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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

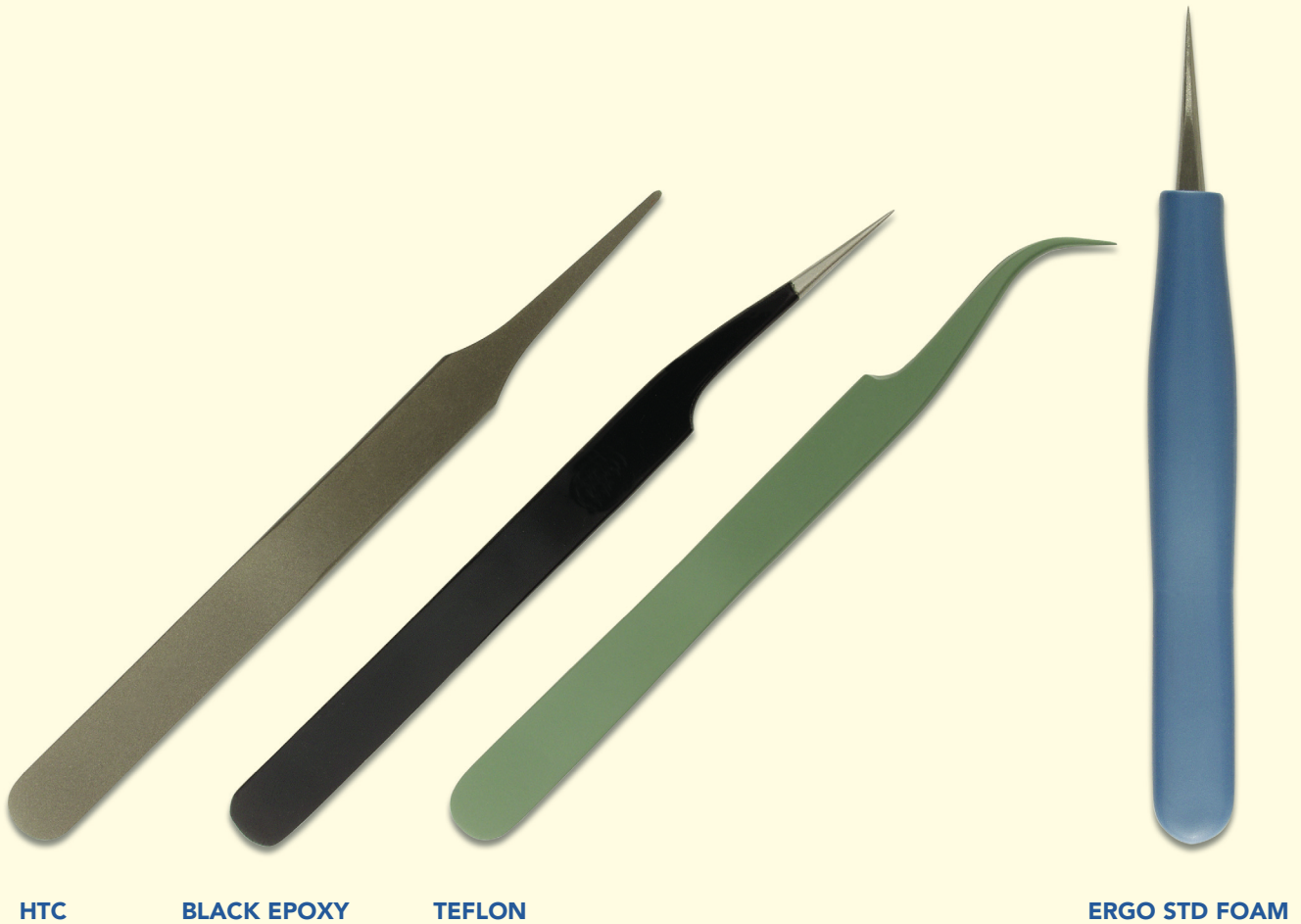
VACUUM PICK-UP TOOLS AND ACCESSORIES (pages 55-78)
Wide range of Self-contained and Continuous Vacuum Tools, with Accessories

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



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

2A-SA-TE 120 mm - 4³/₄"

-Very Popular Flat Tips



* 2.0mm - .078"



3C-SA-TE 110 mm - 4¹/₄"

-Narrow Fine Tips



* 0.25mm - .0098"

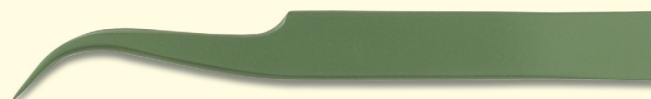


7-SA-TE 120 mm - 4³/₄"

-Curved Very Fine Tips



* 0.4mm - .0157"



37S-SA-1-TE 125 mm - 5"

-For Wafers and Round Part
-2 Prongs



* 7.0mm - .275"



300W-SA-TE 125 mm - 5"

-For 3" Wafers and Round Parts
-3 Prongs



* 9.0mm - .355"



400W-SA-TE 125 mm - 5"

-For 4" Wafers and CD
-4 Prongs



* 12.5mm - .492"



500W-SA-TE 125 mm - 5"

-For 5" Wafers and CD
-5 Prongs



* 16.0mm - .629"



600W-SA-TE 125 mm - 5"

-For 6" Wafers and CD
-6 Prongs



* 19.50mm - .767"



