

TABLE OF CONTENTS



Switzerland

	page		page
Technical information	2 to3	CATALOGS FOR OTHER SIPEL LINES	43
		QUICK CHANGE SOFT TIP TWEEZERS	
		QUICK CHANGE CERAMIC TIP TWEEZERS	
Complementary information	4	PLIERS CUTTERS and SPECIAL APPLICATIONS	
Coatings available	5	Miscellaneous Tools	
TEFLON	6	MINI-SPATULAS	44
HTC	7	SCISSORS	45 to 47
ERGO FOAM	8	FORCEPS	48 to 50
BLACK EPOXY	9	SCALPEL HANDLES & BLADES	51
Mini Steel Tweezers	10 to 11	MISCEL. SPATULAS	52
Steel Tweezers - six grades	12 to 20	MIRRORS	52
BIO-MED		MICRO SCREWDRIVERS	53
BIO-TECH			
ZENITH		Vacuum Pick-Up Tools and Accessories	55 to 77
PREMIUM		Self Contained Vacuum Handling Tools	
PRIME-X		PEN-VAC Family	56 to 63
SL PRIME-X		SLIM-VAC	63
Reverse Action Steel Tweezers	21 to 22	VACULA	64
Nickel Plated Serrated Tips Tweezers	23	HP300-ESD	64
Brass Tweezers	24	PINCH-VAC	64
Wafers and CDs Handling Tweezers	25 to 29	HANDY-VAC	65
SMD Tweezers	30 to 33	BULB-VAC	65
		CUPS & PROBES (Selection of Tips)	66 to 71
Components Handling Tweezers	34 to 35	Continuous Vacuum Handling Tools	
Micro Cutting Tweezers	36	PAC-VAC	72
Flush Cutting Tweezers	37 to 40	SMD-VAC	72
Plastic Tweezers	41 to 42	STEALTH -VAC	73
WHITE DELRIN 500		STEALTH-WAND	73
GREY STATIC DISSIPATIVE		PORTA-VAC	73
BLACK STATIC DISSIPATIVE		PORTA-WAND	74
ESD BLACK CONDUCTIVE		PORTA-WAND ELITE	75
		MISCEL. HANDLES	76
		MISCEL. WAFER TIPS	77
		MISCEL. ACCESSORIES	78
		Desoldering Braids	79
		Lotions and Containers	80
		Numerical Index	81 to 83

TWEEZERS MATERIALS

No Suffix = Carbon Steel

-S = Stainless Steel

-SA = Stainless Antiacid Antimagnetic Steel

-N = Nickel Silver

-NI = Nickel Plated

-PB = Phosphorus Bronze

-BR = Brass

Example :

3C

3C-S

3C-SA

11-N

AA-Ni

3C-PB

3C-BR

COATINGS

-TE = TEFLON Coating (page 6)

Temperature resistance up to 280°C/520°F

Available on all Steel Tweezers

Example :

2A-SA-TE

-HTC = HTC Coating (page 7)

High temperature resistance up to 620°C/1150°F

Available on all Steel Tweezers

2A-SA-HTC

ERGO-... = Ergonomic Foam Coating (page 8)

Ergonomic Static Dissipative Foam Coating

Available on all Steel Tweezers

ERGO-2A-SA

-EX = Black EPOXY Coating (page 9)

Black Epoxy coating, prevents corrosion

Available on Cutting Tweezers series with EZ Lever

Available on PRIME-X Line Steel Tweezers

2A-SA-EX

STEEL TWEEZERS' SIX GRADES (pages 12-20)

.../BM = Medical Line - BIO MED

.../T = Biology Line - BIO-TECH

.../S = High Tech Electronic Line - ZENITH

.../E = Electronic Line - PREMIUM

.../P = Low Cost PRIME-X Line

SL.../P = SUPER LIGHT PRIME-X Line

Example :

3C-SA/BM

3C-SA/T

3C-SA/S

3C-SA/E

3C-SA/P

SL3C-SA/P

OPTIONS

Prefix **R** = Reverse Action Tweezers (pages 21, 22 & 33)

Suffix **-D** = Inside Serrated Tips

Suffix **-AP** = Adjustable Pressure(see below)

Example :

R2A-SA

2A-SA-D

R2A-SA-AP



WHAT IS EZ LEVER ? (pages 38-40)

Supreme Ergonomic Tool design

EZ Lever makes cutting and handling much "easier"

EZ Lever is perfect for either right or left handed operators

EZ Lever enables better visibility and access

EZ Lever reduces fatigue

EZ Lever fits on all cutting tweezers as well as on steel tweezers

Suffix **-EZ** = Ergonomic EZ Lever(see below)

Example :

3C-SA-EZ



ERGONOMIC ANTI-FATIGUE EZ LEVER



EZ-5-ESD



EZ-3-ESD



EZ-2-ESD



EZ-1-ESD

MINI STEEL TWEEZERS (pages 10-11)
Very small, light weight, ergonomic design

NICKEL PLATED SERRATED TIPS TWEEZERS (page 23)
Stainless Steel, Hardened Tip

BRASS TWEEZERS (page 24)
Anti-Sparking Solid Brass
Soft, for handling delicate parts

WAFERS AND CDs HANDLING TWEEZERS (pages 25-29)
Stainless Antiacid Antimagnetic Steel
Large range for handling any Wafers' sizes

SMD TWEEZERS (pages 30-33)
Specially designed for Surface Mounted Devices
Excellent for handling chips, ceramic devices and all small parts.
Stainless Antiacid Antimagnetic Steel

COMPONENTS HANDLING TWEEZERS (pages 34-35)
Stainless Antiacid Antimagnetic Steel
Insertion-Extraction Tools

MICRO CUTTING TWEEZERS (page 36)
Stainless Antiacid Antimagnetic Steel
The largest choice for micro wires

FLUSH CUTTING TWEEZERS (pages 37-40)
Hardened Polished Carbon Steel
Black Epoxy Coated with EZ Lever

PLASTIC TWEEZERS (pages 41-42)
Light weight, Light cost, 7 models, 28 versions
Heat resistance 464°F - 240°C
White Delrin 500
Grey Static Dissipative
Black Static Dissipative
Black Conductive

MINI SPATULAS (page 44)
Oilers, standard or ESD Safe
Wide Variety of Applications

SCISSORS (pages 45-47)
Stainless Steel, Shiny Polished

FORCEPS (pages 48-50)
Stainless Steel, Shiny Polished
Plastic Coated or Shiny Polished Handles

SCALPEL HANDLES AND BLADES (page 51)
Stainless Steel
Wide Variety of Blades and Handles

SPATULAS, KNIVES, MIRRORS (page 52)
Stainless Steel
For General Purpose

MICRO SCREWDRIVERS (page 53)
Flat and Cross Blades

VACUUM PICK-UP TOOLS AND ACCESSORIES (pages 55-78)
Wide range of Self-contained and Continuous Vacuum Tools, with Accessories

DESOLDERING BRAIDS (page 79)
Complete catalog available upon request

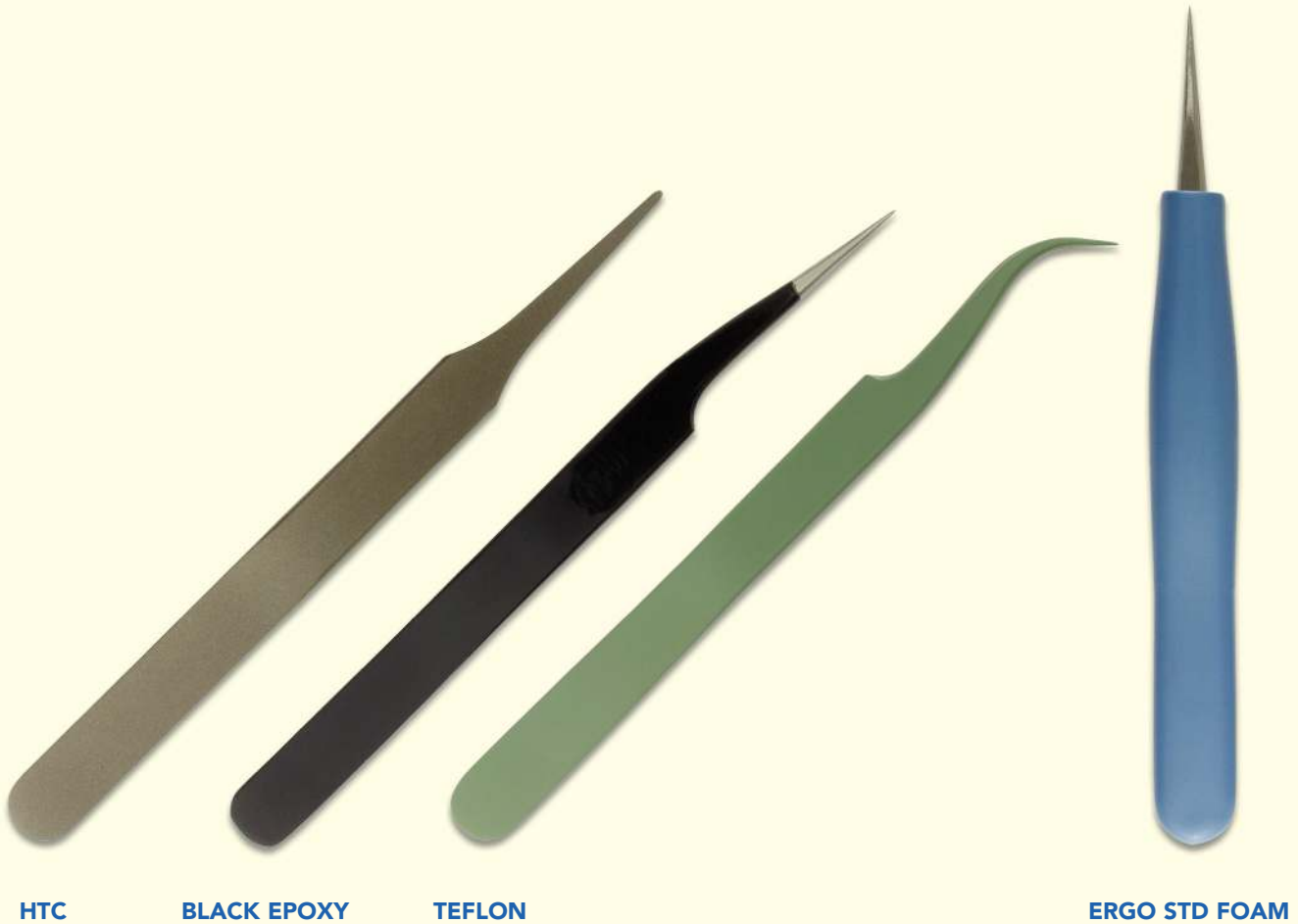
R&R LOTIONS & CONTAINERS (page 80)
Complete catalog available upon request

4 NEW COATINGS FOR TWEEZERS

Available on All Steel Tweezers



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HTC

Suf: **-HTC** High Temperature Coating Resistance up to 620°C / 1150°F

BLACK EPOXY

Suf: **-EX** Epoxy Coating 5 mil

TEFLON

Suf: **-TE** Temperature Coating Resistance up to 280°C / 520°F

ERGO STD FOAM

Préf: **ERGO-** Ergonomic Static Dissipative Foam Coating

TEFLON COATING





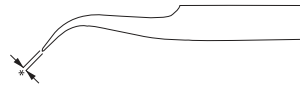











Available on All Steel Tweezers

Temperature coating resistance up to 280°C / 520°F

Suf: -TE



Switzerland

<p>2A-SA-TE 120 mm - 4³/₄"</p> <p>-Very Popular Flat Tips</p>	 <p>* 2.0mm - .078"</p>	
<p>3C-SA-TE 110 mm - 4¹/₄"</p> <p>-Narrow Fine Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>7-SA-TE 120 mm - 4³/₄"</p> <p>-Curved Very Fine Tips</p>	 <p>* 0.4mm - .0157"</p>	
<p>37S-SA-1-TE 125 mm - 5"</p> <p>-For Wafers and Round Part -2 Prongs</p>	 <p>* 7.0mm - .275"</p>	
<p>300W-SA-TE 125 mm - 5"</p> <p>-For 3" Wafers and Round Parts -3 Prongs</p>	 <p>* 9.0mm - .355"</p>	
<p>400W-SA-TE 125 mm - 5"</p> <p>-For 4" Wafers and CD -4 Prongs</p>	 <p>* 12.5mm - .492"</p>	
<p>500W-SA-TE 125 mm - 5"</p> <p>-For 5" Wafers and CD -5 Prongs</p>	 <p>* 16.0mm - .629"</p>	
<p>600W-SA-TE 125 mm - 5"</p> <p>-For 6" Wafers and CD -6 Prongs</p>	 <p>* 19.50mm - .767"</p>	

HTC COATING

















Available on All Steel Tweezers

High Temperature Coating Resistance up to 620°C / 1150°F

Suf: -HTC



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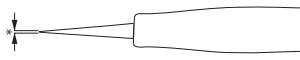

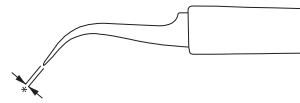

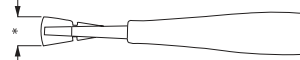

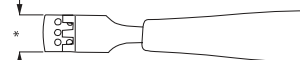



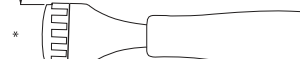



<p>2A-SA-HTC 120 mm - 4³/₄"</p> <p>-Very Popular Flat Tips</p>	 <p>* 2.0mm - .078"</p>	
<p>3C-SA-HTC 110 mm - 4¹/₄"</p> <p>-Narrow Fine Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>7-SA-HTC 120 mm - 4³/₄"</p> <p>-Curved Very Fine Tips</p>	 <p>* 0.4mm - .0157"</p>	
<p>37S-SA-1-HTC 125 mm - 5"</p> <p>-For Wafers and Round Parts -2 Prongs</p>	 <p>* 7.0mm - .275"</p>	
<p>39S-SA-3-HTC 125 mm - 5"</p> <p>-For Wafers and Round Parts -3 Prongs -6 Holes</p>	 <p>* 9.0mm - .355"</p>	
<p>400W-SA-HTC 125 mm - 5"</p> <p>-For 4" Wafers and CD -4 Prongs</p>	 <p>* 12.5mm - .492"</p>	
<p>500W-SA-HTC 125 mm - 5"</p> <p>-For 5" Wafers and CD -5 Prongs</p>	 <p>* 16.0mm - .629"</p>	
<p>600W-SA-HTC 125 mm - 5"</p> <p>-For 6" Wafers and CD -6 Prongs</p>	 <p>* 19.50mm - .767"</p>	

ERGO STD FOAM COATING



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Available on All Steel Tweezers
Ergonomic Static Dissipative Foam Coating
Pref: ERGO-

<p>ERGO-2A-SA 120 mm - 4³/₄"</p> <p>-Very Popular Flat Tips</p>	 <p>* 2.0mm - .078"</p>	
<p>ERGO-3C-SA 110 mm - 4¹/₄"</p> <p>-Narrow Fine Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>ERGO-7-SA 120 mm - 4³/₄"</p> <p>-Curved Very Fine Tips</p>	 <p>* 0.20mm - .0078"</p>	
<p>ERGO-37S-SA-1 125 mm - 5"</p> <p>-For Wafers and Round Parts -2 Prongs</p>	 <p>* 7.0mm - .275"</p>	
<p>ERGO-39S-SA-3 125 mm - 5"</p> <p>-For Wafers and Round Parts -3 Prongs -6 Holes</p>	 <p>* 9.0mm - .355"</p>	
<p>ERGO-400W-SA 125 mm - 5"</p> <p>-For 4" Wafers and CD -4 Prongs</p>	 <p>* 12.5mm - .492"</p>	
<p>ERGO-500W-SA 125 mm - 5"</p> <p>-For 5" Wafers and CD -5 Prongs</p>	 <p>* 16.0mm - .629"</p>	
<p>ERGO-600W-SA 125 mm - 5"</p> <p>-For 6" Wafer and CD -6 Prongs</p>	 <p>* 19.50mm - .767"</p>	

BLACK EPOXY COATING





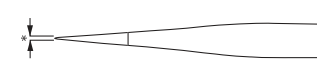



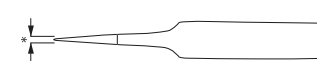







Available on All Steel Tweezers

Epoxy Coating 5 mils Suf: -EX

One Grade Available: -PRIME-X, Suffix /P Example: 2A-SA-EX/P



Switzerland

<p>2A-SA-EX/P 120 mm - 4³/₄"</p> <p>-Very Popular Flat Tips</p>	 <p>* 2.0mm - .078"</p>	
<p>2AB-SA-EX/P 120 mm - 4³/₄"</p> <p>-Curved Flat Tips</p>	 <p>* 2.0mm - .078"</p>	
<p>3-SA-EX/P 120 mm - 4³/₄"</p> <p>-Fine Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>3C-SA-EX/P 110 mm - 4¹/₄"</p> <p>-Narrow Fine Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>5-SA-EX/P 110 mm - 4¹/₄"</p> <p>-Extra Fine, Very Sharp Tips</p>	 <p>* 0.20mm - .0078"</p>	
<p>5A-SA-EX/P 120 mm - 4³/₄"</p> <p>- Extra Fine, Very Sharp Tips</p>	 <p>* 0.35mm - .014"</p>	
<p>7-SA-EX/P 115 mm - 4¹/₂"</p> <p>-Curved Very Fine Tips</p>	 <p>* 0.20mm - .0078"</p>	
<p>AA-SA-EX/P 125 mm - 5"</p> <p>-Fine Strong Tips</p>	 <p>* 0.50mm - .020"</p>	

MINI TWEEZERS

Stainless Antiacid Antimagnetic Steel



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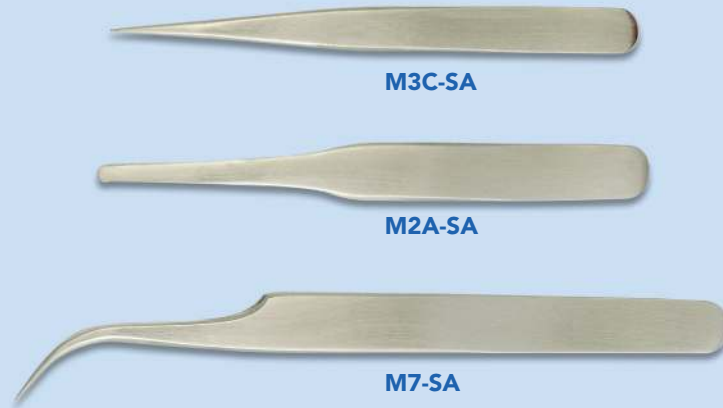
Very Light Ergonomic Micro Tweezers

Two Grades Available:

ZENITH, Suffix /S

PRIME-X, Suffix /P

Example: MAC-SA/P



MAC-SA

80 mm – 3²/₁₆"

-Thick Short Tips



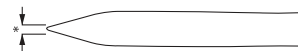
* 0.30mm - .012"



MH-SA

85 mm – 3⁵/₁₆"

-Very Strong Tips



* 0.50mm - .020"



MHD-SA

80 mm – 3²/₁₆"

-Very Strong Tips



* 0.50mm - .020"



MOC-SA

70 mm – 2³/₄"

-Strong Short Tips



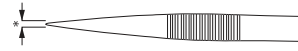
* 0.40mm - .0157"



MOOD-SA

85 mm – 3⁵/₁₆"

-Strong Thick Serrated Tips



* 0.40mm - .0157"



MINI TWEEZERS

Stainless Antiacid Antimagnetic Steel



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Two Grades available: ZENITH, Suffix /S
 PRIME-X, Suffix /P
 Example: M3C-SA/S

<p>M5S-SA 90 mm – 3⁹/₁₆"</p> <p>-Very Fine Long Tips</p>	 <p>* 0.35mm - .014"</p>	
<p>M2-SA 85 mm – 3⁵/₁₆"</p> <p>-Medium Flat Tips</p>	 <p>* 0.50mm - .020"</p>	
<p>M2A-SA 70 mm – 2³/₄"</p> <p>-Very Popular Flat Tips</p>	 <p>* 2.0mm - .078"</p>	
<p>M3C-SA 70 mm – 2³/₄"</p> <p>-Narrow Fine Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>M4-SA 70 mm – 2³/₄"</p> <p>-Very Fine Tips</p>	 <p>* 0.30mm - .0127"</p>	
<p>M4A-SA 85 mm – 3⁵/₁₆"</p> <p>-Fine Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>M5-SA 80 mm – 3²/₁₆"</p> <p>-Extra Fine Tips</p>	 <p>* 0.20mm - .0078"</p>	
<p>M7-SA 95 mm – 3³/₄"</p> <p>-Curved Very Fine Tips</p>	 <p>* 0.20mm - .0078"</p>	

STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel



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Six Grades Available

BIO-MED, Suffix /BM

PREMIUM, Suffix /E







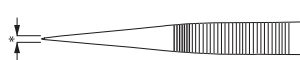











BIO-TECH, Suffix /T

PRIME-X, Suffix /P

ZENITH, Suffix /S

SL PRIME-X, Prefix SL...

