

EXCELTA®



55 TH ANNIVERSARY

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PRECISELY RIGHT FOR OVER 55



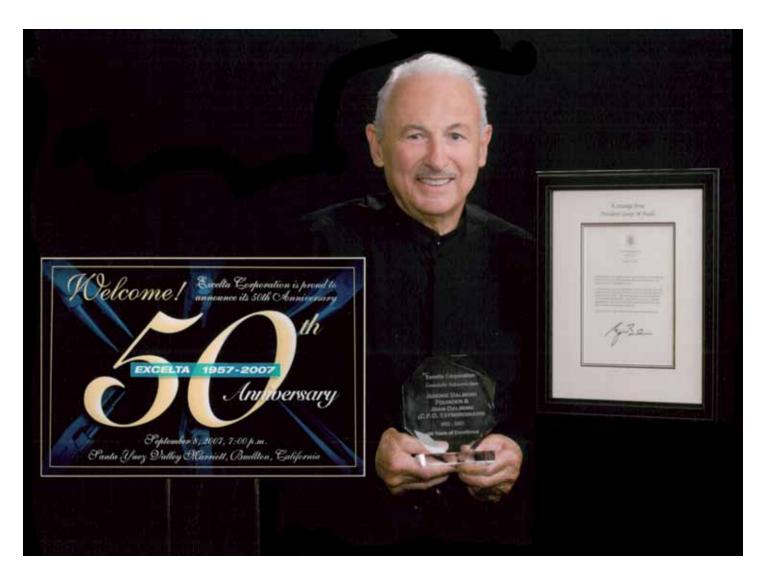
Excelta began by introducing watchmaker tools to the aerospace industry in the mid 1950's. Today we manufacture and market tweezers, forceps, pliers, cutters and small precision tools through our distribution network to the Military, Consumer Electronic, Medical Device Manufacturing, Electronic Assembly and Repair Industries.

Excelta's expertise provides assembly solutions for customers involved with precision hand assembly. Our product offering has evolved from simple chain nose pliers and a few tweezers to over 1,200 assembly aids. Through our "Special/Custom Applications Department" we are able to adapt tools to the specific needs of our customers. Excelta maintains a position of highest quality while delivering innovative solutions. We pride ourselves on staying one step ahead in providing quality tools for tomorrow's needs.

Excelta's precision hand tools are *Precisely Right* for your critical application.

Dedicated to Jerome Dalseme

FOUNDER - EXCELTA CORPORATION



This catalog is dedicated to our father Jerome Dalseme, for his love of tools and leaving a legacy which has kept Excelta Corporation on the cutting edge of supplying and manufacturing precision hand tools for over 55 years.

With love and gratitude,
your daughters,
LYNN BONZER & JANIS PAPIRO



THE WHITE HOUSE

WASHINGTON

August 23, 2007

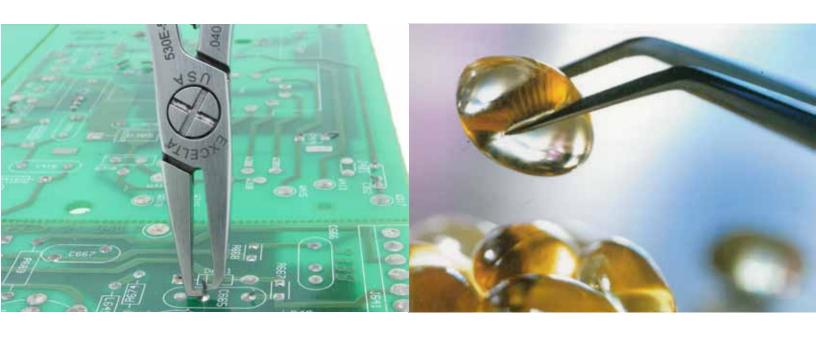
Congratulations to the employees of Excelta Corporation as you celebrate your 50th anniversary. This milestone reflects your dedication to your customers and the community you serve.

America's businesses are the driving force behind our Nation's robust and growing economy, and our workers are the most talented, innovative, and productive in the world. I appreciate your hard work and contributions to your industry and our Nation. Your years of service have expanded opportunities for our citizens, encouraged economic development, and helped America stay prosperous and strong.

Laura and I send our best wishes for many years of continued success.

/20130

Excelta has made it easy to find the tool Precisely Right for the job.



Our FIVE STAR SYSTEM takes the guesswork out of selecting the right tool.



5 Levels of Quality5 Levels of Pricing

We offer a wide range of materials and designs for any application.





For the most critical applications, the Excelta Five Star line offers ultra-precision with the most advanced materials available.



For demanding applications, the Excelta Four Star line meets and exceeds high precision requirements.



The Excelta Three Star line offers the widest range of products designed for Military, Semiconductor and Electronic assembly.



When precision is required and price is a concern, the Excelta Two Star line fills most requirements for consumer electronics.



The Excelta One Star line offers quality products at the most economical price.

Call us at Excelta Corporation or contact your local Excelta Sales Representative to find tools "Precisely Right" for you.

Simply Look for the Stars



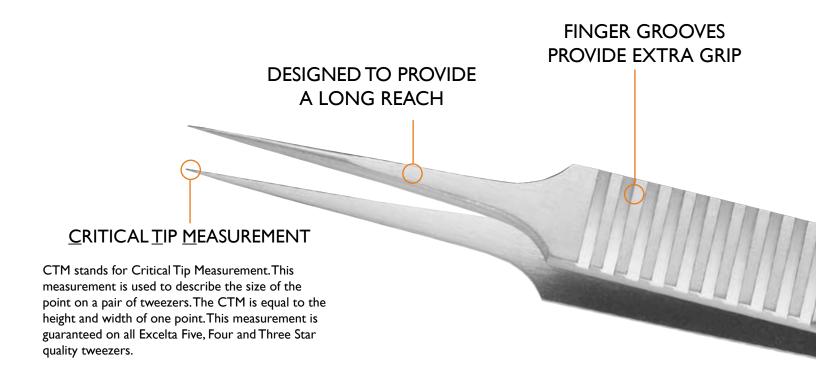












WHY COBALTIMA®?

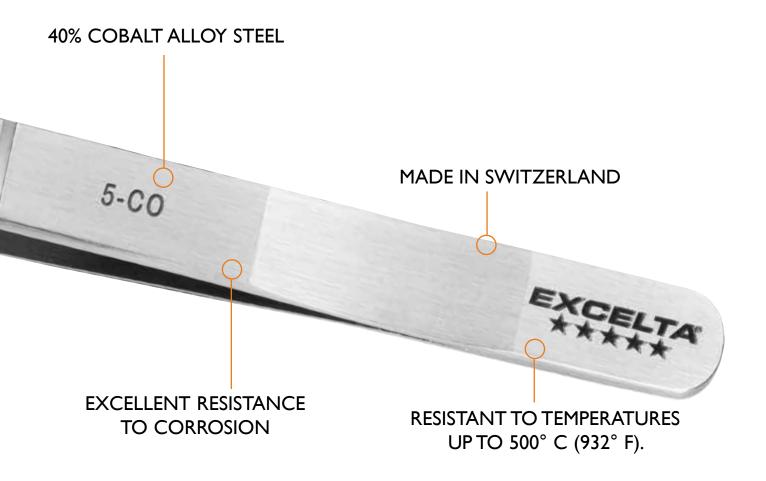
COBALTIMA® - The perfect combination of strength and durability. Superior to the best stainless steel, these tweezers and forceps have points insensitive to fatigue that maintain their elasticity. The hardness of the points is progressive; reaching its peak in the deployment-zone where we have measured a Rockwell C hardness of 63/64 for model 5-CO.

CHEMICAL COMPOSITION

CO	Ni	Мо	Cr	Ti	Nb	Al	Fe
40	16	7	20	_	_	_	Bal

MADE IN SWITZERLAND

*** * ULTRA PRECISION



Temperature of Fusion	(°C)		450–1460
Volunteer Mass	(g.cm³)		8.3
Electrical Resistivity at 20°	(Ω Cm)		90/95
Thermo Co-efficient Between 0 and 3000°C	softened	(°C)	4.10-4
	crushed	(°C)	20,8.10-3
Magnetic Properties	antimagnetic		

TWEEZERS / FORCEPS

COBALTIMA® | MADE IN SWITZERLAND *** ULTRA PRECISION

2-CO ****

4 3/4" long

TAPERED TIP TWEEZERS WITH STRONG FINE POINTS

The stronger points on this design can be used to bend small wires and components. CTM = .010" wide x .004" high



Tip Shape

3C-CO ****

4 1/4" long

STRAIGHT TIP TWEEZERS WITH VERY FINE POINTS

Very popular design for handling and placing of small parts. CTM = .003" wide x .002" high



Tip Shape



3-CO ****

4 3/4" long

STRAIGHT TIP TWEEZERS WITH VERY FINE POINTS

Our most popular design for all types of micro assembly. CTM = .003" wide x .002" high



Tip Shape



4-CO ****

4 %" long

TAPERED TIPTWEEZERS WITH EXTRA FINE POINTS

The tapered tips on this design provide a long reach into limited access areas.

CTM = .003" wide x .001" high



Tip Shape



5-CO ****

4 %" long

TAPERED TIP TWEEZERS WITH MICRO FINE POINTS

This design has our finest points for handling the smallest parts. CTM = .002" wide x .001" high





COBALTIMA® | MADE IN SWITZERLAND TWEEZERS / FORCEPS | **** ULTRA PRECISION

Our special Cobalt Steel is harder than stainless steel antimagnetic and has excellent resistance to corrosion and temperatures up to 500°C. The radiused inside edges protect parts from scratching, while the outside finger grooves provide extra grip and feel when handling very small parts.

5A-CO ★★★★★

4 1/2" long

OFFSET TIP TWEEZERS WITH MICRO FINE POINTS

The offset design offers better visibility in dense areas. CTM = .003" wide x .001" high



Tip Shape

7-CO ****

4 1/2" long

CURVED TIP TWEEZERS WITH VERY FINE POINTS

Our most popular design for working under high magnification. CTM = .003" wide x .002" high



Tip Shape

7B-CO ★★★★★

4 1/2" long

SERRATED CURVED TIP TWEEZERS WITH VERY FINE POINTS

The added serrations provide additional grip when handling small parts.

CTM = .003" wide x .002" high



Tip Shape



51-CO ****

4 1/2" long

BENT TIP TWEEZERS WITH MICRO FINE POINTS

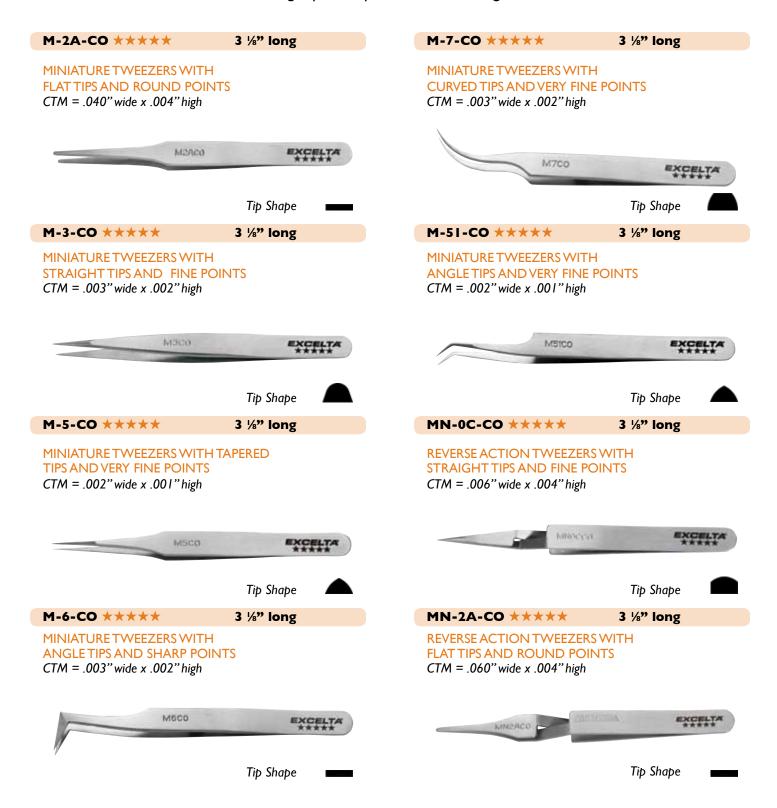
The bent tips are helpful when reaching into confined areas. CTM = .002" wide x .001" high





COBALTIMA® MINIATURE TWEEZERS TWEEZERS / FORCEPS MINIATURE TWEEZERS ****** ULTRA PRECISION

Miniature COBALTIMA® tweezers were specifically designed for work under a microscope and engineered to fit small hands. The radiused inside edges protect parts from scratching.



WHY HIGH POLISH?

- Designed to handle delicate parts without scratching
- Smoother than standard radius edged Forceps
- Antimagnetic
- Anti-Acid
- Stainless Steel
- Neverust®

"Mirror Polish" series of forceps are made in Switzerland by highly skilled craftsmen who produce the finest tip forceps in the world.

Forged from medical grade stainless steel, these forceps are antimagnetic and anti-acid.

Special mirror polish on the tips removes any sharp edges for safe handling of even the most delicate components.

CRITICAL TIP MEASUREMENT

This measurement is used to describe the size of the point on a pair of tweezers or forceps. The CTM is equal to the height and width of one point. This measurement is guaranteed on all Excelta Four Star quality forceps.

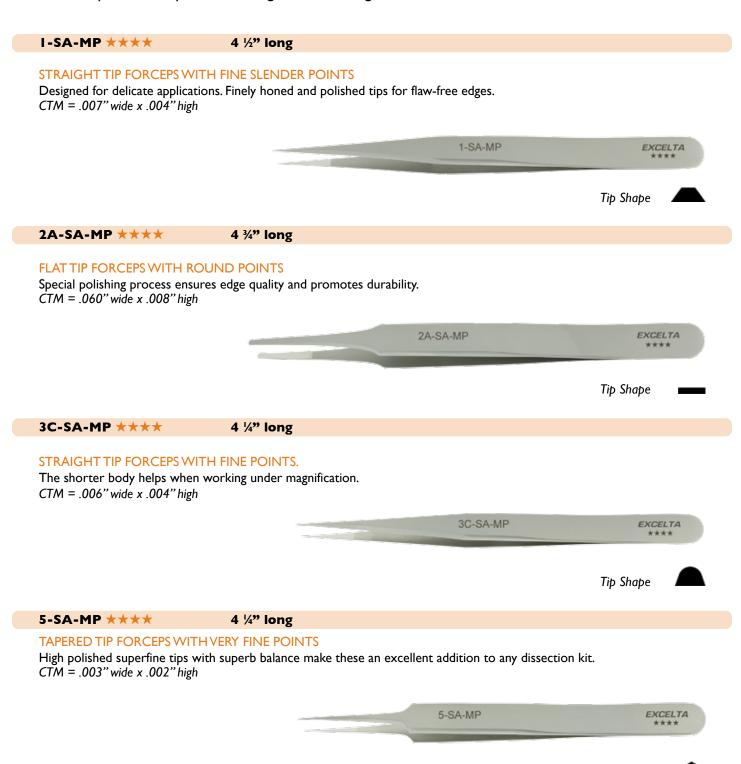






Tip Shape

"MP" Forceps are Made in Switzerland from the finest non-corrosive Stainless Steel Antimagnetic, the tips are mirror polished to prevent nicking and scratching.





5A-SA-MP ★★★★

4 1/2" long

OFFSET TIP FORCEPS WITH VERY FINE POINTS

The offset design offers easy access in confined areas. CTM = .004" wide x .003" high



Tip Shape

51-SA-MP ★★★★

4 1/2" long

ANGLED TIP FORCEPS WITH VERY FINE POINTS

The most popular design used for delicate manipulation of ultra small parts. CTM = .003" wide $\times .002$ " high



Tip Shape



7-SA-MP ***

4 1/2" long

CURVED TIP FORCEPS WITH FINE POINTS

Curved tips allow for maximum visibility under magnification.

CTM = .006" wide x .004" high

7-SA-MP EXCELTA

Tip Shape



SS-SA-MP ★★★★

5 1/2" long

LONG STRAIGHT TIP FORCEPS WITH FINE POINTS

The extra long length and slimmer body is useful when working in limited access areas. CTM = .003" wide x .002" high





MINIATURE TWEEZERS & FORCEPS

★★ HIGH PRECISION

Our Miniature Tweezers & Forceps were specifically designed for work under a microscope and engineered to fit small hands. Available in Neverust[®], Stainless Steel or Carbon Steel.



Tip Shape

REVERSE ACTION TWEEZERS

★★★ HIGH PRECISION ★ GENERAL PRECISION

Our Reverse Action Tweezers are designed to hold parts without finger strain.

Available in Neverust® or Stainless Steel.

31-SA-C ***

4 3/4" long

REVERSE ACTION TWEEZERS FOR GENERAL PURPOSE ASSEMBLY

The tips are bent at a 45-degree angle for better visibility when handling small parts. CTM = .02" wide x . 01" high



Tip Shape



29-SA ★★★ 29-S-SE ★ 6" long

STAINLESS STEEL REVERSE ACTION TWEEZERS WITH FIBER HANDLES

These tweezers have straight tips. Part number 29-SA has smooth inside tips, 29-S-SE has serrated inside tips. CTM = .08" wide $\times .05$ " high



Tip Shape



30-SA ★★★ 30-S-SE ★

6" long

STAINLESS STEEL REVERSE ACTION TWEEZERS WITH FIBER HANDLES

These tweezers have angled tips. Part number 30-SA has smooth inside tips, 30-S-SE has serrated inside tips. CTM = .08" wide x . 04" high



Tip Shape



31B-SA-SE *

6 1/2" long

REVERSE ACTION SCREW HOLDING TWEEZERS

The special groove in the tips hold small screws, useful when needing help getting them started. Also useful when working in dense and hard to reach areas.







★★★ HIGH PRECISION ★ GENERAL PRECISION

DN-1-SN ****

4 ¾" long

DN-3C-SA-SE ★

4 ¼" long

REVERSE ACTION TWEEZERS WITH STRAIGHT TIPS AND SLENDER POINTS

The light tension is great for holding parts without added finger strain. CTM = .01" wide x .01" high



DN-2A-SN ****
DN-2A-SA-SE *

4 ¾" long

REVERSE ACTION TWEEZERS WITH TAPERED TIPS AND FLAT ROUND POINTS

Used for handling fine wires and components.

CTM = .06" wide x .01" high



DN-5-SN ★★★★

4 1/4" long

REVERSE ACTION TWEEZERS WITH TAPERED TIPS AND EXTRA FINE POINTS

Excellent for use in die attaching and wire bonding for micro-electronic assembly. CTM = .01" wide x ..01" high



DN-7-SN ****

4 ½" long

DN-7-SA-SE ★

REVERSE ACTION TWEEZERS WITH CURVED TIPS AND FINE POINTS

This design allows maximum visibility under magnification.

CTM = .01" wide x .01" high



31-SA ***

4 %" long

REVERSE ACTION TWEEZERS FOR GENERAL PURPOSE ASSEMBLY

This style is useful when sorting and handling various components.