HTC COATING

Available on All Steel Tweezers

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

Suf: -HTC



Switzerland

2A-SA-HTC

120 mm - 4³/₄"

-Very Popular Flat Tips



* 2.0mm - .078"



3C-SA-HTC

110 mm - 4¹/₄"

-Narrow Fine Tips



* 0.25mm - .0098"



7-SA-HTC

120 mm - 4³/₄"

-Curved Very Fine Tips



* 0.4mm - .0157"



37S-SA-1-HTC

125 mm - 5"

-For Wafers and Round Parts
-2 Prongs



* 7.0mm - .275"



39S-SA-3-HTC

125 mm - 5"

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



* 9.0mm - .355"



400W-SA-HTC

125 mm - 5"

-For 4" Wafers and CD
-4 Prongs



* 12.5mm - .492"



500W-SA-HTC

125 mm - 5"

-For 5" Wafers and CD
-5 Prongs



* 16.0mm - .629"



600W-SA-HTC

125 mm - 5"

-For 6" Wafers and CD
-6 Prongs



* 19.50mm - .767"



ERGO STD FOAM COATING

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



ERGO-2A-SA 120 mm - 4³/₄"

-Very Popular Flat Tips

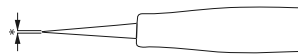


* 2.0mm - .078"

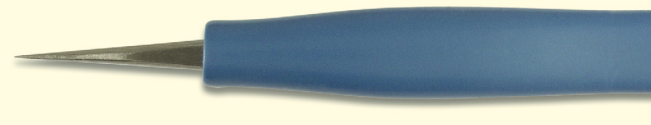


ERGO-3C-SA 110 mm - 4¹/₄"

-Narrow Fine Tips



* 0.25mm - .0098"



ERGO-7-SA 120 mm - 4³/₄"

-Curved Very Fine Tips

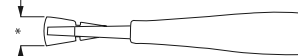


* 0.20mm - .0078"



ERGO-37S-SA-1 125 mm - 5"

-For Wafers and Round Parts
-2 Prongs

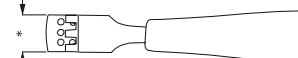


* 7.0mm - .275"



ERGO-39S-SA-3 125 mm - 5"

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



* 9.0mm - .355"



ERGO-400W-SA 125 mm - 5"

-For 4" Wafers and CD
-4 Prongs



* 12.5mm - .492"



ERGO-500W-SA 125 mm - 5"

-For 5" Wafers and CD
-5 Prongs



* 16.0mm - .629"



ERGO-600W-SA 125 mm - 5"

-For 6" Wafer and CD
-6 Prongs



* 19.50mm - .767"



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



2A-SA-EX/P 120 mm - 4 ³ / ₄ " -Very Popular Flat Tips	 * 2.0mm - .078"	
2AB-SA-EX/P 120 mm - 4 ³ / ₄ " -Curved Flat Tips	 * 2.0mm - .078"	
3-SA-EX/P 120 mm - 4 ³ / ₄ " -Fine Tips	 * 0.25mm - .0098"	
3C-SA-EX/P 110 mm - 4 ¹ / ₄ " -Narrow Fine Tips	 * 0.25mm - .0098"	
5-SA-EX/P 110 mm - 4 ¹ / ₄ " -Extra Fine, Very Sharp Tips	 * 0.20mm - .0078"	
5A-SA-EX/P 120 mm - 4 ³ / ₄ " - Extra Fine, Very Sharp Tips	 * 0.35mm - .014"	
7-SA-EX/P 115 mm - 4 ¹ / ₂ " -Curved Very Fine Tips	 * 0.20mm - .0078"	
AA-SA-EX/P 125 mm - 5" -Fine Strong Tips	 * 0.50mm - .020"	

MINI TWEEZERS

Stainless Antiacid Antimagnetic Steel



Switzerland

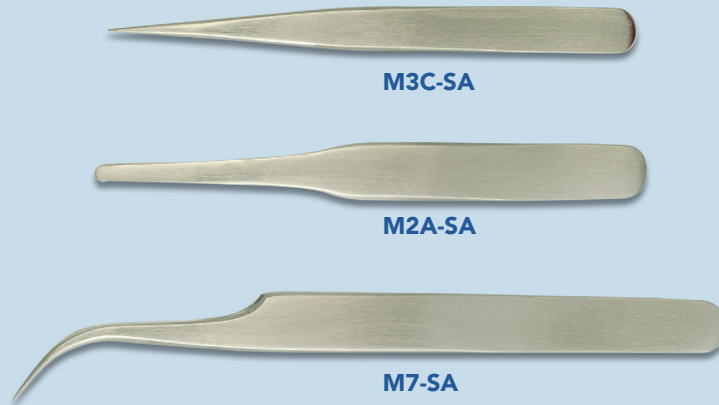
Very Light Ergonomic Micro Tweezers

Two Grades Available:

ZENITH, Suffix /S

PRIME-X, Suffix /P

Example: MAC-SA/P



MAC-SA

80 mm – 3²/₁₆"

-Thick Short Tips



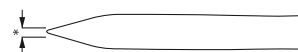
* 0.30mm - .012"



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

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



MSS-SA 90 mm – 3⁹/₁₆"

-Very Fine Long Tips



* 0.35mm - .014"



M2-SA 85 mm – 3⁵/₁₆"