Example: AA-SA/T

<p>A-SA 115 mm – 4 1/2"</p> <p>-Fine Straight</p>	 <p>* 0.40mm - .0157"</p>	
<p>AA-NI 125 mm – 5"</p> <p>-Fine Strong Tips -Nickel Plated</p>	 <p>* 0.40mm - .0157"</p>	
<p>AA-SA 125 mm - 5"</p> <p>-Fine Strong Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>AC-SA 110 mm – 4 1/4"</p> <p>-Fine Strong Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>GG-SA 125 mm - 5"</p> <p>-Very Fine Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>HH-NI 110 mm – 4 1/4"</p> <p>-Strong Tips -Nickel Plated</p>	 <p>* 0.40mm - .0157"</p>	
<p>MM-NI 125 mm – 5"</p> <p>-Strong Multipurpose -Nickel Plated</p>	 <p>* 0.50mm - .020"</p>	
<p>MM-SA 125 mm – 5"</p> <p>-Strong Multipurpose</p>	 <p>* 0.50mm - .020"</p>	
<p>NN-NI 125 mm – 5"</p> <p>-Fine Tips -Nickel Plated</p>	 <p>* 0.50mm - .020"</p>	

STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel

Six Grades Available

BIO-MED, Suffix /BM

BIO-TECH, Suffix /T

ZENITH, Suffix /S

Example: OO-SA/S


















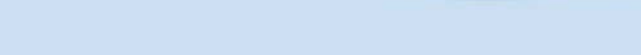
PREMIUM, Suffix /E

PRIME-X, Suffix /P

SL PRIME-X, Prefix SL...



Switzerland

<p>O-SA 120 mm – 4³/₄"</p> <p>-Fine Straight Strong Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>OC-SA 90 mm – 3⁹/₁₆"</p> <p>-Strong Short Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>OC10-SA 100 mm – 4"</p> <p>OC11-SA 110 mm – 4¹/₄"</p>	 <p>* 0.40mm - .0157"</p>	
<p>OO-SA 120 mm – 4³/₄"</p> <p>-Strong Thick Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>OO-NI 115 mm – 4¹/₂"</p> <p>-Fine Tips -Nickel Plated</p>	 <p>* 0.30mm - .012"</p>	
<p>OOB-SA 120 mm – 4³/₄"</p> <p>- Fine Straight Strong Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>OOD-SA 120 mm – 4³/₄"</p> <p>-Strong Thick Serrated Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>OOO-SA 120 mm – 4³/₄"</p> <p>-Strong Thick Rounded Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>PSF-SA 130 mm – 5¹/₈"</p> <p>-Flat Square Tips</p>	 <p>* 2.30mm - .090"</p>	

STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel



Switzerland

Six Grades Available

BIO-MED, Suffix /BM

BIO-TECH, Suffix /T

ZENITH, Suffix /S

Example: 1-SA/BM

PREMIUM, Suffix /E

PRIME-X, Suffix /P

SL PRIME-X, Prefix SL...

<p>RR-SA 145 mm – 5³/₄"</p> <p>-Heavy Straight Tips</p>	 <p>* 0.50mm - .020"</p>	
<p>SS-SA 140 mm – 5¹/₂"</p> <p>-Long Tweezers -Very Fine Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>SSL-SA 150 mm - 6"</p> <p>-Very Long Tweezers -Very Fine Tips</p>	 <p>* 0.40mm - .015"</p>	
<p>SSXL-SA 205 mm - 8"</p> <p>-Extra Long Tweezers -Fine Tips</p>	 <p>* 0.50mm - .020"</p>	
<p>ZA 120 mm – 4³/₄"</p> <p>-Carbon Hardened Strong Fine Tips</p>	 <p>* 0.35mm - .014"</p>	
<p>1-SA 115 mm – 4¹/₂"</p> <p>-Multipurpose Fine Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>1B-SA 115 mm – 4¹/₂"</p> <p>-Serrated Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>2-SA 115 mm – 4¹/₂"</p> <p>-Medium Flat Tips</p>	 <p>* 0.50mm - .020"</p>	
<p>2A-SA 120 mm – 4³/₄"</p> <p>-Very Popular Flat Tips</p>	 <p>* 2.00mm - .078"</p>	



















STEEL TWEEZERS Stainless Antiacid Antimagnetic Steel

Six Grades Available

BIO-MED, Suffix /BM
 BIO-TECH, Suffix /T
 ZENITH, Suffix /S

PREMIUM, Suffix /E
 PRIME-X, Suffix /P
 SL PRIME-X, Prefix SL...
 Example: 3C-SA/E



<p>2AB-SA 115 mm – 4 1/2"</p> <p>-Curved Flat Tips</p>	 <p>* 2.00mm - .078"</p>	
<p>2A-N 120 mm – 4 3/4"</p> <p>-Flat Round Tips -Nickel Alloy</p>	 <p>* 2.00mm - .078"</p>	
<p>2AB-N 115 mm – 4 1/2"</p> <p>-Curved Flat Tips -Nickel Alloy</p>	 <p>* 2.00mm - .078"</p>	
<p>3-SA 120 mm – 4 3/4"</p> <p>-Fine Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>3C-SA 110 mm – 4 1/4"</p> <p>-Narrow Fine Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>3CB-SA 100 mm – 4"</p> <p>-Narrow Fine Bent Tips</p>	 <p>* 0.25mm - .0098"</p>	
<p>4-SA 110 mm – 4 1/4"</p> <p>-Very Fine Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>4A-SA 110 mm – 4 1/4"</p> <p>-Fine Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>5-SA 110 mm – 4 1/4"</p> <p>-Extra Fine, Very Sharp Tips</p>	 <p>* 0.20mm - .0078"</p>	

STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel



Switzerland

Six Grades Available

BIO-MED, Suffix /BM

PREMIUM, Suffix /E


















BIO-TECH, Suffix /T

PRIME-X, Suffix /P

ZENITH, Suffix /S

SL PRIME-X, Prefix SL...

Example: SL7-SA

<p>5A-SA 120 mm – 4³/₄"</p> <p>-Extra Fine, Very Sharp Tips</p>	 <p>* 0.35mm - .014"</p>	
<p>5B-SA 110 mm – 4¹/₄"</p> <p>-Bent Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>5C-SA 115 mm – 4¹/₂"</p> <p>-Double Bent -Circumvented Tips</p>	 <p>* 0.20mm - .0078"</p>	
<p>6-SA 110 mm – 4¹/₄"</p> <p>-Fine Angled Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>7-SA 115 mm – 4¹/₂"</p> <p>-Curved Very Fine Tips</p>	 <p>* 0.20mm - .0078"</p>	
<p>7A-SA 120 mm – 4³/₄"</p> <p>-Curved Fine Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>7B-SA 120 mm – 4³/₄"</p> <p>-Serrated Curved Fine Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>7C-SA 95 mm – 3³/₄"</p> <p>-Curved Very Fine Tips</p>	 <p>* 0.20mm - .0078"</p>	
<p>11-N 120 mm – 4³/₄"</p> <p>-Strong Fine Tips -Nickel Alloy</p>	 <p>* 0.40mm - .0157"</p>	

STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel

Six Grades Available

BIO-MED, Suffix /BM

PREMIUM, Suffix /E

BIO-TECH, Suffix /T

PRIME-X, Suffix /P

















ZENITH, Suffix /S

SL PRIME-X, Prefix SL...

Example: 24-SA/P



Switzerland

<p>12-N 120 mm – 4³/₄"</p> <p>-Fine Tips -Nickel Alloy</p>	 <p>* 0.30mm - .012"</p>	
<p>12A-SA 115 mm – 4¹/₂"</p> <p>-Flat Bowed Tips</p>	 <p>* 2.00mm - .078"</p>	
<p>20A-SA 115 mm – 4¹/₂"</p> <p>-With Alignment Pin -Strong Fine Serrated Tips</p>	 <p>* 1.00mm - .0394"</p>	
<p>21-SA/150 mm – 6" 21-SA/200 mm – 8" 21-SA/250 mm – 10" 21-SA/300 mm – 12"</p> <p>-Strong Rounded Tips</p>	 <p>* 2.00mm - .078"</p>	
<p>23-SA 160 mm – 6¹/₄"</p> <p>-With Alignment Pin -Curved Tips</p>	 <p>* 1.20mm - .047"</p>	
<p>24-SA 155 mm – 6²/₁₆"</p> <p>-With Alignment Pin -Fine Bent Tips</p>	 <p>* 0.80mm - .032"</p>	
<p>25-SA 120 mm – 4³/₄"</p> <p>-Thin Tips</p>	 <p>* 4.00mm - .157"</p>	
<p>26-SA 115 mm – 4¹/₂"</p> <p>-Round Tips</p>	 <p>* 6.00mm - .235"</p>	

STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel



Switzerland

Six Grades Available

BIO-MED, Suffix /BM

BIO-TECH, Suffix /T







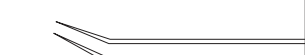







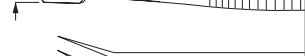

ZENITH, Suffix /S

Example: 35A-SA/S

PREMIUM, Suffix /E

PRIME-X, Suffix /P

SL PRIME-X, Prefix SL...

<p>34-SA 120 mm – 4³/₄"</p> <p>-Flat Straight Tips</p>	 <p>* 3.00mm - .118"</p>	
<p>34A-SA 120 mm – 4³/₄"</p> <p>-Flat Straight Tips</p>	 <p>* 6.50mm - .256"</p>	
<p>34B-SA 120 mm – 4³/₄"</p> <p>-Flat Angled Tips</p>	 <p>* 2.50mm - .098"</p>	
<p>34B-SA-M 120 mm – 4³/₄"</p> <p>-Flat Angled Tips</p>	 <p>* 3.50mm - .14"</p>	
<p>35A-SA 120 mm – 4³/₄"</p> <p>-For Handling Delicate Electronics Parts</p>	 <p>* 6.00mm - .235"</p>	
<p>35B-SA 120 mm – 4³/₄"</p> <p>-Small Curved Tips</p>	 <p>* 1.40mm - .055"</p>	
<p>35AD-SA 120 mm – 4³/₄"</p> <p>-Fine Straight Serrated Tips</p>	 <p>* 6.00mm - .235"</p>	
<p>36A-SA 120 mm – 4³/₄"</p> <p>-Flat Angled Tips</p>	 <p>* 6.00mm - .235"</p>	

STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel

Six Grades Available

BIO-MED, Suffix /BM

BIO-TECH, Suffix /T

ZENITH, Suffix /S

Example: 51-SA/BM

PREMIUM, Suffix /E

PRIME-X, Suffix /P

SL PRIME-X, Prefix SL...

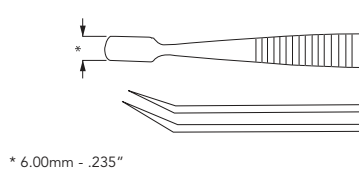


Switzerland

36A-SA-R

120 mm – 4³/₄"

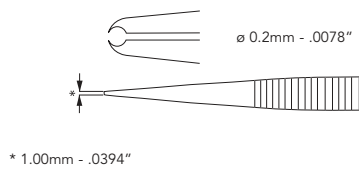
-Flat Angled Round End Tips



38-SA

110 mm – 4¹/₄"

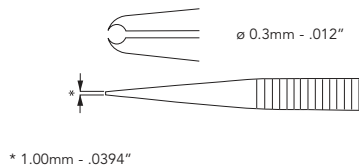
-Excellent For Pick Up Miniature Round Wire



39-SA

110 mm – 4¹/₄"

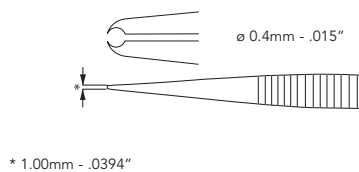
-Excellent For Pick Up Miniature Round Wire



40-SA

110 mm – 4¹/₄"

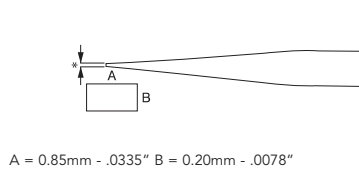
-Excellent For Pick Up Miniature Round Wire



47-SA

135 mm – 5¹/₄"

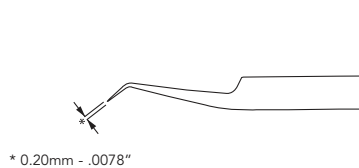
-Strong Flat Square Tips, Very Popular



51-SA

115 mm – 4¹/₂"

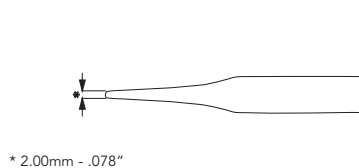
-Superfine Bent Tips



52A-SA

120 mm – 4³/₄"

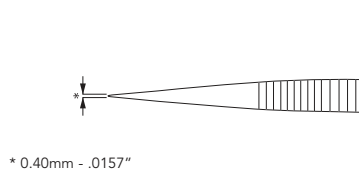
-Flat Tips
-Smooth Action



64-SA

115 mm – 4¹/₂"

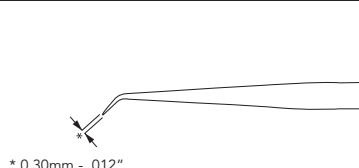
-Very Fine Tweezer



65A-SA

140 mm – 5¹/₂"

-Very Fine Bent Tips



STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel



Switzerland

Six Grades Available

BIO-MED, Suffix /BM

BIO-TECH, Suffix /T



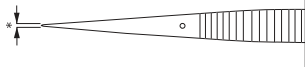

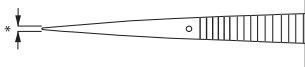

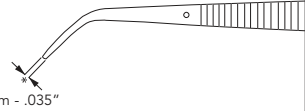







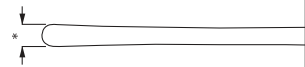

ZENITH, Suffix /S

PREMIUM, Suffix /E

PRIME-X, Suffix /P

SL PRIME-X, Prefix SL...

Example: 231-SA/E

<p>218-SA 160 mm – 6¹/₄"</p> <p>-With Alignment Pin -Diamond Style, Fine Tips</p>	 <p>* 0.60mm - .0235"</p>	
<p>219-SA 160 mm – 6¹/₄"</p> <p>-With Alignment Pin -Diamond Style, Medium Tips</p>	 <p>* 0.80mm - .032"</p>	
<p>220-SA 140 mm – 5¹/₂"</p> <p>-With Alignment Pin -Diamond Style, Medium Tips</p>	 <p>* 0.90mm - .035"</p>	
<p>220C-SA 140 mm – 5¹/₂"</p> <p>-With Alignment Pin -Diamond Style, Medium Bent Tips</p>	 <p>* 0.90mm - .035"</p>	
<p>227-SA 140 mm – 5¹/₂"</p> <p>-Diamond Style, Medium Tips -Slide Lock</p>	 <p>* 1.00mm - .0394"</p>	
<p>231-SA 120 mm – 4³/₄"</p> <p>-Fine Straight Tips</p>	 <p>* 0.60mm - .0235"</p>	
<p>231A-SA 120 mm – 4³/₄"</p> <p>-Fine Straight Serrated Tips</p>	 <p>* 0.60mm - .0235"</p>	
<p>245-SA 145 mm – 5³/₄"</p> <p>-Strong Serrated Tips</p>	 <p>* 3.50mm - .137"</p>	
<p>251A-SA 165 mm – 6¹/₂"</p> <p>-Long Flat Rounded End Tips</p>	 <p>* 6.00mm - .235"</p>	





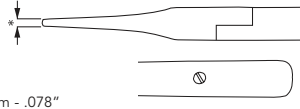









REVERSE ACTION TWEEZERS



Switzerland

Stainless Antiacid Antimagnetic Steel

Two Grades Available: ZENITH, Suffix /S
 PRIME-X, Suffix /P
 Example: R3-SA/S

<p>R1-SA 125 mm – 5"</p> <p>-Multipurpose Fine Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>R2A-SA 115 mm – 4 1/2"</p> <p>-Very Popular Flat Tips</p>	 <p>* 2.00mm - .078"</p>	
<p>R2A-SA-AP 115 mm – 4 1/2"</p> <p>-Adjustable Screw Pressure</p>	 <p>* 2.00mm - .078"</p>	
<p>R3-SA 120 mm – 4 3/4"</p> <p>-Fine Tips</p>	 <p>* 0.40mm - .0157"</p>	
<p>R5-SA 115 mm – 4 1/2"</p> <p>-Extra Fine, Very Sharp Tips</p>	 <p>* 0.20mm - .0078"</p>	
<p>R5A-SA 110 mm – 4 1/4"</p> <p>-Fine, Very Sharp Tips</p>	 <p>* 0.30mm - .012"</p>	
<p>R7-SA 115 mm – 4 1/2"</p> <p>-Curved Very Fine Tips</p>	 <p>* 0.40mm - .0157"</p>	

REVERSE ACTION TWEEZERS













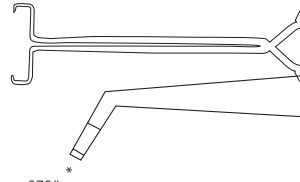



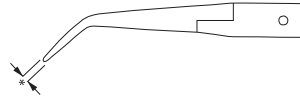

Switzerland

Stainless Antiacid Antimagnetic Steel

Two Grades Available: ZENITH, Suffix /S

PRIME-X, Suffix /P

Example: R218-SA/P

<p>R28-SA 160 mm – 6¹/₄"</p> <p>-Strong Tips</p>	 <p>* 3.00mm - .120"</p>	
<p>R28F-SA 160 mm – 6¹/₄"</p> <p>-Flat Strong Tips</p>	 <p>* 4.50mm - .177"</p>	
<p>R29-SA 160 mm – 6¹/₄"</p> <p>-Straight Tips</p>	 <p>* 2.50mm - .098"</p>	
<p>R29D-SA/14-16 145 mm – 5³/₄"</p> <p>R29D-SA/22 R29D-SA/28 R29D-SA/40 -For Handling DIP -Other Sizes Available</p>	 <p>* 2.00mm - .078"</p>	
<p>R30-SA 160 mm – 6¹/₄"</p> <p>-Bent Tips</p>	 <p>* 2.50mm - .098"</p>	
<p>R30D-SA/14-16 150 mm – 6"</p> <p>R30D-SA/22 R30D-SA/28 R30D-SA/40 -Bent Tips, For Handling DIP -Other Sizes Available</p>	 <p>* 2.00mm - .078"</p>	
<p>R218-SA 160 mm – 6¹/₄"</p> <p>-Medium Tips</p>	 <p>* 1.20mm - .0472"</p>	
<p>R218B-SA 155 mm – 6²/₁₀"</p> <p>-Medium Curved Tips</p>	 <p>* 1.20mm - .0472"</p>	

NICKEL PLATED SERRATED TIPS TWEEZERS



Switzerland

Stainless Steel

81083 115 mm – 4 1/2"

-Inside Serrated Fine Straight Tips



* 0.60mm - .0236"



81084 130 mm – 5 1/8"

-Inside Serrated Strong Tips



* 2.00mm - .0787"



81085 115 mm – 4 1/2"

-Inside Serrated Fine Bent Tips



* 0.60mm - .0236"



81333 115 mm – 4 1/2"

-Inside Serrated Fine Straight Tips



* 0.60mm - .0236"



BRASS TWEEZERS Anti Sparking Solid Brass



Switzerland

Soft for Handling Delicate Parts

Two Grades Available: ZENITH, Suffix /S
PRIME-X, Suffix /P
Example: AM-BR/P

AA-BR -Fine Strong Tips	125 mm – 5"	 * 0.60mm - .0235"	
AM-BR -Fine Strong Tips	115 mm – 4 1/2"	 * 0.60mm - .0235"	
P-BR -Fine Tips	125 mm – 5"	 * 0.50mm - .020"	
SS-BR -Very Fine Long Tips	135 mm – 5 1/4"	 * 0.50mm - .020"	
1-BR -Multipurpose Fine Tips	120 mm – 4 3/4"	 * 0.30mm - .012"	
2A-BR -Very Popular Flat Tips	120 mm – 4 3/4"	 * 2.0mm - .078"	
3-BR -Fine Tips	120 mm – 4 3/4"	 * 0.40mm - .0157"	
3C-BR -Narrow Fine Tips	110 mm – 4 1/4"	 * 0.40mm - .0157"	
5-BR -Extra Fine, Very Sharp Tips	110 mm – 4 1/4"	 * 0.40mm - .0157"	
7-BR -Curved Very Fine Tips	115 mm – 4 1/2"	 * 0.50mm - .020"	

Other Models Available Upon Request

WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel



Switzerland

Large Range of Tweezers for Handling CDs and Wafers of all Sizes

37S-SA-1 120 mm – 4³/₄"

-For Wafers and Round Parts
-2 Prongs

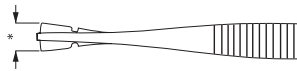


* 7.50mm - .295"



37S-SA-L 120 mm – 4³/₄"

-Long Upper Tip
-For Wafers and Round Parts
-2 Prongs



* 7.50mm - .295"



39S-SA-3 120 mm – 4³/₄"

-For Wafers and Round Parts
-3 Prongs
-6 Holes

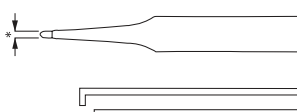


* 9.00mm - .354"



62A-SA 115 mm – 4¹/₂"

-For Wafers and Round Parts
-Straight



* 2.00mm - .078"



72A-SA 115 mm – 4¹/₂"

-For Wafers and Round Parts
-Angulated

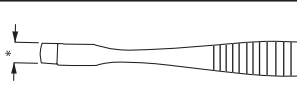


* 2.00mm - .078"



85A-SA 120 mm – 4³/₄"

-For Wafers and Round Parts
-Straight

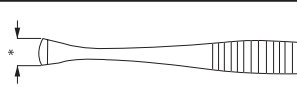


* 6.50mm - .256"



85C-SA 120 mm – 4³/₄"

-For Wafers and Round Parts
-Straight



* 6.00mm - .235"



