

# Swanstrom Tools for Electronics

ESD Safe

Made in the USA

Precision



Swanstrom  
Tools USA



# Swanstrom Tools USA

## OUR MISSION

*To profit with our partners by increasing productivity with precision quality ergonomic tools.*

## OUR PROMISE

We promise our customers simply the finest, most ergonomic and durable tools for their industrial requirements, and to serve them accurately, on time, and with the highest ethical standards.

## OUR QUALITY AND ERGONOMICS

Our specialties are long life, user friendly tools, for high tech industries and people who use tools intensely. Swanstroms soon prove themselves to operators, engineers, ergonomists, buyers, distributors, and CEOs.

Strength and long life starts in our steel. Smoother bearings, sharper knives, beautiful ergo black and soft touch foams are easily felt and seen. Perfect heat treating hardens tools and their value. Precision shaping and honing and other finishes conform exactly to each user's unique requirements, increasing customer productivity and loyalty.

Factory use proves our long edge and bearing life. Comfort of our ESD safe textured foam is immediately obvious and best for users' product quality and people, thereby reducing their tools costs, workers comp costs, and total costs.

## OUR WARRANTY

We warrant these products free of defects in material or workmanship for a tool lifetime of normal use, often many years. Any product failing to satisfy the customer should be reported to our Sales Manager, who will quickly get the customer satisfied while directing the complaints, tools, and questions to quality manager for thorough analysis.

If inspection shows that the product failed to meet new tool specifications, we will repair, replace, or credit (our option). Abused or altered tools are not covered. Swanstrom® brand tools remain warranty covered through at least two Swanstrom servicings.

## SWANSTROM'S FIRST CENTURY

From blacksmithing in Sweden to Superior and Duluth in 1890, Swanstroms grew with and enhanced North American worker productivity. Andrew, Frank and Otto's horseshoe, wagon, and machinist work, and the icy hills of Duluth sparked their first inventions for smith and horse productivity. Diamond Calk, founded in 1908, made special calks (studs) and the tools for installing them in shoes. They rose to lead the farrier and horse transportation tool industry as Swanstroms developed tough tool principles: ergonomic designs, tough steel, precision forging, machining, and treating for body toughness, special alloys and localized heat treating for hard bearings, grippers, and cutting edges.

Machines, barbed wire, electrification, and war brought Swanstroms into the trenches with wrenches, pliers, and wire cutters. Telephones and radios of the twenties were good for the electronic tool business. World War tool needs took Swanstroms intensely to high tech industry. They won the Army Navy "E" award for excellence in mil-spec tool production, quality, and on-time delivery in 1943.

Mid century brought automotive, aviation, plastic and electronic revolutions. Swanstroms refined big tough designs as their high tech tools became smaller. John and his team led the electronic tool makers in 1965, patenting copper alloy smooth bearings and furnishing them with the highest alloy forgings. In 1969 they won the USA's second ever GSA Vendor Certification Award.

In the 1980s, Jack's many years in fighter aircraft and Diamond Tool management had taught his team the need for and the "how to" of high tech tools and related production and quality systems.

Consolidations took Diamond headquarters from Duluth in 1983. Swanstrom Tools USA was founded by several seasoned professionals to emphasize ergonomics and excellence in high tech tools. Servicing all brands of electronic tweezers, pliers and cutters, while building a state of the art factory, Swanstrom brought forging, machining, and heat treating together in related new ergonomic tools in 1986.

Ergonomic and tool life enhancements along with speed and solid business relations keep Swanstrom partners productive and profitable in high tech communications, avionics, computers, plastics, medical electronics, and related distribution.

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In loving memory of Jack Swanstrom, Jr. — 1944-2002



Andrew (2nd), Frank (5th) circa 1900



Otto, Frank, and John Swanstrom 1943



Dan Hellie (Director of Marketing), and Lynnette Swor (Sales Manager) 2001

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## Connecting with Swanstrom:

**Swanstrom Tools USA**  
3300 James Day Avenue  
Superior, WI 54880-5526

**Web site:** [www.swanstromtoolsusa.com](http://www.swanstromtoolsusa.com)  
**Email:** [swanstromtools@earthlink.net](mailto:swanstromtools@earthlink.net)  
**Phone:** (715) 392-9231  
**Toll Free:** (800) 287-8872  
**Fax:** (715) 392-9233

## Ergonomic Considerations

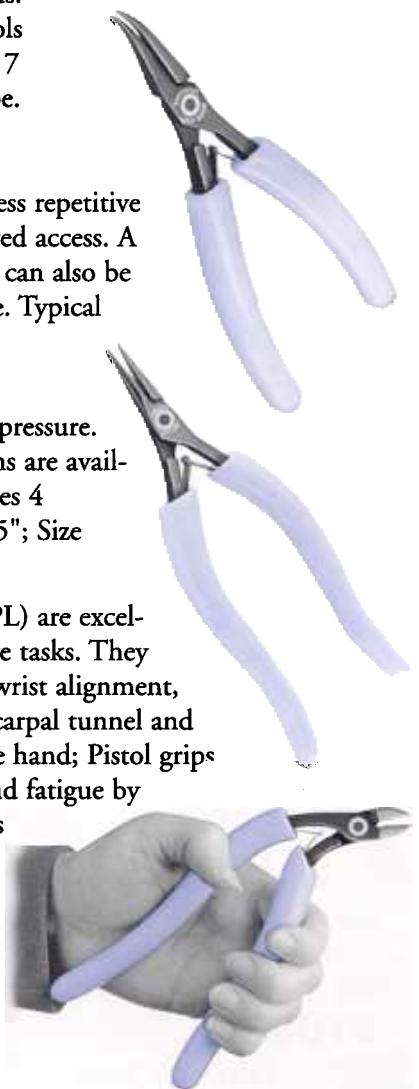
Ergonomic tools allow people to work safely and cost effectively. Tools should be selected based on the operator and task to be performed.

Size, weight and handle form and opening should be comfortable to the employee. Generally, smaller sized tools are more comfortable for smaller hands and larger tools are more effective with larger hands.

Swanstrom electronic tools are available in sizes 3 to 7 dependent upon tool type.

### Handles

- Traditional Shorts for less repetitive work areas with restricted access. A traditional style handle can also be an operator's preference. Typical width: 2.0"
- Double Ergonomic (E) disperse and minimize pressure. Extended handle lengths are available. Typical width: Sizes 4 & 5: 1.75"; Size 6-1.95"; Size 7-2.13"
- Pistol Grip (EPR or EPL) are excellent for highly repetitive tasks. They help maintain normal wrist alignment, reducing potential for carpal tunnel and disperse pressure on the hand; Pistol grips further reduce strain and fatigue by allowing all four fingers to be used.



### Handle Features

- Handle diameter distributes the pressure over a larger hand surface and eases pick up.
- Double action leaf springs are soft touch and adjustable, minimizing the force and pressure on the hand.
- Static Dissipative Soft Touch™ foam handles distribute hand pressure evenly while protecting sensitive components from electro-static discharge.