-Medium Flat Tips



* 0.50mm - .020"



M2A-SA 70 mm – 2³/₄"

-Very Popular Flat Tips



* 2.0mm - .078"



M3C-SA 70 mm – 2³/₄"

-Narrow Fine Tips



* 0.25mm - .0098"



M4-SA 70 mm – 2³/₄"

-Very Fine Tips



* 0.30mm - .0127"

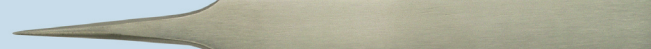


M4A-SA 85 mm – 3⁵/₁₆"

-Fine Tips



* 0.40mm - .0157"



M5-SA 80 mm – 3²/₁₆"

-Extra Fine Tips



* 0.20mm - .0078"



M7-SA 95 mm – 3³/₄"

-Curved Very Fine Tips



* 0.20mm - .0078"



Other Models Available Upon Request

STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel

Six Grades Available

BIO-MED, Suffix /BM

BIO-TECH, Suffix /T

ZENITH, Suffix /S

Example: AA-SA/T

PREMIUM, Suffix /E

PRIME-X, Suffix /P

SL PRIME-X, Prefix SL...



Switzerland

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

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

O-SA

120 mm – 4³/₄"

-Fine Straight Strong Tips



* 0.40mm - .0157"



OC-SA

90 mm – 3⁹/₁₆"

-Strong Short Tips



* 0.40mm - .0157"



OC10-SA

100 mm – 4"

OC11-SA

110 mm – 4¹/₄"

OO-SA

120 mm – 4³/₄"

-Strong Thick Tips



* 0.40mm - .0157"



OO-NI

115 mm – 4¹/₂"

-Fine Tips

-Nickel Plated



* 0.30mm - .012"



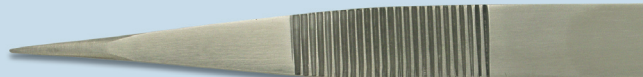
OOB-SA

120 mm – 4³/₄"

- Fine Straight Strong Tips



* 0.40mm - .0157"



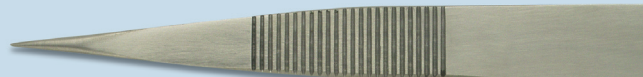
OOD-SA

120 mm – 4³/₄"

-Strong Thick Serrated Tips



* 0.40mm - .0157"



OOO-SA

120 mm – 4³/₄"

-Strong Thick Rounded Tips



* 0.30mm - .012"



PSF-SA

130 mm – 5¹/₈"

-Flat Square Tips



* 2.30mm - .090"



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...

RR-SA

145 mm – 5³/₄"

-Heavy Straight Tips



* 0.50mm - .020"



SS-SA

140 mm – 5¹/₂"

-Long Tweezers
-Very Fine Tips



* 0.30mm - .012"



SSL-SA

150 mm - 6"

-Very Long Tweezers
-Very Fine Tips



* 0.40mm - .015"



SSXL-SA

205 mm - 8"

-Extra Long Tweezers
-Fine Tips



* 0.50mm - .020"



ZA

120 mm – 4³/₄"

-Carbon Hardened
Strong Fine Tips



* 0.35mm - .014"



1-SA

115 mm – 4¹/₂"

-Multipurpose Fine Tips



* 0.30mm - .012"



1B-SA

115 mm – 4¹/₂"

-Serrated Tips



* 0.30mm - .012"



2-SA

115 mm – 4¹/₂"

-Medium Flat Tips



* 0.50mm - .020"



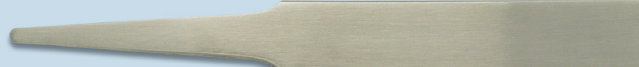
2A-SA

120 mm – 4³/₄"

-Very Popular Flat Tips



* 2.00mm - .078"



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



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

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: SL7-SA



5A-SA -Extra Fine, Very Sharp Tips	120 mm – 4 ³ / ₄ "	 * 0.35mm - .014"	
5B-SA -Bent Tips	110 mm – 4 ¹ / ₄ "	 * 0.40mm - .0157"	
5C-SA -Double Bent -Circumvented Tips	115 mm – 4 ¹ / ₂ "	 * 0.20mm - .0078"	
6-SA -Fine Angled Tips	110 mm – 4 ¹ / ₄ "	 * 0.40mm - .0157"	
7-SA -Curved Very Fine Tips	115 mm – 4 ¹ / ₂ "	 * 0.20mm - .0078"	
7A-SA -Curved Fine Tips	120 mm – 4 ³ / ₄ "	 * 0.30mm - .012"	
7B-SA -Serrated Curved Fine Tips	120 mm – 4 ³ / ₄ "	 * 0.40mm - .0157"	
7C-SA -Curved Very Fine Tips	95 mm – 3 ³ / ₄ "	 * 0.20mm - .0078"	
11-N -Strong Fine Tips -Nickel Alloy	120 mm – 4 ³ / ₄ "	 * 0.40mm - .0157"	