86B-SA 120 mm – 4³/₄"

-For Wafers and Round Parts
-Angulated



* 6.00mm - .235"



WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel

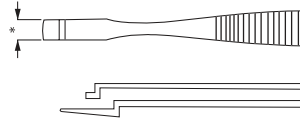


Switzerland

Large Range of Tweezers for Handling CDs and Wafers of all Sizes

200A-SA 120 mm – 4³/₄"

-For 2" Wafers and Round Parts

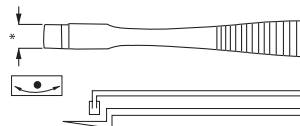


* 5.50mm - .216"



200J-SA 120 mm – 4³/₄"

-For 2" Wafers and Round Parts
-Free Floating Teflon Paddle

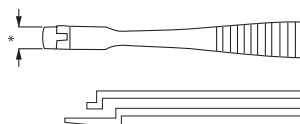


* 6.50mm - .256"



200W-SA 120 mm – 4³/₄"

-For 2" Wafers and Round Parts
-2 Prongs

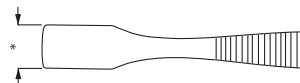


* 6.50mm - .256"



300-SA 125 mm – 5"

-For 3" Wafers and Round Parts

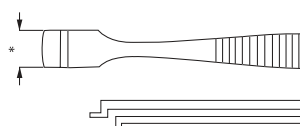


* 11.00mm - .433"



300A-SA 125 mm – 5"

-For 3" Wafers and Round Parts

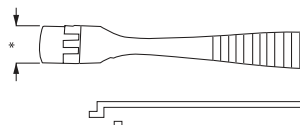


* 9.50mm - .374"



300E-SA 125 mm – 5"

-For 3" Wafers and Round Parts
-3 Prongs

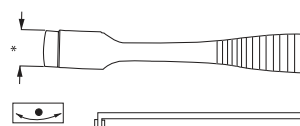


* 9.50mm - .374"



300J-SA 125 mm – 5"

-For 3" Wafers and Round Parts
-Free Floating Teflon Paddle

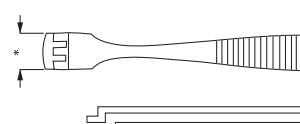


* 9.50mm - .374"



300W-SA 125 mm – 5"

-For 3" Wafers and Round Parts
-3 Prongs



* 9.50mm - .374"



WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel



Switzerland

Large Range of Tweezers for Handling CDs and Wafers of all Sizes

<p>400-SA</p> <p>125 mm – 5"</p> <p>-For 4" Wafers and CD</p>	<p>125 mm – 5"</p>	<p>* 13.50mm - .531"</p>	
<p>400A-SA</p> <p>125 mm – 5"</p> <p>-For 4" Wafers and CD</p>	<p>125 mm – 5"</p>	<p>* 12.50mm - .492"</p>	
<p>400E-SA</p> <p>125 mm – 5"</p> <p>-For 4" Wafers and CD</p> <p>-4 Prongs</p>	<p>125 mm – 5"</p>	<p>* 12.50mm - .492"</p>	
<p>400J-SA</p> <p>125 mm – 5"</p> <p>-For 4" Wafers and CD</p> <p>-Free Floating Teflon Paddle</p>	<p>125 mm – 5"</p>	<p>* 12.50mm - .492"</p>	
<p>400W-SA</p> <p>125 mm – 5"</p> <p>-For 4" Wafers and CD</p> <p>-4 Prongs</p>	<p>125 mm – 5"</p>	<p>* 12.50mm - .492"</p>	
<p>400WG-SA</p> <p>125 mm – 5"</p> <p>-For 4" Wafers and CD</p> <p>-4 Prongs</p> <p>-With a Gap 6 mm - .235"</p>	<p>125 mm – 5"</p>	<p>* 12.50mm - .492"</p>	
<p>500-SA</p> <p>130 mm – 5 1/8"</p> <p>-For 5" Wafers and CD</p>	<p>130 mm – 5 1/8"</p>	<p>* 17.00mm - .669"</p>	
<p>500A-SA</p> <p>125 mm – 5"</p> <p>-For 5" Wafers and CD</p>	<p>125 mm – 5"</p>	<p>* 16.00mm - .629"</p>	

WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel



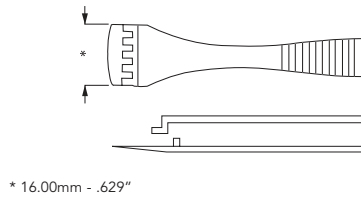
Switzerland

Large Range of Tweezers for Handling CDs and Wafers of all Sizes

500E-SA

125 mm – 5"

- For 5" Wafers and CD
- 5 Prongs



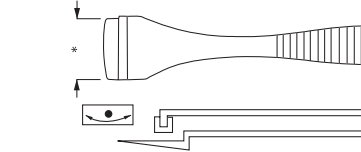
* 16.00mm - .629"



500J-SA

125 mm – 5"

- For 5" Wafers and CD
- Free Floating Teflon Paddle



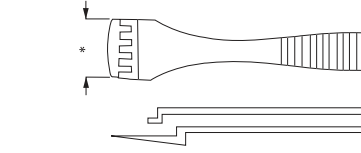
* 16.00mm - .629"



500W-SA

125 mm – 5"

- For 5" Wafers and CD
- 5 Prongs



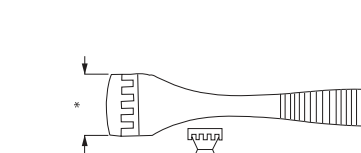
* 16.00mm - .629"



500WG-SA

125 mm – 5"

- For 5" Wafers and CD
- 5 Prongs
- With a Gap 9 mm - .354"



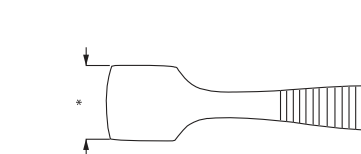
* 16.00mm - .629"



600-SA

130 mm – 5 1/8"

- For 6" Wafers and CD



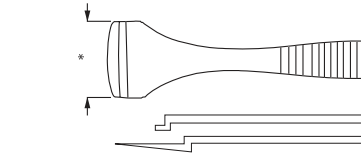
* 19.50mm - .767"



600A-SA

125 mm – 5"

- For 6" Wafers and CD



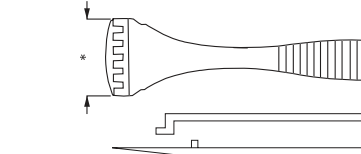
* 19.50mm - .767"



600E-SA

125 mm – 5"

- For 6" Wafers and CD
- 6 Prongs



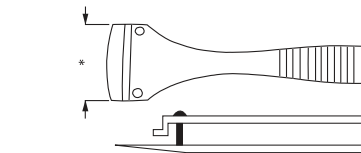
* 19.50mm - .767"



600GB-SA

125 mm – 5"

- For 6" Wafers and CD
- Stop Opening



* 19.50mm - .767"



WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel

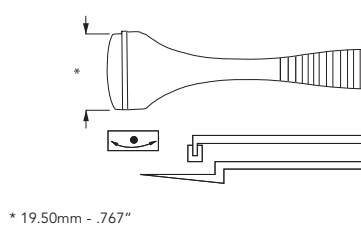


Switzerland

Large Range of Tweezers for Handling CDs and Wafers of all Sizes

600J-SA 125 mm – 5"

- For 6" Wafers and CD
- Free Floating Teflon Paddle

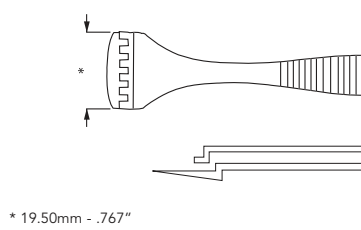


* 19.50mm - .767"



600W-SA 125 mm – 5"

- For 6" Wafers and CD
- 6 Prongs

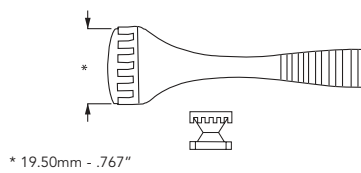


* 19.50mm - .767"



600WG-SA 125 mm – 5"

- For 6" Wafers and CD
- 6 Prongs
- With a Gap 11 mm - .433"

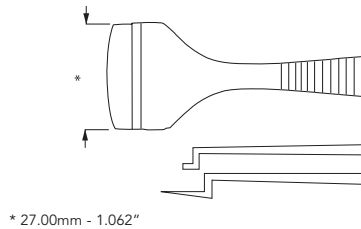


* 19.50mm - .767"



800A-SA 150 mm – 6"

- For 8" Wafers and CD

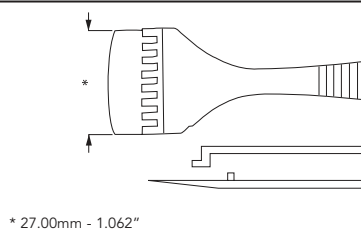


* 27.00mm - 1.062"



800E-SA 150 mm – 6"

- For 8" Wafers and CD
- 8 Prongs

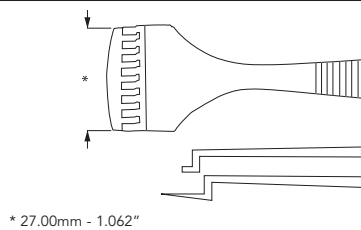


* 27.00mm - 1.062"



800W-SA 150 mm – 6"

- For 8" Wafers and CD
- 8 Prongs

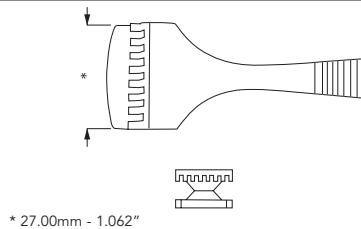


* 27.00mm - 1.062"



800WG-SA 150 mm – 6"

- For 8" Wafers and CD
- 8 Prongs
- With a Gap 17mm - .669"



* 27.00mm - 1.062"



SMD TWEEZERS

Stainless Antiacid Antimagnetic Steel



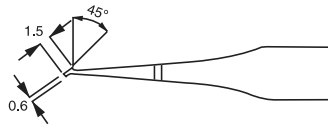
Switzerland

Especially designed for Surface Mounted Devices
Teflon coating available, add "TE"

SMD10-SA

120 mm – 4³/₄"

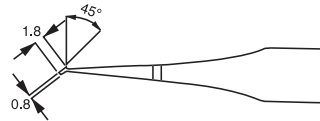
-45° Angle



SMD10A-SA

120 mm – 4³/₄"

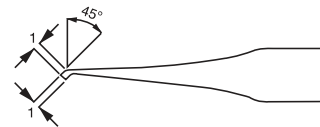
-45° Angle



SMD20-SA

120 mm – 4³/₄"

-45° Angle



SMD30-SA

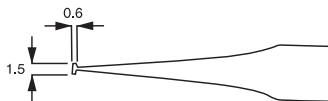
120 mm – 4³/₄"

-15° Angle



SMD40-SA

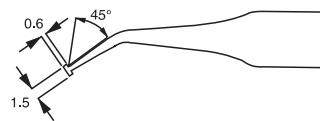
120 mm – 4³/₄"



SMD50-SA

120 mm – 4³/₄"

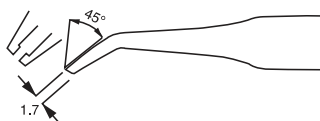
-45° Angle



SMD60-SA

120 mm – 4³/₄"

-45° Angle



SMD70-SA

120 mm – 4³/₄"

-45° Angle



SMD TWEEZERS

Stainless Antiacid Antimagnetic Steel

Especially designed for Surface Mounted Devices
Teflon coating available, add "TE"



Switzerland

<p>SMD80-SA 120 mm – 4³/₄"</p> <p>-15° Angle</p>		
<p>SMD90-SA 120 mm – 4³/₄"</p> <p>-15° Angle</p>		
<p>SMD100-SA 120 mm – 4³/₄"</p>		
<p>SMD110-SA 120 mm – 4³/₄"</p> <p>-15° Angle</p>		
<p>SMD120-SA 120 mm – 4³/₄"</p>		
<p>SMD130-SA 120 mm – 4³/₄"</p> <p>-45° Angle</p>		
<p>SMD200-SA 120 mm – 4³/₄"</p>		
<p>SMD201-SA 120 mm – 4³/₄"</p> <p>-45° Angle</p>		

SMD TWEEZERS

Stainless Antiacid Antimagnetic Steel



Switzerland

Especially designed for Surface Mounted Devices
Teflon coating available, add "TE"

<p>SMD202-SA 120 mm – 4³/₄"</p>		
<p>SMD203-SA 120 mm – 4³/₄"</p>		
<p>SMD204-SA 120 mm – 4³/₄" -45° Angle</p>		
<p>SMD205-SA 120 mm – 4³/₄" -45° Angle</p>		

REVERSE ACTION SMD TWEEZERS

Stainless Antiacid Antimagnetic Steel

Especially designed for Surface Mounted Devices -Teflon coating available, add "TE"

<p>SMDR10-SA 120 mm – 4³/₄" -45° Angle -Reverse Action</p>		
<p>SMDR10A-SA 120 mm – 4³/₄" -45° Angle -Reverse Action</p>		
<p>SMDR30-SA 120 mm – 4³/₄" -15° Angle -Reverse Action</p>		

REVERSE ACTION SMD TWEEZERS

Stainless Antiacid Antimagnetic Steel
Especially designed for Surface Mounted Devices
Teflon coating available, add "TE"



<p>SMDR250-SA 115 mm – 4 1/2"</p> <p>-Reverse Action</p>		
<p>SMDR251-SA 115 mm – 4 1/2"</p> <p>-45° Angle -Reverse Action</p>		
<p>SMDR252-SA 115 mm – 4 1/2"</p> <p>-Reverse Action</p>		
<p>SMDR253-SA 115 mm – 4 1/2"</p> <p>-Reverse Action</p>		
<p>SMDR254-SA 115 mm – 4 1/2"</p> <p>-45° Angle -Reverse Action</p>		
<p>SMDR255-SA 115 mm – 4 1/2"</p> <p>-Reverse Action</p>		
<p>SMDR256-SA 115 mm – 4 1/2"</p> <p>-Reverse Action</p>		

COMPONENTS HANDLING TWEEZERS



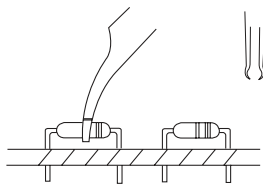
Switzerland

Stainless Antiacid Antimagnetic Steel
Insertion Extraction Tweezers

532B-SA-2

115 mm – 4¹/₂"
* 2.00 mm - .078"

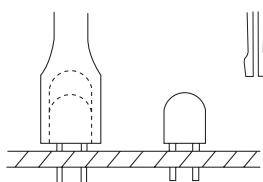
-For Components Ø 2mm - .078"



571-SA

120 mm – 4³/₄"
* 4.00 mm - .157"

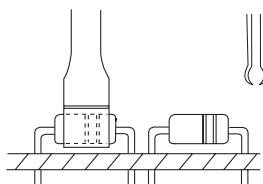
-For Components Ø 2.5mm - .1"
to 5 mm - .2"



572-SA

120 mm – 4³/₄"
* 6.40 mm - .251"

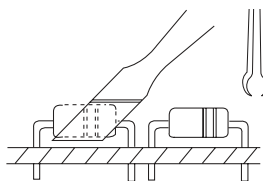
-For Components Ø 2.5mm - .1"
to 5 mm - .2"



573-SA

120 mm – 4³/₄"
* 6.40 mm - .251"

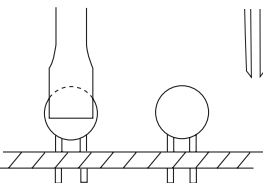
-For Components Ø 2.5mm - .1"
to 6 mm - .24"
-45° Angle



574-SA

120 mm – 4³/₄"
* 6.40 mm - .251"

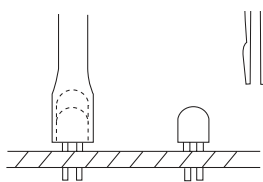
-Flat Tips



577-SA

120 mm – 4³/₄"
* 2.70 mm - .106"

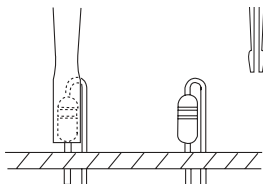
-For Components Ø 3 mm - .12"



577A-SA

120 mm – 4³/₄"
* 2.00 mm - .078"

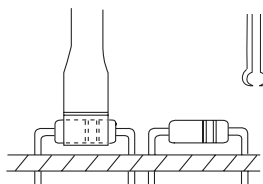
-For Components Ø 1.0 mm - .04"
to 1.5 mm - .06"



578-SA

120 mm – 4³/₄"
* 6.40 mm - .251"

-For Components Ø 2.5 mm - .1"



COMPONENTS HANDLING TWEEZERS

Stainless Antiacid Antimagnetic Steel
Insertion Extraction Tweezers





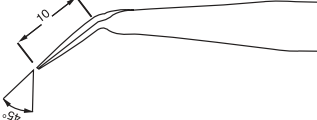

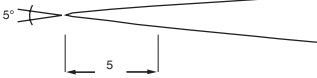



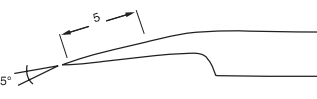







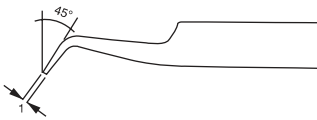



<p>578A-SA 110 mm – 4¹/₄" * 2.30 mm - .090"</p> <p>-For Components Ø 1mm - .04" to 1.5 mm - .06"</p>		
<p>578B-SA 120 mm – 4³/₄" * 6.40 mm - .251"</p> <p>-For Components Ø 1.0mm - .04" to 1.5 mm - .06"</p>		
<p>579-SA 120 mm – 4³/₄" * 6.40 mm - .251"</p> <p>-For Components Ø 2.5mm - .1" -45° Angle</p>		
<p>579A-SA 115 mm – 4¹/₂" * 2.30 mm - .090"</p> <p>-For Components Ø 1.0mm - .04" to 1.5 mm - .06" -45° Angle</p>		
<p>585-SA 145 mm – 5³/₄" * 4.00 mm - .157"</p> <p>-For Extraction</p>		

MICRO CUTTING TWEEZERS

MC Series, for Micro Wires
Stainless Antiacid Antimagnetic Steel



Switzerland

<p>MC16-SA 120 mm – 4³/₄"</p> <p>-For Micro Soft Wire</p>		
<p>MC17-SA 120 mm – 4³/₄"</p> <p>-For Micro Soft Wire</p>		
<p>MC18-SA 120 mm – 4³/₄"</p> <p>-For Micro Soft Wire</p>		
<p>MC19-SA 115 mm – 4¹/₂"</p> <p>-For Micro Soft Wire</p>		
<p>MC20-SA 110 mm – 4¹/₄"</p> <p>-For Micro Soft Wire</p>		
<p>MC21-SA 110 mm – 4¹/₄"</p> <p>-For Micro Soft Wire</p>		
<p>MC22-SA 110 mm – 4¹/₄"</p> <p>-For Micro Soft Wire</p>		
<p>MC23-SA 110 mm – 4¹/₄"</p> <p>-For Micro Soft Wire</p>		
<p>MC24-SA 110 mm – 4¹/₄"</p> <p>-For Micro Soft Wire</p>		
<p>MC25-SA 110 mm – 4¹/₄"</p> <p>-For Micro Soft Wire</p>		

FLUSH CUTTING TWEEZERS

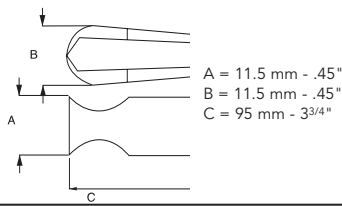
15A Series

Hardened Polished Carbon Steel

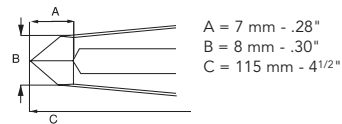


Switzerland

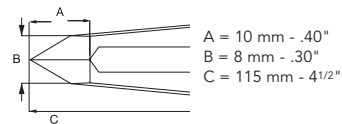
D
-Transverse End Cutting
-Nickel Plated Carbon Steel



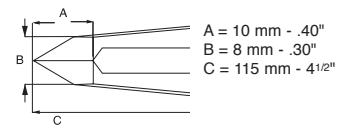
15AC
-Flat Head
-Tip Cutting



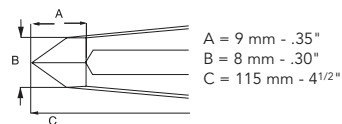
15AP
-Flat Head
-Parallel Cutting
15AP-SA
-same as above
-Stainless Antiacid Antimagnetic Steel



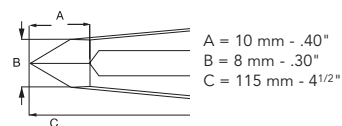
15AP-T
-Flat Head
-Parallel Cutting
-CARBIDE BLADES



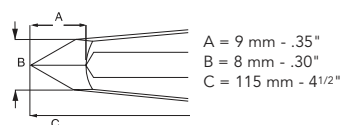
15A-FW
-Flat Head
-Tip Cutting



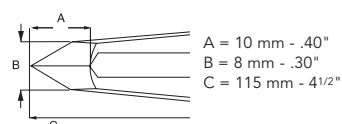
15A-GW
-Flat Head
-Tip Cutting
15A-GW-SA
-same as above
-Stainless Antiacid Antimagnetic Steel