### Spring Choices Include:

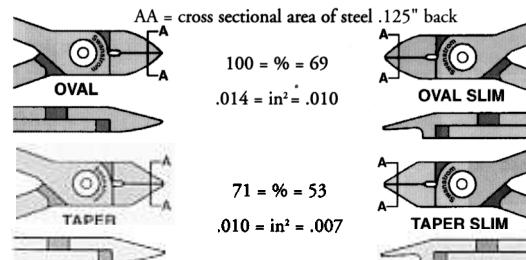
- Double adjustable leaf
- Coils
- Secrets

## Head, Tip, and Edge Options

The many tool heads, angles and tip shapes, and edges allow tool choices based on arm and hand position to maximize visibility, ergonomics, and economics. Generally a tool with a larger head lasts longer.

### Tip Shape

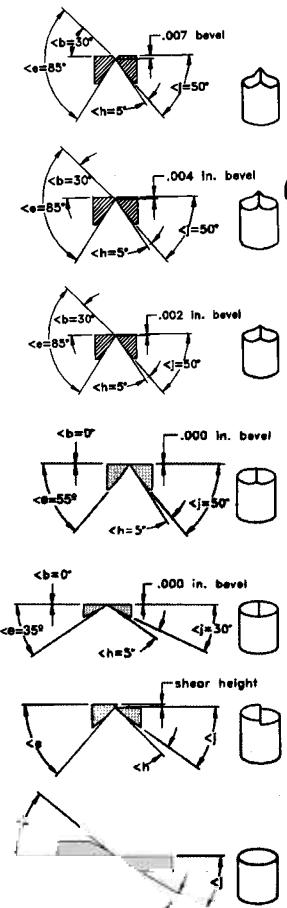
- Oval - the most durable
- Oval Slim - for getting into smaller spaces
- Taper - also for getting into very small spaces
- Taper Slim - most versatile but weaker tips



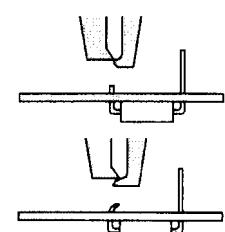
- Angle end and curved nose cutters - the most task specific.
- Leverage and Tip Control - operator effort minimized by using the shortest jaw length possible for the task.

### Edge Type

- Bevel .007" - cuts where pinch or spike is not critical, longest life, most pressure to cut
- Flush .004" - reduces pinch, spike and squeeze pressure
- Full Flush .002" - further reduces pinch, spike, and squeeze
- Super Flush .000" - produces minimal spike and shock transmittal, more ergonomic, less squeeze
- Super Flush, Super Sharp .000" - produces least spike, most ergonomic and easiest to squeeze
- Near Shear - leaves a slight deformation and step left on the cut, reduces force required to cut.
- Pure Shear - no spike, small side deformation, easiest cut



- Stand-Off Shear - minimizes shock, leaves no spike and produces consistent "stand off" lead lengths
- Stand-Off Bend/Cut



All Handles are ESD Safe  
(Static Dissipative)

## Tool Life Expectancy

Tool attributes that give Swanstroms longest life:

- High chrome, high carbon alloy steel for bearings and edges. Aircraft grade bearing quality E52100 steel hardened to HRC 65 and then tempered to ideal for intended work.
- Edge angles for ease of cut and edge life (10 choices).
- Longer handles for leverage and pressure distribution.
- Wider bodies for better bearing properties and strength.
- Very hard cut edges for edge life (HRC 65, tempered).
- Stainless Scrivets™ for lubricity, adjustability, cleanliness.
- Stainless adjustable leaf springs welded in place, or "secret" tension springs—optional.

Tools are scientifically inspected and tested at key production stages. Touch tests are performed on tool edges, tip, joints and springs to confirm all functions ideal.

Many years of lab and field testing prove that Swanstrom cutters used within design limits, give well over 1,000,000 clean cuts on common lead material such as .020 tinned copper.

## Tool Maintenance:

For better tool life, perform proper easy local maintenance.

- Oil joints regularly. An occasional single drop is wise.
- Oil joint and Scrivet™ before adjustment.
- Protect spring-to-handle weld if adjusting leaf spring.
- Cut only material tool is designed to cut.
- Use proper size tools for parts being cut. Use larger tools for larger and harder parts.
- Keep tools with stops adjusted for type of material cut.
- Keep tools sharp and well serviced. Use Swanstrom Tool Service for most perfect recon. (all brands)

## Don'ts:

- Don't force a tight, stiff joint. (oil it)
- Don't cut material for which tool was not designed.
- Don't pull on springs without protecting the weld under the plastic (rotate-bend for more pressure).
- Don't improperly grind. Heat and the wrong touch will quickly damage tool beyond repair, may soften the edges, and void warranty.
- Don't forget Swanstrom Tool Service. 1-800-287-8872

## Abbreviations for Tool Head Descriptions

Anvil	A	Hose Clamp	HC	Shear	S
Bevel	B	High Leverage	HL	Short Nose	SN
Bend Cut	BC	Jaw Relief	JR	Slim	SL
Bypass	BP	Long Nose	LN	Smooth	SM
Concave	CV	Long Slim	LS	Special Radius	SR
Convex	CX	Micro	MI	Step	ST
Curved	C	Mini	M	Stress Relief	STR
Double	D	Near Shear	NS	Submini	SU
Double End	DE	Nipper	N	Super Flush	SF
Extra Long	EL	Oval	Ov	Taper	T
Fine	FN	Oval Slim	OS	Taper Slim	TS
Fine Tip	FT	Relieved	RE	Tip Cut	TC
Flat Nose	FLN	Round	R	Ultra Fine	UF
Flat/Round	F/R	Round Nose	RN	V Notch	V
Flush	F	Scissor	SC	Variable Jaw	VJ
Full Flush	FF	Serrated	SER		

Special radius edges to meet DOD 2000 Specs are available by adding the suffix SR to the part number.

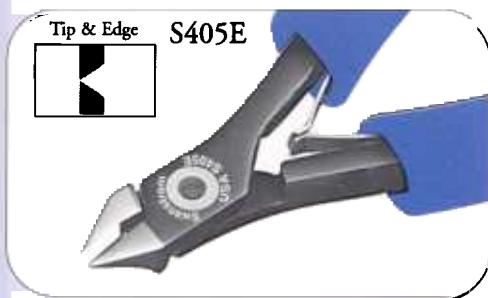
## Cutting Capacities

Gage	in	mm	Part Numbers
32	0.007	0.2	S185E
24	0.020	0.6	S171E, S171, S219E, S219, S223E, S223
22	0.025	0.6	S170E, S170, S212E, S212, S215E, S215, S218E, S218, S224E, S224, S225E, S225, S482E, S482
20	0.032	0.8	S202E, S202, S203E, S203, S205B, S213E, S213, S233E, S233, S234E, S234, S291, S402E, S402, S423E, S423, S432E, S432, S483E, S483, S485E, S485, S491E, S491, S492E, S492, S605E, S605
18	0.040	1.0	S201E, S201, S205E, S205, S405E, S405, S412E, S412, S413E, S413, S414E, S414, S420E, S420, S421E, S421, S422E, S422, S430E, S430, S431E, S431, S435E, S435, SC15E
16	0.050	.3	S410E, S410, S411E, S411, S415E, S415, S416E, S416, S512E, S512, S513E, S513, S514E, S514, S516E, S516, S520E, S520, S521E, S521
14	0.060	1.6	S510E, S510, S511E, S511, S515E, S515, S534E, S534, S535E, S535, S612E, S613E, S614E, S616E, S620E, S621E
12	0.080	2.0	S610E, S611E, S615E, SC5E, SC17E, ST5E, SV5E, SV5ESP
11	0.090	2.3	S700E, S710E S350E, S350, S351E, S351 SC7E, ST7E, SV7E