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: 24-SA/P



12-N -Fine Tips -Nickel Alloy	120 mm – 4 ³ / ₄ "	 * 0.30mm - .012"	
12A-SA -Flat Bowed Tips	115 mm – 4 ¹ / ₂ "	 * 2.00mm - .078"	
20A-SA -With Alignment Pin -Strong Fine Serrated Tips	115 mm – 4 ¹ / ₂ "	 * 1.00mm - .0394"	
21-SA /150 mm – 6" 21-SA/200 mm – 8" 21-SA/250 mm – 10" 21-SA/300 mm – 12" -Strong Rounded Tips		 * 2.00mm - .078"	
23-SA -With Alignment Pin -Curved Tips	160 mm – 6 ¹ / ₄ "	 * 1.20mm - .047"	
24-SA -With Alignment Pin -Fine Bent Tips	155 mm – 6 ² / ₁₆ "	 * 0.80mm - .032"	
25-SA -Thin Tips	120 mm – 4 ³ / ₄ "	 * 4.00mm - .157"	
26-SA -Round Tips	115 mm – 4 ¹ / ₂ "	 * 6.00mm - .235"	

STEEL TWEEZERS

Six Grades Available

BIO-MED, Suffix /BM
BIO-TECH, Suffix /T
ZENITH, Suffix /S
Example: 35A-SA/S

Stainless Antiacid Antimagnetic Steel

PREMIUM, Suffix /E
PRIME-X, Suffix /P
SL PRIME-X, Prefix SL...



Switzerland

34-SA

120 mm – 4³/₄"

-Flat Straight Tips



* 3.00mm - .118"



34A-SA

120 mm – 4³/₄"

-Flat Straight Tips



* 6.50mm - .256"



34B-SA

120 mm – 4³/₄"

-Flat Angled Tips



* 2.50mm - .098"



34B-SA-M

120 mm – 4³/₄"

-Flat Angled Tips



* 3.50mm - .14"



35A-SA

120 mm – 4³/₄"

-For Handling Delicate Electronics Parts



* 6.00mm - .235"



35B-SA

120 mm – 4³/₄"

-Small Curved Tips



* 1.40mm - .055"



35AD-SA

120 mm – 4³/₄"

-Fine Straight Serrated Tips



* 6.00mm - .235"



36A-SA

120 mm – 4³/₄"

-Flat Angled Tips



* 6.00mm - .235"



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

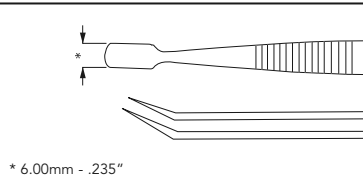
PRIME-X, Suffix /P

SL PRIME-X, Prefix SL...

36A-SA-R

120 mm – 4³/₄"

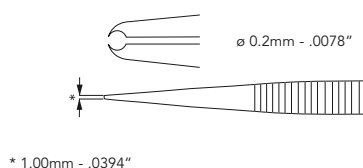
-Flat Angled Round End Tips



38-SA

110 mm – 4¹/₄"

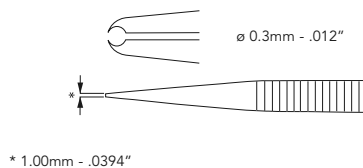
-Excellent For Pick Up Miniature Round Wire



39-SA

110 mm – 4¹/₄"

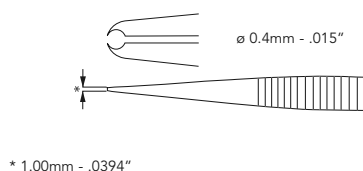
-Excellent For Pick Up Miniature Round Wire



40-SA

110 mm – 4¹/₄"

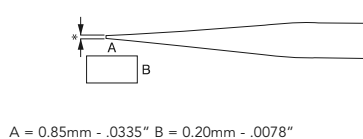
-Excellent For Pick Up Miniature Round Wire



47-SA

135 mm – 5¹/₄"

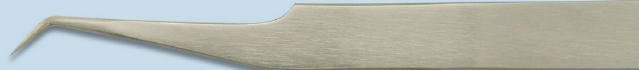
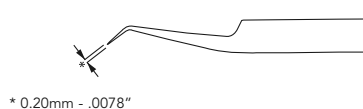
-Strong Flat Square Tips, Very Popular



51-SA

115 mm – 4¹/₂"

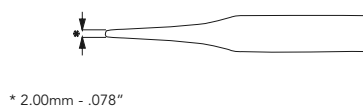
-Superfine Bent Tips



52A-SA

120 mm – 4³/₄"

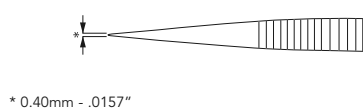
-Flat Tips
-Smooth Action



64-SA

115 mm – 4¹/₂"

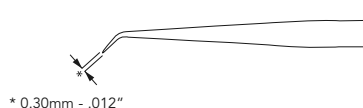
-Very Fine Tweezer



65A-SA

140 mm – 5¹/₂"

-Very Fine Bent Tips



STEEL TWEEZERS

Stainless Antiacid Antimagnetic Steel

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



Switzerland

218-SA 160 mm – 6 1/4"

-With Alignment Pin
-Diamond Style, Fine Tips



* 0.60mm - .0235"



219-SA 160 mm – 6 1/4"

-With Alignment Pin
-Diamond Style, Medium Tips



* 0.80mm - .032"



220-SA 140 mm – 5 1/2"

-With Alignment Pin
-Diamond Style, Medium Tips



* 0.90mm - .035"



220C-SA 140 mm – 5 1/2"

-With Alignment Pin
-Diamond Style, Medium Bent Tips



* 0.90mm - .035"