CTM = .02" wide x .01" high





NON-MAGNETIC TWEEZERS ★★★★ EXTREME PRECISION

- Made from lightweight Titanium Alloy
- Great for all soldering applications, solder will not adhere to the tips
- Non-Magnetic zero magnetic retentivity
- Non-Corrosive high resistance to most acids
- Heat resistant up to 430°C (806°F)

3C-TA ★★★★

4 1/4" long

TITANIUM ALLOY TWEEZERS WITH STRAIGHT TIPS AND FINE POINTS

Very popular design used for micro-assembly. CTM = .006" wide x .004" high



Tip Shape



5-TA ****

4 1/2" long

TITANIUM ALLOY TWEEZERS WITH TAPERED TIPS AND EXTRA-FINE POINTS

The very fine tips are perfect when working under high magnification. CTM = .003" wide x .002" high



Tip Shape



7-TA ★★★★

4 1/2" long

TITANIUM ALLOY TWEEZERS WITH CURVED TIPS AND VERY-FINE POINTS

The curved tips allow for better visibility when working in tight areas. CTM = .006" wide x .004" high





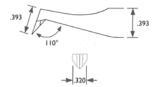
STAINLESS STEEL ★★★★★ ULTRA PRECISION ★★★★ EXTREME PRECISION

I5A-HT ★★★★★

4 ½" long

CARBIDE BLADE CUTTING TWEEZERS

Carbide Inserts on Stainless Steel body. Our finest cutting tweezers. Cutting Capacity 0.010" Hard Wire / 0.015" Soft Copper Wire



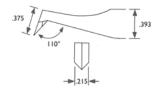


15A-GW-S ★★★★

4 1/2" long

GENERAL PURPOSE CUTTING TWEEZERS

General purpose cutting tweezers. Stainless Steel. Cutting Capacity 0.010" Soft Copper Wire



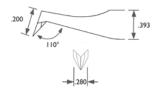


15A-RW-S ★★★★

4 ½" long

ROUND TIP CUTTING TWEEZERS

Fine round tip cutting tweezers. Stainless Steel. Cutting Capacity 0.010" Soft Copper Wire



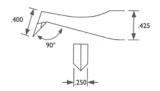


I5A-S ★★★★

4 1/2" long

RADIUS EDGE CUTTING TWEEZERS

General purpose cutting tweezers with radius edges. Stainless Steel. Cutting Capacity 0.010" Soft Copper Wire



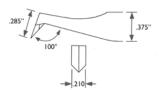




CARBON STEEL ★★★ HIGH PRECISION

14A-GW ★★★

4 %" long



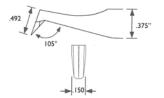
SLIM HIGH PRECISION CUTTING BLADES

New thinner body is designed to be lightweight and easy to handle. Cutting Capacity 0.010" Soft Copper Wire



14A-N ★★★

4 ½" long



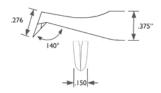
LONG PRECISION CUTTING BLADES

Angled tips can be used horizontally or vertically. Cutting Capacity 0.005" Soft Copper Wire



52-MW ★★★

4 ½" long



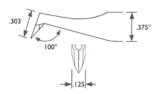
HIGH PRECISION MICRO STRAIGHT TIPS

Excellent for working in dense access areas. Non-Reflective ESD Safe Epoxy Coating. Cutting Capacity 0.005" Soft Copper Wire



54-MW ★★★

4 1/4" long



HIGH PRECISION MICRO ANGLED TIPS

Designed for maximum visibility when working under magnification. Non-Reflective ESD Safe Epoxy Coating. Cutting Capacity 0.008" Soft Copper Wire



55-MW ****

4 1/4" long

.160

ULTRA FINE CUTTING BLADES

The very finest cutting blades available. Non-Reflective ESD Safe Epoxy Coating. Cutting Capacity 0.005" Soft Copper Wire





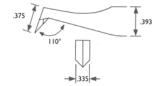
UNCOATED CARBON STEEL ★ ★ ★ HIGH PRECISION ★ ★ FINE PRECISION

I5A-GW-M ★★★

4 1/2" long

GENERAL PURPOSE CUTTING TWEEZERS

General purpose cutting tweezers. Carbon steel. Cutting Capacity 0.010" Soft Copper Wire





I5A-GW-M-OF, Optimum Flush Cutting Blades **I5A-GW-M-PB,** Parallel Cutting Blades

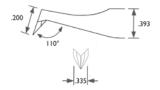
15A-RW-M ★★★

4 ½" long

FINE ROUND TIP CUTTING TWEEZERS

Fine rounded tips. Carbon steel.

Cutting Capacity 0.010" Soft Copper Wire





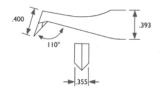
I5A-RW-M-OF, Optimum Flush Cutting Blades **I5A-RW-M-PB,** Parallel Cutting Blades

15A-GW-PE ★★

4 ½" long

GENERAL PURPOSE CUTTING TWEEZERS

General purpose cutting tweezers. Carbon steel. Cutting Capacity 0.010" Soft Copper Wire





I5A-GW-PE-OF, Optimum Flush Cutting Blades **I5A-GW-PE-PB**, Parallel Cutting Blades

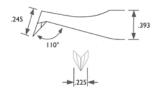
I5A-RW-PE ★★

4 1/2" long

FINE ROUND TIP CUTTING TWEEZERS

Fine rounded tips. Carbon steel.

Cutting Capacity 0.010" Soft Copper Wire





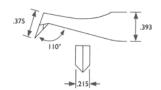
I5A-RE-PE-OF, Optimum Flush Cutting Blades **I5A-RE-PE-PB,** Parallel Cutting Blades



COATED CARBON STEEL ★★★ HIGH PRECISION

15A-GW ★★★

4 ½" long



GENERAL PURPOSE CUTTING TWEEZERS

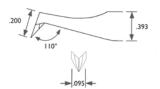
General purpose cutting tweezers. Carbon steel with ESD safe epoxy coating. Cutting Capacity 0.010" Soft Copper Wire



I5A-GW-OF, Optimum Flush Cutting Blades **I5A-GW-PB,** Parallel Cutting Blades

I5A-RW ★★★

4 1/2" long



FINE ROUND TIP CUTTING TWEEZERS

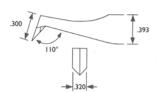
Fine rounded tips. Carbon steel with ESD safe epoxy coating. Cutting Capacity 0.010" Soft Copper Wire



I5A-RW-OF, Optimum Flush Cutting Blades **I5A-RW-PB**, Parallel Cutting Blades

15A-C ★★★

4 1/2" long



SHORT FINE BLADE CUTTING TWEEZERS

Small fine blades. Carbon steel with ESD safe epoxy coating. Cutting Capacity 0.010" Soft Copper Wire



I5A-C-OF, Optimum Flush Cutting Blades **I5A-C-PB,** Parallel Cutting Blades

I5A-SW ★★★

4 ½" long

.350 .393

RADIUS FACE CUTTING TWEEZERS

Designed to provide greater visibility. Carbon steel with ESD safe epoxy coating. Cutting Capacity 0.010" Soft Copper Wire



I5A-SW-OF, Optimum Flush Cutting Blades **I5A-SW-PB,** Parallel Cutting Blades

ELECTRONIC STYLE TWEEZERS

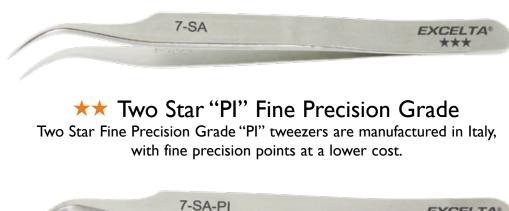
The following pages feature electronic style tweezers.

Most styles are available in three quality levels and materials.

The stars are used to designate the quality level.

** ★★★ Three Star High Precision Grade

Three Star High Precision Grade tweezers are manufactured in Switzerland, with high precision points, the perfect choice when working under 5x to 10x magnification.





★ One Star "SE" General Precision Grade

One Star General Precision Grade "SE" tweezers are manufactured for general purpose use when magnification is not required.

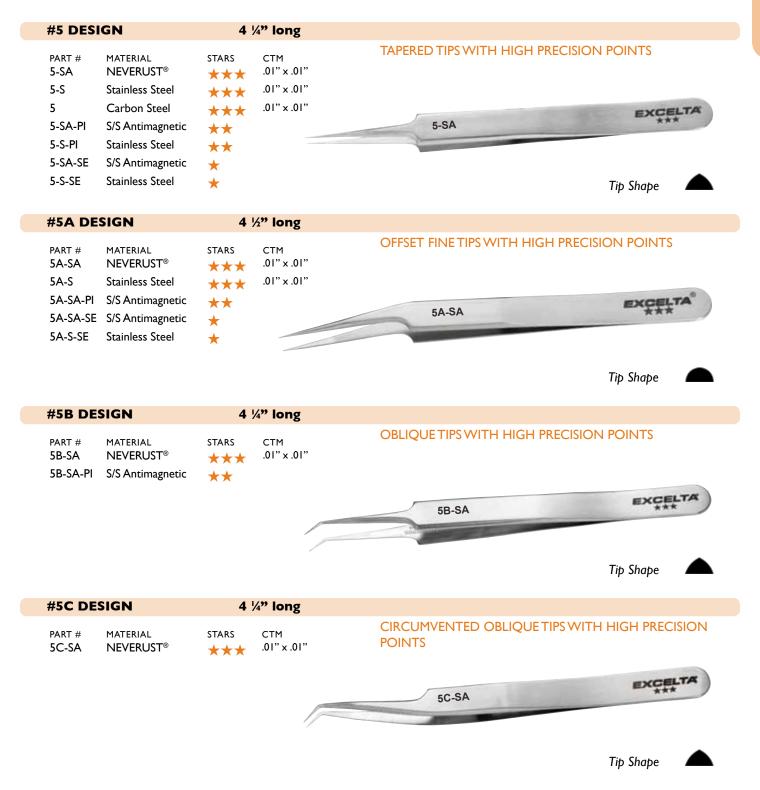


Materials

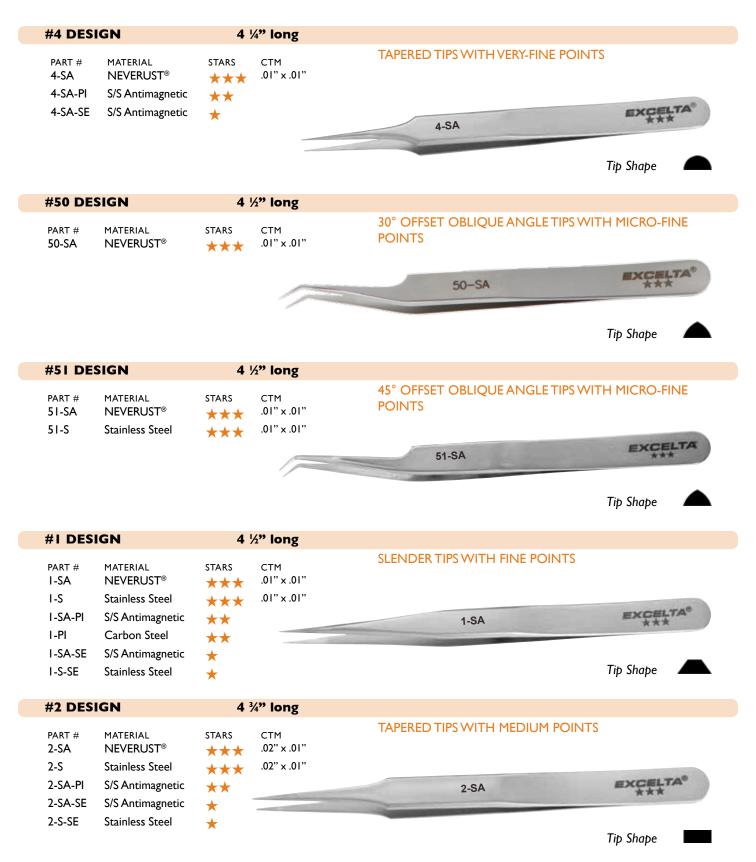
Stainless Steel Antimagnetic – Part number code "SA" NEVERUST® tweezers have superior antimagnetic, anti-acid and anti-corrosion properties. "SA" material is the most popular material used for electronic assembly.

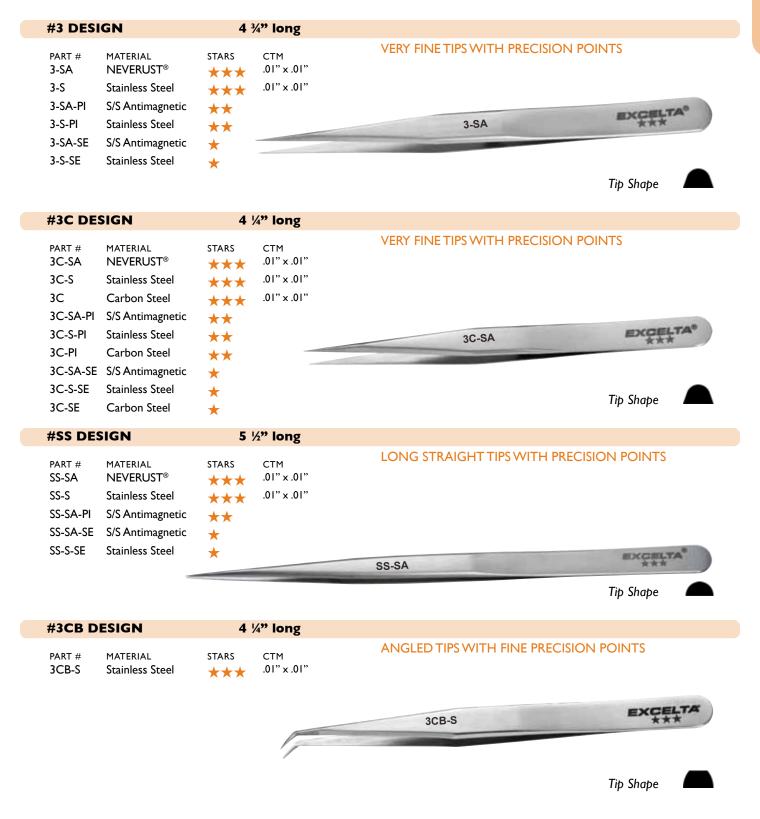
Stainless Steel – Part number code "S" stainless steel tweezers have a higher carbon content and will produce a harder tip than the "SA" series. "S" series can rust under extreme exposure.

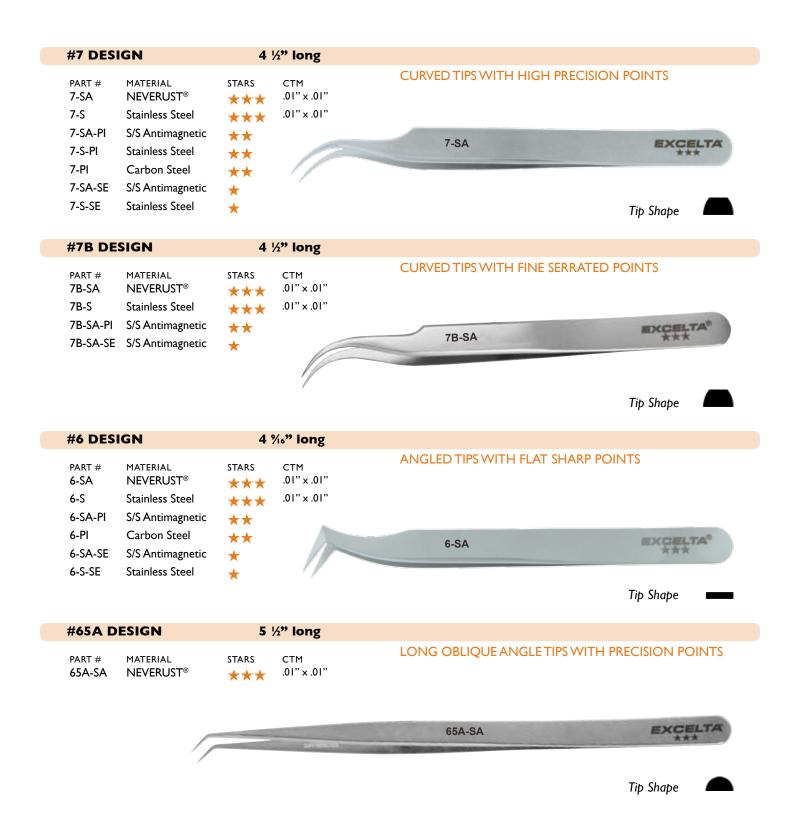
Carbon Steel – Part number code not applicable. The tips are flame hardened for long life and are highly magnetic with low rust resistance.