All Serviced Tools Are Returned ESD Safe  
(Static Dissipative)

# Super Diagonal Cutters



Tool Numbers	Description				Overall Length	Jaw Length	Cutter Length	Tip Width short	Tip Thick
	ergo	short	head	edge					
S111E	S111	Ov	F	.004	in .65	4.25	0.53	0.40	0.23
				.100	mm 144	108	13	10	0.80
S112E	S112	Ov	SF	.000	in 5.65	4.25	0.53	0.40	0.23
				.000	mm 144	108	13	10	0.80
S115E	S115	T	F	.004	in 5.65	4.25	0.53	0.40	0.17
				.100	mm 144	108	13	10	0.80
S116E	S116	T	SF	.000	in 5.65	4.25	0.53	0.40	0.17
				.000	mm 144	108	13	10	0.80
S121E	S121	TS	SF	.000	in 5.65	4.25	0.53	0.40	0.17
				.000	mm 144	108	13	10	0.80
S405E	S405	TS	SN	SF	.000	in 5.46	4.61	0.34	0.25
				.000	mm 139	117	'9	5	0.80
S410E	S410	Ov	B	.007	in 5.65	4.80	0.53	0.40	0.23
				.180	mm 144	122	13	10	0.80
S411E	S411	Ov	F	.004	in 5.65	4.80	0.53	0.40	0.23
				.100	mm 144	122	13	10	0.80
S412E	S412	Ov	SF	.000	in 5.65	4.80	0.53	0.40	0.23
				.000	mm 144	122	13	10	0.80
S413E	S413	OS	F	.004	in 5.65	4.80	0.53	0.40	0.23
				.100	mm 144	122	13	10	0.80
S414E	S414	OS	SF	.000	in 5.65	4.80	0.53	0.40	0.23
				.000	mm 144	122	13	10	0.8
S415E	S415	T	F	.004	in 5.65	4.80	0.53	0.40	0.17
				.100	mm 144	122	13	10	0.80
S416E	S416	T	SF	.000	in 5.65	4.80	0.53	0.40	0.17
				.000	mm 144	122	13	10	0.80
S420E	S420	TS	F	.004	in 5.65	4.80	0.53	0.40	0.17
				.100	mm 144	122	13	10	0.80
S421E	S421	TS	SF	.000	in 5.65	4.80	0.53	0.40	0.17
				.000	mm 144	122	13	10	0.80
S422E	S422	Ov	SU	SF	.000	in 5.63	4.78	0.50	0.20
				.000	mm 143	121	13	10	0.80
S423E	S423	OS	TC	SF	.000	in 5.63	4.78	0.50	0.20
				.000	mm 143	121	13	8	0.80
S430E	S430	Ov	HL	B	.007	in 5.53	4.68	0.40	0.28
				.180	mm 140	119	10	7	0.80
S431E	S431	Ov	HL	F	.004	in 5.53	4.68	0.40	0.28
				.100	mm 140	119	10	7	0.80
S432E	S432	Ov	HL	SF	.000	in 5.53	4.68	0.40	0.28
				.000	mm 140	119	10	7	0.80
S435E	S435	T	HL	SF	.000	in 5.51	4.66	0.38	0.26
				.000	mm 140	118	10	7	0.80
S510E	S510	Ov	B	.007	in 5.78	4.93	0.63	0.50	0.24
				.180	mm 147	125	16	13	1.30
S511E	S511	Ov	F	.004	in 5.78	4.93	0.63	0.50	0.24
				.100	mm 147	125	16	13	1.30
S512E	S512	Ov	SF	.000	in 5.78	4.93	0.63	0.50	0.24
				.000	mm 147	125	16	13	0.05
S513E	S513	OS	F	.004	in 5.78	4.93	0.63	0.50	0.24
				.100	mm 147	125	16	13	1.30
S514E	S514	OS	SF	.000	in 5.78	4.93	0.63	0.50	0.24
				.000	mm 147	125	16	13	1.30
S515E	S515	T	F	.004	in 5.78	4.93	0.63	0.50	0.17
				.100	mm 147	125	16	13	1.30
S516E	S516	T	SF	.000	in 5.78	4.93	0.63	0.50	0.17
				.000	mm 147	1.25	16	13	0.05
S520E	S520	TS	F	.004	in 5.78	4.93	0.63	0.50	0.17
				.100	mm 147	125	16	13	1.30
S521E	S521	TS	SF	.000	in 5.78	4.93	0.63	0.50	0.17
				.000	mm 147	1.25	16	13	0.05

## Super Diagonal Cutters

Tool Numbers	Description				Overall Length ergo	Jaw Length short	Cutter Length	Tip Width	Tip Thick		
	ergo	short	head	edge							
S534E	S534	T	HL	F	.004 .100	in 5.60 mm 142	4.75 121	0.44 11	0.32 8	0.22 5	0.05 1.30
S535E	S535	T	HL	SF	.000 .000	in 5.60 mm 142	4.75 121	0.44 11	0.32 8	0.22 5	0.05 1.30
S610E	S610	Ov	B	F	.007 .180	in 6.33 mm 161	5.40 137	0.80 20	0.60 15	0.26 7	0.06 1.50
S611E	S611	Ov	F	F	.004 .100	in 6.33 mm 161	5.40 137	0.80 20	0.60 15	0.26 7	0.06 1.50
S612E	S612	Ov	SF	F	.000 .000	in 6.33 mm 161	5.40 137	0.80 20	0.60 15	0.26 7	0.06 1.50
S613E	S613	OS	F	F	.004 .100	in 6.33 mm 161	5.40 137	0.80 20	0.60 15	0.26 7	0.06 1.50
S614E	S614	OS	SF	F	.000 .000	in 6.33 mm 161	5.40 137	0.80 20	0.60 15	0.26 7	0.06 1.50
S615E	S615	T	F	F	.004 .100	in 6.33 mm 161	5.40 137	0.80 20	0.60 15	0.18 5	0.05 1.30
S616E	S616	T	SF	F	.000 .000	in 6.33 mm 161	5.40 137	0.80 20	0.60 15	0.18 5	0.05 1.30
S620E	-	TS	F	F	.004 .100	in 6.33 mm 161	-	0.80 20	0.60 15	0.18 5	0.05 1.30
S621E	-	TS	SF	F	.000 .000	in 6.33 mm 161	-	0.80 20	0.60 15	0.18 5	0.05 1.30
S63E		OS SN FF	F	F	.002 .050	in 6.23 mm 158	-	0.70 13	0.50 8	0.28 11	0.04 1
S700E	-	Ov	B	B	.007 .180	in 7.34 mm 186	-	0.50 13	0.30 8	0.44 11	0.07 1.80
S710E	-	Ov	B	B	.007 .180	in 7.74 mm 197	-	0.90 23	0.70 18	0.33 8	0.07 1.80



All tools ESD Safe (Static Dissipative)  
Protects circuit components. Does not  
insulate. Do not use on live circuits!