227-SA 140 mm – 5 1/2"

-Diamond Style, Medium Tips
-Slide Lock



* 1.00mm - .0394"



231-SA 120 mm – 4 3/4"

-Fine Straight Tips



* 0.60mm - .0235"



231A-SA 120 mm – 4 3/4"

-Fine Straight Serrated Tips



* 0.60mm - .0235"



245-SA 145 mm – 5 3/4"

-Strong Serrated Tips

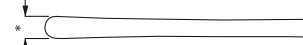


* 3.50mm - .137"



251A-SA 165 mm – 6 1/2"

-Long Flat Rounded End Tips



* 6.00mm - .235"



Other Models Available Upon Request

REVERSE ACTION TWEEZERS

Stainless Antiacid Antimagnetic Steel

Two Grades Available: ZENITH, Suffix /S

PRIME-X, Suffix /P

Example: R3-SA/S



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

REVERSE ACTION TWEEZERS

Stainless Antiacid Antimagnetic Steel

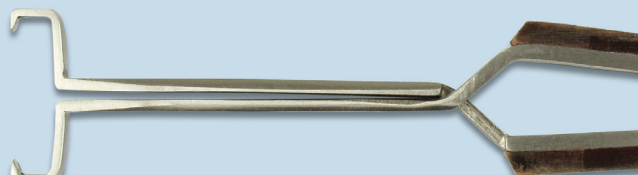
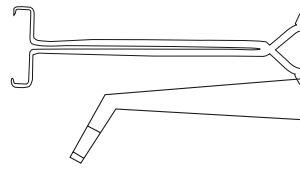
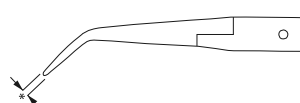
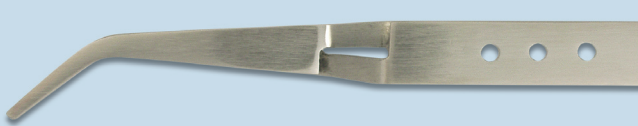
Two Grades Available: ZENITH, Suffix /S

PRIME-X, Suffix /P

Example: R218-SA/P



Switzerland

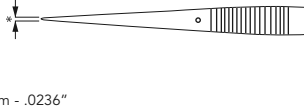
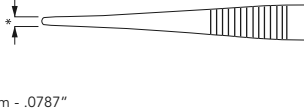
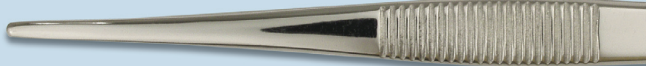
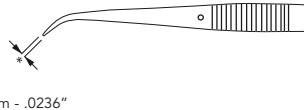
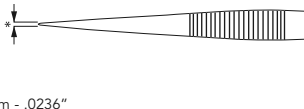
R28-SA -Strong Tips	160 mm – 6 ¹ / ₄ "	 * 3.00mm - .120"	
R28F-SA -Flat Strong Tips	160 mm – 6 ¹ / ₄ "	 * 4.50mm - .177"	
R29-SA -Straight Tips	160 mm – 6 ¹ / ₄ "	 * 2.50mm - .098"	
R29D-SA/14-16 R29D-SA/22 R29D-SA/28 R29D-SA/40 -For Handling DIP -Other Sizes Available	145 mm – 5 ³ / ₄ "	 * 2.00mm - .078"	
R30-SA -Bent Tips	160 mm – 6 ¹ / ₄ "	 * 2.50mm - .098"	
R30D-SA/14-16 R30D-SA/22 R30D-SA/28 R30D-SA/40 -Bent Tips, For Handling DIP -Other Sizes Available	150 mm – 6"	 * 2.00mm - .078"	
R218-SA -Medium Tips	160 mm – 6 ¹ / ₄ "	 * 1.20mm - .0472"	
R218B-SA -Medium Curved Tips	155 mm – 6 ² / ₁₀ "	 * 1.20mm - .0472"	

Other Models Available Upon Request

NICKEL PLATED SERRATED TIPS TWEEZERS



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

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

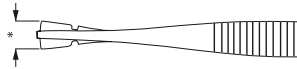


* 7.50mm - .295"



37S-SA-L 120 mm – 4³/₄"

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

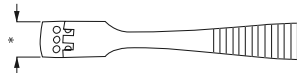


* 7.50mm - .295"



39S-SA-3 120 mm – 4³/₄"

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

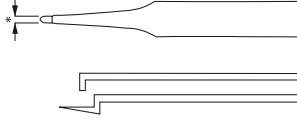


* 9.00mm - .354"



62A-SA 115 mm – 4¹/₂"

- For Wafers and Round Parts
- Straight

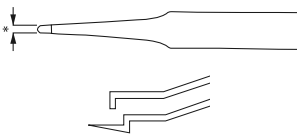


* 2.00mm - .078"



72A-SA 115 mm – 4¹/₂"

- For Wafers and Round Parts
- Angulated

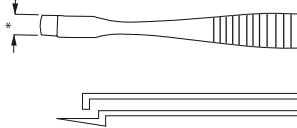


* 2.00mm - .078"



85A-SA 120 mm – 4³/₄"

- For Wafers and Round Parts
- Straight

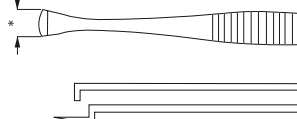


* 6.50mm - .256"