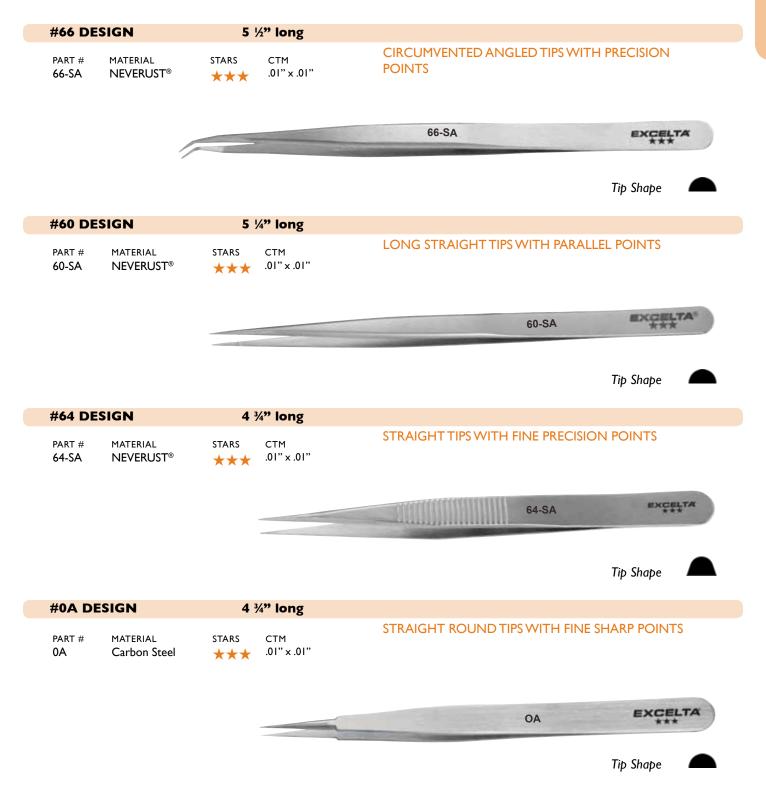


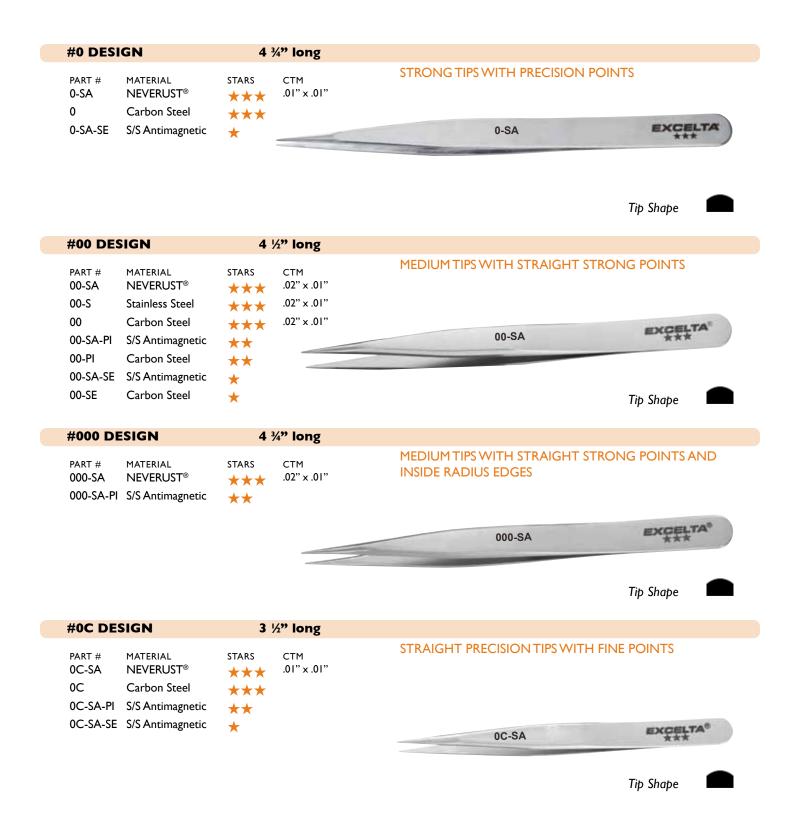
ELECTRONIC *** HIGH PRECISION STYLE TWEEZERS GENERAL PRECISION

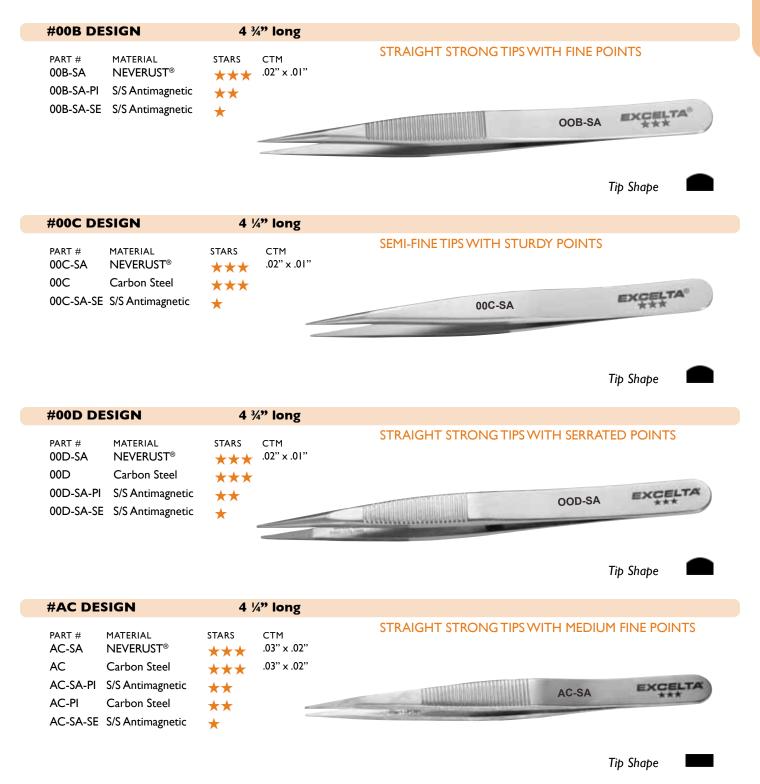




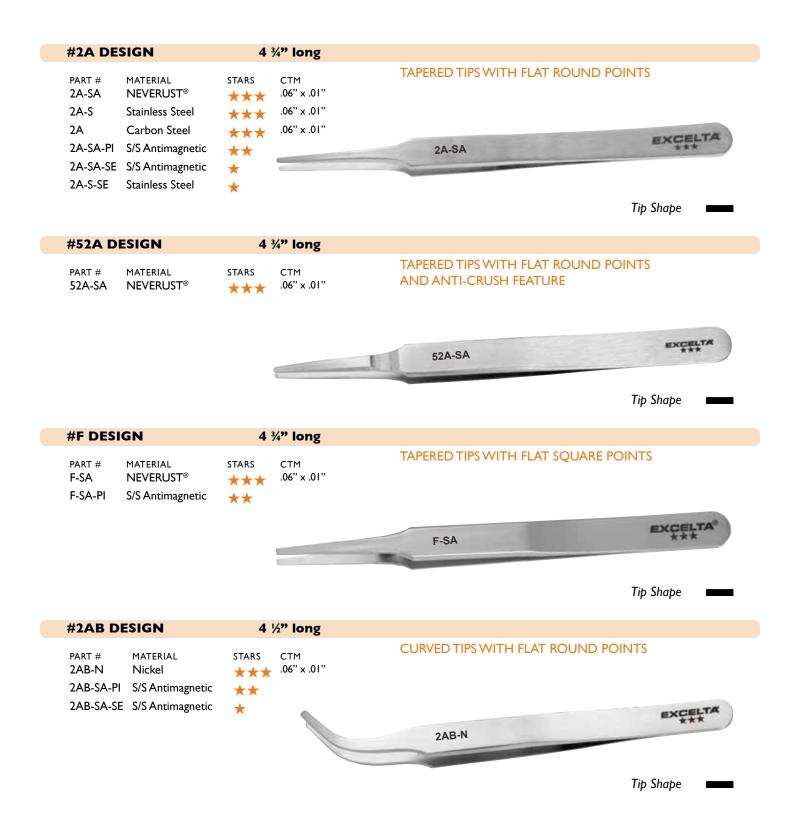


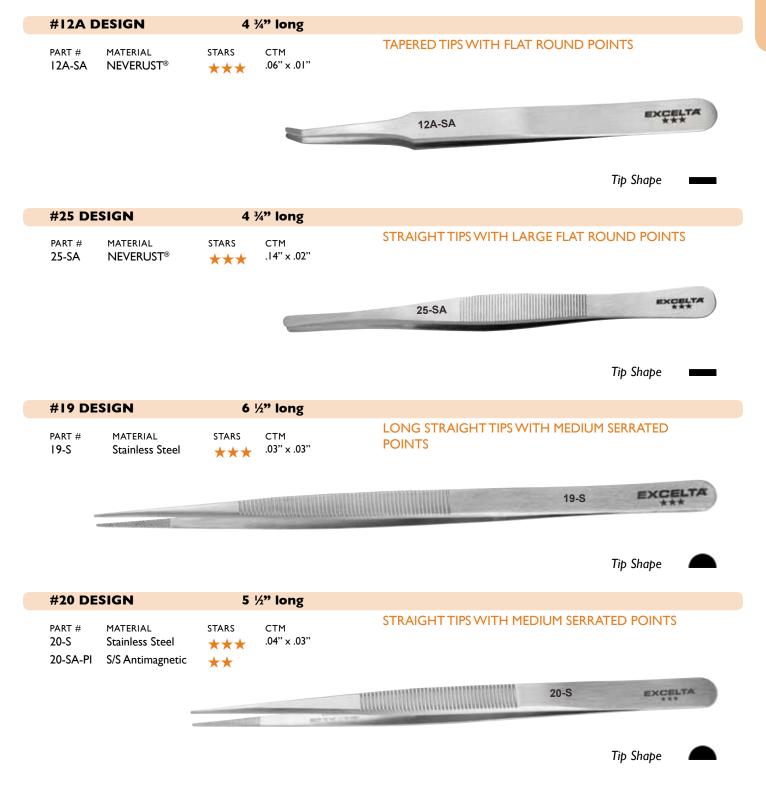




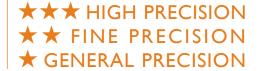


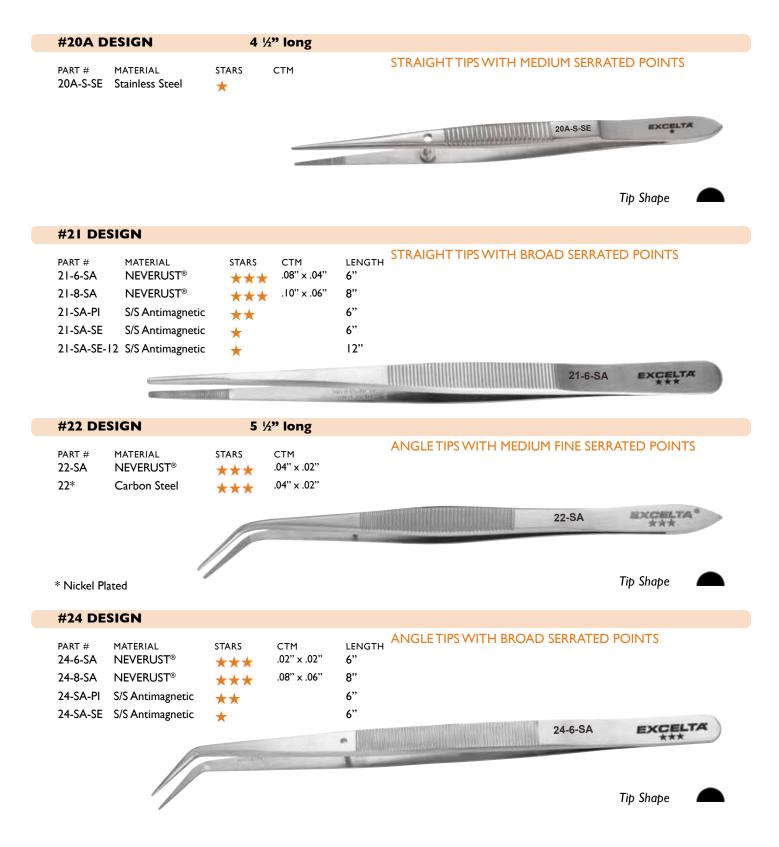
ELECTRONIC ** HIGH PRECISION ** FINE PRECISION STYLE TWEEZERS ★ GENERAL PRECISION





GENERAL PURPOSE TWEEZERS WITH STRONG TIPS



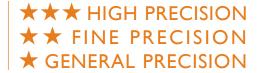


GENERAL PURPOSE TWEEZERS WITH STRONG TIPS

★★★ HIGH PRECISION
★★ FINE PRECISION
★ GENERAL PRECISION



GENERAL PURPOSE TWEEZERS WITH STRONG TIPS







#AH DE	SIGN	5" long		
	ART # MATERIAL STARS H-SA-SE S/S Antimagnetic *		WIDE DIAMOND SHAPE SERRA	ATED TIPS
			AH-SA-SE	EXCELTA®

GENERAL PURPOSE TWEEZERS WITH STRONG TIPS

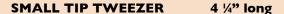




SMALL PARTS HANDLING TWEEZERS | SPECIAL DESIGNS | | ** * HIGH PRECISION | | GENERAL PRECISION

EXCELTA

EXCELTA



HOLE SIZE PART # MATERIAL STARS .008" 38 Carbon Steel *** .015" 40 Carbon Steel .015" 40-S Stainless Steel



#35 DESIGN

SMALL DIAMETER HOLE

BROAD, FLAT TIPS

815-SA-SE



PART # CTM MATERIAL STARS 35A-SA **NEVERUST®** .29" x .01" $\star\star\star$ 35A-SA-SE S/S Antimagnetic

*



#815-SA-SE *

4 1/2" long

ROUND TIP TWEEZERS

These tweezers can handle many types of round components and electronic devices.

The inside hole diameter is 0.060" (1.5mm). S/S Antimagnetic.

815B-SA-SE *

135A-SA ★★★

Same as above with 45° offset tips.



BROAD TIP TWEEZERS

Used for picking up delicate parts by the edges from a flat surface.

Tips close parallel at .750". NEVERUST®.



32A-SA ★★★

4 1/2" long

ROUND TIP TWEEZERS

Holds components firmly, offering easy positioning on many types of resistors and diodes. The 45 degree angle allows maximum surface clearance. In a closed position, the inside diameter is .156" (4.0 mm.) NEVERUST®.



42A-SA ★★★

4 1/2" long

ROUND TIP TWEEZERS

Holds components firmly, offering easy positioning. Can be used on many types of cylindrical components. The 45 degree angle allows maximum surface clearance. In a closed position, the inside diameter is .253" (6.5mm). NEVERUST®.



27-SA ★★★

4 1/4" long

FLAT TIP TWEEZERS

Very useful when straightening components or lead wires. NEVERUST®. $CTM = .25" \times .02"$



#36 DESIGN

4 3/4" long

PART # 36A-SA

MATERIAL **NEVERUST®** **STARS** *** CTM

36A-SA-SE S/S Antimagnetic

.25" x .02"

45 DEGREE OFFSET BROAD TIPS

SURFACE MOUNT HANDLING TWEEZERS SPECIAL DESIGNS ** FINE PRECISION

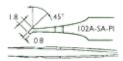
ALLTIP DIMENSIONS ARE METRIC

102A-SA-PI ★★

4 ½" long

CHIP HANDLING PADDLE TIP TWEEZERS

The wider point has been designed for easy manipulation of most chips and miniature components. Anti-crush device has been added to reduce chip breakage. S/S Antimagnetic



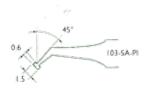


103-SA-PI ★★

4 1/4" long

S.M.D. PADDLE TIP TWEEZERS

The 45° angle tips are very helpful for placing SOT-23 and SOT-89 packages. S/S Antimagnetic





104-SA-PI ★★

4 1/2" long

S.M.D. PADDLETIPTWEEZERS

The wide paddle points provide perfect control when manipulating and placing SOT-89 transistors and monolithic chip capacitors. S/S Antimagnetic



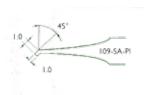


109-SA-PI ★★

4 1/4" long

S.M.D. PADDLE TIP TWEEZERS

The small points are set at a 45° angle for working in dense areas. S/S Antimagnetic





SPECIAL DESIGNS

★★★ HIGH PRECISION

★★ FINE PRECISION

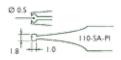
ALLTIP DIMENSIONS ARE METRIC

110-SA-PI ★★

4 1/4" long

S.M.D. PADDLE TIP TWEEZERS

The small groove on the inside of the points provides better control when placing small parts and wires. S/S Antimagnetic



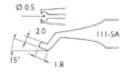


III-SA ***

4 1/2" long

S.M.D. PADDLE TIP TWEEZERS

The angle of the tips and the small 0,5mm hole will firmly hold many types of SMD components. NEVERUST®



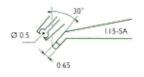


115-SA ★★★

4 1/4" long

S.M.D. PADDLE TIP TWEEZERS

The 0,5mm groove on the inside of the tip is designed on a 30° angle for holding and placing cylindrical devices. NEVERUST®





116-SA ***

4 1/4" long

S.M.D. PADDLE TIP TWEEZERS

Tips have a 1mm groove for handling small cylindrical devices. $\mbox{NEVERUST}^{\circledast}$





121-SA ***

5 ½" long

CHIP HANDLING PADDLE TIP TWEEZERS

The thin flat tips are cut at 45° making these tweezers useful when picking parts from a "Gel Pak". NEVERUST®





SURFACE MOUNT | SPECIAL DESIGNS | ** * HIGH PRECISION HANDLING TWEEZERS

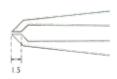
ALLTIP DIMENSIONS ARE METRIC

122-SA ★★★

4 1/2" long

CHIP HANDLING PADDLE TIP TWEEZERS

The strong flat tips will firmly hold components when de-soldering. **NEVERUST®**



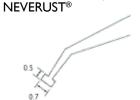


123-SA ★★★

4 1/2" long

CHIP HANDLING PADDLE TIP TWEEZERS

The smaller size tips will handle many types of S.M.D. resistors and capacitors.



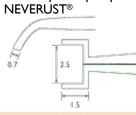


124-SA ★★★

4 1/4" long

S.M.D. PADDLE TIP TWEEZERS

The unique shape tips on these tweezers are helpful in placing SOT-23 and TO-236 packages.



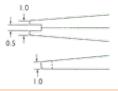


125-SA ★★★

4 1/4" long

S.M.D. PADDLE TIP TWEEZERS

The tips on these tweezers have a 0,5mm slot in the end which is great for picking and placing of 402 resistors. **NEVERUST®**



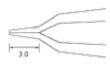


126-SA ***

4 1/4" long

CHIP HANDLING FINE TIP TWEEZERS

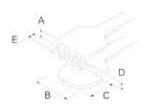
The fine tip and parallel closing jaws are very useful for routing jumper wires on PC boards. **NEVERUST®**







MADE IN ITALY ★★★ HIGH PRECISION ★★ FINE PRECISION



Our Wafer Handling Tweezers include a special engaging slot for easy handling of wafers.

Made in Italy from Stainless Steel Antimagnetic. "B" models have a 20° bend in body to improve handling.

3" WAFER HANDLING TWEEZERS - 4 1/4" Long







4" WAFER HANDLING TWEEZERS - 4 %" Long



490	-SA-PI ★★		490E	B-SA-PI ≯	**	4 9 01	L-SA-PI 🗲	r *	490	Γ-SA-PI ≯	r *	491-	SA-PI ★	k
Α	4.0 MM .	157"	Α	4.0 MM	.157"	Α	4.0 MM	.157"	Α	4.0 MM	.157"	Α	4.0 MM	.157"
В	12.0 MM .4	472"	В	12.0 MM	.472"	В	12.0 MM	.472"	В	12.0 MM	.472"	В	12.0 MM	.472"
С	7.0 MM .2	275"	С	7.0 MM	.275"	С	7.0 MM	.275"	С	7.0 MM	.275"	С	7.0 MM	.275"
D	3.1 MM .	125"	D	3.5 MM	.138"	D	3.5 MM	.138"	D	3.5 MM	.138"	D	3.5 MM	.138"
			_	3 I MM	125"	_	2 I MM	125"				_	2 I MM	125"

5" WAFER HANDLING TWEEZERS - 5" Long



													_	
590-9	SA-PI 🛨	*	591E	B-SA-PI 🤊	**	5 9 01	L-SA-PI 🗲	**	5907	Γ-SA-PI ≯	**	591-	SA-PI ★	k
Α	4.0 MM	.157"	Α	4.0 MM	.157"	Α	4.5 MM	.180"	Α	6.5 MM	.257"	Α	4.0 MM	.157"
В	16.2 MM	.638"	В	16.2 MM	.638"	В	16.2 MM	.638"	В	16.2 MM	.638"	В	16.2 MM	.638"
С	9.0 MM	.355"	С	9.0 MM	.355"	С	9.0 MM	.355"	С	9.0 MM	.355"	С	9.0 MM	.355"
D	2.7 MM	.106"	D	2.7 MM	.106"	D	2.7 MM	.106"	D	2.7 MM	.106"	D	2.7 MM	.106"
			E	3.1 MM	.125"	E	3.1 MM	.125"				Ε	3.1 MM	.125"

6" WAFER HANDLING TWEEZERS - 5" Long



690-S	A-PI 🛨	*	6911	B-SA-PI	**	6901	L-SA-PI ★	*	6907	Γ-SA-PI ϶	*	691-	SA-PI ★	k
Α	3.8 MM	.150"	Α	3.0 MM	.118"	Α	3.5 MM	.140"	Α	6.5 MM	.257"	Α	3.0 MM	.118"
В	19.8 MM	.780"	В	19.8 MM	.780"	В	19.8 MM	.780"	В	19.2 MM	.780"	В	19.8 MM	.780"
С	9.0 MM	.355"	С	9.0 MM	.355"	С	9.0 MM	.355"	С	9.0 MM	.355"	С	9.0 MM	.355"
D	2.7 MM	.106"	D	2.7 MM	.106"	D	2.7 MM	.106"	D	2.7 MM	.106"	D	2.7 MM	.106"
			Ε	3.1 MM	.125"	Ε	3.1 MM	.125"				Ε	3.1 MM	.125"

8" WAFER HANDLING TWEEZERS - 7" Long





890L	-SA **	k .
Α	3.8 MM	.150"
В	28.5 MM	1.120"
С	11.5 MM	.450"
E	2.15 MM	.100"



ERGO-TWEEZE® ERGONOMIC TWEEZERS

ESD SAFE CUSHION GRIPS ****** ULTRA PRECISION *** HIGH PRECISION * FINE PRECISION

Performance With The Ergonomic Advantage!



ERGO-TWEEZE® ERGONOMIC TWEEZERS

ESD SAFE CUSHION GRIPS ****** ULTRA PRECISION *** HIGH PRECISION * FINE PRECISION

Soft foam cushion grips provide relief from hand fatigue and Carpel Tunnel Syndrome.



ERGO-TWEEZE® ERGONOMIC TWEEZERS



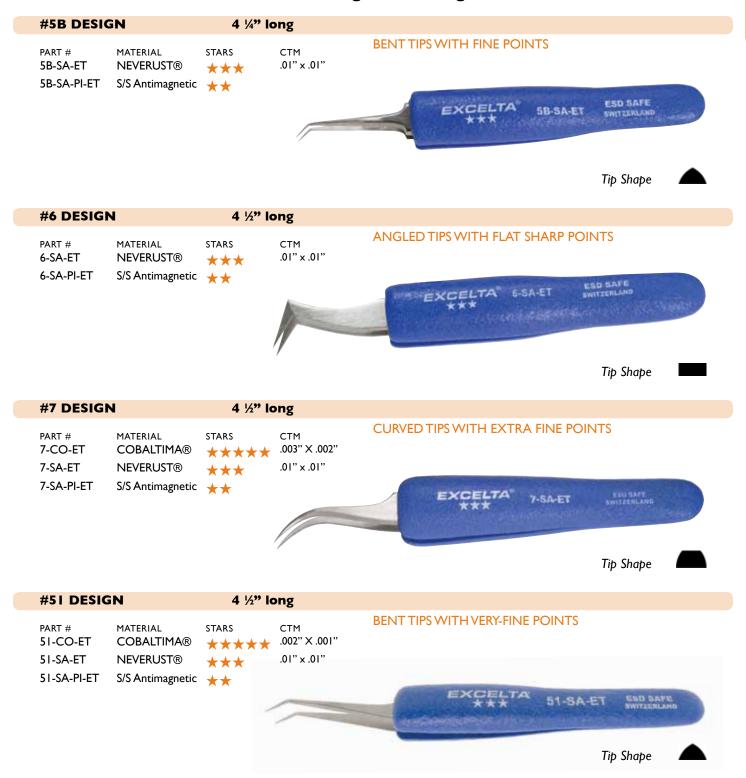
Wider, Softer, Designed With You In Mind! Better Control!