**Swanstrom****Angle End and Tip Cutters**

Tip &amp; Edge S171E



Jaw S215E



Jaw S218E



Jaw S223E



Jaw S224E



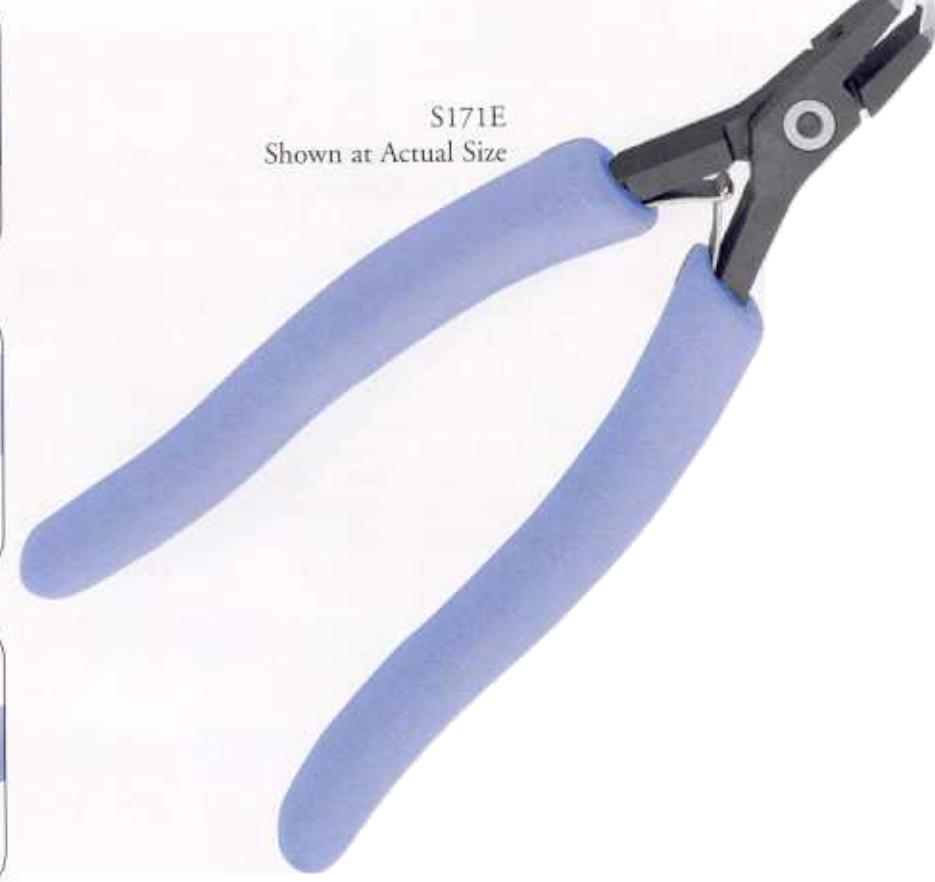
Jaw S225E

**Reverse Angle Cutters**

Tool Numbers	Description				Overall Length ergo	Jaw Length short	Cutter Length	Tip Width	Tip Thick
	ergo	short	head	edge					
S170E	-	long	SF	.000	in 5.74 .000 mm 146	-	0.61 15	0.20 5	0.15 4
S171E	S171	long	SF	.000	in 5.73 .000 mm 146	4.88 124	0.60 15	0.17 4	0.13 3

**Angle End Cutters**

Tool Numbers	Description				Overall Length ergo	Jaw Length	Cutter Length	Tip Width	Tip Thick
	ergo	short	head	edge					
S215E	S215	SU LN 45° SF	.000	in 5.84 .000 mm 148	4.99 127	0.71 18	0.25 6	0.19 5	0.07 1.80
S218E	S218	M 45° T SF	.000	in 5.72 .000 mm 145	4.87 124	0.59 15	0.23 6	0.17 4	0.05 1.30
S223E	S223	MI 45° LN SF	.000	in 5.80 .000 mm 147	4.95 126	0.67 17	0.16 4	0.15 4	0.05 1.30
S224E	S224	LN 45° JR SF	.000	in 5.89 .000 mm 150	5.04 128	0.76 19	0.19 5	0.18 4	0.08 1.90
S225E	S225	LN 45° SF	.000	in 5.84 .000 mm 148	4.99 127	0.71 18	0.26 7	0.18 5	0.11 2.80
S482E	S482	MI 45° N SF	.000	in 5.59 .000 mm 142	4.74 121	0.46 12	0.23 6	0.20 5	0.04 1
S483E	S483	T 60° N SF	.000	in 5.76 .000 mm 146	4.91 125	0.60 15	0.45 11	0.18 5	0.03 0.80
S485E	S485	R 60° N SF	.000	in 5.76 .000 mm 146	4.91 125	0.60 15	0.45 11	0.25 6	0.03 0.80
S491E	S491	60° N F	.004	in 5.76 .100 mm 146	4.91 125	0.60 15	0.45 11	0.25 6	0.03 0.80
S492E	S492	60° N SF	.000	in 5.76 .000 mm 146	4.91 125	0.60 15	0.45 11	0.25 6	0.03 0.80



### Transverse End Cutters

Tool Numbers	Description				Overall Length ergo	Jaw Length short	Cutter Length	Tip Width	Tip Thick
	ergo	short	head	edge					
S233E	S233	LN	SF	.000	in	5.88	5.03	0.75	0.10
						.000	149	128	2.5
S234E	S234	SN	F	.004	in	5.88	5.03	0.75	0.11
				.100	mm	149	128	19	2.50
								4	2.50

### Long Nose Tip Cutters

Tool Numbers	Description				Overall Length ergo	Jaw Length short	Cutter Length	Tip Width	Tip Thick
	ergo	short	head	edge					
S212E	S212	FN	RE	SF	.000	in	5.99	5.14	0.86
							.000	152	131
S213E	-	RE	SF	.000	in	5.99	0.86	0.17	0.17
						.000	152	22	
S219E	S219	UF	RE	SF	.000	in	5.99	5.14	0.86
							.000	152	131
S291	S291	LN	SER	A	in	5.28	1.00	0.25	0.08
						mm	134	25	
S350E	-	SM	S	-	in	6.86	-	1.70	0.50
						mm	174	43	
S351E	S351	SER	S	-	in	6.86	6.01	1.70	0.50
						mm	174	153	
S391E	-	SER	S	-	in	6.16	-	1	0.50
						mm	156	25	



S350E  
Shown at Actual Size



All tools ESD Safe (Static Dissipative)  
Protects circuit components. Does not insulate. Do not use on live circuits!

# Shear Cutters and Strippers

## Shear Cutters

Tool Numbers ergo	Description		Overall Length ergo	Jaw Length	Cutter Length	Tip Width	Tip Thick
	head	edge					
SC5E	OvSC	S	in 6.41	1.25	1.25	0.35	0.05
			mm 163	32	32	9	1.30
SC7E	OvSC	S	in 8.29	1.45	1.45	0.35	0.10
			mm 211	37	37	9	2.50
SC15E	T SC	S	in 5.66	0.50	0.50	0.06	0.05
			mm 144	13	13	1.4	1.30
SC17E	T SC	S	in 7.50	0.70	0.70	0.08	0.07
			mm 190	18	18	1.90	1.80
ST5E	R ST	S	in 6.66	1.50	1.25	0.33	0.20
			mm 169	38	32	8	5
ST7E	R ST	S	in 8.47	1.63	1.50	0.35	0.22
			mm 215	41	38	9	6