15A-NW
-Rounded Head
-Tip Cutting



15A-SW
-Rounded Head
-Tip Cutting
15A-SW-SA
-Stainless Antiacid Antimagnetic Steel
15AP-SW
-Rounded Head
-Parallel Cutting



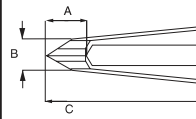
FLUSH CUTTING TWEEZERS

Miniature 215A Series
Hardened Polished Carbon Steel



215A

-Flat Head
-Micro Cut

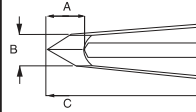


A = 5.5 mm - .22"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



215AS

-Rounded Head
-Micro Cut

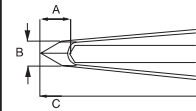


A = 5.5 mm - .22"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



215ASM

-Rounded Head
-Micro Cut

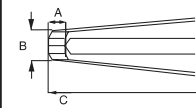


A = 3.5 mm - .10"
B = 6.5 mm - .25"
C = 115 mm - 4 1/2"



215B

-Flat Head
-Micro Cut



A = 2.5 mm - .10"
B = 4.5 mm - .18"
C = 115 mm - 4 1/2"

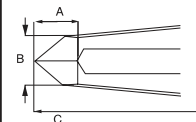


FLUSH CUTTING TWEEZERS

15A and Miniature 215A Series
Black Epoxy Coated With Patented EZ Lever

15AC-EZ

-Flat Head
-Tip Cutting
-Black Epoxy Coated

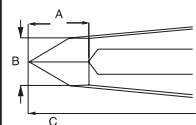


A = 7 mm - .28"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



15A-GW-EZ

-Flat Head
-Tip Cutting
-Black Epoxy Coated

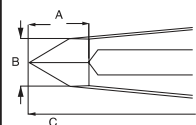


A = 10 mm - .40"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



15AP-EX

-Flat Head
-Parallel Cutting
-Black Epoxy Coated

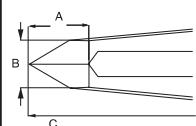


A = 10 mm - .40"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



15AP-EZ

-Flat Head
-Parallel Cutting
-Black Epoxy Coated



A = 10 mm - .40"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



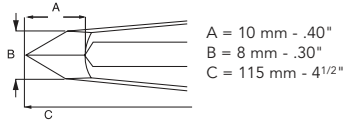
FLUSH CUTTING TWEEZERS

15A and Miniature 215A Series
Black Epoxy Coated With Patented EZ Lever



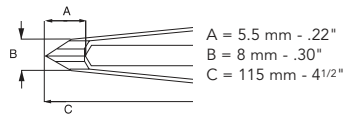
15A-SW-EZ

- Rounded Head
- Tip Cutting
- Black Epoxy Coated



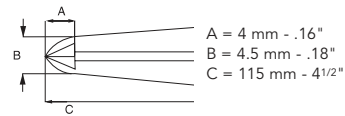
215A-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated



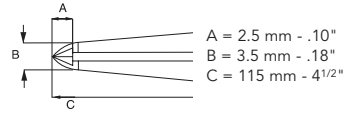
215AB-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated



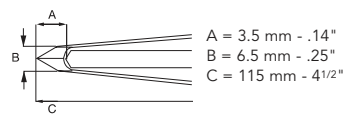
215AE-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated



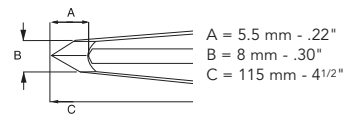
215ASM-EZ

- Rounded Head
- Micro Cut
- Black Epoxy Coated



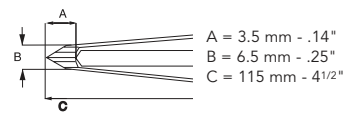
215AS-EZ

- Rounded Head
- Micro Cut
- Black Epoxy Coated



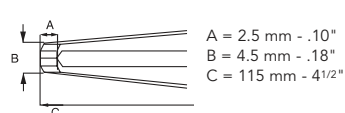
215AM-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated



215B-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated



FLUSH CUTTING TWEEZERS

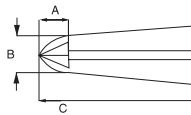
315A Series "Red Dot" With Stronger Blades
Black Epoxy Coated With Patented EZ Lever



Switzerland

315AB-EZ

- Micro Strong Cut
- Black Epoxy Coated
- Red Dot

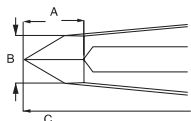


A = 4 mm - .16"
B = 4.5 mm - .18"
C = 95 mm - 3³/₄"



315A-GW-EZ

- Micro Strong Cut
- Tip Cutting
- Black Epoxy Coated
- Red Dot

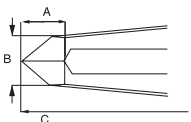


A = 10 mm - .40"
B = 8 mm - .30"
C = 115 mm - 4¹/₂"



315AC-EZ

- Micro Strong Cut
- Tip Cutting
- Black Epoxy Coated
- Red Dot

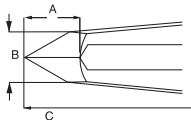


A = 7 mm - .28"
B = 8 mm - .30"
C = 115 mm - 4¹/₂"



315A-NW-EZ

- Micro Strong Cut
- Tip Cutting
- Black Epoxy Coated
- Red Dot

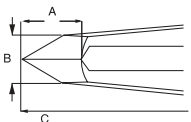


A = 9 mm - .35"
B = 8 mm - .30"
C = 115 mm - 4¹/₂"



315A-SW-EZ

- Micro Strong Cut
- Tip Cutting
- Black Epoxy Coated
- Red Dot

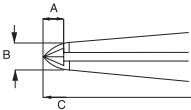


A = 10 mm - .40"
B = 8 mm - .30"
C = 115 mm - 4¹/₂"



315AE-EZ

- Micro Strong Cut
- Black Epoxy Coated
- Red Dot

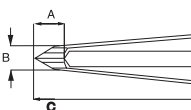


A = 2.5 mm - .10"
B = 3.5 mm - .14"
C = 115 mm - 4¹/₂"



315AM-EZ

- Micro Strong Cut
- Black Epoxy Coated
- Red Dot

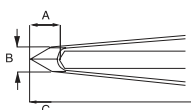


A = 3.5 mm - .14"
B = 6.5 mm - .25"
C = 115 mm - 4¹/₂"



315ASM-EZ

- Micro Strong Cut
- Black Epoxy Coated
- Red Dot



A = 3.5 mm - .14"
B = 6.5 mm - .25"
C = 115 mm - 4¹/₂"



PLASTIC TWEEZERS

Light Weight - Light Cost

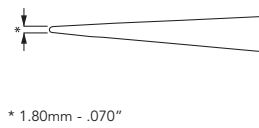
7 Models x 4 Different Materials = 28 Versions



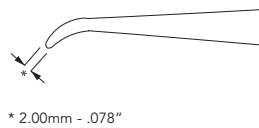
Switzerland



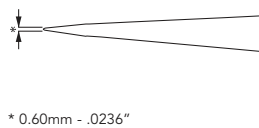
P2A-DEL White Delrin 500 118 mm – 4²/₃"
P2A-STD/G Grey Static Dissipative
P2A-STD Black Static Dissipative
P2A-ESD Black Conductive
 -Straight Flat Rounded Tips



P2AB-DEL White Delrin 500 118 mm – 4²/₃"
P2AB-STD/G Grey Static Dissipative
P2AB-STD Black Static Dissipative
P2AB-ESD Black Conductive
 -Curved Flat Rounded Tips



P3C-DEL White Delrin 500 118 mm – 4²/₃"
P3C-STD/G Grey Static Dissipative
P3C-STD Black Static Dissipative
P3C-ESD Black Conductive
 -Very Fine Straight Tips



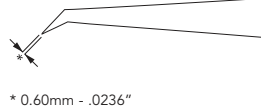
PLASTIC TWEEZERS

Light Weight - Light Cost
7 Models x 4 Different Materials = 28 Versions



Switzerland

P6A-DEL White Delrin 500 118 mm – 4²/₃"
P6A-STD/G Grey Static Dissipative
P6A-STD Black Static Dissipative
P6A-ESD Black Conductive
 -Very Fine Angulated Tips



* 0.60mm - .0236"



P7-DEL White Delrin 500 118 mm – 4²/₃"
P7-STD/G Grey Static Dissipative
P7-STD Black Static Dissipative
P7-ESD Black Conductive
 -Very Fine Curved Tips



* 0.50mm - .020"



P35-DEL White Delrin 500 118 mm – 4²/₃"
P35-STD/G Grey Static Dissipative
P35-STD Black Static Dissipative
P35-ESD Black Conductive
 -Straight Flat Tips



* 3.00mm - .12"



P35A-DEL White Delrin 500 118 mm – 4²/₃"
P35A-STD/G Grey Static Dissipative
P35A-STD Black Static Dissipative
P35A-ESD Black Conductive
 -Straight Flat Radiused Tips



* 5.30mm - .208"



FEATURES :

- Heat Resistant 240°C / 464°F
- No Contamination
- Non-Magnetic
- Acid Resistant
- Tips Do Not Spread Under Pressure

SPECIFICATION SHEET UPON REQUEST ON :

- White Delrin 500
- Grey Static Dissipative
- Black Static Dissipative
- Black Conductive

QUICK CHANGE SOFT-TIP TWEEZERS Patented
QUICK CHANGE CERAMIC TIP TWEEZERS Patented
PLIERS CUTTERS and SPECIAL APPLICATIONS



FOR ELECTRONIC ASSEMBLY

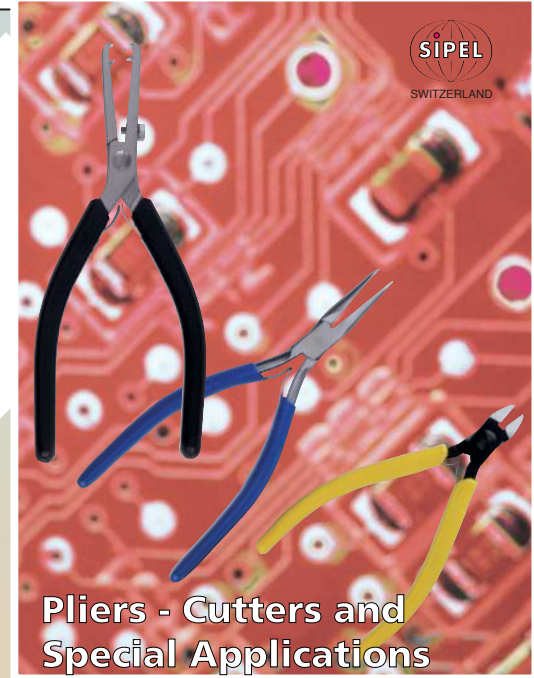
QUICK

CHANGE

TOOLS

NEW CERAMIC TIPS
Hundreds of Models Available

HIGH TECHNOLOGY



Pliers - Cutters and Special Applications

MINI SPATULAS - NEW ESD SAFE



Switzerland

Wide Variety of Applications in all Types of Electronic Assembly:
 Apply Epoxy and Fluxes
 Touch up Solderpastes
 Used as Oilers

TIP: Heat Treated Steel, 60 HRC
 HANDLE: Easy Grip Hex Shape

Tip Length: 13 mm – 1/2"
 Overall Length: 63.5 mm – 2 1/2"
 White Cap
MS025
 Black Handle, Tip size: 0.25 mm - .010"
MS038
 Blue Handle, Tip size: 0.38 mm - .015"
MS050
 Green Handle, Tip size: 0.50 mm - .020"
MS063
 Red Handle, Tip size: 0.63 mm - .025"



5 Pieces Set - White Cap

MS5
 2ea. MS025 Black
 1ea. MS038 Blue
 1ea. MS050 Green
 1ea. MS063 Red



Tip Length: 13 mm – 1/2"
 Overall Length: 63.5 mm – 2 1/2"
 Black ESD Cap
MS025-ESD
 Black Handle, Black dot, Tip size: 0.25 mm - .010"
MS038-ESD
 Black Handle, Blue Dot, Tip size: 0.38 mm - .015"
MS050-ESD
 Black Handle, Green Dot, Tip size: 0.50 mm - .020"
MS063-ESD
 Black Handle, Red Dot, Tip size: 0.63 mm - .025"



5 Pieces Set, Black Handle - Black ESD Cap

MS5-ESD
 2ea. MS025-ESD Black Dot
 1ea. MS038-ESD Blue Dot
 1ea. MS050-ESD Green Dot
 1ea. MS063-ESD Red Dot



SCISSORS

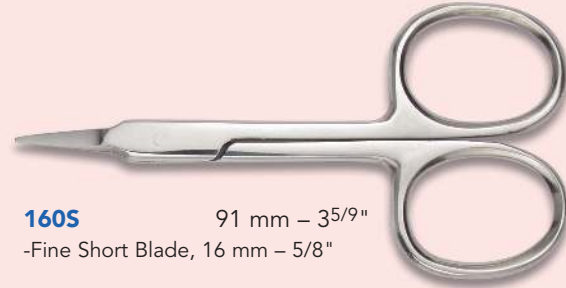
Stainless Steel
Shiny Polished



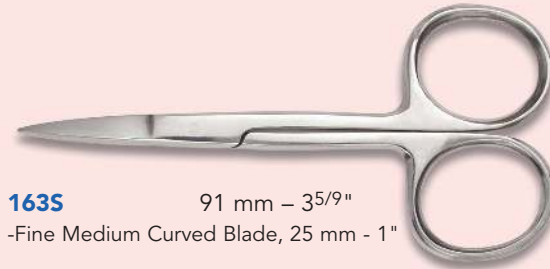
Switzerland



162S 91 mm – 3⁵/₉"
-Fine Medium Blade, 25 mm - 1"



160S 91 mm – 3⁵/₉"
-Fine Short Blade, 16 mm – 5/8"



163S 91 mm – 3⁵/₉"
-Fine Medium Curved Blade, 25 mm - 1"



164S 115 mm – 4¹/₂"
-Straight Slim Blade, 30 mm – 1¹/₄"



166S 118 mm – 4²/₅"
-Bent Slim Blade, 30 mm – 1¹/₄"



170S 90 mm – 3¹/₂"
-All Purpose Blade, 27 mm – 1"



171S 100 mm – 4"
-All Purpose Blade, 35 mm – 1³/₈"

SCISSORS

Stainless Steel
Shiny Polished



Switzerland



172S 120 mm – 4³/₄"
-All Purpose, Blade 44.5 mm – 1³/₄"



175S 130 mm – 5¹/₈"
-General Purpose "Electrician", Blade 46.5 mm – 1⁵/₆"



179S 150 mm – 6"
-Sharp End Tips, Blade 50 mm – 2"



179AS 145 mm – 5¹/₂"
-One Sharp End Tip, Blade 50 mm – 2"
-One Rounded End Tip

SCISSORS

Stainless Steel
Shiny Polished



Switzerland



177S 180 mm – 7¹/₂"
-Bent Trimmer Scissors, Blade 73 mm – 2⁵/₆"



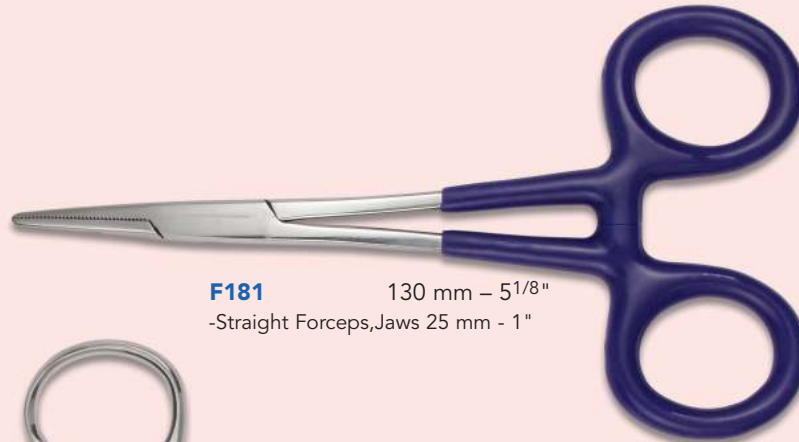
178S 200 mm – 8"
-Bent Trimmer Scissors, Blade 95 mm – 3³/₄"

FORCEPS

Stainless Steel
Shiny Polished
Plastic Coated Handles



Switzerland



F181 130 mm – 5¹/₈"
-Straight Forceps, Jaws 25 mm - 1"



F181-P 130 mm – 5¹/₈"
-Straight Forceps, Jaws 25 mm - 1"



F182 160 mm – 6¹/₃"
-Straight Forceps, Jaws 38 mm – 1¹/₂"



F182-P 160 mm – 6¹/₃"
-Straight Forceps, Jaws 38 mm – 1¹/₂"

FORCEPS

Stainless Steel
Shiny Polished
Plastic Coated Handles



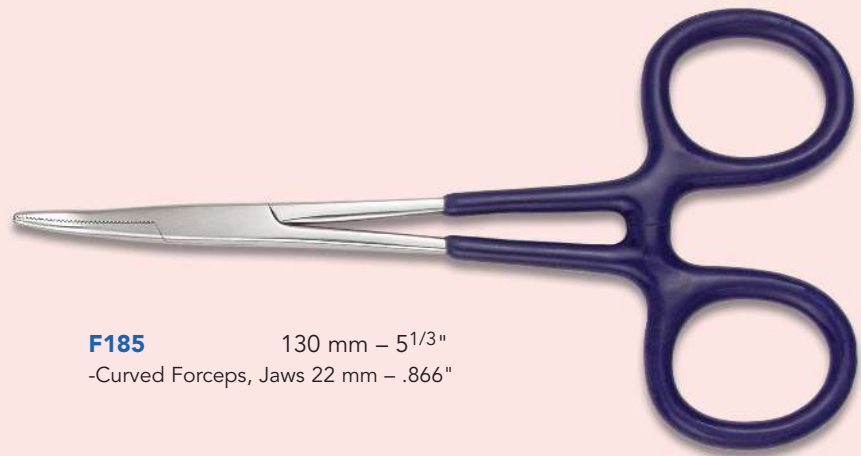
Switzerland



F183 200 mm – 8"
-Straight Forceps, Jaws 45 mm – 1⁷/₈"



F183-P 200 mm – 8"
-Straight Forceps, Jaws 45 mm – 1⁷/₈"



F185 130 mm – 5¹/₃"
-Curved Forceps, Jaws 22 mm – .866"



F185-P 130 mm – 5¹/₃"
-Curved Forceps, Jaws 22 mm - .866"

FORCEPS

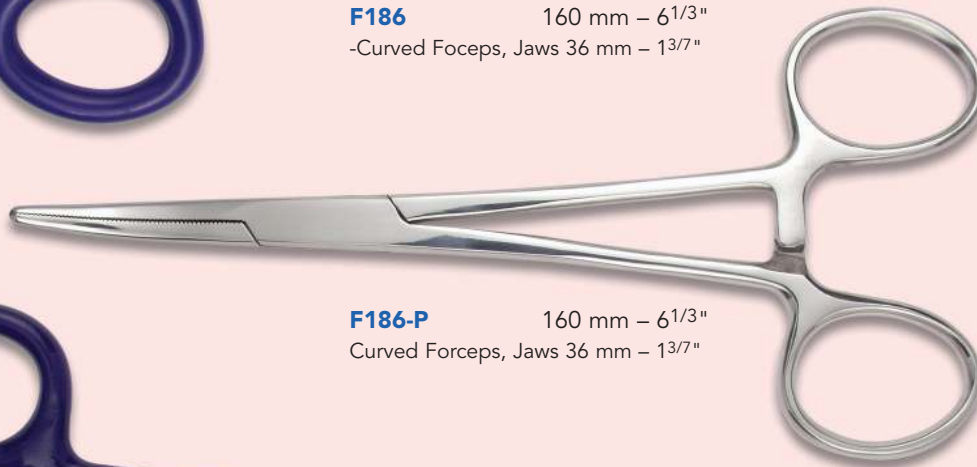
Stainless Steel
Shiny Polished
Plastic Coated Handles



Switzerland



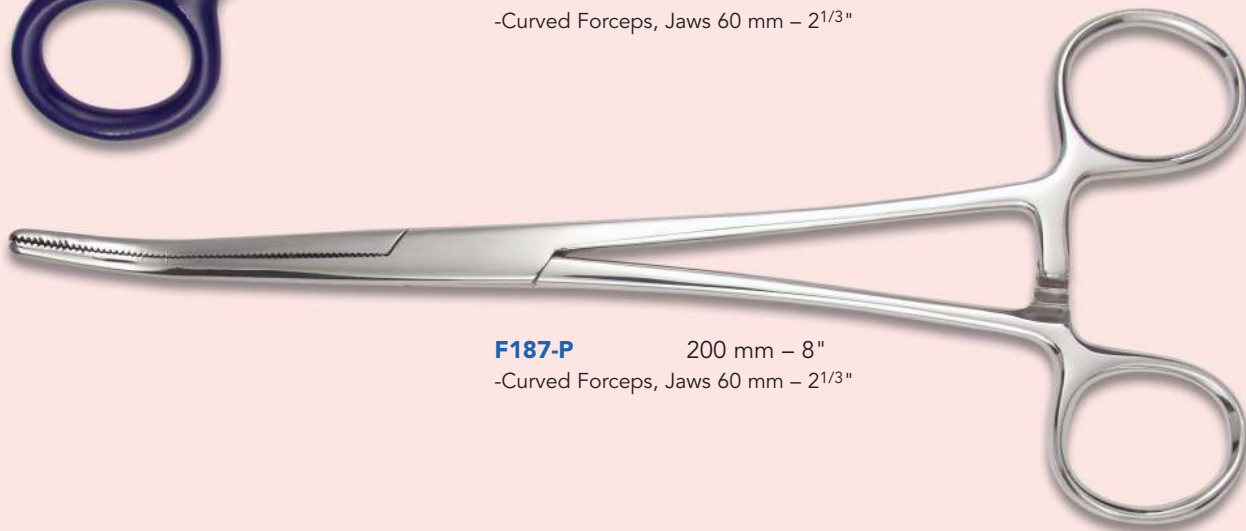
F186 160 mm – 6¹/₃"
-Curved Forceps, Jaws 36 mm – 1³/₇"