ERGO-TWEEZE® ERGONOMIC TWEEZERS

ESD SAFE CUSHION GRIPS ****** ULTRA PRECISION ** * HIGH PRECISION * * FINE PRECISION

A Breakthrough in Handling.







Zirconia ceramic is six-times harder than stainless steel, non-magnetic and chemically inert. Solder will not adhere to the surface. It has a working temperature over 1090° C (2000° F) with a stainless steel body and replaceable tips. Non-metal tips for safe handling of delicate parts. Clean room safe.



Replacement Tip Kits available.

D-275A-CE ★★★★

4 3/4" long

WHITE CERAMIC TIP TWEEZERS

White Ceramic tips screwed onto NEVERUST® body. Tip size .012" wide.

Replacement Tip Kit D-275-RTX



DN-277-CE ★★★★

4 3/4" long

WHITE CERAMIC TIP REVERSE ACTION TWEEZERS

White Ceramic tips screwed onto NEVERUST® body. Tip size .020" wide.

Replacement Tip Kit D-275-RTX



277-CE ★★★

5" long

WHITE CERAMIC TIP TWEEZERS

White Ceramic tips screwed onto nickel silver non-magnetic body. Tip size .040" wide.

* Non-Replaceable Tips



CERAMIC TIP TWEEZERS

MADE IN SWITZERLAND ★★★ HIGH PRECISION

Zirconia ceramic is six-times harder than stainless steel, non-magnetic and chemically inert. Solder will not adhere to the surface. It has a working temperature over 1090° C (2000° F) with a stainless steel body and replaceable tips. Non-metal tips for safe handling of delicate parts. Clean room safe.



2A-CE ★★★

5 3/4" long

WHITE CERAMIC FLAT ROUND TIPTWEEZERS

White Ceramic tips screwed onto NEVERUST® body. Tip size .080" wide.

Replacement Tip Kit P/N is 2A-CE-RTX



3-CE ★★★

5 3/4" long

WHITE CERAMIC TIP REVERSE ACTION TWEEZERS

White Ceramic tips screwed onto NEVERUST® body. Tip size .015" wide.

Replacement Tip Kit P/N is 3-CE-RTX



7-CE ★★★

5 3/4" long

WHITE CERAMIC CURVED TIPTWEEZERS

White Ceramic tips screwed onto NEVERUST® body. Tip size .025" wide.

Replacement Tip Kit P/N is 7-CE-RTX



PEEK TIP TWEEZERS

MADE IN SWITZERLAND ★★★★ ULTRA PRECISION

PEEK is a high temperature thermoplastic with excellent chemical resistance. Inert to all common solvents, it resists a wide range of inorganic liquids. It has a working temperature of 249° C (480° F) and a NEVERUST® body.



Replacement Tip Kits available.

162A-RT ★★★★★

5" long

ESD SAFE PEEK FINETIPTWEEZERS

On NEVERUST® body with .020" tip size.

Replacement Tip Kit P/N is 162A-RTX



162B-RT ★★★★★

5" long

ESD SAFE PEEK SMALL TIP TWEEZERS

On NEVERUST® body with .040" tip size.

Replacement Tip Kit P/N is 162B-RTX



162C-RT ★★★★★

5" long

ESD SAFE PEEK MEDIUM TIP TWEEZERS

On NEVERUST® body with .080" tip size.

Replacement Tip Kit P/N is 162C-RTX



762A-RT ★★★★★

5" long

ESD SAFE PEEK CURVED TIP TWEEZERS

On NEVERUST® body with .020" tip size.

Replacement Tip Kit P/N is 762A-RTX



OPOLYMER | MADE IN SWITZERLAND ★★★★ EXTREME PRECISION

Copolymer tips have a surface resistivity of 10¹⁰ Ohm cm, temperature resistant to 90° C (195° F) and are silicon and chloride free. Stainless steel antimagnetic body with screw on replaceable tips. ESD and clean room safe.



179A-RT ★★★★

5" long

COPOLYMER FINE TIP TWEEZERS

Black Copolymer tips screwed onto NEVERUST® body with outside finger serrations. Tip size .020" wide.

Replacement Tip Kit P/N is 179A-RTX



179D-RT ★★★★

5" long

COPOLYMER FLAT TIP TWEEZERS

Black Copolymer tips screwed onto NEVERUST® body with outside finger serrations. Tip size .080" wide.

Replacement Tip Kit P/N is 179D-RTX



179DN-RT ★★★★

5 1/2" long

COPOLYMER REVERSE ACTION FLAT TIP TWEEZERS

Black Copolymer tips screwed onto NEVERUST® body. Tip size .080" wide.

Replacement Tip Kit P/N is 179D-RTX



M-179A-RT ★★★★

3 1/4" long

MINIATURE COPOLYMER FINE TIP TWEEZERS

Black Copolymer tips screwed onto NEVERUST® body. Tip size .020" wide.



CARBOFIB MADE IN ITALY TIP TWEEZERS MADE IN ITALY ** HIGH PRECISION

Carbofib is a teflon base material with 30% carbon fibers added. Carbofib is conductive with a surface resistivity of 10³ Ohm cm, and temperature resistant up to 121° C (249° F). Stainless steel antimagnetic body with screw on replaceable tips. Designed for safe handling of delicate parts.



Replacement Tip Kits available.

159-RT ★★★

5" long

EXTRA FINE CARBOFIBTIPTWEEZERS

Black Carbofib tips screwed onto S/S Antimagnetic body. Tip size .012" wide.

Replacement Tip Kit P/N is 159-RTX



Also Available in Reverse Action - Part No. 159-RTN

159A-RT ★★★

5" long

FINE CARBOFIBTIPTWEEZERS

Black Carbofib tips screwed onto S/S Antimagnetic body. Tip size .020" wide.

Replacement Tip Kit P/N is 159A-RTX



159B-RT ★★★

5" long

SMALL CARBOFIB TIP TWEEZERS

Black Carbofib tips screwed onto S/S Antimagnetic body. Tip size .040" wide.

Replacement Tip Kit P/N is 159B-RTX



159C-RT ★★★

5" long

MEDIUM CARBOFIB TIP TWEEZERS

Black Carbofib tips screwed onto S/S Antimagnetic body. Tip size .080" wide.

Replacement Tip Kit P/N is 159C-RTX



159D-RT ★★★

5" long

FLAT CARBOFIBTIPTWEEZERS

Black Carbofib tips screwed onto S/S Antimagnetic body. Tip size .060" wide.

Replacement Tip Kit P/N is 159D-RTX



Also Available in Reverse Action - Part No. 159D-RTN

159E-RT ★★★

5" long

LARGE CARBOFIBTIPTWEEZERS

Black Carbofib tips screwed onto S/S Antimagnetic body. Tip size .120" wide.

Replacement Tip Kit P/N is 159E-RTX



759-RT ★★★

5" long

CURVED CARBOFIB TIP TWEEZERS

Black Carbofib tips screwed onto S/S Antimagnetic body. Tip size .020" wide.

Replacement Tip Kit P/N is 759-RTX



Also Available in Reverse Action - Part No. 759-RTN

WHITE DELRIN | MADE IN ITALY IP TWEEZERS

Delrin tips have outstanding resistance to chemicals and solvents. They are electrically insulative and resistant to temperatures up to 85° C (185° F). Stainless steel antimagnetic body with screw on replaceable tips. Excellent for clean room use.



Replacement Tip Kits available.

159B-RTW ★★★

5" long

WHITE DELRIN TIP TWEEZERS

White Delrin tips screwed onto S/S Antimagnetic body. Tip size .040" wide.

Replacement Tip Kit P/N is 159B-RTWX



159C-RTW ★★★

5" long

WHITE DELRIN FLAT TIP TWEEZERS

White Delrin tips screwed onto S/S Antimagnetic body. Tip size .080" wide.

Replacement Tip Kit P/N is 159C-RTWX



159D-RTW ★★★

5" long

WHITE DELRIN MEDIUM TIPTWEEZERS

White Delrin tips screwed onto S/S Antimagnetic body. Tip size .060" wide.

Replacement Tip Kit P/N is 159D-RTWX



CONDUCTIVE PLASTIC HANDLING TWEEZERS

★★ FINE PRECISION

3C-ESD ★★

4 %" long

CONDUCTIVE PLASTIC TWEEZERS WITH SHARP POINTS

Temperature resistant to 100°C (212° F). Surface Resistivity of 10⁵ Ohm.



609-ESD ★★

4 %" long

CONDUCTIVE PLASTIC TWEEZERS WITH 1/8" WIDE POINTS

Temperature resistant to 100°C (212° F). Surface Resistivity of 10⁵ Ohm.



35A-ESD ★★

4 1/2" long

CONDUCTIVE PLASTIC TWEEZERS WITH 1/4" WIDE POINTS

Temperature resistant to 100°C (212° F). Surface Resistivity of 10⁵ Ohm.



6-ESD ★★

4 3/4" long

CONDUCTIVE PLASTIC TWEEZERS WITH ANGLED TIPS AND SHARP POINTS

Temperature resistant to 100°C (212° F). Surface Resistivity of 10⁵ Ohm.



2A-ESD ★★

4 %" long

CONDUCTIVE PLASTIC TWEEZERS WITH TAPERED TIPS 1/16" FLAT POINTS

Temperature resistant to 100°C (212° F). Surface Resistivity of 10⁵ Ohm.



HANDLING TWEEZERS

PLASTIC MADE IN USA ** GENERAL PRECISION

Glass Filled Delrin and Acetal Tweezers

4 %" long 61*

GLASS FILLED DELRIN TWEEZERS

9/32" Wide Points

808 ★ 4 1/2" long

GLASS FILLED DELRIN TWEEZERS

Sharp Angled Points

7-LER ★ 4 1/2" long

GLASS FILLED DELRIN TWEEZERS

Sharp Points

4 1/2" long 609 ★

GLASS FILLED DELRIN TWEEZERS

1/8" Wide Points

300 ★ 4 %" long

GLASS FILLED DELRIN TWEEZERS

3/32" Wide Points

P2A ★ 4 %" long

GLASS FILLED DELRIN TWEEZERS

7/64" Flat Points

7A-LER 🛨 4 1/2" long

ACETAL TWEEZERS

Clean Room Safe, anti-static tweezers with sharp Points

609A★ 4 ½" long **ACETAL TWEEZERS**

Clean Room Safe, anti-static tweezers with 1/8" wide Points





Other designs are available upon request. Call (866) 392-3582 for information.

116-CF ****

4 3/4" long

S.M.D. CARBOFIB TWEEZER

Carbofib tips mounted on a Stainless Steel body featuring a .039" (1,0mm) hole in the tip. Excellent in handling cylindrical devices without scratching or nicking.





0-SA-WO ****

4 3/4" long

WIDE-OPENING PARALLEL JAW TWEEZER

These tweezers feature blades that are parallel at 1/2". Makes for a sure grip when handling larger objects.



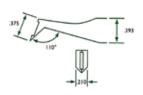


I5A-ST-PE ★★★★★

4 ½" long

STRIPPING TWEEZER

Designed to strip Teflon® and other coated wire exactly to the AWG size without nicking. Available in sizes 30AWG and smaller. When ordering indicate wire gauge at the end of catalog part number. (Example 15A-ST-PE-36)





TRISISTA 3 ***
TRISISTA 7 ***

6 ½" long 6 ½" long

JEWELERS TWEEZER

Tweezers feature double serrated inside tips.

Trisista 3 has a matte black finish to eliminate glare.





PRECISION WIRE CUTTERS

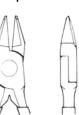
Round



Round / Relieved



Tapered



Tapered / Relieved



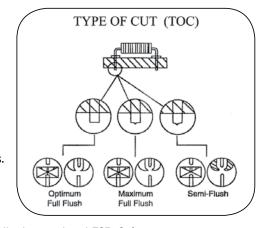


The Head Shape of the ogival or round head is the most common head for a cutting tool. It allows for the maximum amount of "metal" behind the cutting edge delivering an extremely long tool life.

The tapered head was developed to allow the cutting tool to get into those "hard to reach" areas. It was designed more along

diagonal lines with less "metal" behind the cutting edge.

The "Type of Cut" refers to the outside angle of the cutting blades. A semi-flush cutter (cutting edge at 45° with a .010" bevel) will produce more cuts than a maximum flush cutter. A maximum flush cutter (cutting edge at 45° with a .005" bevel) will produce more cuts than an optimum flush cutter (cutting edge out with no bevel). Be sure to choose the type of cut to suit your cutting needs.



The Grip on a hand tool should fit comfortably in your hand.

You can choose from our soft foam cushion grips or molded grips, both ergonomically designed and ESD Safe.



Teal Molded Grips - 10°Ω/sq Excelta Part No. GP-TEAL5



Teal Double-Dip Grips 10¹⁰Ω/sq Excelta Part No. GP-DDLP



Teal Foam Cushion Grips 10¹⁰Ω/sq Excelta Part No. GP-FOAM

LAZER LINE® CUTTERS





Excelta has pioneered the combined use of Laser technology with the most advanced CNC machining to produce the finest grade cutter available. We start with premium steel made in the USA, laser cut for consistency, and CNC machined to exact specifications. The cutting blades are induction hardened to 63 - 65 Rockwell C for durability and precision hard-milled for sharpness to produce state of the art tools, *Precisely Right* for all your cutting needs.

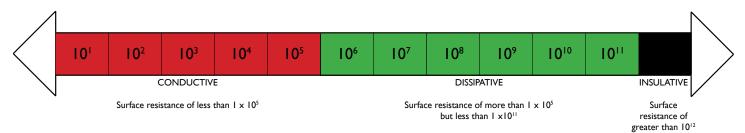


CUTTER CORRELATION CHART

Reference #	Cut	Wire Type	.010"	.012"	.016"	.020"	.025"	.032"	.040"	.050"	.064"
			30 AWG	28 AWG	26 AWG	24 AWG	22 AWG	20 AWG	18 AWG	16 AWG	14 AWG
00705115	SF	Soft									
2876EHT	3 F	Hard									
20065115	SF	Soft									
2896EHT	21	Hard									
0007FUT	<u> </u>	Soft									
2897EHT	SF	Hard									
00005115	0.5	Soft									
2899EHT	SF	Hard									
7104E / 7204E	MF	Soft									
7130E / 7230E	SF	Soft									
7230EH	SF	Hard									
7131E / 7231E	MF	Soft									
7231EH	MF	Hard									
7132E / 7232E	OF	Soft									
7134E / 7234E	MF	Soft									
7135E / 7235E	OF	Soft									
7137E / 7237E	MF	Soft									
7237EH	MF	Hard									
7138E / 7238E	OF	Soft									
7140E / 7240E	SF	Soft									
7141E / 7241E	MF	Soft									
7241EHT	MF	Hard									
7142E / 7242E	OF	Soft									
7143E / 7243E	SF	Soft									
7144E / 7244E	MF	Soft									
7145E / 7245E	OF	Soft									
7146E / 7246E	SF	Soft									
7147E / 7247E	MF	Soft									
7247EHT	MF	Hard									
7148E / 7248E	OF	Soft									
7150E / 7250E	SF	Soft									
7151E / 7251E	MF	Soft									
7152E / 7252E	OF	Soft									
7170E / 7270E	OF	Soft									
7171E / 7271E	OF	Soft									
7172E / 7272E	MF	Soft									
7174E / 7274E	OF	Soft									
7175E / 7275E	MF	Soft									
7182E / 7282E	MF	Soft									
7282EH	MF	Hard									
7282EHT	MF	Hard									
7183E / 7283E	OF	Soft									
7149E / 7249E	OF	Soft									
9240E	SF	Soft									
9241E	MF	Soft									
9242E	OF	Soft									
9243E	SF	Soft									
9244E	MF	Soft									
9245E	OF	Soft									
9246E	SF	Soft									
9247E	MF	Soft									
9248E	OF	Soft									

ESD, Insulative, Conductive, Dissipative or Anti-Static. What do these terms mean?

ESD is an acronym for electrostatic discharge. Many times it is used incorrectly as a term for something that is "electrostatic discharge safe." The terms Insulative, Conductive, and Dissipative are all terms which subdivide ESD into more detail.



PRECISION WIRE CUTTERS

7000 SERIES SMALL HEAD CUTTERS

★★★★ ULTRA PRECISION

MADE IN THE USA



LONG ERGONOMIC HANDLES

5 3/4" Small Round Head

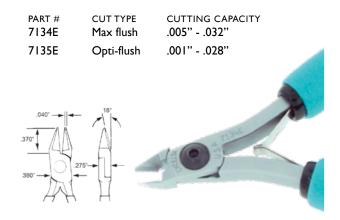
PART # 7130E	CUT TYPE Semi-flush	CUTTING CAPACITY .008"040"	
7131E	Max flush	.005"040"	
7132E	Opti-flush	.001"032"	e di
380"	275'-		

STANDARD HANDLES

5" Small Round Head

PART # 7230E	CUT TYPE Semi-flush	CUTTING CAPACITY .008"040"	
7231E	Max flush	.005"040"	
7232E	Opti-flush	.001"032"	
.375-	75-	0,	1

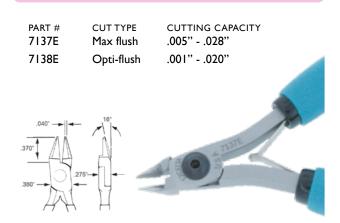
5 3/4" Small Tapered Head



5" Small Tapered Head

PART # 7234E	CUT TYPE Max flush	CUTTING CAPACITY .005"032"
7235E	Opti-flush	.001"028"
.370 275	16-	10,

5 3/4" Small Tapered / Relieved Head



5" Small Tapered / Relieved Head

PART #	CUT TYPE	CUTTING CAPACITY
7237E	Max flush	.005"028"
7238E	Opti-flush	.001"020"
.370	16-	

7000 SERIES MEDIUM HEAD CUTTERS

★★★★★ ULTRA PRECISION PRECISION WIRE CUTTERS

Excelta has pioneered the use of Laser technology with advanced CNC machining to produce the finest cutters available. We start with premium steel, laser cut for consistency and CNC machined to exact specifications. The cutting blades are induction hardened to RHc 63 - 65 and precision hard-milled for sharpness. **MADE IN USA**

LONG ERGONOMIC HANDLES

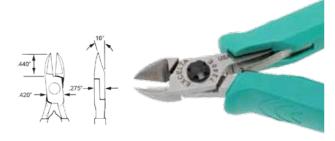
STANDARD HANDLES

5 3/4" Medium Round Head

PART # 7140E	CUT TYPE Semi-flush	CUTTING CAPACITY .008"042"	
7141E	Max flush	.005"040"	
7142E	Opti-flush	.003"032"	
	46°		
.440°	75	10	

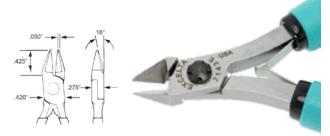
5" Medium Round Head

PART # 7240E	CUT TYPE Semi-flush	CUTTING CAPACITY .008"042"
7241E	Max flush	.005"040"
7242E	Opti-flush	.003"032"



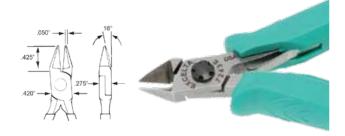
5 3/4" Medium Tapered Head

PART # 7143E	CUT TYPE Semi-flush	CUTTING CAPACITY
7144E	Max flush	.005"036"
7145E	Opti-flush	.002"028"



5" Medium Tapered Head

PART #	CUT TYPE	CUTTING CAPACITY
7243E	Semi-flush	.008"036"
7244E	Max flush	.005"036"
7245E	Opti-flush	.002"028"