85C-SA 120 mm – 4³/₄"

- For Wafers and Round Parts
- Straight

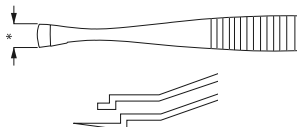


* 6.00mm - .235"



86B-SA 120 mm – 4³/₄"

- For Wafers and Round Parts
- Angulated



* 6.00mm - .235"



WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel

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

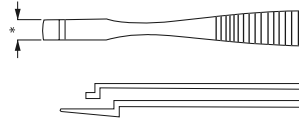


Switzerland

200A-SA

120 mm – 4³/₄"

-For 2" Wafers and Round Parts



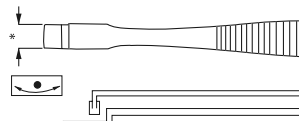
* 5.50mm - .216"



200J-SA

120 mm – 4³/₄"

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



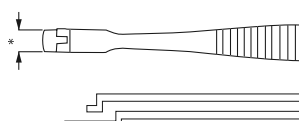
* 6.50mm - .256"



200W-SA

120 mm – 4³/₄"

-For 2" Wafers and Round Parts
-2 Prongs



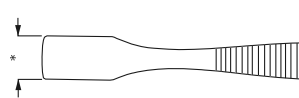
* 6.50mm - .256"



300-SA

125 mm – 5"

-For 3" Wafers and Round Parts



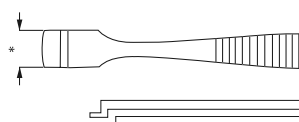
* 11.00mm - .433"



300A-SA

125 mm – 5"

-For 3" Wafers and Round Parts



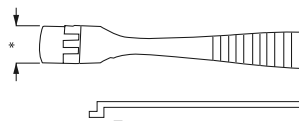
* 9.50mm - .374"



300E-SA

125 mm – 5"

-For 3" Wafers and Round Parts
-3 Prongs



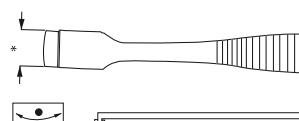
* 9.50mm - .374"



300J-SA

125 mm – 5"

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



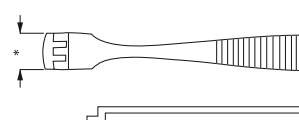
* 9.50mm - .374"



300W-SA

125 mm – 5"

-For 3" Wafers and Round Parts
-3 Prongs



* 9.50mm - .374"



WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel

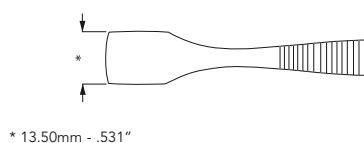
Large Range of Tweezers for Handling CDs and Wafers of all Sizes



400-SA

125 mm – 5"

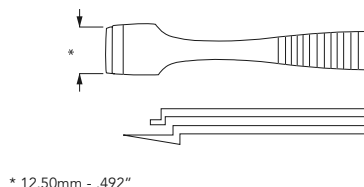
-For 4" Wafers and CD



400A-SA

125 mm – 5"

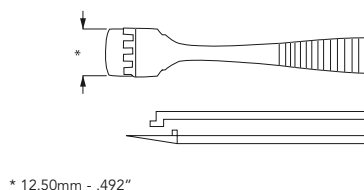
-For 4" Wafers and CD



400E-SA

125 mm – 5"

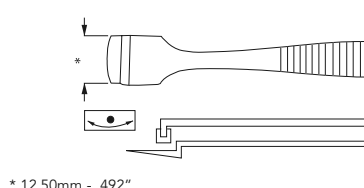
-For 4" Wafers and CD
-4 Prongs



400J-SA

125 mm – 5"

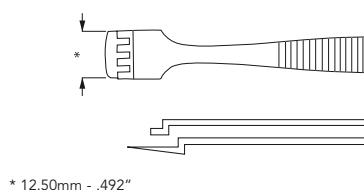
-For 4" Wafers and CD
-Free Floating Teflon Paddle



400W-SA

125 mm – 5"

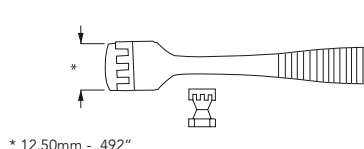
-For 4" Wafers and CD
-4 Prongs



400WG-SA

125 mm – 5"

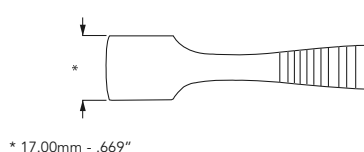
-For 4" Wafers and CD
-4 Prongs
-With a Gap 6 mm - .235"



500-SA

130 mm – 5 1/8"

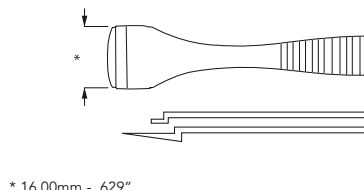
-For 5" Wafers and CD



500A-SA

125 mm – 5"

-For 5" Wafers and CD



WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel

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

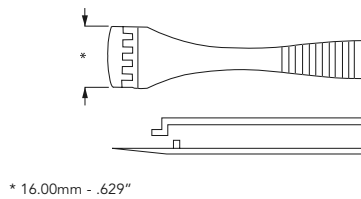


Switzerland

500E-SA

125 mm – 5"