F186-P 160 mm – 6¹/₃"
Curved Forceps, Jaws 36 mm – 1³/₇"



F187 200 mm – 8"
-Curved Forceps, Jaws 60 mm – 2¹/₃"



F187-P 200 mm – 8"
-Curved Forceps, Jaws 60 mm – 2¹/₃"

SCALPEL HANDLES AND BLADES



Switzerland

MULTI BLADE HANDLE 130 mm – 5 1/8"

MULTI 34-SA

-Black Anodized
"One Handle only For Any Blade"



GUARD LOCK 34 55 mm – 2 1/6"



-Safety Guard Lock For Multi 34-SA
-Totally Safe, Locked With Pocket Clip

SCALPEL HANDLES



No 3 Stainless Steel 125 mm – 4 5/6"



No 4 Stainless Steel 135 mm – 5 1/4"

SCALPEL BLADES

-For Handle No 3



6



9



10



10A



11



12



12D



13



14



15

SCALPEL BLADES

-For Handle No 4



16



21



24



19



22



25



20



23



36

MISCELLANEOUS TOOLS

Stainless Steel
For General Purpose



Switzerland

350-S 110 mm - 4.33"



-Strong Cutting Scalpel
-Stainless Steel, Shiny Polished

350L-S 155 mm - 6.1"



-Strong Cutting Scalpel
-Stainless Steel, Shiny Polished

342-S 185 mm - 7.28"



-Double End Strong Mixing Spatula
-Stainless Steel, Shiny Polished

345-S 220 mm - 8.66" **346-S** 180 mm - 7.086" **347-S** 155 mm - 6.102"



-Flexible Mixing Spatula
-Stainless Steel w/Wooden Handle

M10



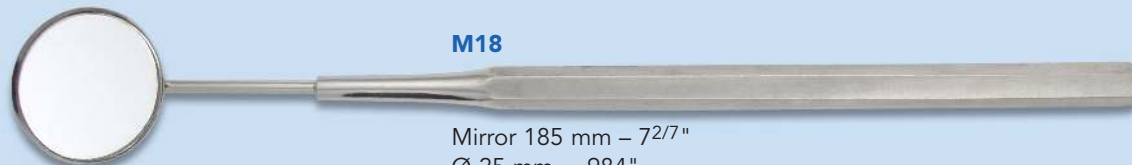
Mirror 170 mm - 6⁵/₈"
Ø 16 mm - .6299"

M15



Mirror 165 mm - 6¹/₂"
Ø 22 mm - .8661"

M18



Mirror 185 mm - 7²/₇"
Ø 25 mm - .984"

M30



Mirror 190 mm - 7²/₅"
Ø 30 mm - 1.181"

MICRO SCREWDRIVERS

Flat and Cross Blades



Switzerland

MICRO SCREWDRIVER



-B1 50 mm – 2"
-Blade Width 1.6 mm - .063" ⊖

MICRO SCREWDRIVER



-B2 60 mm – 2¹/₃"
-Blade Width A = 0.8 mm - .0314" ⊖
B = 1.7 mm - .0669" ⊕

0.8 mm - .0314" Yellow ⊖

1.0 mm - .0393" Black ⊖

1.2 mm - .0472" Red ⊖

1.4 mm - .0551" Grey ⊖

2.0 mm - .0787" Green ⊖

MICRO SCREWDRIVERS' SET B5



MICRO SCREWDRIVERS' SET B6

1.0 mm-.0393" ⊖ 1.3 mm-.0511" ⊖ 1.5 mm-.0590" ⊖ 1.0 mm-.0393" ⊕ 1.4 mm-.0551" ⊕ 2.0 mm-.0787" ⊕



SIPEL ELECTRONIC S.A.

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e-mail: sipel@sipel.ch - www.sipel.com

VACUUM PICK-UP TOOLS AND ACCESSORIES



Switzerland

Complete Program pages 56 to 77



PEN-VAC® ORIGINAL

Self Contained Vacuum Handling Tools

Blue Anodized Finish.

With Storage Compartment. Ideal for Picking up Small Flat Parts up to 200 Grams.

With High Temperature BLUE Silicone Cups, Can Handle up to 250°C / 480°F



Switzerland

V8901

-Without Probe+Cup



146 mm - 5 3/4"

V8901-L

With 2 Probes+Cups

-1ea V8906-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8906-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

V8901-M

With 2 Probes+Cups

-1ea V8906-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8906-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

V8901-S

With 2 Probes+Cups

-1ea V8906-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8906-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8901-A

With 4 Probes+Cups

-1ea V8906-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8906-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8906-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8906-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

V8901-LMS

With 6 Probes+Cups

-1ea V8906-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8906-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8906-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8906-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8906-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8906-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8901-LMS-D

See Page 62



PEN-VAC® ORIGINAL ESD SAFE

Self Contained Vacuum Handling Tools



Switzerland

Clear Aluminum Finish.

With Storage Compartment. Ideal for Picking up Small Flat Parts up to 200 Grams.

With High Temperature BLACK ESD Silicone Cups, Can Handle up to 230°C / 445°F

V8901-ESD

-Without Probe + Cup



146 mm - 5 3/4"

V8901-L-ESD

With 2 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

V8901-M-ESD

With 2 Probes+Cups

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

V8901-S-ESD

With 2 Probes+Cups

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8904-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8901-A-ESD

With 4 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

V8901-LMS-ESD

With 6 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8904-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8901-LMS-D-ESD

See Page 62



PEN-VAC® JUNIOR

Self Contained Vacuum Handling Tools



Switzerland

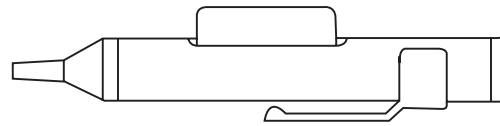
Red Anodized Finish.

No Storage Compartment. Ideal for Picking up Small Flat Parts up to 200 Grams.

With High Temperature RED Silicone Cups, Can Handle up to 250°C / 480°F

V8920

-Without Probe+Cup



110 mm - 4 1/4"

V8920-L

With 2 Probes+Cups

-1ea V8902-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8902-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

V8920-M

With 2 Probes+Cups

-1ea V8902-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

V8920-S

With 2 Probes+Cups

-1ea V8902-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8902-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920-A

With 4 Probes+Cups

-1ea V8902-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8902-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

V8920-LMS

With 6 Probes+Cups

-1ea V8902-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8902-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8902-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8902-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920-LMS-D

See Page 62



PEN-VAC® JUNIOR ESD SAFE

Self Contained Vacuum Handling Tools



Switzerland

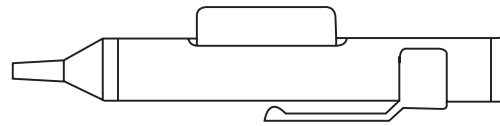
Clear Aluminum Finish.

No Storage Compartment. Ideal for Picking up Small Flat Parts up to 200 Grams.

With High Temperature BLACK ESD Silicone Cups, Can Handle up to 230°C / 445°F

V8920-ESD

-Without Probe+Cup



110 mm - 4 1/4"

V8920-L-ESD

With 2 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

V8920-M-ESD

With 2 Probes+Cups

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

V8920-S-ESD

With 2 Probes+Cups

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8904-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920-A-ESD

With 4 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

V8920-LMS-ESD

With 6 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8904-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920-LMS-D-ESD

See Page 62



PEN-VAC® JUNIOR-E New Generation



Switzerland

Self Contained Vacuum Handling Tools

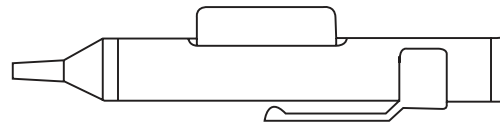
Red Anodized Finish.

No Storage Compartment. Ideal for Picking up Small Flat Parts up to 200 Grams.

With High Temperature RED Silicone Cups, Can Handle up to 250°C / 480°F

V8920E

-Without Probe+Cup



127 mm - 5"

V8920E-L

With 2 Probes+Cups

-1ea V8902-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8902-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

V8920E-M

With 2 Probes +9 Cups

-1ea V8902-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

V8920E-S

With 2 Probes+Cups

-1ea V8902-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8902-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920E-A

With 4 Probes+Cups

-1ea V8902-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8902-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

V8920E-LMS

With 6 Probes+Cups

-1ea V8902-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8902-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8902-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8902-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8902-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920E-LMS-D

See Page 62



PEN-VAC® JUNIOR-E ESD SAFE

New Generation. Self Contained Vacuum Handling Tools.



Switzerland

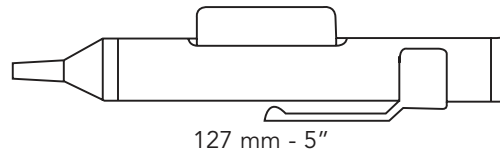
Clear Aluminum Finish.

No Storage Compartment. Ideal for Picking up Small Flat Parts up to 200 Grams.

With High Temperature BLACK ESD Silicone Cups, Can Handle up to 230°C / 445°F

V8920E-ESD

-Without Probe+Cup



V8920E-L-ESD

With 2 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

V8920E-M-ESD

With 2 Probes+Cups

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

V8920E-S-ESD

With 2 Probes+Cups

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8904-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920E-A-ESD

With 4 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

V8920E-LMS-ESD

With 6 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8904-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920E-LMS-D-ESD

See Page 62



PEN-VAC® ORIGINAL, JUNIOR AND JUNIOR-E DELUXE PACKAGING



Switzerland

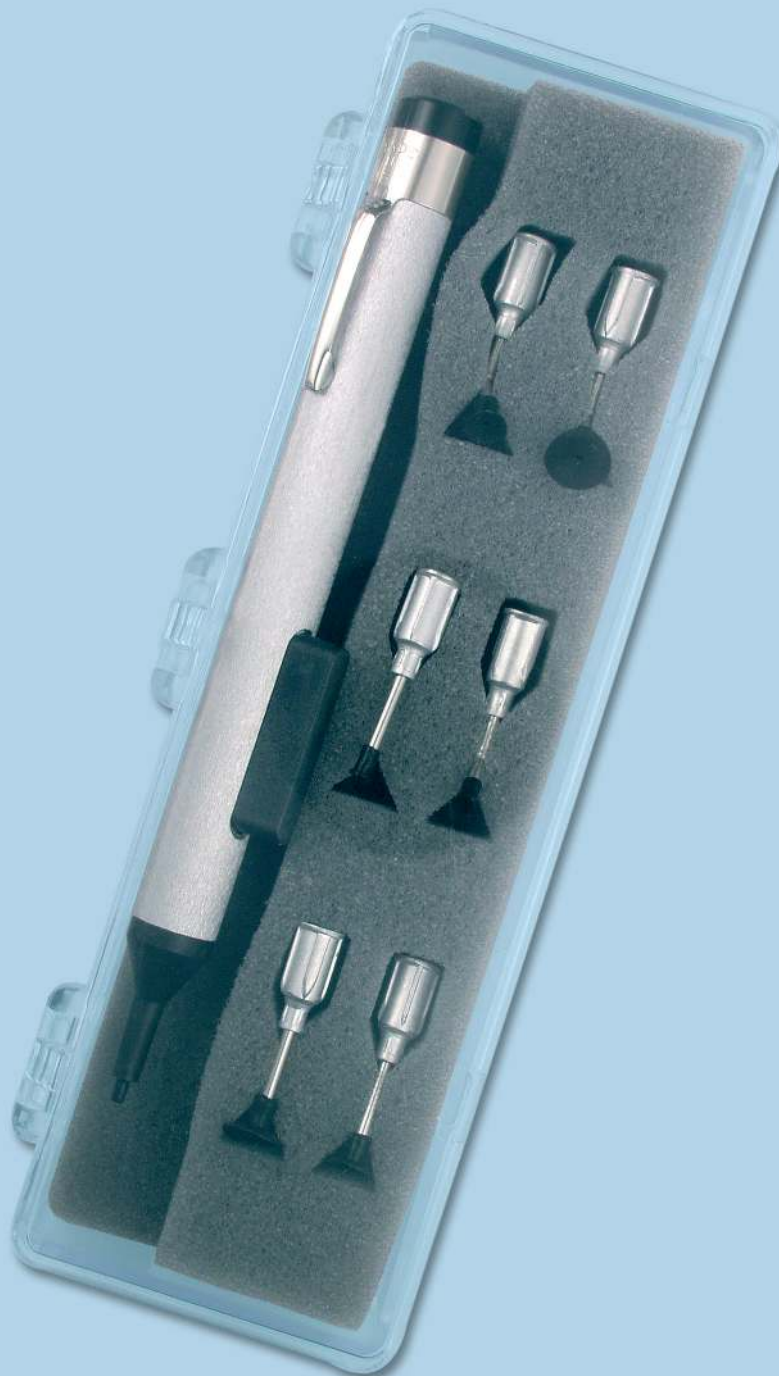
Hard Clear Plastic Box with Foam Location for Each Item

V8901-LMS-D Blue Anodized Finish
 With 6 Probes+Cups
 -1ea V8906-LB
 Bent Probe+Cup Ø 9.53 mm – 3/8"
 -1ea V8906-LS
 Straight Probe+Cup Ø 9.53 mm – 3/8"
 -1ea V8906-MB
 Bent Probe+Cup Ø 6.35 mm – 1/4"
 -1ea V8906-MS
 Straight Probe+Cup Ø 6.35 mm – 1/4"
 -1ea V8906-SB
 Bent Probe+Cup Ø 3.18 mm – 1/8"
 -1ea V8906-SS
 Straight Probe+Cup Ø 3.18 mm – 1/8"

V8901-LMS-D-ESD Clear Aluminum Finish
 With 6 Probes+Cups
 -1ea V8904-LB
 Bent Probe+Cup Ø 9.53 mm – 3/8"
 -1ea V8904-LS
 Straight Probe+Cup Ø 9.53 mm – 3/8"
 -1ea V8904-MB
 Bent Probe+Cup Ø 6.35 mm – 1/4"
 -1ea V8904-MS
 Straight Probe+Cup Ø 6.35 mm – 1/4"
 -1ea V8904-SB
 Bent Probe+Cup Ø 3.18 mm – 1/8"
 -1ea V8904-SS
 Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920E-LMS-D Red Anodized Finish
V8920-LMS-D
 With 6 Probes+Cups
 -1ea V8902-LB
 Bent Probe+Cup Ø 9.53 mm – 3/8"
 -1ea V8902-LS
 Straight Probe+Cup Ø 9.53 mm – 3/8"
 -1ea V8902-MB
 Bent Probe+Cup Ø 6.35 mm – 1/4"
 -1ea V8902-MS
 Straight Probe+Cup Ø 6.35 mm – 1/4"
 -1ea V8902-SB
 Bent Probe+Cup Ø 3.18 mm – 1/8"
 -1ea V8902-SS
 Straight Probe+Cup Ø 3.18 mm – 1/8"

V8920E-LMS-D-ESD
V8920-LMS-D-ESD Clear Aluminium Finish
 With 6 Probes+Cups
 -1ea V8904-LB
 Bent Probe+Cup Ø 9.53 mm – 3/8"
 -1ea V8904-LS
 Straight Probe+Cup Ø 9.53 mm – 3/8"
 -1ea V8904-MB
 Bent Probe+Cup Ø 6.35 mm – 1/4"
 -1ea V8904-MS
 Straight Probe+Cup Ø 6.35 mm – 1/4"
 -1ea V8904-SB
 Bent Probe+Cup Ø 3.18 mm – 1/8"
 -1ea V8904-SS
 Straight Probe+Cup Ø 3.18 mm – 1/8"



PEN-VAC® PRO SERIES

Self Contained Vacuum Handling Tools



Switzerland

Black or Grey Light Weight ESD Safe Plastic

High Temperature BLACK ESD Silicone Cups or Static Dissipative BLACK BUNA-N Cups

V8910-9BK-ESD 127 mm - 5"
-Black Body

With 4 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

Available Also in Version:

V8910-9BK-B Black Buna-N Static
Dissipative Non-Marking Material

V8910-BK-X-ESD Without Probes and Cups



V8910-9GR-ESD 127 mm - 5"
-Grey Body

With 4 Probes+Cups

-1ea V8904-LB

Bent Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

Available Also in Version:

V8910-9GR-B Black Buna-N Static
Dissipative Non-Marking Material

V8910-GR-X-ESD Without Probes and Cups



SLIM-VAC®

Self Contained Vacuum Handling Tools

V9501-ESD 118 mm – 45/8"

With 4 Probes+Cups

-1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8904-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

Available Also in Version:

V9501-B Black Buna-N Static
Dissipative Non-Marking Material

V9501-X-ESD Without Probes and Cups



VACULA®

New Self Contained Vacuum Handling Tools ESD Safe Slim Body With Top Plunger



Switzerland

HP 300-ESD

Easily Handles up to 500 Grams

PINCH-VAC® ESD SAFE

Low Cost Vacuum Tool

VACULA® VC-1-ESD

140 mm – 5 1/2"

With 3 Probes+Cups

-1ea V8904-HS

Straight Probe+Cup Ø12.70mm-1/2"

-1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm-3/8"

-1ea V8904-MS

Straight Probe+Cup Ø 6.35 mm-1/4"

Available Also in Version:

VC-1-B Black Buna-N Static

Dissipative Non-Marking Material

VC-1-X Without Probes and Cups



VACULA® VC-2-ESD

135 mm – 5 1/4"

With 2 Cups Only

-1 ea V9062-ESD Ø 15.88 mm – 5/8"

-1 ea V9050-ESD Ø 12.70 mm – 1/2"

Available Also in Version:

VC-2-B Black Buna-N Static

Dissipative Non-Marking Material

VC-2-X Without Cups



HP 300-ESD

120 mm – 4 3/4"

ESD Safe High Power Vacuum Tool for Large Component Easily Lifts up to 500 grams

With 3 Cups Only

-1 ea V9075-ESD Ø 19.05 mm – 3/4"

-1 ea V9062-ESD Ø 15.88 mm – 5/8"

-1 ea V9050-ESD Ø 12.70 mm – 1/2"



PINCH-VAC® ESD SAFE VPV-6-ESD

125 mm – 4 7/8"

With 2 Probes + Cups

-1 ea V8904-LS

Straight Probe+Cup Ø 9.53mm -3/8"

-1 ea V8904-MB

Bent Probe+Cup Ø 6.35 mm -1/4"

+ 1 Cup Only V9013-ESD

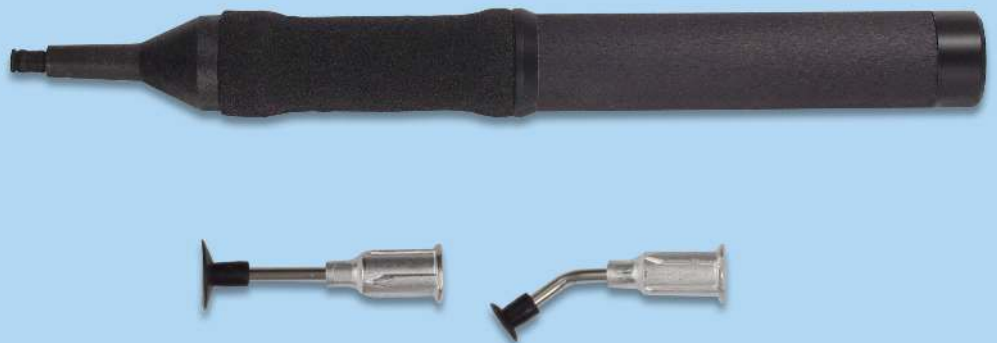
Ø3.18mm-1/8"

Available Also in Version:

VPV-6-B Black Buna-N Static

Dissipative Non-Marking Material

VPV-6-X Without Probes and Cups



LOW COST ESD SAFE VACUUM HANDLING TOOLS

HANDY-VAC®

HV-X-ESD (body only-no cup) 70 mm – 2³/₄"



HANDY-VAC®

- HV-013-ESD** (cup only Ø 3.18mm – 1/8")
- HV-025-ESD** (cup only Ø 6.35mm – 1/4")
- HV-038-ESD** (cup only Ø 9.53mm – 3/8")
- HV-050-ESD** (cup only Ø 12.70mm – 1/2")
- HV-062-ESD** (cup only Ø 15.88mm – 5/8")
- HV-075-ESD** (cup only Ø 19.05mm – 3/4")



