or suction cups
3232		0.023	15	0.106	3	Adapter fix, for direct working or as an adapter for suction tips 20442/20412 or suction cup 2052E.



Polyethylene suction tip. For working with 3200 or 3232 adapter.

Model		Outside Ø		Inside Ø		Description
		Inch	mm	Inch	mm	
2044Z		0.051	1.3	0.035	0.9	Polyethylene suction tip. For working with 3200 or 3232 adapter.

Stainless-steel suction needle, bent 45°, for working with 3200 or 3232 adapter.

Model		Outside Ø		Inside Ø		Description
		Inch	mm	Inch	mm	
3303		0.012	0.30	0.005	0.16	Stainless-steel suction needle, bent 45°, for working with 3200 or 3232 adapter.
3310Z		0.039	1.0	0.026	0.65	Stainless-steel suction needle, bent 45°, for working with 3200 or 3232 adapter.

Silicone suction cup, for working with 3200 or 3232 adapter.

Model		Diameter		Description
		Inch	mm	
2052E		0.177	4.5	Silicone suction cup, for working with 3200 or 3232 adapter.

Accessories

Order No.	Description
3008ESD	Tubing system flexible, ESD safe