## Strippers

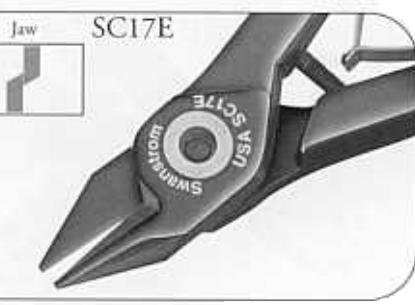
Tool Numbers ergo	Description		Overall Length ergo	Jaw Length	Cutter Length	Tip Width	Tip Thick
	head	edge					
SV5E	T V	S	in 5.79	0.63	0.50	0.32	0.22
			mm 147	16	13	8	6
SV5E-SP	T V BP	S	in 5.79	0.63	0.50	0.32	0.22
			mm 147	16	13	8	6
SV7E	Ov	S	in 8.29	1.45	1.45	0.35	0.10
			mm 211	37	37	9	2.50



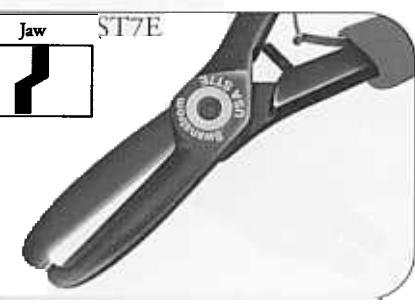
SC5E



SC15E



SC17E



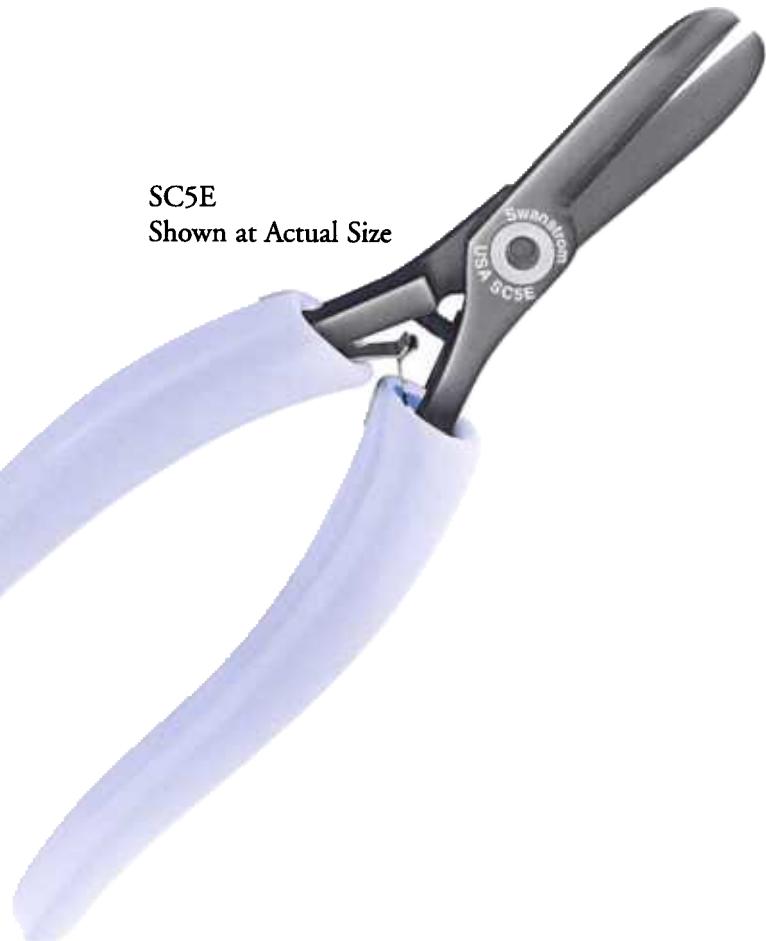
ST7E

SC5E

Shown at Actual Size



All tools ESD Safe (Static Dissipative)  
Protects circuit components. Does not  
insulate. Do not use on live circuits!



### Stand-Off Cutters

#### Tool Numbers Description

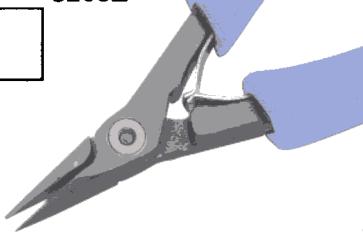
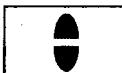
Tool Numbers	ergo	short	head	edge	Overall	Jaw	Cutter	Tip	Tip	Stand-Off
					Length	Length	Length	Width	Thick	Distance
S185E -	LSH	S	in	ergo	5.93	-	0.78	0.13	0.32	0.03
(lead stabilizing hole)				mm	151	-	20	3	8	3
S201E S201	45°	S	in	5.83	4.98	0.70	0.18	0.25	0.18	0.04
			mm	146	126	18	5	6	5	1
S202E S202	UF LN	S	in	5.92	5.07	0.79	0.10	0.215	0.09	0.04
			mm	150	129	20	3	5	2.20	1
S203E S203	LN	A	in	6.09	5.24	0.96	0.10	0.18	0.03	0.04
			mm	155	133	24	2.5	5	3.20	1
S205E -	LN	S	in	5.92	-	0.79	0.18	0.235	0.18	0.04
			mm	150	-	20	5	6	4.60	1
S205B BC	S	in	5.10	0.79	0.18	0.235	0.18	0.18	0.04	
		mm	129	20	5	6	4.60	1		
S605E S605	LS	S	in	6.52	5.67	1.36	0.092	0.193	0.09	0.03
			mm	166	144	35	2	5	2.3	0.80

S202E  
Shown at Actual Size



# Snipe (short) and Long Nose Pliers

Tip & Edge S208E



Tip & Edge S242E



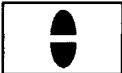
Tip & Edge S220E



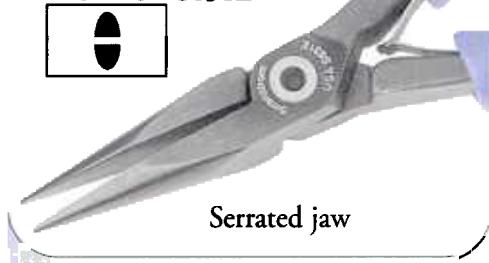
Tip & Edge S324E



Tip & Edge S631E



Serrated jaw



Tip & Edge S721E



Serrated jaw

## Snipe Nose Pliers

Tool Numbers ergo	short	Tool head	Description jaw	in mm	Overall Length		Jaw Length	Tip Width	Tip Thick
					ergo	short			
-	S108	MI	SM	in mm	-	4.61 117	0.88 22	0.05 1.10	0.03 0.80
-	S109	MI	SER	in mm	-	4.61 117	0.88 22	0.05 1.10	0.03 0.80
-	S206	MI	SM	in mm	-	4.73 120	0.45 11	0.05 1.10	0.03 0.80
S208E	S208	SU	SM	in mm	5.93 151	5.08 129	0.80 20	0.05 1.10	0.03 0.80
S209E	S209	SU	SER	in mm	5.93 151	5.08 129	0.80 20	0.05 1.10	0.03 0.80
S210E	S210	-	SM	in mm	5.93 151	5.08 129	0.80 20	0.06 1.50	0.03 0.80
S211E	S211	-	SER	in mm	5.93 151	5.08 129	0.80 20	0.06 1.50	0.03 0.80
S242E	S242	C	SM	in mm	6.03 153	5.18 132	0.90 23	0.07 1.80	0.04 1
S243E	-	C	SER	in mm	6.03 153	-	0.90 23	0.07 1.80	0.04 1