HANDY-VAC®

- HV-SB-ESD** (Bent Probe+Cup Ø 3.18mm – 1/8")
- HV-SS-ESD** (Straight Probe+Cup Ø 3.18mm – 1/8")
- HV-MB-ESD** (Bent Probe+Cup Ø 6.35mm – 1/4")
- HV-MS-ESD** (Straight Probe+Cup Ø 6.35mm – 1/4")
- HV-LB-ESD** (Bent Probe+Cup Ø 9.53mm – 3/8")
- HV-LS-ESD** (Straight Probe+Cup Ø 9.53mm – 3/8")
- HV-HB-ESD** (Bent Probe+Cup Ø 12.70mm – 1/2")
- HV-HS-ESD** (Straight Probe+Cup Ø 12.70mm – 1/2")
- HV-JB-ESD** (Bent Probe+Cup Ø 15.88mm – 5/8")
- HV-JS-ESD** (Straight Probe+Cup Ø 15.88mm – 5/8")
- HV-KB-ESD** (Bent Probe+Cup Ø 19.05mm – 3/4")
- HV-KS-ESD** (Straight Probe+Cup Ø 19.05mm – 3/4")



HANDY-VAC® DELUXE KIT

- HV-4-ESD** (4 probes and cups)
V8904-LB/MB/MS/SB
- HV-6-ESD** (6 probes and cups)
V8904-LB/LS/MB/MS/SB/SS
- HV-4-B** (4 Probes and Black Buna-N Cups)
V8903-LB/MB/MS/SB
- HV-6-B** (6 probes and Black Buna-N Cups)
V8903-LB/LS/MB/MS/SB/SS



BULB-VAC

- BVJ-X-ESD** (without cup) 90 mm – 3¹/₂"
- BVJ-025-ESD** (cup Ø 6.35mm – 1/4")
- BVJ-038-ESD** (cup Ø 9.53mm – 3/8")
- BVJ-050-ESD** (cup Ø 12.70mm – 1/2")
- BVJ-062-ESD** (cup Ø 15.88mm – 5/8")
- BVJ-075-ESD** (cup Ø 19.05mm – 3/4")
- BVJ-025-B** (Black Buna cup Ø 6.35mm – 1/4")
- BVJ-038-B** (Black Buna cup Ø 9.53mm – 3/8")
- BVJ-050-B** (Black Buna cup Ø 12.70mm – 1/2")
- BVJ-062-B** (Black Buna cup Ø 15.88mm – 5/8")
- BVJ-075-B** (Black Buna cup Ø 19.05mm – 3/4")



VACUUM CUPS

ESD Safe and NON ESD Safe
Wide Selection of Materials and Sizes



Switzerland



V9009

Ø 2.38mm – 3/32"



V9013

Ø 3.18mm – 1/8"



V9018

Ø 4.76mm – 3/16"



V9025

Ø 6.35mm – 1/4"



V9038

Ø 9.53mm – 3/8"



V9050

Ø 12.70mm – 1/2"



V9062

Ø 15.88mm – 5/8"



V9075

Ø 19.05mm – 3/4"

Available in Following Materials. Add Suffix:

- R **RED** High-Temperature Silicone Cups (up to 480°F / 250°C)
- B **BLACK BUNA-N** Static Dissipative Non-Marking Cups (up to 250°F / 120°C)
- ESD **BLACK ESD** High Temperature Safe Silicone Cups. See Above (up to 445°F / 230°C)
- W **WHITE** Silicone Cups (up to 480°F / 250°C)
- U **BLUE** High Temperature Silicone Cups (up to 480°F / 250°C)
- C **CLEAR** High Temperature Silicone Cups (up to 480°F / 250°C)

NEW TEFLON VACUUM CUPS, ANTI-STATIC

Semi-Rigid. For Handling Contamination Sensitive Parts. Ideal for Optics. No Residue.
Temperature up to 500°F / 260°C. For Continuous Vacuum only.



VTC9013

Ø 3.18mm – 1/8"



VTC9018

Ø 4.76mm – 3/16"



VTC9025

Ø 6.35mm – 1/4"



VTC9038

Ø 9.53mm – 3/8"



VTC9050

Ø 12.70mm – 1/2"



VTC9062

Ø 15.88mm – 5/8"



VTC9075

Ø 19.05mm – 3/4"

VACUUM CUPS

WITH 12.70mm – 1/2" PROBE

Wide Selection of Materials and Sizes



V8904- Series: High Temperature **BLACK** ESD Safe Silicone Cup



Available in Following Materials, With 12.70mm - 1/2" Probe:

- V8902- RED** High-temperature Silicone cups (up to 250°C / 480°F)
- V8903- BLACK BUNA-N** Static Dissipative Non-Marking Cups (up to 120°C / 250°F)
- V8904- BLACK** High Temperature ESD Safe Silicone Cups. See Above (up to 230°C / 445°F)
- V8905- WHITE** Silicone Cups (up to 250°C / 480°F)
- V8906- BLUE** High Temperature Silicone Cups (up to 250°C / 480°F)
- V8907- CLEAR** High Temperature Silicone Cups (up to 250°C / 480°F)

Add Suffix:

- DB** to order with the 2.38mm – 3/32" Ø Cup and **45° Bent** Probe
- DS** to order with the 2.38mm – 3/32" Ø Cup and **Straight** Probe
- SB** to order with the 3.18mm – 1/8" Ø Cup and **45° Bent** Probe
- SS** to order with the 3.18mm – 1/8" Ø Cup and **Straight** Probe
- PB** to order with the 4.76mm – 3/16" Ø Cup and **45° Bent** Probe
- PS** to order with the 4.76mm – 3/16" Ø Cup and **Straight** Probe
- MB** to order with the 6.35mm – 1/4" Ø Cup and **45° Bent** Probe
- MS** to order with the 6.35mm – 1/4" Ø Cup and **Straight** Probe
- LB** to order with the 9.53mm – 3/8" Ø Cup and **45° Bent** Probe
- LS** to order with the 9.53mm – 3/8" Ø Cup and **Straight** Probe
- HB** to order with the 12.70mm – 1/2" Ø Cup and **45° Bent** Probe
- HS** to order with the 12.70mm – 1/2" Ø Cup and **Straight** Probe
- JB** to order with the 15.88mm – 5/8" Ø Cup and **45° Bent** Probe
- JS** to order with the 15.88mm – 5/8" Ø Cup and **Straight** Probe
- KB** to order with the 19.05mm – 3/4" Ø Cup and **45° Bent** Probe
- KS** to order with the 19.05mm – 3/4" Ø Cup and **Straight** Probe

VACUUM CUPS

WITH 25.40mm – 1" PROBE

Wide Selection of Materials and Sizes



Switzerland

V8914- Series: High Temperature **BLACK** ESD Safe Silicone Cup



Available in Following Materials, With 25.40mm - 1" Probe:

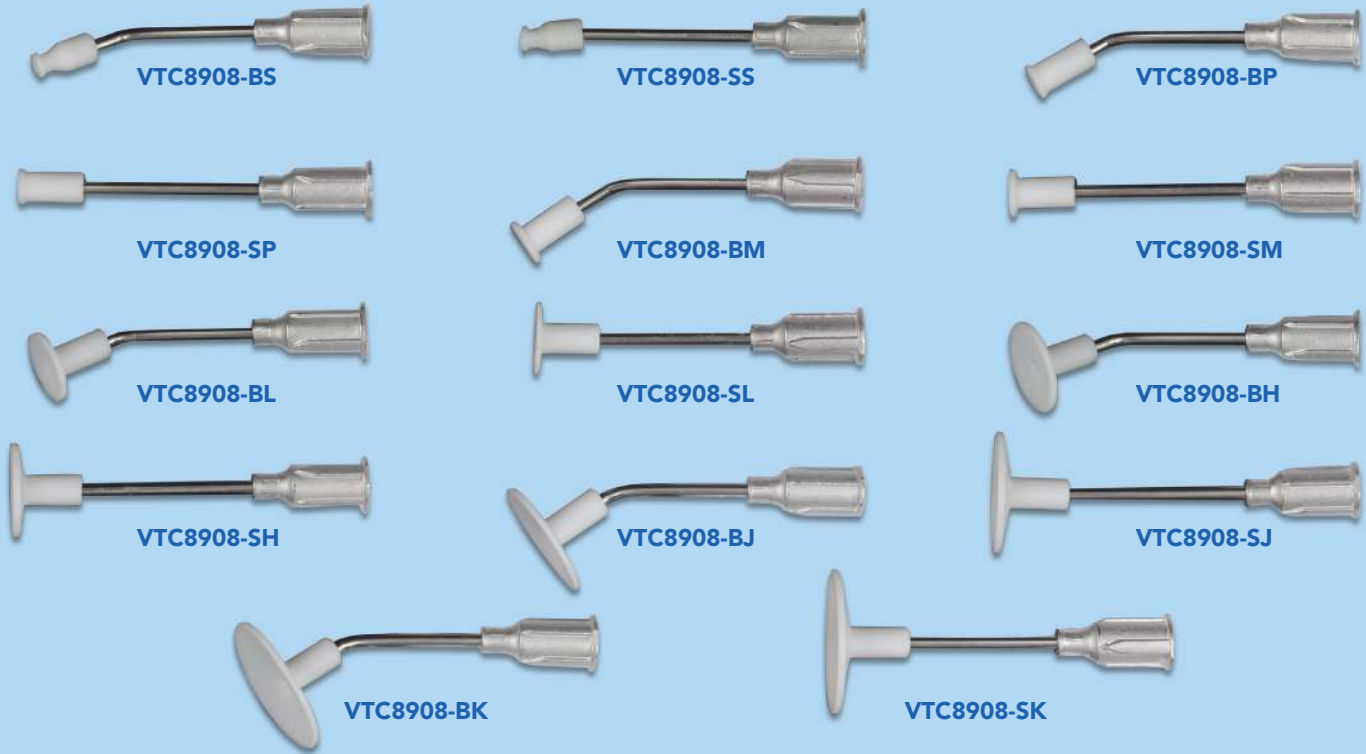
- V8912- RED** High-temperature Silicone cups (up to 250°C / 480°F)
- V8913- BLACK BUNA-N** Static Dissipative Non-Marking Cups (up to 120°C / 250°F)
- V8914- BLACK** High Temperature ESD Safe Silicone Cups. See Above (up to 230°C / 445°F)
- V8915- WHITE** Silicone Cups (up to 250°C / 480°F)
- V8916- BLUE** High Temperature Silicone Cups (up to 250°C / 480°F)
- V8917- CLEAR** High Temperature Silicone Cups (up to 250°C / 480°F)

Add Suffix:

- DB** to order with the 2.38mm – 3/32" Ø Cup and **45° Bent** Probe
- DS** to order with the 2.38mm – 3/32" Ø Cup and **Straight** Probe
- SB** to order with the 3.18mm – 1/8" Ø Cup and **45° Bent** Probe
- SS** to order with the 3.18mm – 1/8" Ø Cup and **Straight** Probe
- PB** to order with the 4.76mm – 3/16" Ø Cup and **45° Bent** Probe
- PS** to order with the 4.76mm – 3/16" Ø Cup and **Straight** Probe
- MB** to order with the 6.35mm – 1/4" Ø Cup and **45° Bent** Probe
- MS** to order with the 6.35mm – 1/4" Ø Cup and **Straight** Probe
- LB** to order with the 9.53mm – 3/8" Ø Cup and **45° Bent** Probe
- LS** to order with the 9.53mm – 3/8" Ø Cup and **Straight** Probe
- HB** to order with the 12.70mm – 1/2" Ø Cup and **45° Bent** Probe
- HS** to order with the 12.70mm – 1/2" Ø Cup and **Straight** Probe
- JB** to order with the 15.88mm – 5/8" Ø Cup and **45° Bent** Probe
- JS** to order with the 15.88mm – 5/8" Ø Cup and **Straight** Probe
- KB** to order with the 19.05mm – 3/4" Ø Cup and **45° Bent** Probe
- KS** to order with the 19.05mm – 3/4" Ø Cup and **Straight** Probe

To order with 90° bent Probe, Add /90 to the P/N . Example: **V8914-MB/90**

NEW ANTI-STATIC TEFLON VACUUM CUPS VTC 8908 SERIES AVAILABLE WITH 25.40mm – 1" PROBE ONLY



- VTC8908-BS** with 3.18mm – 1/8" Ø Cup and **45° Bent** Probe
- VTC8908-SS** with 3.18mm – 1/8" Ø Cup and **Straight** Probe
- VTC8908-BP** with 4.76mm – 3/16" Ø Cup and **45° Bent** Probe
- VTC8908-SP** with 4.76mm – 3/16" Ø Cup and **Straight** Probe
- VTC8908-BM** with 6.35mm – 1/4" Ø Cup and **45° Bent** Probe
- VTC8908-SM** with 6.35mm – 1/4" Ø Cup and **Straight** Probe
- VTC8908-BL** with 9.53mm – 3/8" Ø Cup and **45° Bent** Probe
- VTC8908-SL** with 9.53mm – 3/8" Ø Cup and **Straight** Probe
- VTC8908-BH** with 12.70mm – 1/2" Ø Cup and **45° Bent** Probe
- VTC8908-SH** with 12.70mm – 1/2" Ø Cup and **Straight** Probe
- VTC8908-BJ** with 15.88mm – 5/8" Ø Cup and **45° Bent** Probe
- VTC8908-SJ** with 15.88mm – 5/8" Ø Cup and **Straight** Probe
- VTC8908-BK** with 19.05mm – 3/4" Ø Cup and **45° Bent** Probe
- VTC8908-SK** with 19.05mm – 3/4" Ø Cup and **Straight** Probe

To order with 90° bent Probe, Add /90 to the P/N . Example: **VTC8908-BM/90**

NEW DUAL CUPS

Additional Sizes And Information Upon Request



Switzerland



V-Dual Cup-2-L-B-00
Straight Dual Cup, with 2 Cups
2ea V9038 Black Buna Ø 9.53mm - 3/8"

Other Angle Available Upon Request



V-Dual Cup-4-J-B-90
90° Angle Dual Cup, with 2 Cups
2ea V9062 Black Buna Ø 15.88mm - 5/8"

NEW MICRO VAC TIPS S3950 SERIES AVAILABLE WITH 12.70mm – 1/2" PROBE ONLY

Designed For Continuous Vacuum Tools, for Handling Very Small Parts, such as 0.15 mm - .006"



S3950-B-ESD



S3950-S-ESD



S3951-B-ESD



S3951-S-ESD



S3955-B-ESD



S3955-S-ESD



S3956-B-ESD



S3956-S-ESD

- S3950-B...** : Outside Ø 0.30mm - .011" - Inside Ø 0.14mm - .006", w / **45° Bent** Probe
- S3950-S...** : Outside Ø 0.30mm - .011" - Inside Ø 0.14mm - .006", w / **Straight** Probe
- S3951-B...** : Outside Ø 0.80mm - .031" - Inside Ø 0.50mm - .012", w / **45° Bent** Probe
- S3951-S...** : Outside Ø 0.80mm - .031" - Inside Ø 0.50mm - .012", w / **Straight** Probe
- S3955-B...** : Outside Ø 1.00mm - .039" - Inside Ø 0.40mm - .015", w / **45° Bent** Probe
- S3955-S...** : Outside Ø 1.00mm - .039" - Inside Ø 0.40mm - .015", w / **Straight** Probe
- S3956-B...** : Outside Ø 1.27mm - .050" - Inside Ø 0.86mm - .034", w / **45° Bent** Probe
- S3956-S...** : Outside Ø 1.27mm - .050" - Inside Ø 0.86mm - .034", w / **Straight** Probe

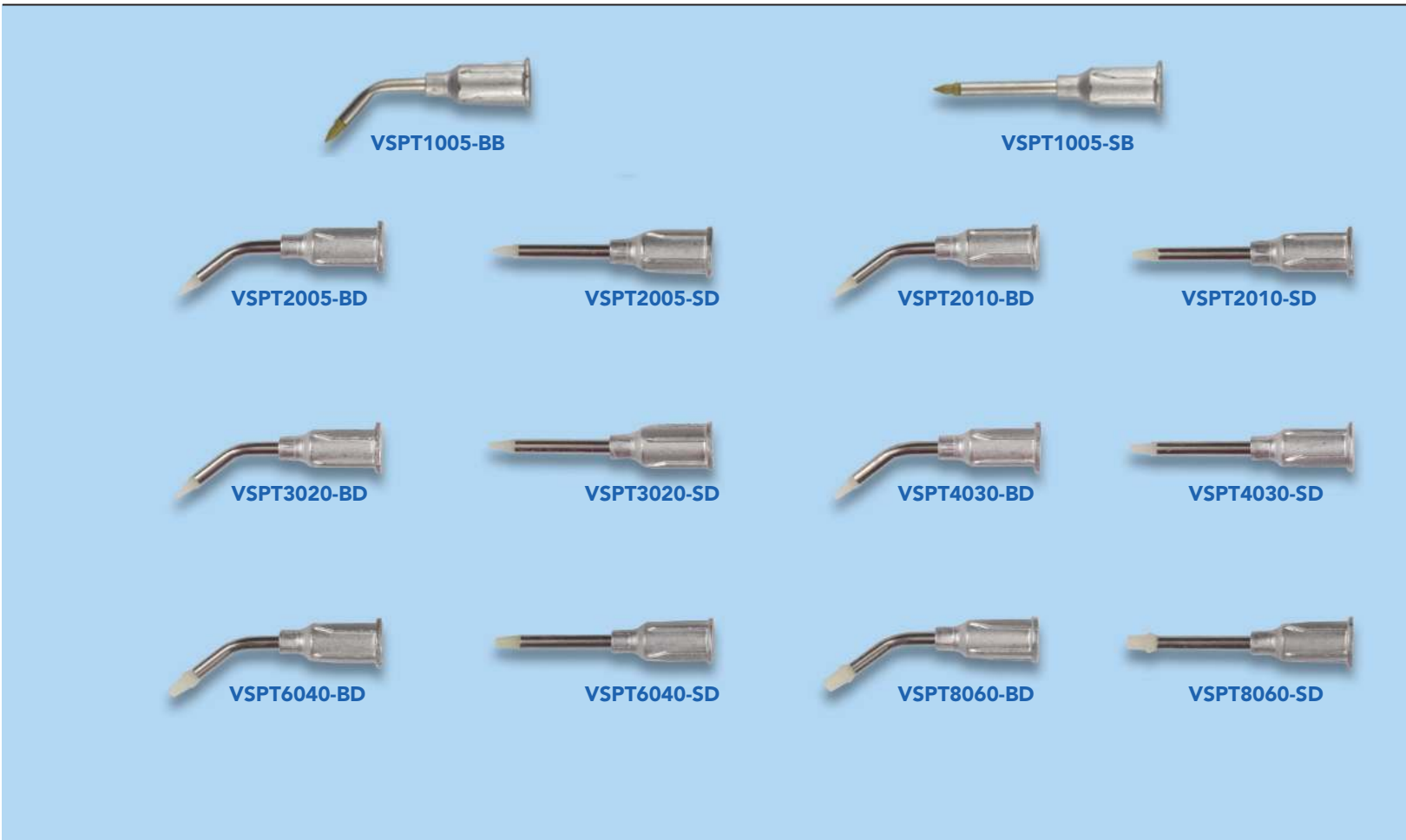
Available in Following Materials. Add Suffix:

- ESD** **BLACK ESD** Safe Carbon Fibre. See Above (Heat Resistance up to 230°C / 445°F)
- STD** **GREY Static** Dissipative Carbon Fibre (Heat Resistance up to 230°C / 445°F)
- W** **WHITE** Delrin 500 (up to 230°C / 445°F)

NEW MICRO VAC TIPS VSPT SERIES

AVAILABLE WITH 12.70mm – 1/2" PROBE ONLY

Designed For Continuous Vacuum Tools, for Handling Very Small Parts,
such as 0.152mm - .006"



Available in Following Materials. Add Suffix:

- D** **WHITE DELRIN** Static Dissipative, up to 100°C / 212°F
- B** **BRASS** Conductive, Gold Plated, up to 260°C / 500°F
- T** **TORLON** Non ESD Safe, up to 232°C / 475°F

- VSPT1005-B...** : Outside Ø 0.25mm - .010" - Inside Ø 0.13mm - .005", w / **45° Bent** Probe, available only in BRASS or TORLON
- VSPT1005-S...** : Outside Ø 0.25mm - .010" - Inside Ø 0.13mm - .005", w / **Straight** Probe, available only in BRASS or TORLON
- VSPT2005-BD...** : Outside Ø 0.51mm - .020" - Inside Ø 0.13mm - .005", w / **45° Bent** Probe, available only in DELRIN
- VSPT2005-SD...** : Outside Ø 0.51mm - .020" - Inside Ø 0.13mm - .005", w / **Straight** Probe, available only in DELRIN
- VSPT2010-B...** : Outside Ø 0.51mm - .020" - Inside Ø 0.25mm - .010", w / **45° Bent** Probe
- VSPT2010-S...** : Outside Ø 0.51mm - .020" - Inside Ø 0.25mm - .010", w / **Straight** Probe
- VSPT3020-B...** : Outside Ø 0.76mm - .030" - Inside Ø 0.51mm - .020", w / **45° Bent** Probe
- VSPT3020-S...** : Outside Ø 0.76mm - .030" - Inside Ø 0.51mm - .020", w / **Straight** Probe
- VSPT4030-B...** : Outside Ø 1.02mm - .040" - Inside Ø 0.76mm - .030", w / **45° Bent** Probe
- VSPT4030-S...** : Outside Ø 1.02mm - .040" - Inside Ø 0.76mm - .030", w / **Straight** Probe
- VSPT6040-B...** : Outside Ø 1.52mm - .060" - Inside Ø 1.02mm - .040", w / **45° Bent** Probe
- VSPT6040-S...** : Outside Ø 1.52mm - .060" - Inside Ø 1.02mm - .040", w / **Straight** Probe
- VSPT8060-B...** : Outside Ø 2.00mm - .080" - Inside Ø 1.52mm - .060", w / **45° Bent** Probe
- VSPT8060-S...** : Outside Ø 2.00mm - .080" - Inside Ø 1.52mm - .060", w / **Straight** Probe

CONTINUOUS VACUUM HANDLING TOOLS



PAC-VAC™ PORTABLE ESD SAFE

The PAC-VAC is Battery Operated and Self-Contained.