5 3/4" Medium Tapered / Relieved Head

PART #	CUT TYPE	CUTTING CAPACITY
7146E	Semi-flush	.008"036"
7147E	Max flush	.005"036"
7148E	Opti-flush	.002"028"



5" Medium Tapered / Relieved Head

PART # 7246E	CUT TYPE Semi-flush	CUTTING CAPACITY .008"036"
7247E	Max flush	.005"036"
7248E	Opti-flush	.002"028"



7000 SERIES ANGULATED HEAD CUTTERS PRECISION WIRE CUTTERS

★★★ ULTRA PRECISION

LONG ERGONOMIC HANDLES

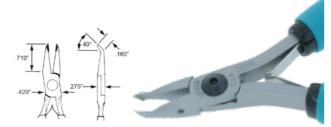
MADE IN USA

STANDARD HANDLES

6" Miniature Angulated Head

PART # 7175E

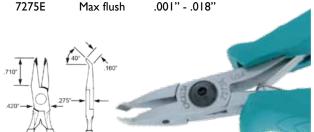
CUT TYPE Max flush CUTTING CAPACITY .001" - .018"



5 1/4" Miniature Angulated Head

PART # **CUT TYPE**

CUTTING CAPACITY .001" - .018"



6" Medium Angulated Head

PART # 7182E

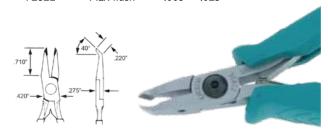
CUT TYPE Max flush **CUTTING CAPACITY** .003" - .025"



5 1/4" Medium Angulated Head

PART # 7282E

CUT TYPE Max flush **CUTTING CAPACITY** .003" - .025"



6" Large Angulated Head

PART # 7172E

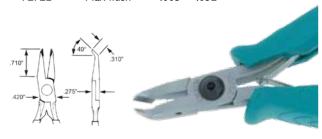
CUT TYPE Max flush **CUTTING CAPACITY** .005" - .032"



5 1/4" Large Angulated Head

PART # 7272E

CUT TYPE Max flush CUTTING CAPACITY .005" - .032"



6" Large Angulated/Tapered Head

PART # 7104E

CUT TYPE Max flush CUTTING CAPACITY .003" - .025"

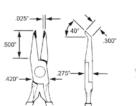


5 1/4" Large Angulated/Tapered Head

CUT TYPE PART # 7204E

Max flush

CUTTING CAPACITY .003" - .025"





7000 SERIES FINE TIP CUTTERS PRECISION WIRE CUTTERS

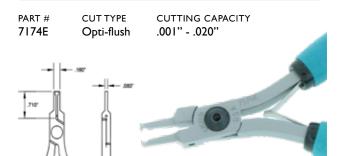
★★★★ ULTRA PRECISION

MADE IN USA

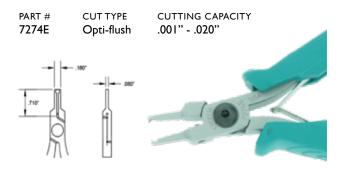
LONG ERGONOMIC HANDLES

STANDARD HANDLES

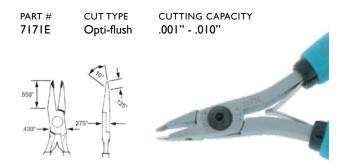
6" Transverse End Cutter



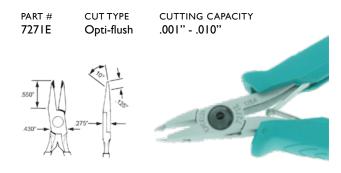
5 1/2" Transverse End Cutter



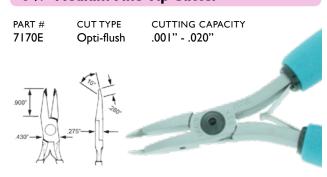
5 3/4" Small Fine Tip Cutter



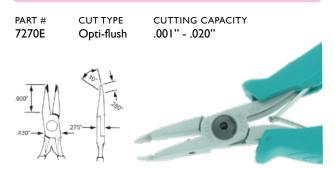
5 1/4" Small Fine Tip Cutter



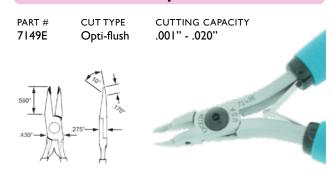
6 1/4" Medium Fine Tip Cutter



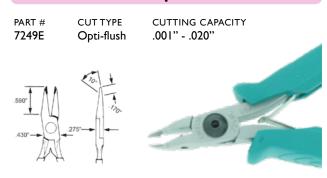
5 3/4" Medium Fine Tip Cutter



5 ¾" Relieved Fine Tip Cutter



5 ½" Relieved Fine Tip Cutter



7000 SERIES CARBIDE INSERT CUTTERS

HARD WIRE CUTTERS | ★★★★★ ULTRA PRECISION

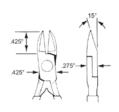
MADE IN USA

Carbide insert cutters are made from carbon steel cutter blanks with tungsten carbide inserts. The extremely hard cutting edge (79/81 Rockwell "C") is excellent for cutting most types of medical and hard wires. All carbide insert cutters feature a maximum flush cut.

5" Medium Round Head Carbide Cutter





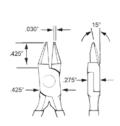




5" Medium Tapered/Relieved Head Carbide Cutter

7247EHT

CUT TYPE Max flush CUTTING CAPACITY .008" - .020" Hard Wire

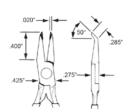




5" Angulated Head Carbide Cutter

PART # 7282EHT

CUT TYPE Max flush **CUTTING CAPACITY** .005" - .020" Hard Wire





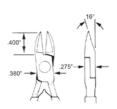
7000 SERIES TUNGSTEN ALLOY CUTTERS HARD WIRE CUTTERS | **** ULTRA PRECISION

Tungsten Alloy cutters are made from a special blend of tungsten cobalt, vanadium and chromium. A unique heat treating process makes a very hard, tough cutting edge (66/68 Rockwell "C".

MADE IN USA

4 3/4" Miniature Head Tungsten Alloy Cutter

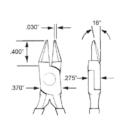
PART # **CUT TYPE CUTTING CAPACITY** 7230EH .001" - .020" Hard Wire Semi-flush 7231EH Max flush .003" - .010" Hard Wire





4 ¾" Miniature Tapered/Relieved Tungsten Alloy Cutter

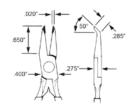
CUTTING CAPACITY PART # CUT TYPE 7237EH Max flush .003" - .010" Hard Wire





5" Angulated Head Tungsten Alloy Cutter

PART # **CUT TYPE** CUTTING CAPACITY 7282EH .003" - .007" Hard Wire Max flush





9000 SERIES SMALL HEAD CUTTERS

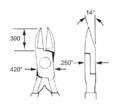


- Cutting Blades Hardened to RHC 63 65
- Low profile Narrow Head Design
- Handles Are Designed For Comfort in Smaller Hands
- Stainless Steel Leaf Springs



5" Medium Round Head

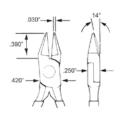
PART #	CUT TYPE	CUTTING CAPACITY
9240E	Semi-flush	.010"040"
9241E	Max flush	.005"040"
9242E	Opti-flush	.002"032"





5" Medium Tapered Head

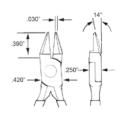
PART #	CUT TYPE	CUTTING CAPACITY
9243E	Semi-flush	.010"040"
9244E	Max flush	.005"032"
9245E	Opti-flush	.002"025"





5" Medium Tapered / Relieved Head

PART #	CUT TYPE	CUTTING CAPACITY
9246E	Semi-flush	.010"040"
9247E	Max flush	.005"032"
9248E	Opti-flush	.002"025"





2800 SERIES WIRE CUTTERS

CARBIDE INSERT CUTTERS

★ ★ FINE PRECISION



The Excelta 2-Star precision
Multi-Purpose Cutters are made
from the finest materials and are
designed with quality and value
in mind. These tools feature
Stainless Steel construction for
excellent corrosion resistance
and carbide inserts for maximum
blade life. Semi-Flush Cut with
ESD Safe soft foam cushion grips.



2876EHT Carbide Insert (actual size)

4 1/4" Small Tapered Head Cutter

PART # **2876EHT**

CUT TYPE Semi-flush

\

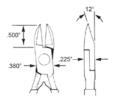


4 1/2" Small Round Head Cutter

PART # 2899EHT

CUT TYPE Semi-flush

E sh CUTTING CAPACITY
.010" - .030" Soft Wire
.008" - .012" Hard Wire





4 1/2" Medium Round Head Cutter

PART # **2897EHT**

CUT TYPE Semi-flush

300"



5 1/2" Large Round Head Cutter

PART # 2896EHT

CUT TYPE Semi-flush

.500"



7" Tube and Cable Cutter

51-T ★★

Stainless steel cutting blades provide a smooth clean cut on plastic tubing and soft cables.

Shear Cut, Cutting Capacity 3/8"



6" Precision Cable Cutter

51I-6 ***

Recommended for cutting stranded cables and wires up to I/2". Locking device keeps cutting jaws in closed position when not in use.

Shear Cut, Cutting Capacity 1/2"



6" Depanelizing Tool

51I-6-DP ★★★

The thin jaws on these cutters are designed to cut the tabs on PC boards. The longer handles provide more leverage when cutting.

Designed to fit a 1/16" or larger slot.







PRECISION PLIERS

With 7 lines to choose from, Excelta makes it easy to select one *Precisely Right* for your application.

Excelta makes a wide range of pliers for general electronics repair and fine mechanical work. Precision lap and box joints ensure precise jaw alignment. ESD safe grips and available ergonomic handles makes finding the exact plier you need easier than ever.

**** 700 Series Medium Head Pliers

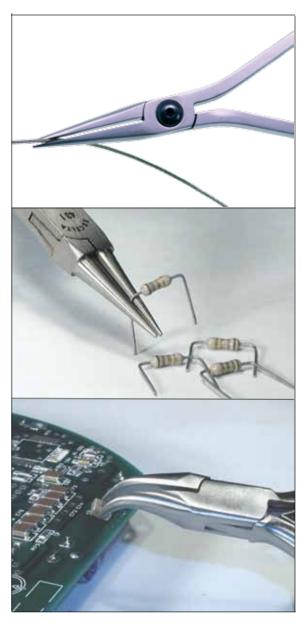
- Made In USA
- Induction Hardened Tips
- Carbon Steel
- ESD Safe Molded Grips

*** Excelta Series Small Head Pliers

- Stainless Steel
- Soft Foam Cushion Grips

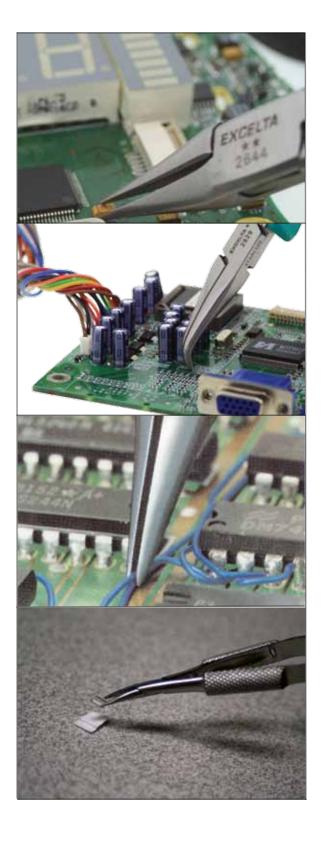
★★ "S" Handle Series Medium Head Pliers

- Stainless Steel
- Ergonomic "S" Handle Grips
- Soft Foam Cushion Grips



★★★★★ ULTRA PRECISION ★★★ HIGH PRECISION ★★ FINE PRECISION

- ★★ 2600 Standard Line Small Head Pliers
 - Stainless Steel
 - Soft Foam Cushion Grips
- ** 2800 Standard Line
 Medium Head Pliers
 - Stainless Steel
 - ESD Safe Molded Grips
- **★★** 2900 Standard Line Large Head Pliers
 - Stainless Steel
 - Soft Foam Cushion Grips
- ** Miniature Pliers
 - Stainless Steel
 - Self-Opening



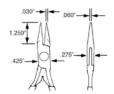
700 SERIES HIGH PRECISION PLIERS

Excelta professional grade pliers have several unique features:

- Lap Joint design insures superior performance
- ESD Safe Molded Grips are standard
- Polished, hand-finished jaws are 100% free of burrs
- Induction hardened tips for long life
- Made in USA

5" Chain Nose

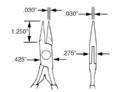
PART # JAW FINISH 744 Smooth 744D Serrated





5" Round Nose

PART # JAW FINISH 743 Smooth





EXCELTA LINE | STAINLESS STEEL FINE PRECISION PLIERS

★★★ HIGH PRECISION

4 1/2" Medium Chain Nose

PART # **IAW FINISH** 11-I Smooth 11-DI Serrated



4 1/2" 60° Small Bent Nose

JAW FINISH PART # 29-I Smooth



4 1/2" Small Flat Nose

JAW FINISH PART # 42-I Smooth



4 1/2" Medium Round Nose

PART # IAW FINISH Smooth 43-I



4 1/2" Small Chain Nose

JAW FINISH PART # 44-I Smooth



4 1/2" Small Needle Nose

JAW FINISH PART # 47-I Smooth



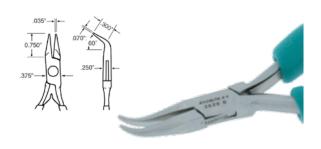
S-HANDLE ERGONOMIC PLIERS

STAINLESS STEEL ★★ FINE PRECISION

6" Curved Tip Chain Nose

PART # 2629S

JAW FINISH Smooth



6" Round Nose

PART # 2643S

JAW FINISH Smooth



6" Flat Tip "Duck Bill"

PART # 2642S

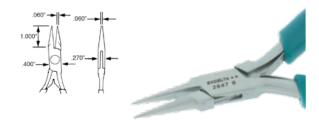
JAW FINISH Smooth



PART # 2647S

JAW FINISH Smooth

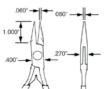




6" Chain Nose

PART # 2644S

JAW FINISH Smooth





SMALL HEAD | STAINLESS STEEL STANDARD LINE PLIERS

★★ FINE PRECISION

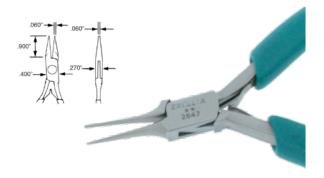
4 ¾" Chain Nose

JAW FINISH PART # 2644 Smooth 2644D Serrated



4 ¾" Needle Nose

JAW FINISH PART # 2647 Smooth



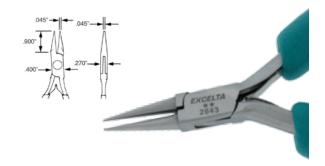
4 ¾" Needle Nose

JAW FINISH PART # 2647D Serrated



4 ¾" Round Nose

JAW FINISH PART # Smooth 2643



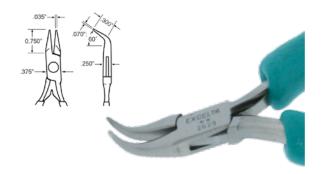
4 3/4" Flat Nose

JAW FINISH PART # Smooth 2642



4 ¾" Bent Nose

JAW FINISH PART # 2629 Smooth



MEDIUM HEAD | STAINLESS STEEL STANDARD LINE PLIERS

★★ FINE PRECISION

5 ¾" Chain Nose

JAW FINISH PART # 2844 Smooth 2844D Serrated



5 1/2" Needle Nose

JAW FINISH PART # 2847 Smooth 2847D Serrated



5 ¾" Round Nose

PART # JAW FINISH 2843 Smooth



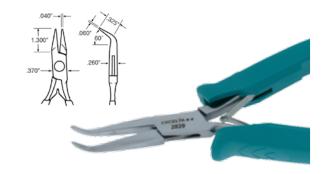
5 ¾" Flat Nose

PART # JAW FINISH 2842 Smooth 2842D Serrated



5 3/4" 60° Bent Nose

JAW FINISH PART # 2829 Smooth



5 ¾" "Duck Bill" Nose

IAW FINISH PART # 2818 Smooth



MEDIUM HEAD | STAINLESS STEEL LONG HANDLE PLIERS

★★ FINE PRECISION

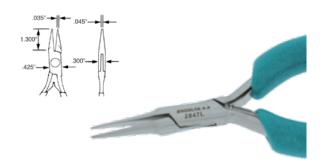
6" Chain Nose

JAW FINISH PART # 2844L Smooth



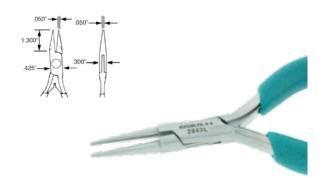
6" Needle Nose

JAW FINISH PART # 2847L Smooth



6" Round Nose

PART # IAW FINISH 2843L Smooth



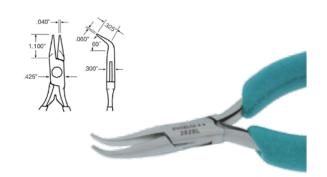
6" Flat Nose

JAW FINISH PART # 2842L Smooth



6" 60° Bent Nose

JAW FINISH PART # 2829L Smooth



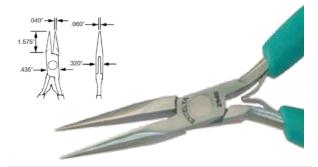


LARGE HEAD | STAINLESS STEEL STANDARD LINE PLIERS

★★ FINE PRECISION

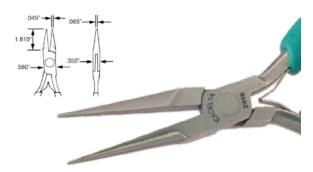
6 1/4" Chain Nose

JAW FINISH PART # 2949 Smooth 2949D Serrated



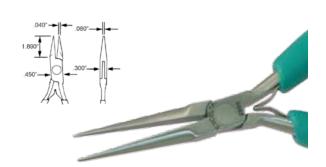
6 1/2" Needle Nose

PART # JAW FINISH 2910 Smooth 2910D Serrated



6 1/2" Needle Nose

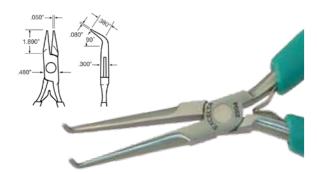
JAW FINISH PART # 2905 Smooth 2905D Serrated





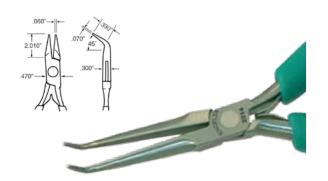
6 1/2" 90° Bent Nose

PART # JAW FINISH 2904 Smooth 2904D Serrated



6 1/2" 45° Bent Nose

PART # JAW FINISH 2914 Smooth 2914D Serrated



805.686.4686

WWW.EXCELTA.COM

MINIATURE PLIERS

STAINLESS STEEL ★★ FINE PRECISION

381 **

3" long

Curved Tip Chain Nose pliers tips are excellent when working in very difficult and confined areas. The jaw length is 1/4".



382 ******

3" long

3" Straight Tip Chain Nose pliers with small fine tips for those very delicate assembly jobs. The jaw length is $\frac{1}{4}$ ".



383 ******

3" long

3" Straight Tip Needle Nose pliers are designed for light work where space and accessibility is limited. The jaw length is $\frac{1}{4}$ ".



384 ******

3" long

3" Angulated Needle Nose Pliers with small tip width and thinness enable this tool to work well in confined areas. The jaw length is $\frac{1}{4}$ ".



385 **

3" long

3" Round Nose Pliers can be used to form small wires and leads. The jaw length is 1/4".