## Long Nose Pliers

Tool Numbers ergo	short	head	Description jaw	Overall Length		Jaw Length	Tip Width	Tip Thick	
				in go	short				
S220E	S220	-	SM	in mm	6.13 156	5.28 134	1.00 25	0.06 1.50	0.03 0.80
S221E	S221		SER	in mm	6.13 156	5.28 134	1.00 25	0.06 1.50	0.03 0.80
SS221E	-	(stainless steel)	SCR	in mm	6.13 156	-	1.00 25	0.06 1.50	0.03 0.80
S320E	S320		SM	in mm	6.86 174	6.01 153	1.70 43	0.06 1.50	0.03 0.80
S321E	S321		SER	in mm	6.86 174	6.01 153	1.70 43	0.06 1.50	0.03 0.80
S323E			SER	in mm	6.86 174	-	1.70 43	0.06 1.60	0.06 1.60
S324E	S324	SL	SM	in mm	6.21 158	5.36 136	1.08 27	0.06 1.50	0.06 1.50
S325E	S325	SL	SER	in mm	6.21 158	5.36 136	1.08 27	0.06 1.50	0.06 1.50
S328E		EL	SM	in mm	6.94 176	-	1.78 45	0.08 2	0.08 2
S329E	S329	EL	SER	in mm	6.94 176	6.09 155	1.78 45	0.08 2	0.08 2
S630E			SM	in mm	7.53 191	-	1.85 47	0.08 2	0.06 1.50
S631E			SER	in mm	7.53 191	-	1.85 47	0.08 2	0.06 1.50
S721E			SER	in mm	8.94 227	-	2.13 54	0.13 3	0.13 3
S831E			SER	in mm	7.94 202	-	1.10 28	0.09 2.40	0.09 2.40

Tip & Edge S721E



Serrated jaw

Tip & Edge S831E



Serrated jaw

# Flat, Needle, and Curve Nose Pliers

## Flat Nose Pliers

Tool Numbers	ergo short	Tool Description		ergo in	Overall Length 6.13	Jaw Length 1.00	Tip Width 0.05	Tip Thick 0.12	
		head	jaw						
S200E	S200	-	SM	in	6.13	5.28	1.00	0.05	0.12
				mm	156	134	25	1.30	3
S300E			SM	in	6.86		1.70	0.05	0.12
				mm	174		43	1.30	3
S380EPR-	-	-	SM	in	7.64	-	1.00	0.05	0.12
				mm	194	-	25	1.30	3
S800E	-		SER	in	8.21		1.25	0.14	0.40
				mm	209		32	3.50	10



## Needle Nose Pliers

Tool Numbers	ergo short	Description		ergo in	Overall Length 6.13	Jaw Length 1.00	Tip Width 0.06	Tip Thick 0.03	
		head	jaw						
S230E	S230	-	SM	in	6.13	5.28	1.00	0.06	0.03
				mm	156	134	25	1.50	0.80
S231E	S231		SER	in	6.13	5.28	1.00	0.06	0.03
				mm	156	134	25	1.50	0.80
S240E	S240	C	SM	in	5.93	5.08	0.80	0.06	0.03
				mm	151	129	20	1.5	0.80
S330E	S330		SM	in	6.86	6.01	1.70	0.06	0.03
				mm	174	153	43	1.50	0.80
S331E	S331	-	SER	in	6.86	6.01	1.70	0.06	0.03
				mm	174	153	43	1.50	0.80
S331E-1	-		SER	in	6.86		1.70	0.09	0.06
				mm	174		43	2.30	1.50
S330AE	S330A	EL	SM	in	7.35	6.50	2.19	0.06	0.06
				mm	187	165	56	1.60	1.60
S340E	S340	C	SM	in	6.56	5.71	1.40	0.06	0.03
				mm	167	145	36	1.50	0.80
S340AE	-	90° EL	SM	in	6.21	-	1.05	0.06	0.06
				mm	158	-	27	1.60	1.60
S341E	S341		SER	in	6.21	5.71	1.40	0.06	0.03
				mm	158	145	36	1.50	0.80
S660E	-	-	SM	in	7.53	-	1.85	0.08	0.80
				mm	191	-	47	2	1.50
S661			SER	in		6.45	1.85	0.08	0.06
				mm		164	47	2	1.50



All tools ESD Safe (Static Dissipative)  
Protects circuit components. Does not insulate. Do not use on live circuits!



# Swanstrom

## Round Nose, Straightening, and Forming Pliers

### Round Nose, Straightening, and Forming Pliers



### Round Nose Pliers

Tool Numbers	Description			Overall Length	Jaw Length	Tip Width	Tip Thick
ergo	short	head	jaw	ergo	short		
S236E	S236	-	SM	in mm	6.13 156	5.28 134	1.00 25
S238E			SM	in mm	5.60 142	0.63 16	0.06 1.50

### Straightening Pliers

Tool Numbers	Description			Overall Length	Jaw Length	Tip Width	Tip Thick
ergo	short	head	jaw	ergo	short		
S808E	-	-	SM	in mm	6.06 154	- -	0.90 23

### Forming Pliers

Tool Numbers	Description			Overall Length	Jaw Length	Tip Width	Tip Thick
ergo	short	head	jaw	ergo	short		
S195E	-	LN	-	in mm	6.26 159	- 25	0.09 2.30
S970E-2	-	STR	S	in mm	6.25 159	1.09 27	0.27 6.90
S980E	S980	CV/CXSM		in mm	5.88 149	5.03 128	1.00 25
S986E	-	F/R	SM	in mm	6.13 156	1.00 25	0.11 2.80
S990E	S990	STR	-	in mm	6.19 157	5.34 136	1.03 26
S991E		D STR	-	in mm	6.39 162	1.23 31	0.75 19



## Specialty Pliers

Tool Numbers	Description		Overall Length	Jaw Length	Tip Width	Tip Thick
ergo	head	jaw	ergo			
S593E	Screw Removal Tool-		in 6.50	1.00	0.18	0.35
			mm 166	25	4.60	4
S691E	VJ teeth	SER	in 6.60	1.05	0.33	0.35
			mm 168	27	8.40	9
S693E	LN	VN	in 8.94	2.10	0.25	0.19
			mm 227	53	6	4.80
S870E	HC 90°	-	in 7.97	1.15	0.70	0.40
			mm 202	29	18	10
S923E	LN JR	SM	in 6.43	1.29	0.15	0.13
	V		mm 163	33	3.80	3.30
S942E	C LN	SM	in 6.11	0.80	0.25	0.12
			mm 155	20	6	3
S950E	LN	SM	in 5.96	0.80	0.18	0.18
			mm 151	20	4.60	4.60
S951E	FN	SM	in 6.86	1.70	0.09	0.25
			mm 174	43	2.30	6

## Double Ended Pliers

Tool Numbers	Description	Overall Length	Jaw Length	Tip Width	Tip Thickness	
S995	DE	in 7.50	Cutter 0.53	Plier 0.88	Cutter 0.23	Plier 0.45
	Cutter/Plier	mm 191	13	22	6	1.10
S996	DE	in 7.75	Round 0.75	Flat 0.80	Round 0.06	Flat 0.05
	Round Nose /Flat Nose	mm 197	19	20	1.50	1.30

S995

Shown at Actual Size



Tip & Edge S593E



Tip & Edge S691E



Tip & Edge S870E



Tip & Edge S923E



Tip & Edge S942E



Tip & Edge S951E



 All tools ESD Safe (Static Dissipative)  
Protects circuit components. Does not  
insulate. Do not use on live circuits!