Comes Complete With Following Features:

- A Belt/Pocket Clip on the Housing
- 4 Feet of Straight Vacuum Hose, #VSH-1/16-4
- 4 Feet of Coiled Vacuum Hose, #VCH-1/16-4
- A Set of Seven Vacuum Tips, #VCS-7-B
- A Vacuum Pick-Up Handle, #V3020-RF-1/16
- 9 Volt Disposable Alkaline Battery
- Lightweight – Only 156 Grams
- Runs up to Eight Hours Continuously on One 9 Volt Alkaline Battery
- Produces Vacuum of Over Ten Inches of Mercury

V3200



SMD-VAC™-GP ESD SAFE

A General Purpose Vacuum Handling Tool That Plugs Directly Into 110 VAC or 200 VAC 50-60HZ.

Comes Complete With Following Features:

- Whisper-Quiet Operation
- 4 Feet of Straight Vacuum Hose, #VSH-1/16-4
- 4 Feet of Coiled Vacuum Hose, #VCH-1/16-4
- A Set of Seven Vacuum Tips, #VCS-7-B
- A Vacuum Pick-Up Handle, #V3020-RF-1/16
- Produces Vacuum of Over Six Inches of Mercury

V8000/110V

V8000/220V

With Optional Side Mounted Vacuum Pen Holder

V8000/110V-HLD

V8000/220V-HLD

SMD-VAC™-HF ESD SAFE

Same as SMD-VAC-GP V8000. Provides Twice The Air Flow

Comes With Same Features as V8000

V8400/110V

V8400/220V

With Optional Side Mounted Vacuum Pen Holder

V8400/110V-HLD

V8400/220V-HLD



SMD-VAC™-HP ESD SAFE

Comes With Same Features as V8000

- Automatic Vacuum pump ON/OFF Control
- Produces Vacuum of Over Fifteen Inches of Mercury
- Variable Air Flow Control

V8100A-110V

V8100A-220V



Foot Switch With Vacuum Pen V3021

VFS-1



CONTINUOUS VACUUM HANDLING TOOLS



STEALTH-VAC™

VVSV-X Without Probes and Cups

High Powered Vacuum Pen, operates on Compressed Air or Nitrogen

- Operates from 30 to 70 P.S.I. at less than 3 C.F.M
- Supplied with coiled hose and straight hose
- Made of ESD Safe materials
- Whisper quite operation
- Air exhausts out the rear of the tool
- Lightweight, Ergonomic design
- **Will accept any of our Probes and Cups**

STEALTH-WAND™

VVSW-X Without Wafer Tip

Innovative Wafer Wand, operates on Compressed Air or Nitrogen

- Operates from 30 to 70 P.S.I. at less than 3 C.F.M
- Supplied with coiled hose and straight hose
- Made of ESD Safe materials
- Cleanroom Safe
- Whisper quite operation
- Air exhausts out the rear of the tool
- Lightweight, Ergonomic design
- **Will accept any of our molded Peek Wafer Tip**



PORTA-VAC® II BATTERY OPERATED WAFER HANDLING TOOLS

Comes With one MOLDED Wafer Tip as Listed Below.

Easily Lifts over 500 Grams.

9V Battery is Included.

PV4000A-MW4 Handling up to 4" (100 mm) Wafers

PV4000A-MW6 Handling up to 6" (150 mm) Wafers

PV4000A-MW8 Handling up to 8" (200 mm) Wafers

PORTA-VAC II Only

PV4000A-X Without Wafer Tip

PORTA-VAC® SERIES 3 BATTERY OPERATED WAFER HANDLING TOOLS

Same as PORTA-VAC II , With Vacuum Level Indicator

Comes With one MOLDED Wafer Tip as Listed Below.

Easily Lifts 300 mm Wafers

PV4300-MW4 Handling up to 4" (100 mm) Wafers

PV4300-MW6 Handling up to 6" (150 mm) Wafers

PV4300-MW8 Handling up to 8" (200 mm) Wafers

PV4300-VWT5R Handling up to 12" (300 mm) Wafers

PORTA-VAC SERIES 3 Only

PV4300-X Without Wafer Tip



CONTINUOUS VACUUM HANDLING TOOLS



PORTA-WAND® BATTERY OPERATED WAFER HANDLING TOOL

Comes With a fixed internal 9.6V NiMH Rechargeable Battery,
In-Stand Charger (P/N VPW6000-CHRG).
Available in 110V or 220V.
Easily Lifts Over 500 Grams.

VPW6000B-MW4/110V Handling up to 4" Wafers
VPW6000B-MW4/220V Handling up to 4" Wafers
VPW6000B-MW6/110V Handling up to 6" Wafers
VPW6000B-MW6/220V Handling up to 6" Wafers
VPW6000B-MW8/110V Handling up to 8" Wafers
VPW6000B-MW8/220V Handling up to 8" Wafers

PORTA WAND® Only
VPW6000B-X Without Wafer Tip , Without Charger



PORTA-WAND® SERIES 3 BATTERY OPERATED WAFER HANDLING TOOL

Same as VPW6000B
With Vacuum Level Indicator

VPW6300B-MW4/110V Handling up to 4" Wafers
VPW6300B-MW4/220V Handling up to 4" Wafers
VPW6300B-MW6/110V Handling up to 6" Wafers
VPW6300B-MW6/220V Handling up to 6" Wafers
VPW6300B-MW8/110V Handling up to 8" Wafers
VPW6300B-MW8/220V Handling up to 8" Wafers

VPW6300B-VWT5R/110V With Wafer Tip VWT5R
VPW6300B-VWT5R/220V With Wafer Tip VWT5R
Handles up to 12" (300 mm) Wafers.

PORTA WAND® Series 3 Only
VPW6300B-X Without Wafer Tip , Without Charger



CHARGER STAND

VPW6000-CHRG/110V With 110V Transformer Included
VPW6000-CHRG/220V With 220V Transformer Included
VPW6000-CHRG-XT Without Transformer



CONTINUOUS VACUUM HANDLING TOOLS



PORTA-WAND® ELITE - VPWE7000

Portable Cleanroom Vacuum Wand

- No Vacuum Lines required
- Available with 110 or 220 Volt Power Supply
- 9.6 Volt rechargeable Nickel Metal Hybride battery pack is compatible with existing PORTA-WAND charging stand VPW6000-CHRG
- Made of ESD Safe Materials
- Internal filters insure Class I Cleanroom performance
- Will accept any of our Molded Peek Wafer Tip
- Lightweight, Ergonomic Design
- Power Switch locks to the ON Position

VPWE7000-MW4/110V Handling up to 4" Wafers

VPWE7000-MW4/220V Handling up to 4" Wafers

VPWE7000-MW6/110V Handling up to 6" Wafers

VPWE7000-MW6/220V Handling up to 6" Wafers

VPWE7000-MW8/110V Handling up to 8" Wafers

VPWE7000-MW8/220V Handling up to 8" Wafers

PORTA-WAND® ELITE Only

VPWE7000-X Without Wafer Tip, Without Charger

PORTA-WAND® ELITE - VPWE7300

- Same as above
- With Led that indicates power on and battery condition

VPWE7300-MW4/110V Handling up to 4" Wafers

VPWE7300-MW4/220V Handling up to 4" Wafers

VPWE7300-MW6/110V Handling up to 6" Wafers

VPWE7300-MW6/220V Handling up to 6" Wafers

VPWE7300-MW8/110V Handling up to 8" Wafers

VPWE7300-MW8/220V Handling up to 8" Wafers

PORTA-WAND® ELITE Only

VPWE7300-X Without Wafer Tip, Without Charger



Complete details on page 77

ESD SAFE VACUUM HANDLES AND ATTACHEMENTS



STANDARD VACUUM PEN WITH CONTROL HOLE

For Continuous Air Vacuum Handling Systems.

V3020-RF-1/16" (for 1/16" ID Hose)

V3020-RF-1/8" (for 1/8" ID Hose)



STANDARD VACUUM PEN WITHOUT CONTROL HOLE, NO FILTER

For Continuous Vacuum Handling Systems

V3021-1/16" (for 1/16" ID Hose)

V3021-1/8" (for 1/8" ID Hose)



VACUUM INTERRUPTER KIT

Includes Four Feet of Straight Hose, Handle and Interrupter Block.

V3025 With 1/2" (12.7 mm) Diameter standard Handle



SLIM VACUUM PEN WITH CONTROL HOLE

For Continuous Vacuum Handling Systems

V3120



SLIM VACUUM PEN WITHOUT CONTROL HOLE

For Continuous Vacuum Handling Systems

V3121



CLEAN ROOM SAFE WAFER WANDS

SLIDE SWITCH WAFER WAND

For Connection to Continuous Vacuum Systems. Can be Used With an In-House Vacuum Systems or With one of V8000 Series Continuous Vacuum Systems.

VWW-2-SD-1/16" (for 1/16" ID Hose)

VWW-2-SD-1/8" (for 1/8" ID Hose)



PUSH-BUTTON WAFER WAND

For Connection to Continuous Vacuum Systems. Can be Used With an In-House Vacuum Systems or With one of V8000 Series Continuous Vacuum Systems.

VWWB-2-SD-1/16" (for 1/16" ID Hose)

VWWB-2-SD-1/8" (for 1/8" ID Hose)



HIGH PERFORMANCE MOLDED WAFER TIPS



PRESS-FIT MOLDED PEEK WAFER TIPS

These Wafer Tips are Molded From ESD Safe PEEK Plastic to Handle Wafers up to 100°C. The Low profile of the Wafer Tip Head Provides Easy Access to Wafers in Industry Standard Boats. These Tips Attach to All of Our Wafer Handling Tools as Well as Competitive Systems.

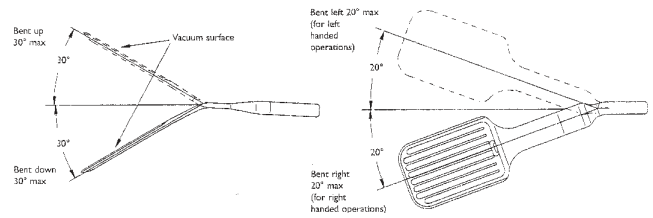
- VMWT-A** Recommended for Handling up to 4" (100 mm) Wafers
- VMWT-B** Recommended for Handling up to 6" (150 mm) Wafers
- VMWT-C** Recommended for Handling up to 8" (200 mm) Wafers
- VMWT-D** Recommended for Handling Larger Sized Wafers



Molded Wafer Tips VMWT-A, VMWT-B and VMWT-C are Available With 30° Bend in the Up or Down Direction as Shown in the Left Drawing Above. To order a Tip With the Up or Down Bend, Add the Angle Plus a "U" for Up or a "D" for Down to the Part Number.
Example: Part Number VMWT-A30D is a VMWT-A Wafer Tip With a 30 Degree Bend in the Down Direction.

Molded Wafer Tips VMWT-A, VMWT-B and VMWT-C are Available With 20° Bend in the Left or Right Direction as Shown in the Right Drawing Above. To order a Tip With the Left or Right Bend, Add the Angle Plus a "L" for Left or a "R" for Right to the Part Number.
Example: Part Number VMWT-C20R is a VMWT-C Wafer Tip With a 20 Degree Bend in the Right Direction.

- VMWT-A-30D, VMWT-A-30U, VMWT-A-20L, VMWT-A-20R**
- VMWT-B-30D, VMWT-B-30U, VMWT-B-20L, VMWT-B-20R**
- VMWT-C-30D, VMWT-C-30U, VMWT-C-20L, VMWT-C-20R**
- VMWT-D-30D, VMWT-D-30U, VMWT-D-20L, VMWT-D-20R**



Other Down and Up Bending Upon Request, Maximum 30°
Other Left and Right Bending Upon Request, Maximum 20°

300MM WAFER HANDLING TIP

VWT-5R

Designed For Safely Handling 12" (300 mm) Wafers. This Unique Design Allows Connection to any of Our Continuous Vacuum Wafer Handling Tools



ESD SAFE VACUUM HANDLING TOOL ACCESSORIES



PV-RESISTOR

The Resistor Adaptor provides a Series Resistor Between the Wafer Tip and Handling Tool.



V2404

Press Fit Hub Adapter ESD Safe. Allows the use of Probes With Vacuum Cups.



V2407

The Adapter for .094 Inch Tube Accepts the Wafer Tips Described in this Catalog as Well as Many Third Party Wafer Tips. Simply unscrew the Adapter From the Front of the Wafer Handling Tools and Replace it with this Adapter.



V2408

Hub Adapter Attaches to the Front of the Wafer Handling Tools to Allow Use of the Probes With Vacuum Cups. Simply Unscrew the Adapter From the Front of the Wafer Handling Tools and Replace it With the Hub Adapter.



V2409

Press Fit Adapter Attaches to the Front of the Wafer handling Tools to Allow Use of Third Party Molded and Quartz Wafer Tips that You May Already Have in this House. Simply Unscrew the Adapter From the Front of the wafer Handling Tools and Replace it With the Press Fit Adapter.



VCH-1/8"
VCH-1/16"

ESD Safe Coiled Vacuum Hose. Available 4", 6", 8" Long.



VSH-1/8"
VSH-1/16"

ESD Safe Straight Vacuum Hose. Available 4", 6", 8" Long.



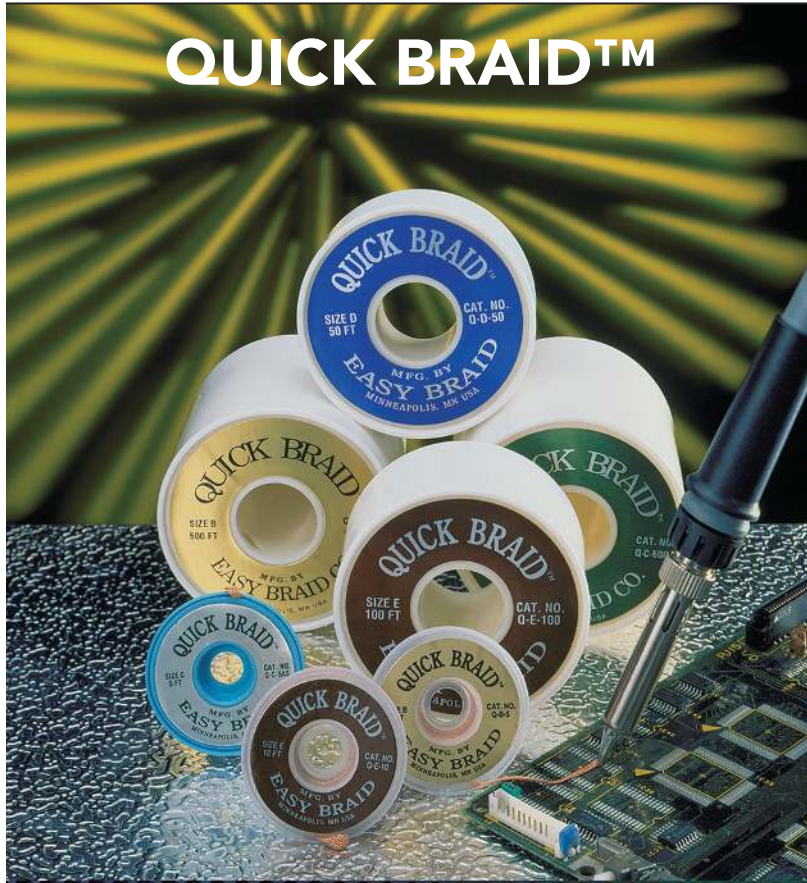
DESOLDERING BRAIDS

Four Answers to your Desoldering Problems

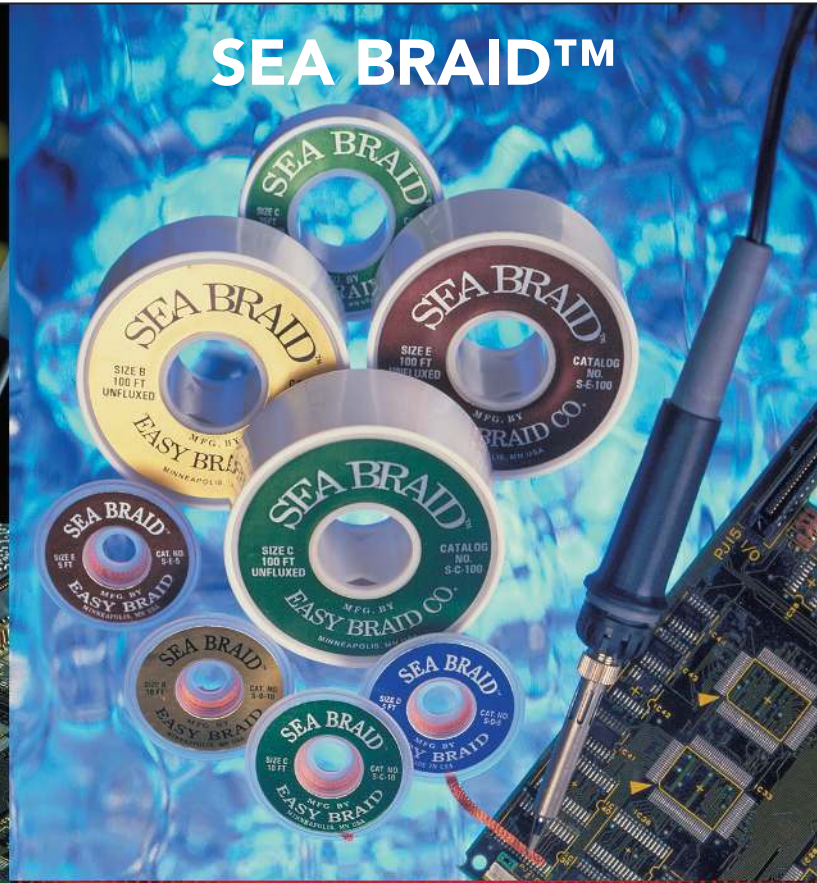


Switzerland

QUICK BRAID™



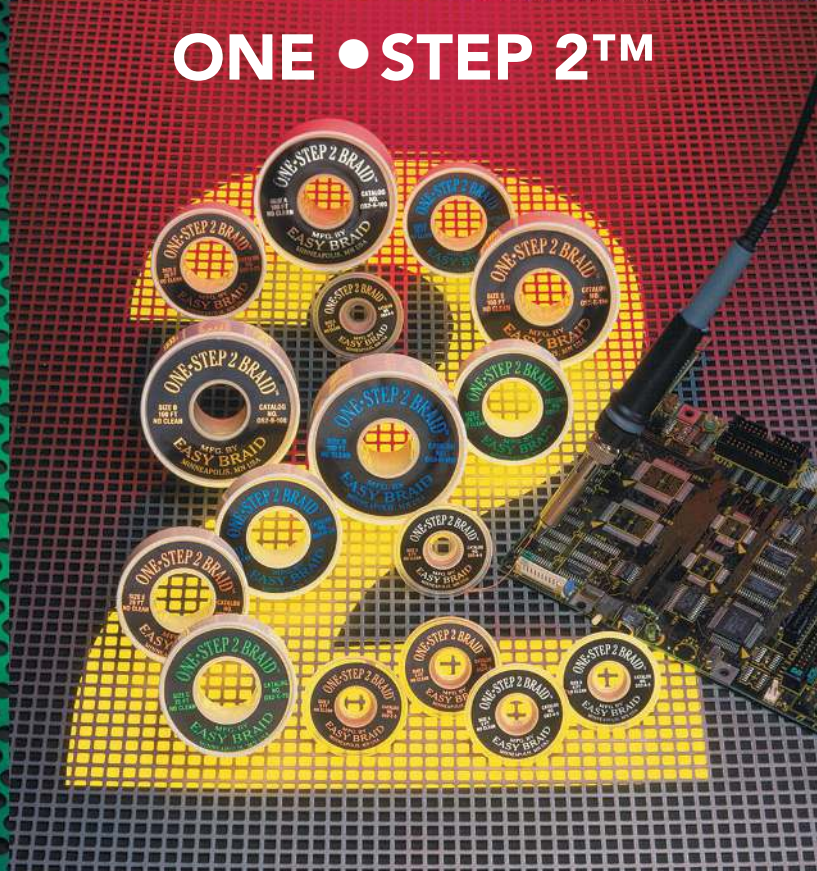
SEA BRAID™



ONE • STEP™



ONE • STEP 2™



R & R LOTION AND CONTAINERS

Static Dissipative Bottles and Containers
 Static Dissipative Lotions and Cleaners



- 1 - FD-1-ESD
- 2 - FD-2-ESD
- 3 - FD-3-ESD
- 4 - ICL-16-ESD
- 5 - ICSC-16-ESD
- 6 - WB-8-ESD
- 7 - SB-32-ESD
- 8 - SD-6-ESD
- 9 - SD-6-ESD-PP
- 10 - IC-SC-32-ESD
- 11 - CTAL-ESD
- 12 - FD-PEN-ESD



- 1 - ICSC-16-ESD
- 2 - ICSC-2
- 3 - ICSC-GAL
- 4 - ICSC-32-ESD
- 5 - ICC-2
- 6 - ICC-32
- 7 - ICC-GAL



- 1 - ICL-32-CR IN A WALL-BR-32
- 2 - ICL-8-CR
- 3 - ICL-32-CR
- 4 - ICL-CR-GAL
- 5 - ICL-1-CR-TUBE
- 6 - ICL8-CR-ESD
- 7 - ICL-16-CR-ESD