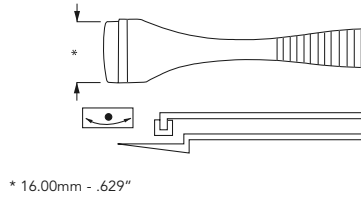
- For 5" Wafers and CD
- 5 Prongs



500J-SA

125 mm – 5"

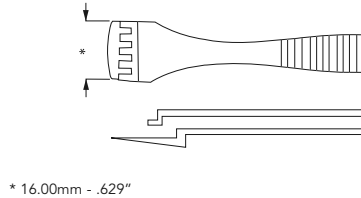
- For 5" Wafers and CD
- Free Floating Teflon Paddle



500W-SA

125 mm – 5"

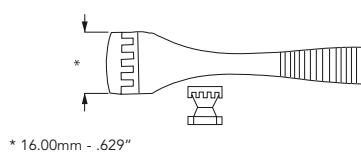
- For 5" Wafers and CD
- 5 Prongs



500WG-SA

125 mm – 5"

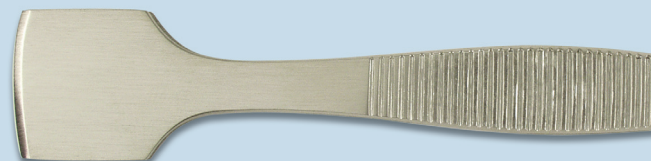
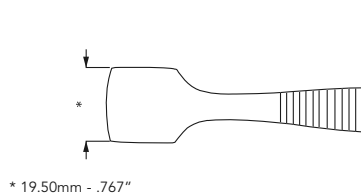
- For 5" Wafers and CD
- 5 Prongs
- With a Gap 9 mm - .354"



600-SA

130 mm – 5 1/8"

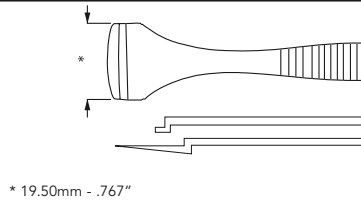
- For 6" Wafers and CD



600A-SA

125 mm – 5"

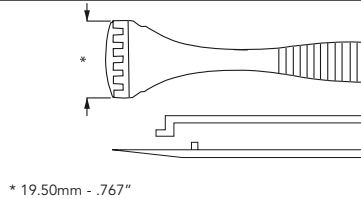
- For 6" Wafers and CD



600E-SA

125 mm – 5"

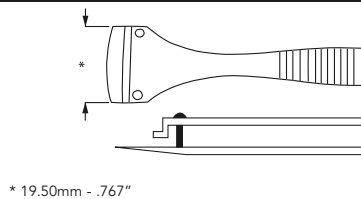
- For 6" Wafers and CD
- 6 Prongs



600GB-SA

125 mm – 5"

- For 6" Wafers and CD
- Stop Opening



WAFER TWEEZERS

Stainless Antiacid Antimagnetic Steel



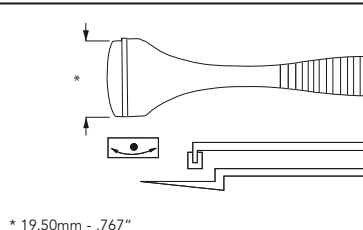
Switzerland

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



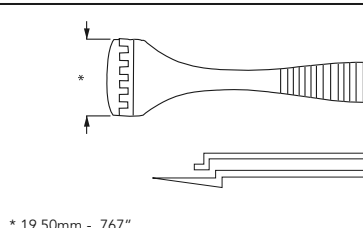
* 19.50mm - .767"



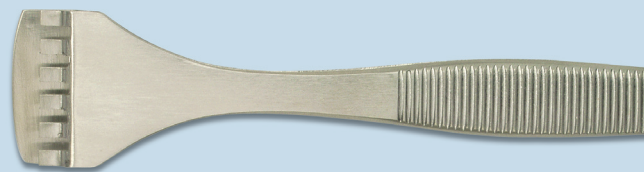
600W-SA

125 mm – 5"

- For 6" Wafers and CD
- 6 Prongs



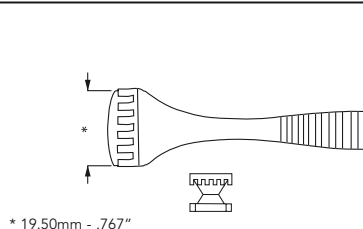
* 19.50mm - .767"



600WG-SA

125 mm – 5"

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



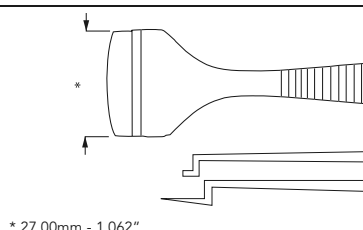
* 19.50mm - .767"



800A-SA

150 mm – 6"

- For 8" Wafers and CD



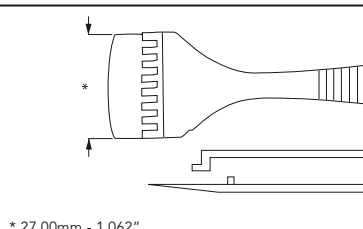
* 27.00mm - 1.062"