## Tweezers

Swanstrom, first in the world to ergonomicize tweezers, and thereby render them ESD safe.

AA-SA



AC-SA



MM-SA



OO-SA



OOD-SA



Serrated jaw

2



Part	Description	Size in	Size mm
AA-SAH	Fine Strong Tips	4.75	120
AC-SAH	Thick Short Tips	4.25	110
MM-SAH	Strong Multi Purpose	5.00	125
OO-SAH	Strong Thick Smooth Tips	4.75	120
OOD-SAH	Strong Thick Serrated Tips	4.75	120
2H	Fine Point Tapered Tips	4.50	115
2A-SAH	Rounded Flat Tips	4.50	115
3-SAH	Fine Tips	4.75	120
3C-SAH	Narrow Fine Tips	4.25	110
5A-SAH	Extra Fine, Very Sharp Tips	4.50	115
5-SAH	Extra Fine, Very Sharp Tips	4.50	115
7-SAH	Curved, Very Fine Tips	4.50	115
7-SADH	Curved, Serrated Tips	4.50	115
21-SAH	Strong Rounded Tips	6.25	159
24-SAH	Fine Bent Tips	6.00	152

Swanstrom's standard foamed tweezers are ESD safe. For no foam drop suffix "H". For serrations add suffix "D"

2A-SA



5-SA



3-SA



7-SA



3C-SA



21-SA



5A-SA



24-SA

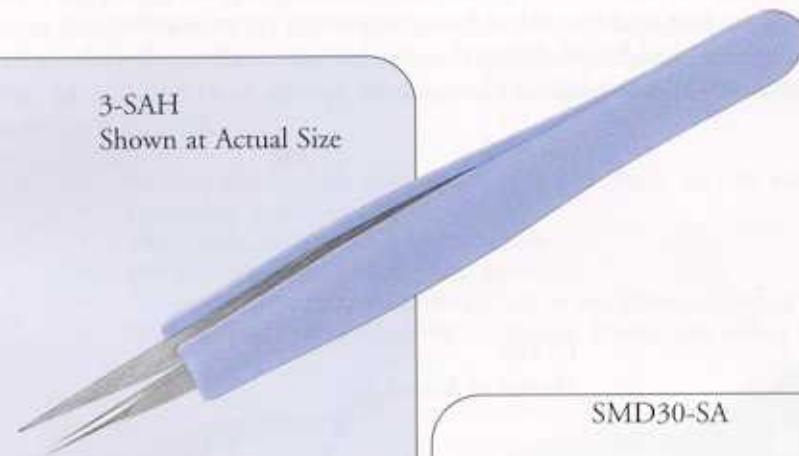


# SMD Tweezers

Part	Description	Size in mm	
SMD10-SA	Groove Tips w/ Anti Crush Control	4.75	120
SMDR10-SA	Groove Tips w/ Anti Crush Control	4.75	120
SMD20-SA	Groove Tips	4.75	120
SMD30-SA	Horizontal Tips	4.75	120
SMDR30-SA	Horizontal Tips, Reverse Action	4.75	120
SMD40-SA	Vertical Placement	4.75	120
SMD50-SA	45° Angle Tips	4.75	120
SMD90-SA	Placing at 60°	4.75	120
SMD110-SA	Tips Relieved	4.75	120
SMD200-SA	Fine Relieved Tips	4.75	120
SMD201-SA	Curved Fine Relieved Tips	4.75	120
SMD203-SA	Narrow Relieved Tips	4.75	120
SMDR254-SA	Angled Flat Tip w/ Inside Relieve	4.50	115

3-SAH

Shown at Actual Size



SMD90-SA



SMD110-SA



SMD200-SA



SMD30-SA



SMD201-SA



SMD10-SA



SMD40-SA



SMD203-SA



SMD20-SA



SMD50-SA



SMDR254-SA



# Plizers

Tip Profile PT10E



Tip Profile PT30E



Unique pressure  
control set screw

## Plizers

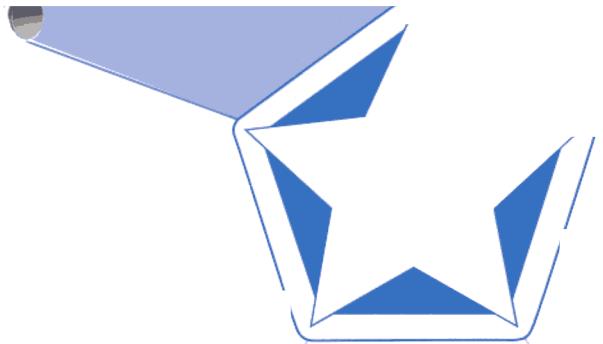
Part	Jaw/Head Type	Overall length	Jaw Length	Width at Joint	Thick at Joint	Handle Width
PT10	Straight Smooth	in	5.50	1.27	0.40	0.25
		mm	140	32	10	6
PT11	Straight Serrated	in	5.50	1.27	0.40	0.25
		mm	140	32	10	6
PT30	Bent Smooth	in	5.10	0.93	0.40	0.25
		mm	130	24	10	6
PT31	Bent Serrated	in	5.10	0.93	0.40	0.25
		mm	130	24	10	6
PT10E	Straight Smooth	in	6.40	1.27	0.40	0.25
		mm	163	32	10	6
PT11E	Straight Serrated	in	6.40	1.27	0.40	0.25
		mm	163	32	10	6
PT30E	Bent Smooth	in	6.10	0.93	0.40	0.25
		mm	155	24	10	6
PT31E	Bent Serrated	in	6.10	0.93	0.40	0.25
		mm	155	24	10	6

Swanstrom, first in the world to bring tweezer precision, stainless, anti-magnetic, and ESD safe ergo handles to bear on the work without the uncomfortable pinch position for operator.

PT10E

Shown at Actual Size

 All tools ESD Safe (Static Dissipative)  
Protects circuit components. Does not insulate. Do not use on live circuits!



## S130-S140 SERIES CUTTERS

**SWANSTROM PRECISION, QUALITY AND VALUE IN AN INDUSTRY FAVORITE!**

The reception to the Swanstrom S130 and S140 series cutters has exceeded expectations since introduction in the Spring of 2002. Customers asked for a design that was user friendly, featured comfortable, soft ESD handles and provided the option of ergonomic handles, at a price that didn't break the bank. Like all Swanstrom tools, the S130 and S140 are made in the USA.