Part #	Page #	Part #	Page #	Part #	Page #	Part #	Page #
AA-BR	24	HV-075-ESD	65	P2A-DEL	41	SMD50-SA	30
AA-NI	12	HV-4-B	65	P2A-ESD	41	SMD60-SA	30
AA-SA	12	HV-4-ESD	65	P2A-STD	41	SMD70-SA	30
AA-SA-EX/P	09	HV-6-B	65	P2A-STD/G	41	SMD80-SA	31
AC-SA	12	HV-6-ESD	65	P35A-DEL	42	SMD90-SA	31
AM-BR	24	HV-HB-ESD	65	P35A-ESD	42	SMDR10A-SA	32
A-SA	12	HV-HS-ESD	65	P35A-STD	42	SMDR10-SA	32
BLADE 6	51	HV-JB-ESD	65	P35A-STD/G	42	SMDR250-SA	33
BLADE 9	51	HV-JS-ESD	65	P35-DEL	42	SMDR251-SA	33
BLADE 10	51	HV-KB-ESD	65	P35-ESD	42	SMDR252-SA	33
BLADE 10A	51	HV-KS-ESD	65	P35-STD	42	SMDR253-SA	33
BLADE 11	51	HV-LB-ESD	65	P35-STD/G	42	SMDR254-SA	33
BLADE 12	51	HV-LS-ESD	65	P3C-DEL	41	SMDR255-SA	33
BLADE 12D	51	HV-MB-ESD	65	P3C-ESD	41	SMDR256-SA	33
BLADE 13	51	HV-MS-ESD	65	P3C-STD	41	SMDR30-SA	32
BLADE 14	51	HV-SB-ESD	65	P3C-STD/G	41	SS-BR	24
BLADE 15	51	HV-SS-ESD	65	P6A-DEL	42	SSL-SA	14
BLADE 16	51	HV-X-ESD	65	P6A-ESD	42	SS-SA	14
BLADE 19	51	LOTIONS AND CONTAINERS	80	P6A-STD	42	SSXL-SA	14
BLADE 20	51	M10	52	P6A-STD/G	42	S3950-B-ESD	70
BLADE 21	51	M15	52	P7-DEL	42	S3950-B-STD	70
BLADE 22	51	M18	52	P7-ESD	42	S3950-B-W	70
BLADE 23	51	M2A-SA	11	P7-STD	42	S3950-S-ESD	70
BLADE 24	51	M2-SA	11	P7-STD/G	42	S3950-S-STD	70
BLADE 25	51	M30	52	P-BR	24	S3950-S-W	70
BLADE 36	51	M3C-SA	11	PSF-SA	13	S3951-B-ESD	70
B1	53	M4A-SA	11	PV4000A-MW4	73	S3951-B-STD	70
B2	53	M4-SA	11	PV4000A-MW6	73	S3951-B-W	70
B5	53	M5-SA	11	PV4000A-MW8	73	S3951-S-ESD	70
B6	53	M7-SA	11	PV4000A-X	73	S3951-S-STD	70
BVJ-025-ESD	65	MAC-SA	10	PV4300-MW4	73	S3951-S-W	70
BVJ-038-ESD	65	MC16-SA	36	PV4300-MW6	73	S3955-B-ESD	70
BVJ-050-ESD	65	MC17-SA	36	PV4300-MW8	73	S3955-B-STD	70
BVJ-062-ESD	65	MC18-SA	36	PV4300-VWT5R	73	S3955-B-W	70
BVJ-075-ESD	65	MC19-SA	36	PV4300-X	73	S3955-S-ESD	70
BVJ-X-ESD	65	MC20-SA	36	PV-RESISTOR	78	S3955-S-STD	70
CERAMIC QUICK CH. TWEEZ.	43	MC21-SA	36	QUICK CHANGE TWEEZERS	43	S3955-S-W	70
D	37	MC22-SA	36	R1-SA	21	S3956-B-ESD	70
DESOLDERING BRAIDS	79	MC23-SA	36	R218B-SA	22	S3956-B-STD	70
ERGO-2A-SA	08	MC24-SA	36	R218-SA	22	S3956-B-W	70
ERGO-375-SA-1	08	MC25-SA	36	R28F-SA	22	S3956-S-ESD	70
ERGO-395-SA-3	08	MHD-SA	10	R28-SA	22	S3956-S-STD	70
ERGO-3C-SA	08	MH-SA	10	R29D-SA/14-16	22	S3956-S-W	70
ERGO-400W-SA	08	MM-NI	12	R29D-SA/22	22	VC-1-B	64
ERGO-500W-SA	08	MM-SA	12	R29D-SA/28	22	VC-1-ESD	64
ERGO-600W-SA	08	MOC-SA	10	R29D-SA/40	22	VC-1-X	64
ERGO-7-SA	08	MOOD-SA	10	R29-SA	22	VC-2-B	64
EZ-1-ESD	03	MS025	44	R2A-SA	21	VC-2-ESD	64
EZ-2-ESD	03	MS025-ESD	44	R2A-SA-AP	21	VC-2-X	64
EZ-3-ESD	03	MS038	44	R30D-SA/14-16	22	VCH-1/16	78
EZ-5-ESD	03	MS038-ESD	44	R30D-SA/22	22	VCH-1/8	78
F181	48	MS050	44	R30D-SA/28	22	V-DUALCUP-2-L-B-00	70
F181-P	48	MS050-ESD	44	R30D-SA/40	22	V-DUALCUP-4-J-B	70
F182	48	MS063	44	R30-SA	22	VFS-1	72
F182-P	48	MS063-ESD	44	R3-SA	21	VMWT-A	77
F183	49	MS5	44	R5A-SA	21	VMWT-B	77
F183-P	49	MS5-ESD	44	R5-SA	21	VMWT-C	77
F185	49	MSS-SA	11	R7-SA	21	VMWT-D	77
F185-P	49	MULTI 34-SA	51	RR-SA	14	VPV-6-B	64
F186	50	NN-NI	12	SMD100-SA	31	VPV-6-X	64
F186-P	50	OC10-SA	13	SMD10A-SA	30	VPV-6-ESD	64
F187	50	OC11-SA	13	SMD10-SA	30	VPW6000B-MW4/110V	74
F187-P	50	OC-SA	13	SMD110-SA	31	VPW6000B-MW4/220V	74
GG-SA	12	OOB-SA	13	SMD120-SA	31	VPW6000B-MW6/110V	74
GUARD LOCK 34	51	OOD-SA	13	SMD130-SA	31	VPW6000B-MW6/220V	74
HANDLE No 3	51	OO-NI	13	SMD200-SA	31	VPW6000B-MW8/110V	74
HANDLE No 4	51	OOO-SA	13	SMD201-SA	31	VPW6000B-MW8/220V	74
HH-NI	12	OO-SA	13	SMD202-SA	32	VPW6000B-X	74
HP-300-ESD	64	O-SA	13	SMD203-SA	32	VPW6000-CHRG/110V	74
HV-013-ESD	65	PLIERS CUTTERS	43	SMD204-SA	32	VPW6000-CHRG/220V	74
HV-025-ESD	65	P2AB-DEL	41	SMD205-SA	32	VPW6000-CHRG-XT	74
HV-038-ESD	65	P2AB-ESD	41	SMD20-SA	30	VPW6300B-MW4/110V	74
HV-050-ESD	65	P2AB-STD	41	SMD30-SA	30	VPW6300B-MW4/220V	74
HV-062-ESD	65	P2AB-STD/G	41	SMD40-SA	30	VPW6300B-MW6/110V	74

Part #	Page #	Part #	Page #	Part #	Page #	Part #	Page #
VPW6300B-MW6/220V	74	VTC9025	66	V8903-LS	67	V8910-9GR-ESD	63
VPW6300B-MW8/110V	74	VTC9038	66	V8903-MB	67	V8910-BK-X	63
VPW6300B-MW8/220V	74	VTC9050	66	V8903-MS	67	V8910-GR-X	63
VPW6300B-VWT5R/110V	74	VTC9062	66	V8903-PB	67	V8912-DB	68
VPW6300B-VWT5R/220V	74	VTC9075	66	V8903-PS	67	V8912-DS	68
VPW6300B-X	74	VVSV-X	73	V8903-SB	67	V8912-HB	68
VPWE7000-MW4/110V	75	VVSW-X	73	V8903-SS	67	V8912-HS	68
VPWE7000-MW4/220V	75	VWT-5R	77	V8904-DB	67	V8912-JB	68
VPWE7000-MW6/110V	75	VWW-2-SD-1/16	76	V8904-DS	67	V8912-JS	68
VPWE7000-MW6/220V	75	VWW-2-SD-1/8	76	V8904-HB	67	V8912-KB	68
VPWE7000-MW8/110V	75	VWWB-2-SD-1/16	76	V8904-HS	67	V8912-KS	68
VPWE7000-MW8/220V	75	VWWB-2-SD-1/8	76	V8904-JB	67	V8912-LB	68
VPWE7000-X	75	V2404	78	V8904-JS	67	V8912-LS	68
VPWE7300-MW4/110V	75	V2405 (Discontinued)		V8904-KB	67	V8912-MB	68
VPWE7300-MW4/220V	75	V2407	78	V8904-KS	67	V8912-MS	68
VPWE7300-MW6/110V	75	V2408	78	V8904-LB	67	V8912-PB	68
VPWE7300-MW6/220V	75	V2409	78	V8904-LS	67	V8912-PS	68
VPWE7300-MW8/110V	75	V3020-RF-1/16	76	V8904-MB	67	V8912-SB	68
VPWE7300-MW8/220V	75	V3020-RF-1/8	76	V8904-MS	67	V8912-SS	68
VPWE7300-X	75	V3021-1/16	76	V8904-PB	67	V8913-DB	68
VSH-1/16	78	V3021-1/8	76	V8904-PS	67	V8913-DS	68
VSH-1/8	78	V3025	76	V8904-SB	67	V8913-HB	68
VSPT1005-BB	71	V3120	76	V8904-SS	67	V8913-HS	68
VSPT1005-BT	71	V3121	76	V8905-DB	67	V8913-JB	68
VSPT1005-SB	71	V3200	72	V8905-DS	67	V8913-JS	68
VSPT1005-ST	71	V8000/110V	72	V8905-HB	67	V8913-KB	68
VSPT2005-BD	71	V8000/110V-HLD	72	V8905-HS	67	V8913-KS	68
VSPT2005-SD	71	V8000/220V	72	V8905-JB	67	V8913-LB	68
VSPT2010-BB	71	V8000/220V-HLD	72	V8905-JS	67	V8913-LS	68
VSPT2010-BD	71	V8100A-110V	72	V8905-KB	67	V8913-MB	68
VSPT2010-BT	71	V8100A-220V	72	V8905-KS	67	V8913-MS	68
VSPT2010-SB	71	V8400/110V	72	V8905-LB	67	V8913-PB	68
VSPT2010-SD	71	V8400/110V-HLD	72	V8905-LS	67	V8913-PS	68
VSPT2010-ST	71	V8400/220V	72	V8905-MB	67	V8913-SB	68
VSPT3020-BB	71	V8400/220V-HLD	72	V8905-MS	67	V8913-SS	68
VSPT3020-BD	71	V8901	56	V8905-PB	67	V8914-DB	68
VSPT3020-BT	71	V8901-A	56	V8905-PS	67	V8914-DS	68
VSPT3020-SB	71	V8901-A-ESD	57	V8905-SB	67	V8914-HB	68
VSPT3020-SD	71	V8901-ESD	57	V8905-SS	67	V8914-HS	68
VSPT3020-ST	71	V8901-L	56	V8906-DB	67	V8914-JB	68
VSPT4030-BB	71	V8901-L-ESD	57	V8906-DS	67	V8914-JS	68
VSPT4030-BD	71	V8901-LMS	56	V8906-HB	67	V8914-KB	68
VSPT4030-BT	71	V8901-LMS-D	62	V8906-HS	67	V8914-KS	68
VSPT4030-SB	71	V8901-LMS-D-ESD	62	V8906-JB	67	V8914-LB	68
VSPT4030-SD	71	V8901-LMS-ESD	57	V8906-JS	67	V8914-LS	68
VSPT4030-ST	71	V8901-M	56	V8906-KB	67	V8914-MB	68
VSPT6040-BB	71	V8901-M-ESD	57	V8906-KS	67	V8914-MS	68
VSPT6040-BD	71	V8901-S	56	V8906-LB	67	V8914-PB	68
VSPT6040-BT	71	V8901-S-ESD	57	V8906-LS	67	V8914-PS	68
VSPT6040-SB	71	V8902-DB	67	V8906-MB	67	V8914-SB	68
VSPT6040-SD	71	V8902-DS	67	V8906-MS	67	V8914-SS	68
VSPT6040-ST	71	V8902-HB	67	V8906-MS	67	V8914-SS	68
VSPT8060-BB	71	V8902-HS	67	V8906-PB	67	V8915-DB	68
VSPT8060-BD	71	V8902-JB	67	V8906-PS	67	V8915-DS	68
VSPT8060-BT	71	V8902-JS	67	V8906-SB	67	V8915-HB	68
VSPT8060-SB	71	V8902-KB	67	V8906-SS	67	V8915-HS	68
VSPT8060-SD	71	V8902-KS	67	V8907-DB	67	V8915-JB	68
VSPT8060-ST	71	V8902-LB	67	V8907-DS	67	V8915-JS	68
VTC8908-BH	69	V8902-LS	67	V8907-HB	67	V8915-KB	68
VTC8908-BJ	69	V8902-MB	67	V8907-HS	67	V8915-KS	68
VTC8908-BK	69	V8902-MS	67	V8907-JB	67	V8915-LB	68
VTC8908-BL	69	V8902-PB	67	V8907-JS	67	V8915-LS	68
VTC8908-BM	69	V8902-PS	67	V8907-KB	67	V8915-MB	68
VTC8908-BP	69	V8902-SB	67	V8907-KS	67	V8915-MS	68
VTC8908-BS	69	V8902-SS	67	V8907-LB	67	V8915-PB	68
VTC8908-SH	69	V8903-DB	67	V8907-LS	67	V8915-PS	68
VTC8908-SJ	69	V8903-DS	67	V8907-MB	67	V8915-SS	68
VTC8908-SK	69	V8903-HB	67	V8907-MS	67	V8915-SS	68
VTC8908-SL	69	V8903-HS	67	V8907-PB	67	V8916-DB	68
VTC8908-SM	69	V8903-JB	67	V8907-PS	67	V8916-DS	68
VTC8908-SP	69	V8903-JS	67	V8907-SB	67	V8916-HB	68
VTC8908-SS	69	V8903-KB	67	V8907-SS	67	V8916-HS	68
VTC9013	66	V8903-KS	67	V8910-9BK-B	63	V8916-JB	68
VTC9018	66	V8903-LB	67	V8910-9BK-ESD	63	V8916-JS	68
				V8910-9GR-B	63	V8916-KB	68

Part #	Page #	Part #	Page #	Part #	Page #	Part #	Page #
V8916-KS	68	V9025-W	66	15A-GW-EZ	38	218-SA	20
V8916-LB	68	V9038-B	66	15A-GW-SA	37	219-SA	20
V8916-LS	68	V9038-C	66	15A-NW	37	220C-SA	20
V8916-MB	68	V9038-ESD	66	15AP	37	220-SA	20
V8916-MS	68	V9038-R	66	15AP-EX	38	227-SA	20
V8916-PB	68	V9038-U	66	15AP-EZ	38	231A-SA	20
V8916-PS	68	V9038-W	66	15AP-SA	37	231-SA	20
V8916-SB	68	V9050-B	66	15AP-SW	37	245-SA	20
V8916-SS	68	V9050-C	66	15AP-T	37	251A-SA	20
V8917-DB	68	V9050-ESD	66	15A-SW	37	300A-SA	26
V8917-DS	68	V9050-R	66	15A-SW-EZ	39	300E-SA	26
V8917-HB	68	V9050-U	66	15A-SW-SA	37	300J-SA	26
V8917-HS	68	V9050-W	66	20A-SA	17	300-SA	26
V8917-JB	68	V9062-B	66	21-SA/150	17	300W-SA	26
V8917-JS	68	V9062-C	66	21-SA/200	17	300W-SA-TE	06
V8917-KB	68	V9062-ESD	66	21-SA/250	17	315AB-EZ	40
V8917-KS	68	V9062-R	66	21-SA/300	17	315AC-EZ	40
V8917-LB	68	V9062-U	66	23-SA	17	315AE-EZ	40
V8917-LS	68	V9062-W	66	24-SA	17	315A-GW-EZ	40
V8917-MB	68	V9075-B	66	25-SA	17	315AM-EZ	40
V8917-MS	68	V9075-C	66	26-SA	17	315A-NW-EZ	40
V8917-PB	68	V9075-ESD	66	34A-SA	18	315ASM-EZ	40
V8917-PS	68	V9075-R	66	34B-SA	18	315A-SW-EZ	40
V8917-SB	68	V9075-U	66	34B-SA-M	18	342-S	52
V8917-SS	68	V9075-W	66	34-SA	18	345-S	52
V8920	58	V9501-B	63	35AD-SA	18	346-S	52
V8920-A	58	V9501-ESD	63	35A-SA	18	347-S	52
V8920-A-ESD	59	V9501-X	63	35B-SA	18	350L-S	52
V8920E	60	ZA	14	36A-SA	18	350-S	52
V8920E-A	60	1-BR	24	36A-SA-R	19	400A-SA	27
V8920E-A-ESD	61	1B-SA	14	37S-SA-1	25	400E-SA	27
V8920E-ESD	61	1-SA	14	37S-SA-1-HTC	07	400J-SA	27
V8920E-L	60	2AB-N	15	37S-SA-1-TE	06	400-SA	27
V8920E-L-ESD	61	2A-BR	24	37S-SA-L	25	400WG-SA	27
V8920E-LMS	60	2AB-SA	15	38-SA	19	400W-SA	27
V8920E-LMS-D	62	2AB-SA-EX/P	09	39-SA	19	400W-SA-HTC	07
V8920E-LMS-D-ESD	62	2AN	15	39S-SA-3	25	400W-SA-TE	06
V8920E-LMS-ESD	61	2A-SA	14	39S-SA-3-HTC	07	500A-SA	27
V8920E-M	60	2A-SA-EX/P	09	40-SA	19	500E-SA	28
V8920E-M-ESD	61	2A-SA-HTC	07	47-SA	19	500J-SA	28
V8920E-S	60	2A-SA-TE	06	51-SA	19	500-SA	27
V8920-ESD	59	2-SA	14	52A-SA	19	500WG-SA	28
V8920E-S-ESD	61	3-BR	24	62A-SA	25	500W-SA	28
V8920-L	58	3C-BR	24	64-SA	19	500W-SA-HTC	07
V8920-L-ESD	59	3CB-SA	15	65A-SA	19	500W-SA-TE	06
V8920-LMS	58	3C-SA	15	72A-SA	25	532B-SA-2	34
V8920-LMS-D	62	3C-SA-EX/P	09	85A-SA	25	571-SA	34
V8920-LMS-D-ESD	62	3C-SA-HTC	07	85C-SA	25	572-SA	34
V8920-LMS-ESD	59	3C-SA-TE	06	86B-SA	25	573-SA	34
V8920-M	58	3-SA	15	160-S	45	574-SA	34
V8920-M-ESD	59	3-SA-EX/P	09	162-S	45	577A-SA	34
V8920-S	58	4A-SA	15	163-S	45	577-SA	34
V8920-S-ESD	59	4-SA	15	164-S	45	578A-SA	35
V9009-B	66	5A-SA	16	166-S	45	578B-SA	35
V9009-C	66	5A-SA-EX/P	09	170-S	45	578-SA	34
V9009-ESD	66	5-BR	24	171-S	45	579A-SA	35
V9009-R	66	5B-SA	16	172-S	46	579-SA	35
V9009-U	66	5C-SA	16	175-S	46	585-SA	35
V9009-W	66	5-SA	15	177-S	47	600A-SA	28
V9013-B	66	5-SA-EX/P	09	178-S	47	600E-SA	28
V9013-C	66	6-SA	16	179A-S	46	600GB-SA	28
V9013-ESD	66	7A-SA	16	179-S	46	600J-SA	29
V9013-R	66	7-BR	24	200A-SA	26	600-SA	28
V9013-U	66	7B-SA	16	200J-SA	26	600WG-SA	29
V9013-W	66	7C-SA	16	200W-SA	26	600W-SA	29
V9018-B	66	7-SA	16	215A	38	600W-SA-HTC	07
V9018-C	66	7-SA-EX/P	09	215AB-EZ	39	600W-SA-TE	06
V9018-ESD	66	7-SA-HTC	07	215AE-EZ	39	800A-SA	29
V9018-R	66	7-SA-TE	06	215A-EZ	39	800E-SA	29
V9018-U	66	11N	16	215AM-EZ	39	800WG-SA	29
V9018-W	66	12A-SA	17	215AS	38	800W-SA	29
V9025-B	66	12N	17	215AS-EZ	39	81083	23
V9025-C	66	15AC	37	215ASM	38	81084	23
V9025-ESD	66	15AC-EZ	38	215ASM-EZ	39	81085	23
V9025-R	66	15A-FW	37	215B	38	81333	23
V9025-U	66	15A-GW	37	215B-EZ	39		

A large rectangular area with a vertical color gradient from yellow at the top to blue at the bottom. It contains 20 horizontal dotted lines for writing notes.