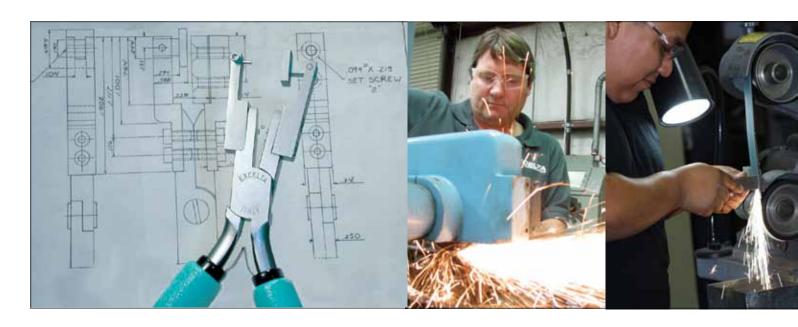
386 ******

3" long

3" Flat Nose Pliers are designed to prevent nicking and marring of delicate component leads. The jaw length 1/4".



EXCELTA®





As the leader in tool technology,

Excelta knows every application is unique. Our Custom Design facility can work from your schematic to manufacture any tool to your specifications. Or, if you prefer, our experienced designers can diagnose your needs and design the tool that is "Precisely Right" for your unique application.



Whether you need a single tool to handle special parts under unique conditions, or a supply of custom tools to crimp, cut, place or extract parts, Excelta's Custom Design Service has the experience, ingenuity and capability to meet your needs.

The following pages include Excelta tools that have been designed with a very special application in mind. If you don't see the tool you're looking for, contact our Custom Design Department at (805) 686-4686 or log on to www.exceltacustomtools.com and we will design the custom tool to fit your application.

ANTI-SHOCK SHEAR CUTTERS

★★★★ ULTRA PRECISION

530E-US ★★★★★

5" long

ANTI-SHOCK SHEAR CUTTER

The shear action cut reduces shock on delicate components and solder connections. The "Stand-Off" keeps the cutting blade from cutting into the solder connections. Tip width .140". Recommended cutting capacity 22 AWG (.025" diameter.) Standard Cut Length .040"



530EA-US ★★★★

5" long

SUPER NARROW ANTI-SHOCK SHEAR CUTTER

The shear action cut reduces shock on delicate components and solder connections. The "Stand-Off" keeps the cutting blade from cutting into the solder connections. Tip width .050". Recommended cutting capacity 22 AWG (.025" diameter.)

Standard Cut Length .040"



530E-5-US ★★★★★

5 ¼" long

NARROW ANTI-SHOCK SHEAR CUTTER

The shear action cut reduces shock on delicate components and solder connections. The "Stand-Off" keeps the cutting blade from cutting into the solder connections. Tip width .090". Recommended cutting capacity 22 AWG (.025" diameter.) Standard Cut Length .040"



530E-15-US ★★★★★

6" long

ADJUSTABLE ANTI-SHOCK SHEAR CUTTER

The "Stand-Off" length can be adjusted from .040" to .250". Recommended cutting capacity 22 AWG (.025" diameter.)



530E-4-US ★★★★★

5 ¾" long

LONG JAW ANTI-SHOCK SHEAR CUTTER

The shear action cut reduces shock, designed with a long thinner tip to fit between connector pins. Tip width is .100". Recommended cutting capacity 24 AWG (.020" diameter.)

Standard Cut Length .040"



530E-5-USL ★★★★★

6" long

NARROW ANTI-SHOCK SHEAR CUTTER WITH ERGONOMIC HANDLE

The shear action cut reduces shock on delicate components and solder connections. The "Stand-Off" keeps the cutting blade from cutting into the solder connections. Tip width .090". Recommended cutting capacity 22 AWG (.025" diameter.) Standard Cut Length .040"



ANTI-SHOCK SHEAR CUTTERS ★★★★ ULTRA PRECISION

907-4 ****

6" long

THIN JAW ANTI-SHOCK SHEAR CUTTER

The thinner jaw gives greater accessibility into high-density areas. Very useful for cutting connector pins in confined areas. Tip width .100". Recommended cutting capacity 20 AWG (.032" diameter.) Standard Cut Length .030"



907-1 ****

6" long

LARGE ANTI-SHOCK SHEAR CUTTER

Reduces shock on delicate solder connections and sensitive components. Tip width . 170". Recommended cutting capacity 20 AWG (.032" diameter.) Standard Cut Length .040"

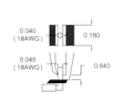


903 ****

5 ½" long

HEAVY-DUTY ANTI-SHOCK SHEAR CUTTER

Shear cutter designed for heavy-duty cutting of connector pins and large component leads. Tip width .180". Recommended cutting capacity 18 AWG (.040" diameter.) Standard Cut Length .040"



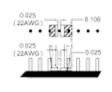


907-5 ****

5 1/4" long

CONNECTOR PIN SHEAR CUTTING PLIERS

This cutter is designed with grooves on the outside of the jaws to fit between connector pins and provide a clean cut. Tip width .100". Recommended cutting capacity 22 AWG (.025" diameter.) Standard Cut Length .025"



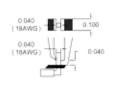


903A ****

5 ½" long

NARROW SHEAR CUTTER

Heavy-duty shear cutter with thin tips for cutting between component leads. Tip width .100". Recommended cutting capacity 18 AWG (.040" diameter.) Standard Cut Length .040"



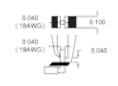


903A-L ★★★★★

6 1/2" long

NARROW SHEAR CUTTER WITH ERGO HANDLE

Heavy-duty shear cutter with thin tips for cutting between component leads. Tip width .100". Recommended cutting capacity 18 AWG (.040" diameter.) Standard Cut Length .040"





ANTI-SHOCK SHEAR CUTTERS ****** ULTRA PRECISION

907-42A ****

5 ½" long

MULTI-LEAD SHEAR CUTTER

This tool will cut up to 8 leads in one easy motion. Anti-Shock shear cut will not damage solder fillet. Standard Cut Length .040"



509-42A-US ★★★★

5 1/4" long

MULTI-LEAD SHEAR CUTTER

This tool is designed to cut one complete row of 8 D.I.P./I.C. leads in one motion. Standard Cut Length .040"



530E-I-US ★★★★★

5" long

SHEAR CUTTER AND BENDING PLIERS

Designed to cut leads .060" from the P.C. board, then bend the lead to 30 degrees keeping components in place when soldering.

Recommended cutting capacity

22 AWG (.025" diameter.)



500-108-US ★★★★★

5" long

SHEAR CUTTING AND BENDING PLIERS

Designed to bend leads to 45 degrees, then cut the lead to .060" keeping component in place when soldering. Recommended cutting capacity 22 AWG (.025" diameter.)



549E-US ★★★★★

5 ¼" long

ANGULATED HEAD SHEAR CUTTER

The shear action cut reduces shock on delicate solder connections or components. The angle of the cutting head helps to increase visibility. Recommended cutting capacity 22 AWG (.025" diameter.) Standard Cut Length .040"



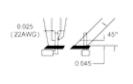
907-59 ****

5 3/4" long

ANGULATED HEAD SHEAR CUTTER

The shear action cut reduces shock on delicate solder connections or components. The angle of the cutting head helps to increase visibility. Recommended cutting capacity 18 AWG (.040" diameter.)

Standard Cut Length .045"





FORMING AND CUTTING

★★★★ ULTRA PRECISION

500-88-US ★★★★★

5" long

FORMING PLIERS WITH SHEAR CUTTER

Designed to form a consistent stand off and cut the lead to length on most popular radial lead components. Recommended for .025" diameter or smaller leads and wires.



500-89-US ★★★★★

5 ½" long

DOG LEG LEAD FORMING PLIER / CUTTER

Designed to increase or decrease the center dimension on radial lead components. The added shear cutter saves component prep time. Recommended for .025" or smaller leads and wires.



500-89B-US ★★★★★

5 1/2" long

DOG LEG LEAD FORMING PLIER / CUTTER

Designed to increase or decrease the center dimension on radial lead components. The added shear cutter saves component prep time. Recommended for .025" or smaller leads and wires.



907-88 ****

6" long

STRESS RELIEF FORMING PLIER / CUTTER

Designed to form a stand off and cut lead to length on most popular radial lead components. Recommended for .030" diameter or smaller leads and wires.



900-88B ****

5 3/4" long

STRESS RELIEF FORMING PLIER / CUTTER

Tool designed to form stress relief and cut lead to specific dimension in one easy step. Recommended for .020" diameter or smaller leads and wires.



907-89 ****

5 3/4" long

DOG LEG LEAD FORMING PLIER / CUTTER

Heavy-duty pliers designed to increase or decrease the center dimension on radial lead components. The added shear cutter saves component prep time. Recommended for .030" or smaller leads and wires.



FORMING AND CUTTING

★★★★ ULTRA PRECISION

907-88C ****

6" long

STRESS RELIEF FORMING PLIERS / CUTTERS

The smaller design of this tool will "Stand-Off" the component closer to the P.C. Board. The added shear cutter saves on component prep time. Recommended for .025" diameter or smaller leads and wires.



907-89B ★★★★★

5 3/4" long

DOG LEG LEAD FORMING PLIER / CUTTER

Heavy-duty pliers designed to increase or decrease the center dimension on radial lead components.



900-11 ****

6 ½" long

INDIVIDUAL LEAD FORMING PLIERS

This tool is used to form an individual lead of a TO-220 or TO-247 type transistor with a .200" offset at .075" from the component body.



500-92-US ★★★★★

5 1/2" long

TO-92 LEAD FORMING PLIERS

The slots on the outside jaw helps these pliers fit between the leads of a TO-92 and flare them out .050" forming a "Stand-Off" in the lead wires.



500-11-US ★★★★★

5 1/2" long

OFF-SET LEAD FORMING PLIERS

Used to form a single lead on TO-220 style transistor. The lead can be formed .100" up or down to "Off Set" the lead. Great when components are mounted vertically on P.C. boards.



554-TXC-US ★★★★★

5 1/2" long

SHEAR CUTTING AND FORMING PLIERS

These pliers will form one lead in and one lead out at the same time on most Radial type components. The added shear cutter saves component prep time. Recommended for .025" diameter or smaller leads and wires.



FORMING PLIERS

★★★★★ ULTRA PRECISION

554A-US ★★★★★

5" long

STRESS RELIEF FORMING PLIERS

Designed to form stress relief for transistor and resistor leads. Tool design will make consistent stand off in a variety of components. Recommended for .025" and smaller wire.



954A ****

6" long

STRESS RELIEF FORMING PLIERS

Designed to form a consistent stress relief in a variety of components. Similar to the 554A-US, made on a larger frame these pliers can form leads and wires up to .030" diameter.



554B-US ****

5 1/2" long

STRESS RELIEF FORMING PLIERS

Tool design will form a consistent relief in a variety of components. Recommended for .020" or smaller wire.



954B ****

6" long

STRESS RELIEF FORMING PLIERS

Designed to form a consistent stand off in a variety of components. Similar to the 554A-US, made on a larger frame these pliers can form leads and wires up to .035" diameter.



554F-US ★★★★★

5 1/2" long

STRESS RELIEF FORMING PLIERS

Our smallest forming pliers used to form a stand off on component leads of .020" diameter or smaller.



554-US ****

5 3/4" long

MULTIPLE LEAD FORMING PLIERS

Stress relief forming pliers for multiple leads on resistors and transistors. Opening stop is adjustable for wire diameter.



FORMING PLIERS

**** ULTRA PRECISION

909-4 ****

5" long

STRESS RELIEF FORMING PLIERS

Stress relief forming pliers for transistors and resistor leads. Tool design is versatile in a variety of applications. Recommended for .035" wire or smaller.



909-4B ****

6 ¼" long

STRESS RELIEF FORMING PLIERS

May be used for many types of components. The smaller dimensions keep components close to P.C. board. Recommended for .030" or smaller leads and wires.



554AJ-US ★★★★★

4 ¾" long

STRESS RELIEF FORMING PLIERS

Designed to form "Stand-Off" on 3 or 5 leads of TO-220 transistors. The angle of the head allows for longer leads to be formed. Recommended for .030" or smaller leads and wires.



554BJ-US ★★★★★

4 3/4" long

STRESS RELIEF FORMING PLIERS

Designed to form "Stand-Off" on 3 or 5 leads of TO-220 transistor. The angle of the head allows for longer leads to be formed. Recommended for .025" or smaller leads and wires.



554TX-US ★★★★★

5 ½" long

STRESS RELIEF FORMING PLIERS

Tool will form stress relief in most radial lead components. Designed to form one lead in and one lead out in a single operation. Recommended for .025" diameter or smaller wire.



554-TXB-US ★★★★★

5" long

STRESS RELIEF FORMING PLIERS

Tool will form stress relief in most radial lead components. Designed to form one lead in and one lead out in a single operation. Recommended for .025" diameter or smaller leads and wires.



FORMING AND CUTTING

★★★★★ ULTRA PRECISION

554N-US ★★★★★

5 ½" long

MULTIPLE LEAD FORMING PLIERS

Stress relief forming pliers for multiple lead components. The "Off Set" design makes this tool versatile for many types of components. Opening stop is adjustable for wire diameter.



554-3RB-US ★★★★

5 1/4" long

LOCK-IN LEAD FORMING PLIERS

Pliers will form an "S" bend on a component lead, enabling the component to stay in place when soldering. Recommended for .025" diameter or smaller leads and wires.



554-3RT-US ★★★★★

5 1/2" long

LOCK-IN LEAD FORMING PLIERS

Pliers will form an "S" bend on a component lead, enabling the component to stay in place when soldering. Recommended for .025" diameter or smaller leads and wires.





900-3RB ****

6" long

LOCK-IN LEAD FORMING PLIERS

Pliers will form an "S" bend on a component lead, enabling the component to stay in place when soldering. These pliers are recommended for leads and wires up to .035" in diameter.



900-3RT ★★★★★

5" long

LOCK-IN LEAD FORMING PLIERS

Pliers will form an "S" bend on a component lead, enabling the component to stay in place when soldering. These pliers are recommended for leads and wires up to .035" in diameter.



500-95B-US ★★★★★

5 1/2" long

DOG LEG LEAD FORMING PLIERS

The design of this tool will form a "Dog Leg" bend in the lead wire. This tool can be used to increase or decrease the center dimensions of the radial lead components. Recommended for .030" or smaller leads and wires.



FORMING PLIERS

★★★★ ULTRA PRECISION

500-104-US ****

5" long

TRANSISTOR FORMING PLIERS

Used in forming 3 leads on a TO-220 style transistor. The two outside leads will be bent .200", while the center lead is bent .300" from the body of the component.



500-104B-US ★★★★★

5" long

TRANSISTOR FORMING PLIERS

An elaborate design for forming 5 leads on a TO-220 component in one easy operation. Tool will ensure uniformity of difficult lead alignment.



907-104 ****

5 1/2" long

TRANSISTOR FORMING PLIERS

Used in forming 3 leads on a TO-220 style transistor. The two outside leads will be bent .150", while the center lead is bent .250" from the body of the component.



500-103-US ★★★★★

5 1/2" long

TRANSISTOR FORMING PLIERS

Designed to form TO-220 style transistors with 3 or 5 leads. Component leads are formed .200" from the body of component.



500-103B-US ★★★★★

5 ½" long

TRANSISTOR FORMING PLIERS

Same as above but with a longer (.600") forming area for wider components.



900-10 ****

5 1/2" long

TRANSISTOR FORMING PLIERS / CUTTER

This tool will cut and form 3 or 5 leads on a TO-220 style component. Leads will be formed to the bottom of component body for surface mounting.



FORMING AND CUTTING

★★★★ ULTRA PRECISION

500-13A-US ★★★★

5" long

.375" FLATPACK FORMING PLIERS / CUTTER

Tool will form a "Gull Wing" and cut multiple leads to length on various types of flat packs. Recommended for .010" or smaller lead thickness. Contact us for quotes on special sizes.



500-13B-US ★★★★★

5 1/4" long

.250" FLATPACK FORMING PLIERS / CUTTER

Tool will form a "Gull Wing" and cut multiple leads to length on various types of QFP and SOIC packages. Recommended for .010" or smaller lead thickness.



907-13A ****

5 1/2" long

.500" FLATPACK FORMING PLIERS / CUTTER

Heavy-duty tool will form a "Gull Wing" and cut multiple leads to length on various types of Flat Packs. Recommended for .010" or smaller lead thickness. Contact us for quotes on special sizes.



500-210-US ★★★★★

5 ½" long

MULTIPLE LEAD FORMING PLIERS

Designed to bend the leads on LED and other multiple lead components. Leads are formed to 90-degree, and .100" from the component body without damage. Recommended on .025" diameter leads and wires.



500-210A-US ★★★★★

4 ¾" long

ADJUSTABLE MULTIPLE LEAD FORMING PLIERS

Designed to form transistor leads with .100" center spacing. Leads are formed at 90-degree for through-hole mounting. The distance from the component body to the bend is adjustable from .100" to .300".



500-12-US ★★★★★

5 ½" long

MULTIPLE LEAD TRANSISTOR FORMING PLIERS

Used to form an "Off Set" in the 2nd and 4th lead on TO-220-5 (5 leads) transistors. This "Off Set" is useful when standing up components mounted vertically on P.C. Boards.





FORMING AND CUTTING

★★★★ ULTRA PRECISION

900-100 ****

6 1/2" long

ROLL PIN INSERTION PLIERS

Designed to insert the card key roll pin, thus reducing production time. 0.046" pin is replaceable.



907-7 ****

6" long

ANTI-SHOCK SHEAR CUTTER / BENDER

Cuts component leads at .060" then bends the lead keeping the component in place when soldering. Recommended cutting capacity 20 AWG (.032" diameter).



900-100A ****

6 1/2" long

ROLL PIN EXTRACTION PLIERS

Designed to remove the card key roll pin, thus reducing production time. 0.086" pin is replaceable.



907 *****

6" long

ANTI-SHOCK SHEAR CUTTER / SWAGER

Cuts component leads to .030" and swages the end of the lead to prevent it from falling out of P.C. board. Recommended cutting capacity 20 AWG (.032" diameter).



907-101 ****

6" long

TERMINAL HANDLING PLIERS

Designed to insert or extract the hard to reach terminal plugs. The inside jaw has a cutout to prevent nicking or pulling on the lead wire.



930E-I ****

5 1/2" long

ANTI-SHOCK SHEAR CUTTER / BENDER

Cuts component leads at .060" then bends the lead keeping the component in place when soldering. Recommended cutting capacity 20 AWG (.032" diameter).



LEAD STRAIGHTENING PLIERS ★★★★ ULTRA PRECISION

531-US ****

5 3/4" long

SOFTIP NYLON JAW PLIERS

Nylon jaws are useful in straightening leads and wires when metal-to-metal contact is not desired. Nylon jaws are screwed on and can be replaced when needed.



531A-US ★★★★★

5 3/4" long

SOFTIP DELRIN JAW PLIERS

Black Delrin material is ESD safe and temperature resistant up to 175°C. Delrin jaws are screwed on and can be replaced when needed.



532-US ★★★★★

5 ¾" long

SOFTIP DELRINTHIN JAW PLIERS

The tapered jaw with a small tip is useful in areas where space is limited. Black Delrin material is ESD safe and temperature resistant up to 175°C. Delrin jaws are screwed on and can be replaced when needed.



508D-US ★★★★★

5 1/2" long

SOFTIP DELRIN WIDE JAW PLIERS

Black Delrin heads eliminate scratching and marring of delicate leads. The jaws are ³/₄" wide, ESD safe and temperature resistant up to 175°C. Delrin jaws are screwed on and can be replaced when needed.



508-US ****

5 1/2" long

METAL JAW STRAIGHTENING PLIERS

This unique tool will straighten multiple leads in one easy operation. The jaws are .825" wide.



508C-US ★★★★★

5 1/4" long

METAL JAW STRAIGHTENING PLIERS

The jaws of these pliers are designed to fit between rows of connector pins. The jaws are .825" wide.



FORMING AND STRIPPING

★★★★ ULTRA PRECISION

533-US ****

6" long

SOFTIP ROUND-FLAT FORMING PLIERS

These pliers have one round metal jaw and one flat Delrin jaw. Excellent for forming leads and wire when scratching and marring cannot be tolerated. The Delrin jaw is screwed on and can be replaced when needed.



6" long

"J" HOOK FORMING PLIERS

This tool forms a "J" hook in leads up to a .031" diameter with an inside diameter of .060" and an outside diameter of .125"







500-101-US ****

5 1/4" long

SMALL CONVEX/CONCAVE FORMING PLIERS

Excellent for forming small wires and leads. The jaw tapers from front to back for forming various lead diameters.