Forged from high chromium, high carbon, 52100 steel  
Precision honed cutting edges  
ESD Safe, static dissipative foam  
Welded, stainless steel, leaf springs  
Induction hardened (Rc65) double tempered cutting edges  
Factory reconditioning of all Super Tools and many competitive tools



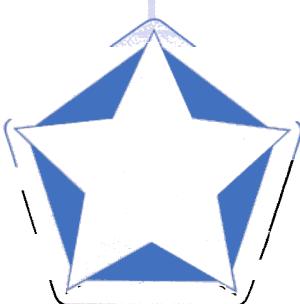
Dark Blue Ergo Handle 5.40"	Yellow Standard Handle 4.10"	Cut Type	Cutter Length	Body Width	Cutting Capacity
S130E	S130	Bevel	.325	.245	16 gage
S131E	S131	Flush	.325	.245	16 gage
S132E	S132	Super Flush	.325	.245	20 gage

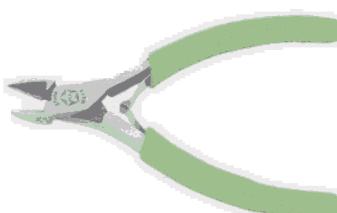
Dark Blue Ergo Handle 5.50"	Yellow Standard Handle 4.70"	Cut Type	Cutter Length	Body Width	Cutting Capacity
S140E	S140	Bevel	.390	.340	16 gage
S141E	S141	Flush	.390	.340	16 gage
S142E	S142	Super Flush	.390	.340	18 gage

(Also available in taper and taper relieved styles)

Swanstrom Tools USA • 3300 James Days Avenue • Superior, WI 54880  
Phone 1-800-287-8872 • Fax 715-392-9233 • [sales@swanstromtools.com](mailto:sales@swanstromtools.com)



- Engineered for small hands and intricate work
- Forged steel for strength, durability, and long life
- Machined with precision for tight tolerances
- Hardened electronically, tempered for toughness
- Honed to precise cut requirements
- Stainless steel leaf springs welded in place
- Cushioned grips for operator comfort
- ESD SAFE for component protection



**MX54**

**Oval head semi-flush diagonal cutters**



- Strongest tips and beveled edge for long life
- Induction hardened edges optimize cutting ease and life

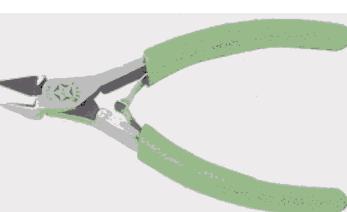


**MX54-9**

**Oval head diagonal flush cutters**



- Strong tips and long life
- Induction hardened edges optimize cutting ease and life
- Flush cut for a sharper edge requiring less squeeze and reduces spike

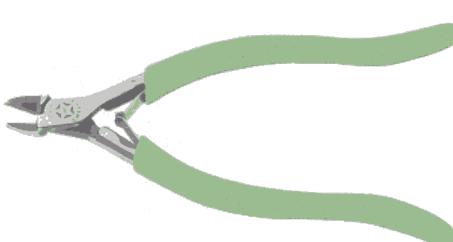


**MX54-5**

**Taper head diagonal flush cutters**



- For intricate and repetitive work between and under closely spaced components
- Induction hardened edges optimize cutting ease and life
- Flush cut for a sharper edge requiring less squeeze and reduces spike

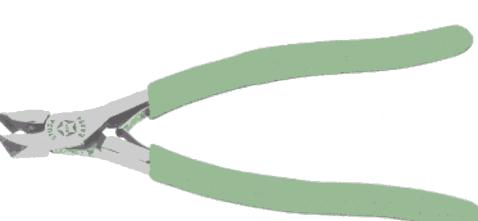


**EMX54-3**

**Oval relieved/slim diagonal flush cutters with ergonomic handles**



- For intricate and repetitive work between and under closely spaced components
- Induction hardened edges optimize cutting ease and life
- E denotes ergonomic (double curve) handles to spread pressure across the palm and relieve carpal tunnel pocket pressure
- Most comfortable hand, wrist and arm positions
- Flush cut for a sharper edge requiring minimum squeeze and reduces spike

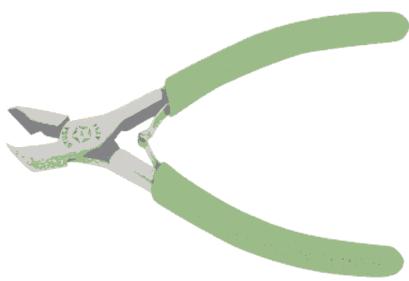


**EAX54**

**Angle end flush cutters with ergonomic handles**



- Angled 60°/30° for ergonomic work positions
- Induction hardened edges optimize cutting ease and life
- E denotes ergonomic (double curve) handles to spread pressure across the palm and relieve carpal tunnel pocket pressure
- For most comfortable hand, wrist and arm positions
- Flush cut for sharper edge, minimum squeeze, maximum ease



**AX54**

**Angle end flush cutters**



- Angled 60°/30° for most ergonomic work positions
- Induction hardened edges optimize cutting ease and life
- Flush cut -for a sharp edge requiring less squeeze and reduces spike



**LX4**

**Submini needle nose serrated pliers**



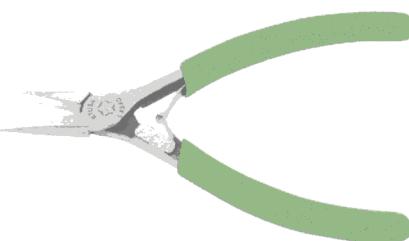
- Where short handles are a must
- Each jaw has fine parallel serrations and beveled edges

**LX4G**

**Submini needle nose smooth pliers**



- Where short handles are a must
- Each jaw is smooth with beveled edges



**LX54**

**Thin long nose serrated pliers**



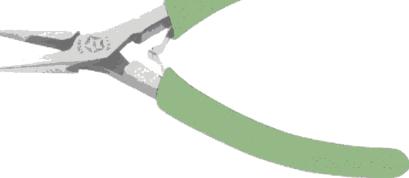
- Each jaw has fine parallel serrations and beveled edges

**LX54G**

**Thin long nose smooth pliers**



- Each jaw is smooth with beveled edges



**NX54**

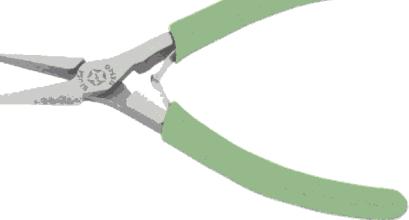
**Slim needle nose serrated pliers**

- Each jaw is serrated with beveled edges

**NX54G**

**Slim needle nose smooth pliers**

- Each jaw is smooth with beveled edges



**DX54G**

**Flat nose smooth pliers**

- Strongest gripping plier
- Ideal for straightening flat leads



**RX54**

**Round nose smooth jaw pliers**



- Used to form perfectly round loops without deformation



**CX54G**

**Curve nose smooth jaw pliers**



- A very ergonomic alternative to long nose pliers
- Each jaw is smooth with beveled edges
- Permits most comfortable arm position for working

## PRICE CUTTER!

If good tools at the lowest possible **tool prices** are your requirement, then STUSA-170 Mini Shear Cutter is 15% stronger and harder than other 170s.

STUSA-170 shear (.004)

STUSA-170ESD

STUSA-171 flush cut (.002)



## Hand Tool Reconditioning

### A Final VALUE MAXER \$!

For **all brands** of tools like those shown in this catalog, **Swanstrom Tool Service**, the pioneer and leader in reconditioning, will clean, repoint, rehone, repolish, respring, rehandle and in cases where necessary, even replace your tools for a very small fraction of your replacement costs.

**FAST—one week turnaround common.**

Tools can be upgraded to ESD safe and sharper than new.

Net Cost:

Forged Diagonal and Tip Cutters . . . . .

Carbide Bladed Cutters . . . . .

Stamped STUSA Micro-Shear Cutters (USA) . . . . .

(Others) . . .

Long Nose and Needle Nose Type Pliers

Tweezers . . . . .

Tweezers with ESD foam ergo upgrade . . .

Volume price and delivery arrangements negotiable.

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