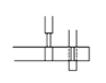


5 1/2" long

HIGH PRECISION STRIPPING PLIERS

Our most precision pliers for stripping Teflon coated wires. To order, specify the wire gauge size by indicating the gauge at the end of the reference number. (Example 502E-US-30 for 30 AWG) Available in 22, 24, 26, 28, and 30 AWG.







500-101A-US ★★★★★

5 ½" long

SMALL CONVEX/CONCAVE FORMING PLIERS

Designed for forming a "J Hook" on wires and leads. The jaw tapers from front to back for forming various lead diameters.



5 1/2" long

ADJUSTABLE V-NOTCH STRIPPER

Precision wire stripper with locking setscrew can be adjusted for stripping 18-30 AWG wire.







PLIERS AND CUTTERS

★★★★ ULTRA PRECISION ★ FINE PRECISION

2922-18 ** **%" Tubing** 2922-I4 ** 1/4" Tubing %" Tubing 2922-38 **

Cuts most types of medical tubing including: Bio-Sil® Tygon® **Autoprene®** Viton® Polyethelene Polypropylene **Polyurethane** Nylon Vinyl Rubber Silicone

- Clean, square cuts for inserting fittings, couplings and quick release valves.
- Available Cutting capacities up to 3/8" OD.
- Replaceable Stainless Steel blade.
- Ergonomic soft cushion grips.

These stainless steel, reverse action pliers have been specifically designed to expand the end of flexible tubing for inserting into plastic or metal fittings and connections.

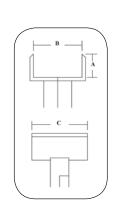


★★★★★ Insertion/Extraction Pliers

Our 505 Series pliers have been designed to handle DIP/IC packages. The chart will help you quickly find the size you are looking for.

Custom size pliers available upon request.

P/N	Α	В	С	PINS
505-US	.180	.400	1.063	18 - 22
505A-US	.180	.600	1.260	24
505B-US	.180	.600	2.080	40
505BG-US	.180	.600	1.398	28
505C-US	.180	.300	.788	14 - 16
505D-US	.180	.300	.358	6 - 8
505E-US	.180	.300	1.260	24
505F-US	.180	.300	.257	4
505G-US	.180	.600	1.660	32
505J-US	.180	.300	.966	20
505K-US	.180	.300	1.398	28









Precisely Right

Excelta offers a wide range of small hand

tools designed to fit your special application needs. Our line of precision tools are perfect for electronics and bio-chemistry, lead-free soldering operations, and for use in research labs.



Medical Grade Scissors	99
Scalpel Handles & Blades	99
Lexers	100
Multi-Purpose Scissors	101 - 103
Spatulas	104
Pin Vices	104
Probes	105 - 107
Hemostats	108
Scratch Brushes	109
Specialty Brushes	110 - 112
Mirrors and Magnifiers	112 - 113

MEDICAL GRADE TOOLS

SCALPELS AND SCISSORS

★★★★ EXTREME PRECISION
★★★ HIGH PRECISION

361 ****

3 1/4" long

Extra Fine Blade Medical Scissors

Stainless Steel with I" Curved Blade. Ideal for ultra miniature work and in confined areas. Made in Switzerland.



362 *******

3 1/4" long

Fine Blade Medical Scissors

Stainless Steel with %" Curved Blade. Thin blades for close tolerance cutting. Made in Switzerland.



363 ****

3 3/4" long

Round Blade Medical Scissors

Stainless Steel with 1 ¼" Curved Blade. A heavy duty miniature scissor for general use. Made in Switzerland.



364 ****

3 3/4" long

Fine Blade Medical Scissors

Stainless Steel with I ¼" Curved Blade. Ideal for delicate applications where small strong blades are required. Made in Switzerland.

175-11 **★★★**

The Safety Scalpel

Smaller handle to fit between your thumb and index finger. It's easy to use and comes with a number 11 style blade and safety cover.

177 ★★★★

5" Scalpel Handle

Made of Stainless Steel with outside finger serrations for positive gripping and easy use. Clean room safe.



Scalpel Blade Remover is safe and easy to use.

For use with 177 Scalpel Handle.



177-10 ******

Large Round Stainless Steel Scalpel Blade



177-11 ***

Angled Stainless Steel Scalpel Blade



177-12 ******

Curved Stainless Steel Scalpel Blade



177-15 ******

Fine Stainless Steel Scalpel Blade



CARBIDE INSERTS

LEXERS STRAIGHT AND CURVED TIPS ★★★★ EXTREME PRECISION

New extreme precision Lexer scissors feature Stainless Steel construction with Tungsten Carbide inserts. Available with either straight or curved cutting blades, these scissors have gold plated handles for easy identification.



375A ★★★★

4" long

Curved Blade Scissors

Stainless Steel with black plastic grips. These scissors have very fine blades for exceptionally close cutting and feature professionally honed cutting edges. I" cut length.



373A ★★★★

4 1/4" long

Straight Blade Safety Scissors

Stainless Steel with blue vinyl grips. These scissors have small blades for close cutting and feature professionally honed cutting edges and round blunt tips for safety. I 1/2" cut length.



370A ★★★★

7" long

Power Shears

Stainless Steel with black soft grip handles. These shears are perfect for heavy materials with an extremely powerful cut. The fully hardened blades have outside serrations on one side. I 3/4" cut length.



SCISSORS STRAIGHT CURVED AND ANGLED STAINLESS STEEL

★★ FINE PRECISION

Self-Opening Precision Scissors

The precision cutting blades are ideal for delicate cutting applications. Stainless steel blade is hardened to Rockwell C-50.

PART #	OVERALL LENGTH	BLADE LENGTH
346	4 ½"	5/8"
346A	3 ¾"	ا ⁄2''
346B	3 ½"	³⁄8"



Self-Opening Precision Scissors

The precision cutting blades angle at 45 degrees, allowing perfect visibility with good clearance.

PART #	OVERALL LENGTH	BLADE LENGTH
349	4 ½"	5/8"
349A	3 ¾"	<u>ነ</u> %"
349B	3 ½"	³⁄8"



Long Blade Scissors

Very popular for long cuts

PART #	OVERALL LENGTH	BLADE LENGTH
297	3 ½"	<mark>¼</mark> "
298	4"	١ ½"
298A	4 ½"	¾"
298B	5"	2"



Short Fine Blade Scissors

Short thin cutting blades for delicate work and close tolerance cutting.

PART #	OVERALL LENGTH	BLADE LENGTH & STYLE
288	3 ¼"	¾" Straight Blades
289	3 ¼"	34" Curved Blades



Medium Fine Blade Scissors

Most popular precision-made scissors for general use. Overall length is 3 3/4". Blade length is I".

PART #	OVERALL LENGTH	BLADE LENGTH & STYLE
290	3 ¾"	I" Straight Blades
291	3 ¾"	I" Curved Blades



60° Angle Slim Blade Scissors

Blade angle offers good surface clearance.

PART #	OVERALL LENGTH	BLADE LENGTH
270	4 1/3"	۱ ¼"



SCISSORS STRAIGHT CURVED AND ANGLED STAINLESS STEEL

★★ FINE PRECISION

271 **

4 3/4" long

Straight blades with extra-long handles provide better cutting leverage. Blade length is I 1/4".



309 ******

4" long

Used for cutting soft wire. Blade length is I 1/4".



Trimmer Scissors

Used for pattern cutting and generalpurpose use. Chrome-plated.

PART # 339	OVERALL LENGTH	BLADE LENGTH 2 3/4"
340	7"	3 1/4"
341	8"	4"



299-P ★★★

5 ½" long

Features molded handles with tempered Stainless Steel blades. Serrations on oneedge makes this scissor great for cutting Kevlar. Wider finger holes and smooth opening makes for easy operation. Blade length 1 3/4".



299D-G ★★

6" long

The Ergonomic design of the handles has no finger holes like traditional scissors. With added return springs and padded grips, these scissors can be used for long periods of time without hand fatigue.



5" long

Heavy duty, general-purpose scissors with serrated outside blade edges. Blade length is | 3/4".





SPATULAS AND PINVICES

★★★ HIGH PRECISION

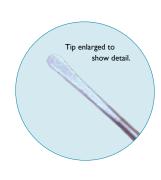
Miniature Spatulas 2 1/2" Plastic Handle

REF. NO.	TIP SIZE	STYLE
260A ★★★	.010"	Black
260B ★★★	.015"	Blue
260C ★★★	.020"	Green
260D ★★★	.025"	Red

Miniature Spatulas 2 ½" ESD Safe Aluminum Handle

REF. NO.	TIP SIZE	STYLE
260A-ESD ★★★	.010"	Black
260B-ESD ★★★	.015"	Blue
260C-ESD ★★★	.020"	Green
260D-ESD ★★★	.025"	Red







220 ***

4 1/4" long

Double-Ended Pin Vise

One end has a square 0 to .025" opening chuck, the other end is a round .035" to .115" opening chuck.



4" long

Brass Handle Pin Vise

0 to .025" opening chuck.



227A ***

3 ½" long

Brass Handle Pin Vise

with 0 to .015" opening chuck.



227B-ET ★★★

4" long

Brass Handle Pin Vise

0 to .025" opening chuck and ergonomic foam grip for comfort.



227A-ET ★★★

3 ½" long

Brass Handle Pin Vise

0 to .015" opening chuck and ergonomic foam grip for comfort.



227C-ET ★★★

4" long

Brass Handle Pin Vise

with .010" probe tip and ergonomic foam grip for comfort.



227C-P Replacement Probes



PEEK PROBES ★★★ HIGH PRECISION

Our line of multi-purpose probes are the perfect tools for electronics and biochemistry, lead-free soldering operations, dosing chemicals in labs, removing solder masking agents, rubber latex and adhesive coatings. Probes are made from PEEK, a high temperature thermoplastic which is inert to all common solvents, it resists a wide range of inorganic liquids. PEEK has a working temperature of 249° C (480° F) and is electrically conductive.

336A-SD ***

5 ½" long

Rounded body with one fine tip and one flat strong point



336B-SD ★★★

5 1/2" long

Square body with one curved fine tip and one flat strong tip



336C-SD ***

5 ½" long

Square body with one flat fine tip and one flat fine sharp tip





STAINLESS PROBE KIT ★★★ HIGH PRECISION





PROBES AND SCRIBES ★★★ HIGH PRECISION

Diamond Tip Scribes ★★★ 4 ½" long

Fine Tips with Aluminum Handles.

REF. NO.	TIP SIZE	STYLE	
475A	20 mil	Straight	
475B	20 mil	Angle	

Micro Tip Probes★★★ 6 ½" long

Stainless Steel. Smallest Tips Available.

REF. NO.	TIP SIZE	STYLE
332A	l mil	Straight
332B	l mil	45°
332C	l mil	25°
332D	l mil	90°
332E	l mil	Hook

Short Tip Micro Probes★★★ 4 ¾" long

Stainless Steel.

REF. NO.	TIP SIZE	STYLE	
335A	l mil	Straight	
335B	l mil	90°	

Fine Tip Probes★★★ 3" long

Stainless Steel probes designed for working under magnification.

REF. NO.	TIP SIZE	STYLE
331A	10 mil	Straight
331B	10 mil	Angle
331C	10 mil	Curved
331D	10 mil	Hook

Fine Tip Probes★★★ 3" long

General purpose Stainless Steel probes wih standard handle.

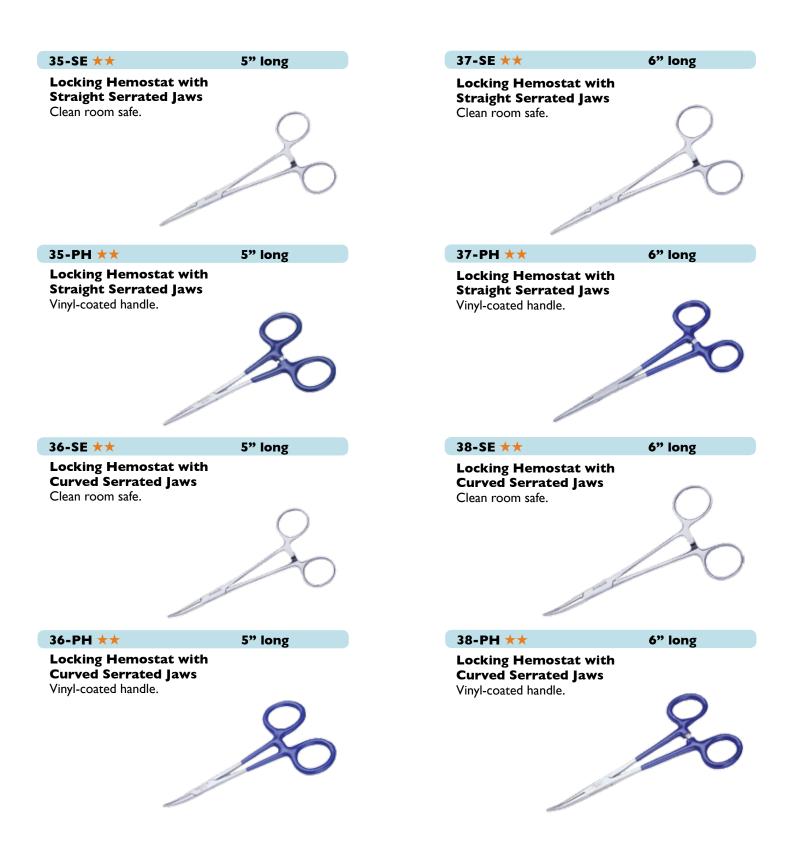
REF. NO.	TIP SIZE	STYLE
330A	10 mil	Straight
330B	10 mil	Angle
330C	10 mil	Curved
330D	10 mil	Hook
330E	10 mil	Angle Chisel
330K Probe Kit		one each 330 A-D
333A	10 mil	Knife







HEMOSTATS LOCKING HANDLES STAINLESS STEEL *** FINE PRECISION



S M A L L HAND TOOLS

BRUSHES & BRUSH KITS

★★ FINE PRECISION

264 **

5 1/4" long

Fiberglass Cleaning Brush

Refillable with long thin handle. Used in very confined areas, which are not accessible with larger diameter brushes. Brush is 1/20" diameter.



Refills available. Use reference no.264A.

263 **

4 1/4" long

Fiberglass Scratch Brush

Retractable and refillable, with plastic handle. Very useful when cleaning and polishing. Brush is 5/16" diameter.



Refills available. Use reference no. 263A.

Scratch Brushes ★★

4 3/4" long

Retractable and refillable with plastic handle. Can be used for fine deburring, polishing, rust removal, or cleaning and erasing in chemical etching processes. Excellent for pre-solder and contact cleaning. Brush is ½" diameter.

REF. NO.	BRUSH MATERIAL	REFILL ONLY REF. NO.
265	Brass	265A
266	Steel	266A
267	Fiberglass	267A
268	Nylon	268A

ESD Safe Bench Brushes ★★ 10" long

Made of high grade bristles with a wooden handle. There are four rows of bristles 4 $\frac{1}{2}$ long and $\frac{1}{2}$ wide, which will not shed.

Available in three degrees of hardness:

187 – Soft

189 - Half Soft

190 - Half Hard



262 ******

Brush Kit

Kit consists of the following: I each brush holder, 265A brass refill, 266A steel refill, 267A fiberglass refill, 268A nylon refill. Supplied in plastic case.



186 ******

8 ½" long

Nylon Bench Brush

White Nylon bristles with a wooden handle. 4 rows of bristles 3 3/4" long and 1/2" wide.



214-H ★★

4 1/2" long

Applicator Brush

Double-ended applicator brush with a short flat end and an extra stiff chiseled end. Bristles are soft Horse Hair.



4 ½" long

Applicator Brush

Double-ended applicator brush with a short flat end and an extra stiff chiseled end. Bristles are soft Horse Hair.





Instrument Cleaning Brushes

Designed for general cleaning in tight areas. The handle is ¼" in diameter, with a tip size of ½" wide and ¾6" long. The fibers are mechanically clamped into the Stainless Steel tube and inserted in the Delrin handle. Available with straight or bent tips.



210S-P	5 ¾" Straight tip with Hog Hair Bristles
210B-P	5 ½" Bent tip with Hog Hair Bristles.
210S-H	5 34" Straight tip with Horse Hair Bristles.
210B-H	5 ½" Bent tip with Horse Hair Bristles.
210S-N	5 ¾" Straight tip with Nylon Bristles.
210B-N	5 ½" Bent tip with Nylon Bristles.
210S-S	5 34" Straight tip with Stainless Steel Bristle
210B-S	5 ½" Bent tip with Stainless Steel Bristles.

Materials

Hog Hair: Strong and stiff with natural taper and split end. Water resistant and heat tolerant to 500°F.

Horse Hair: Soft and slightly stiff. Used for scratch-free dry brushing. Heat resistant to 370°F.

Nylon: Resilient and durable. Impervious to solvents and common chemicals. Resistant to bacteria and heat resistance to 250°F.

Stainless Steel: Resistant to heat, rust and corrosion. Used for wet or dry applications.

Heat Resistant Brushes

The Nylon fibers are epoxy set into the Delrin handles with a high temperature adhesive to resist deterioration in an autoclave. The soft non-shedding Nylon fibers are perfect for working on delicate parts. Brushes should be cleaned prior to clean room use.



211A-N	4 1/2" Long and 3/16" diameter handle
	with K" long and 3/16" wide bristles.
211B-N	4 1/2" Long and 1/4" diameter handle with
	½" long and ¼" wide bristles.
211C-N	4 ½" Long and ¾" diameter handle with
	I" long and ¾" wide bristles.
211D-N	4 ½" Long and ½" diameter handle with
	I" long and 1/2" wide bristles.

Material

Nylon: Resilient and durable. Impervious to solvents and common chemicals. Resistant to bacteria and heat resistant to 250°F. Nylon 6.12 is FDA approved.



SPECIALTY BRUSHES ★★★ HIGH PRECISION

ESD Safe Brushes

Made with Stainless Steel handles and Horse Hair bristles to provide ESD protection. The bristles are mechanically clamped into the handle for maximum fiber retention without the use of adhesives that could contaminate the work area.



212A-H 3 ½" Long and ½" diameter handle with 1/8" long and 1/8" wide bristles.

4 34" Long and 36" diameter handle with 212B-H 5/16" long and 1/4" wide bristles.

212C-H 4 3/4" Long and 5/16" diameter handle with 3/4" long and 3/4" wide bristles.

212D-H 6" Long and 3/4" diameter handle with I" long and 7/16" wide bristles.

Material

Horse Hair: Soft and slightly stiff. Used for scratchfree dry brushing. Heat resistance to 370°F.

Clean room Safe Brushes

Made with Stainless Steel handles and new Statigo9 fiber bristles. The bristles are mechanically clamped into the handle for maximum fiber retention without the use of adhesives that could contaminate the work area. New Statigo9 fibers are similar to Nylon fibers, except they are ESD Safe with a surface resistivity of 106.



213A-N 3 ½" Long and ½" diameter handle with 13B-N 4 3" Long and 16" wide bristles.

%6" long and ¼" wide bristles.

4 3/4" Long and 5/16" diameter handle with 213C-N %" long and %" wide bristles.
213D-N 6" Long and %" diameter handle with

I" long and 7/6" wide bristles.

Material

Statigo9: A static dissipative acetal that is as durable as nylon, thick enough to perform mechanical work, does not shed or slough and is clean room compatible.

SMALL HAND TOOLS

BRUSHES, MIRRORS, SPATULAS

★★ FINE PRECISION

194-ESD ★★

6" long

Soft Cleaning Brush

Two rows of soft bristles. ESD Safe round plastic handle. Brush head is 1/2" long and 3/6" wide.



195-ESD ★★

6 1/2" long

Stiff Cleaning Brush

Stiff bristles clamped into holder. ESD Safe round plastic handle. Brush head is 34" long and 16" wide.



196-ESD ★★

5 ¾" long

Soft Cleaning Brush

One row of soft bristles. ESD Safe flat plastic handle. Brush head is 1 1/2" long and



197-ESD ★★

6 3/4" long

Toothbrush Style Brush

square plastic handle with finger grooves. Brush head is I 1/4" long and



342 ******

Made of polished Stainless Steel these spatulas are double-ended with a round handle. Both ends have a rounded blade I 1/8" long and 3/16" wide.



343 **

7" long

7" long

Made of polished Stainless Steel these spatulas are double-ended with a round handle. One end has a rounded blade I 1/4" long and 5/16" wide, the other end has a square blade 3/8" long and 1/4" wide with a sharp edge for scraping.



345 **

8 ½" long

Made of Stainless Steel with a wooden handle. Can be used for mixing and potting. Blade length is 4 3/4" long and 5/8" wide.



Inspection Mirrors

Outer surfaces are heavily chrome plated. All models feature insulated vinyl grips. The clear-view mirrors are copper-backed and electro-plated.

PART. NO.	SHAPE	LENGTH	DIAMETER
415	Round	8"	۱ ¼"
416	Oval	8 ½"	I" x 2"
417	Round	7 ½"	7∕8"



S M A L L HAND TOOLS

MAGNIFIERS AND LOUPES ★★★ HIGH PRECISION

455A ★★★

The Super Optivisor has a magnifying power of 2.2 and can be used for precise viewing with the added 3.3 power lens. The exclusive clear-view lens has no center post to increase viewing. Shatter-resistant precision and optical lens bring the smallest detail up to a larger and sharper image. Comes with an adjustable headband and can be worn over regular glasses.



401 ******

Magna-Lite Illuminated Optical Magnifier

5X power hand held magnifier. Lens dimension is 1 ¼" square. Perfect for quality control and inspection personnel. Comes in an unbreakable black plastic case.



407 ******

Magna-Lite Illuminating Optical Magnifier

10X power hand held magnifier. Lens dimension is 1 ¼" square. Perfect for quality control and inspection personnel. Comes in an unbreakable black plastic case.



Eyeloupes

Used for magnification in assembly or inspection. Two element optical glass construction. Bright, sharp focus loupes with 360° clear acrylic base to admit light from all directions and a wide range of view.



405★★★★

5 power Eyeloupe



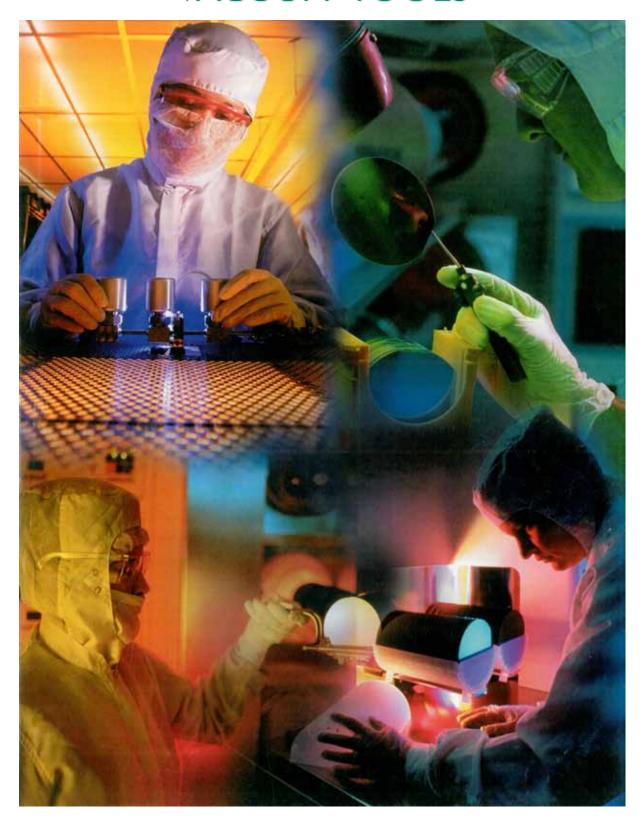
410★★★★
10 power Eyeloupe



422★★★★
22 power Eyeloupe

EXCELTA

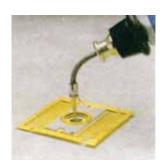
VACUUM TOOLS





Hi-Performance vacuum systems are ideal for handling wafers, disk media, flat panels, or any item with a flat hard surface.

Excelta offers a wide variety of vacuum tools to choose from:



★★★★★ Roto-Pic® Vacuum Systems

The Roto-Pic® is designed to reduce manual handling of both chips and wafers. Round nose wheel rotates 360° so components can be picked up and aligned with ease.



*** Continuous Vacuum Systems

These compact units will handle most of the surface mount components used in industry today. The long life diaphragm vacuum pump generates over six inches of mercury. The unit connects to ground automatically with a three wire power cord.



★★★ Pen Vac's

This is an excellent tool for pick-and-place of many standard and odd size SMT components. Pen-Vacs measure 6" long by ½" round, with a convenient rear storage compartment and pocket clip.



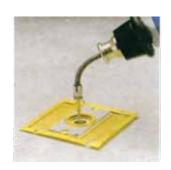
**** Porta-Wand® Vacuum Systems

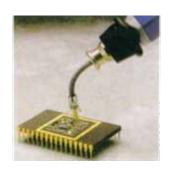
The rechargable battery operated vacuum handling tool features a 9.6V detachable rechargable battery pack. The built-in filters ensure better than Class I performance.

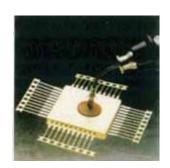












The most revolutionary vacuum pick-up available. Designed to reduce manual handling of both chips and wafers, the Roto-Pic has a smooth positive hold-and-release slide bar. The round nose wheel rotates 360° so components can be picked up and aligned with ease. Easily replaceable tips come in a variety of sizes and silicon rubber cups can be inserted on Roto-Pic for pick-up and manipulation.

VACUUM KITS

2000RK Roto-Pic Vacuum Kit

Complete vacuum handling system includes one each of the following kits:

2000R, 2000P, 2000WP, 2000DA

2000R Vacuum System Kit

Contains one each of the following:

2000A, 2000V, 2000C

2000P Probe Kit

Contains one each of the following probes:

2020, 2021, 2022, 2023, 2024

2000WP Vacuum Cup Kit

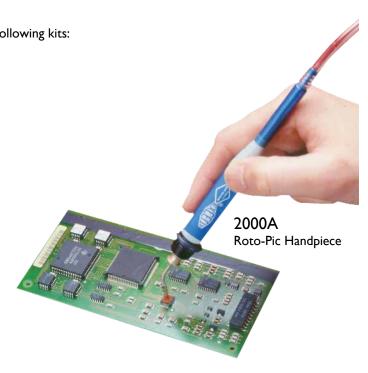
Contains one each of the following cup assemblies:

2050, 2051, 2052, 2060, 2071

2000DA Vacuum Tip Kit

Contains one each of the following tip assemblies:

2040, 2041, 2043, 2044, 2080





Roto-Pic Vacuum System

Ref.No	Description
2000A	Roto-Pic Handpiece
2000V	Vacuum Pump
2000C	3' Plastic Hose



Vacuum Probes

For use with the Roto-Pic Handpiece (2000A)

Ref.No	Description	
2020	45°	
202 I	60°	
2022	45° short	
2023	90°	
2024	180° straight	



Vacuum Cup Assemblies

High temperature vacuum cups made of silicon rubber with brass fitting. Use with Roto-Pic Probes and Handpiece.

2050 3/8" Cup 2051 1/2" Cup 2052 1/4" Cup 2060 Circo-Vac Cup	Ref.No	Description
2052 I/4" Cup	2050	3/8" Cup
· · · · · · · · · · · · · · · · · · ·	205 I	I/2" Cup
2060 Circo-Vac Cup	2052	I/4" Cup
	2060	Circo-Vac Cup
207 I Verto-Vac w/ high temp supp	207 I	Verto-Vac w/ high temp support



Small Tip Assemblies

Vacuum Tips for handling small parts, for use with Roto-Pic Probes and Handpiece.

Ref.No	Inside Diameter	Tip Material
2040	.006"	Teflon
204 I	.005"	Polyethylene
2043	.012"	Polyethylene
2044	.035"	Polyethylene
2080	.004"	Stainless Steel



4000-GP ★★★★

General Purpose Vacuum System

A general-purpose vacuum handling tool that plugs directly into 110 VAC. This compact unit will handle most of the surface mount components used in the industry today. The long life diaphragm vacuum pump generates over six inches of mercury. The unit connects to ground automatically with a three wire power cord.

The 4000-GP comes complete with the following features:

- Whisper-quiet operation.
- 4 feet of coiled vacuum hose.
- Vacuum pick-up handpiece.
- · No-skid rubber feet.
- · Produces vacuum of over six inches of mercury.
- Side mounted handpiece holder.
- Set of nine vacuum tips: PVS-CB-12, PVS-CB-14,

PVS-CB-18, PVS-CB-38, PVB-CB-332, PVB-CB-316, PVB-CB-14, PVB-CB-18, PVB-CB-38.

4000-HP ★★★★

High Performance Vacuum System

High performance vacuum handling system will handle small to large size components. The precision pump and motor generate over fifteen inches of mercury. The compact tower design takes up a very small footprint on the work surface. An electric eye penholder on the side automatically shuts the unit off when the vacuum pen is placed in it. A jack on the rear of the 4000-HP allows the use of the optional foot switch to control vacuum during pick and place operations.

The 4000-HP comes complete with the following features:

- Quiet operation.
- 4 feet of coiled vacuum hose.
- Vacuum pick-up hand piece.
- Automatic vacuum pump ON/OFF control.
- · No-skid rubber feet.
- ESD connection on rear of unit.
- Produces vacuum of over fifteen inches of mercury.
- Set of nine vacuum tips: PVS-CB-12, PVS-CB-14,

PVS-CB-18, PVS-CB-38, PVB-CB-332, PVB-CB-316, PVB-CB-14, PVB-CB-18, PVB-CB-38.

Individual System Components

4000-FS Foot Switch for 4000-HP 4000-H Handle for 4000-HP/GP 4000-RF Replacement Filter for 4000-HP





PEN-VAC SYSTEMS ★★★ HIGH PRECISION

PV-2A-ESD ★★★

Pen-Vac Standard

This is an excellent tool for pick-and-place of many standard and odd size SMT components. The Pen-Vac Standard is 6" long by ½" round, with a convenient rear storage compartment and pocket clip.

The kit contains the following 6 Buna-N static dissipative vacuum cups and probes: PVB-CB-18, PVB-CB-14, PVB-CB-38, PVS-CB-18, PVS-CB-14, PVS-CB-38.

PV-2-ESD ★★★

Pen-Vac Standard

This Pen-Vac Standard comes with the handpiece and convenient rear storage compartment and pocket clip.

The kit contains the following 2 Buna-N static dissipative vacuum cups and probes: **PVB-CB-14**, **PVB-CB-18**.



Pen-Vac Pro

The Pen-Vac PRO is 5" long by ½" round. The plastic static dissipative body provides ESD protection at a lower cost.

The kit contains the following 6 Buna-N static dissipative vacuum cups and probes: **PVB-CB-18**, **PVB-CB-14**, **PVB-CB-38**, **PVS-CB-18**, **PVS-CB-14**, **PVS-CB-38**.



PV-HV ***

Handi-Vac®

This 3" vacuum-bulb pick-up-tool is simple and easy to use. When the vacuum bulb is squeezed, place the soft suction cup on the part to be handled, then relax your squeeze and the part is firmly gripped. A second squeeze releases the part.

The Handi-Vac kit comes with the handpiece, and the following 4 Buna-N static dissipative vacuum cups and probes: **PVB-CB-18**, **PVB-CB-14**, **PVS-CB-18**, **PVS-CB-38**.

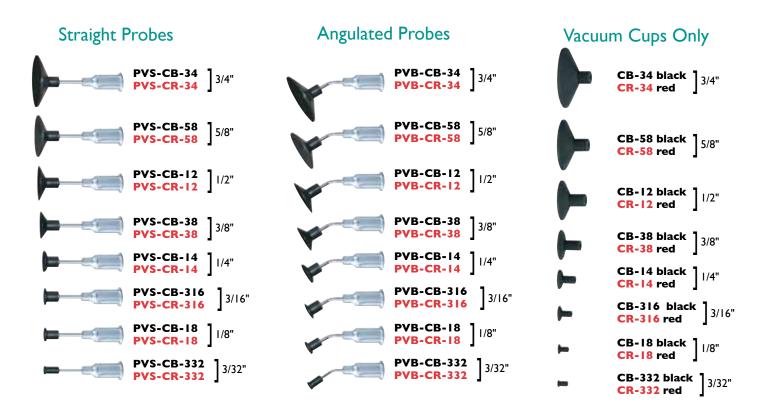




CUPS AND PROBES HIGH PRECISION

Finest Quality Replacement Cups + Tips

- Cup Sizes from ³/₃₂" to I"
- Black Cups are Buna-N Static Safe Non-marking (Working Temperature -5° 250°F)
- Red Cups are High Temperature Silicon Rubber (Working Temperature -65° 480°F)
- Interchangeable with Pen-Vac Junior, Pen-Vac Standard, Pen-Vac Pro and Handi-Vac



Small Tips

Designed for handling very small parts. Tips are made in ESD Safe Delrin Plastic so there is no chance of static or mechanical damage. **Small tips should be used with continuous vacuum systems only.**





PORTA-WAND® SYSTEM ★★★★ ULTRA PRECISION

PV-500-W4 ****	Kit with 4" Wafer Tip
PV-500-W6 ****	Kit with 6" Wafer Tip
PV-500-W8 ****	Kit with 8" Wafer Tip
PV-500-W12 ****	Kit with 12" Wafer Tip



Porta-Wand® Elite

Rechargeable Battery Operated Vacuum Handling Tool

Kit comes with a detachable 9.6V NiMH rechargeable battery pack, an in-stand charger and one wafer tip as listed below. The **detachable battery pack** contains the rear exhaust filter for the entire tool to ensure better than Class I performance. The battery pack can be recharged when attached to the tool or when separated from the tool. Ideal for handling wafers, disk media, flat panels, or any item that has a flat hard surface. A power-on indicator flashes when the battery pack needs to be recharged or interchanged with a fully charged battery pack. A push-button provides easy on/off control with a lock-to-on position. An intake air filter is replaceable from the front of the tool. Every Porta-Wand is tested to meet Class I clean room particle contamination requirements. A serialized particle counter printout is provided with every tool.

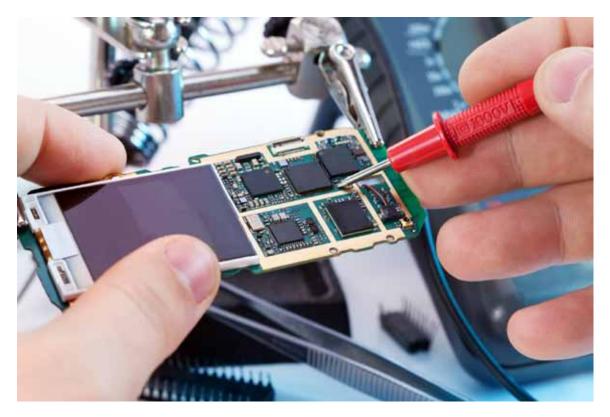


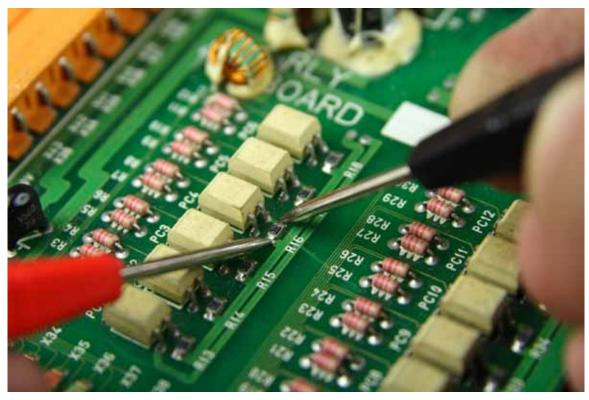
Replacement Molded Wafer Tips (ESD Safe)

PV-W4 ★★★★	4" Replacement Wafer Tip
PV-W6 ★★★★	6" Replacement Wafer Tip
PV-W8 ★★★★	8" Replacement Wafer Tip
PV-W12 ****	12" Replacement Wafer Tip

EXCELTA

TEST AND MEASURING





POCKET BEEPER ★★★ HIGH PRECISION

PB-1 ***

As a continuity tester, Pocket-Beeper affords the operator quick discernment of point-to-point continuity testing by a clear audible tone. As a transistor and diode tester, the Pocket-Beeper analyzes "in circuit" junctions for go/no go normality.

The Model PB-1 indicates leakage, short or open conditions of transistors. Pocket-Beeper's portability, combined with its unique self-contained design and rugged enclosure, makes it ideal for production and field service applications.

Applications:

- Point-to-point continuity
- Rapid in-circuit scanning of transistors and diodes
- · Detects shorts, open and leakage in components
- Positive go/no go testing
- · Field servicing and maintenance

Features:

- Automatic power shut-off when not in use
- Audibly indicates conditions
- · Low power drain for long battery life
- · Will not harm any solid-state device or delicate circuits

Specifications:

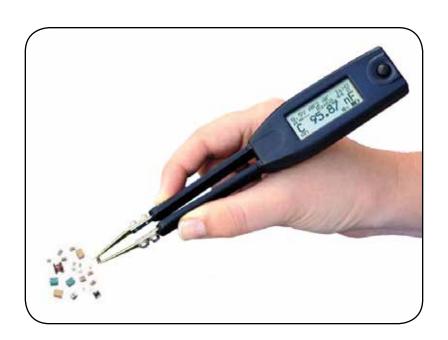
- Power (internally supplied) I.5 VDC "C" dry cell
- Probe signal voltage 1.6 volts peak-to-peak
- Dimensions: 4" high X I H" deep X 2 M" wide.
- Ambient temperature range +10°F to +120°F
- Weight: 12 ounces maximum

Replacement Probes: PB-1-L



INTELLITWEEZE® R-C-L METER

★★★★ High Precision TM-150 **★★★★★** Ultra Precision TM-500



The IntelliTweeze® is a quick and easy way of testing and troubleshooting many types of components. With the use of only one hand, this lightweight unit will quickly measure resistance, capacitance, inductance, continuity and polarity.

Measures Resistance, Capacitance, and Inductance

The primary display shows the present reading. The secondary display (above the primary display) shows the present reading of additional parameters when the primary display shows other features (L,C). The bar graph provides an analog indication of the measure input.

Measures Continuity

The beeper sounds for resistance below the threshold, or to indicate momentary open circuit.

Measures Diode Polarity

Manual setting for testing polarity on diodes.



PHYSICAL SPECIFICATIONS

Operating Temperature:	0 °C to +55 °C
Battery Type:	3.7V LiPO rechargeable 150mAH
Battery Life (continuous):	80 Hours typical, 2 hours charging cycle
Electromagnetic Compatibility (EMC):	FCC 15 part B, SE
Size:	$14.0 \times 2.5 \times 3.0$ cm $(3.94 \times 0.9 \times 1.5$ in)
Weight:	53 grams (1.9 oz)
Warranty:	l year

TECHNICAL SPECIFICATIONS

AC test mode Test frequency:	I kHz, 10 kHz, 120Hz,100 Hz
Test frequency accuracy:	50 PPM (0.005%)
Test signal level:	0.25/0.5/1.0 +/- 5% Vrms Sine Wave
Source impedance:	62.5Ω/IkΩ/I6kΩ +/- I%

MEASUREMENT RANGES & PRECISION

		**** 1M-500	<u>***</u> IM-150
Resistance	Range:	0.05 Ω to 9.9 M Ω	0.05 Ω to 9.9 M Ω
	Precision:	up to 0.2%	up to 0.7%
Capacitance:	Range:	0.5 pF to 4999 μF	0.5 pF to 4999 μF
	Precision:	up to 0.2%	up to 2.0%
Inductance:	Range:	0.5 μH to 999 mH	0.5 μH to 999 mH
	Precision:	up to 0.5%	up to 1.0%
Quality factor Q:	Range:	0.001 to 1000	0.001 to 1000
Dissipation factor D:	Range:	0.001 to 1000	0.001 to 1000

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