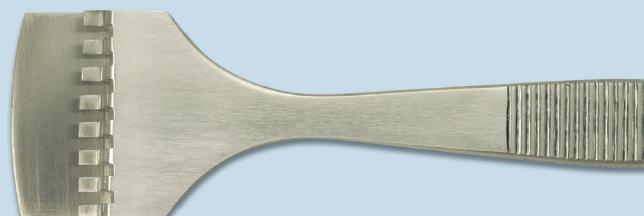
800E-SA

150 mm – 6"

- For 8" Wafers and CD
- 8 Prongs



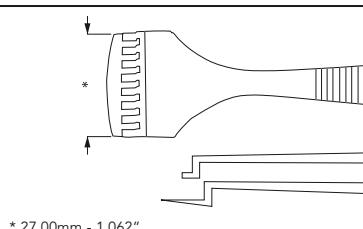
* 27.00mm - 1.062"



800W-SA

150 mm – 6"

- For 8" Wafers and CD
- 8 Prongs



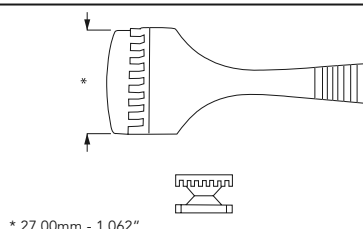
* 27.00mm - 1.062"



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



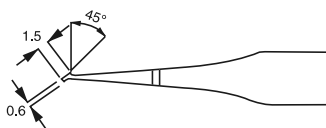
Switzerland

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

SMD10-SA

120 mm – 4³/₄"

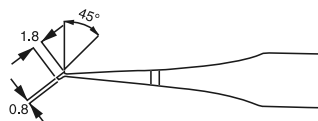
-45° Angle



SMD10A-SA

120 mm – 4³/₄"

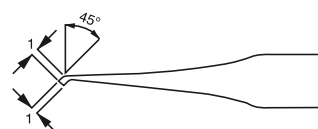
-45° Angle



SMD20-SA

120 mm – 4³/₄"

-45° Angle



SMD30-SA

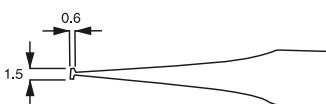
120 mm – 4³/₄"

-15° Angle



SMD40-SA

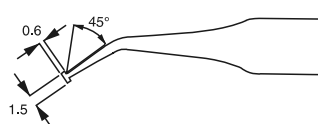
120 mm – 4³/₄"



SMD50-SA

120 mm – 4³/₄"

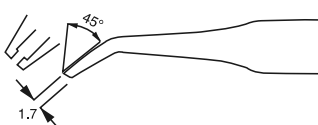
-45° Angle



SMD60-SA

120 mm – 4³/₄"

-45° Angle



SMD70-SA

120 mm – 4³/₄"

-45° Angle



SMD TWEEZERS

Stainless Antiacid Antimagnetic Steel

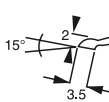
Especially designed for Surface Mounted Devices
Teflon coating available, add "TE"



SMD80-SA

120 mm – 4³/₄"

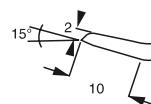
-15° Angle



SMD90-SA

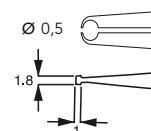
120 mm – 4³/₄"

-15° Angle



SMD100-SA

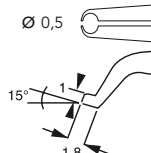
120 mm – 4³/₄"



SMD110-SA

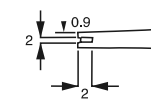
120 mm – 4³/₄"

-15° Angle



SMD120-SA

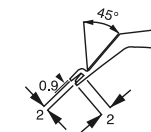
120 mm – 4³/₄"



SMD130-SA

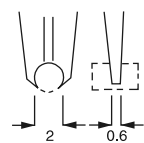
120 mm – 4³/₄"

-45° Angle



SMD200-SA

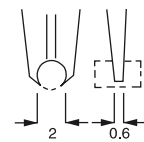
120 mm – 4³/₄"



SMD201-SA

120 mm – 4³/₄"

-45° Angle

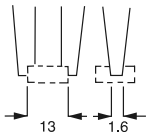
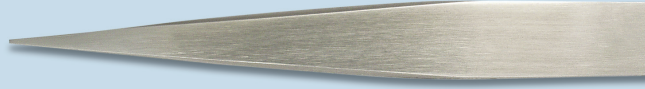
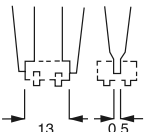
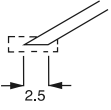
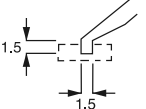


SMD TWEEZERS

Stainless Antiacid Antimagnetic Steel

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

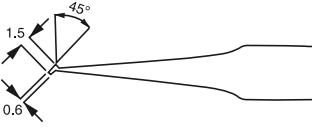
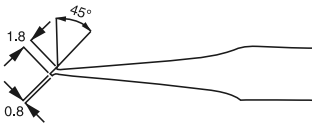


SMD202-SA	120 mm – 4 ³ / ₄ "		
SMD203-SA	120 mm – 4 ³ / ₄ "		
SMD204-SA -45° Angle	120 mm – 4 ³ / ₄ "		
SMD205-SA -45° Angle	120 mm – 4 ³ / ₄ "		

REVERSE ACTION SMD TWEEZERS

Stainless Antiacid Antimagnetic Steel

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

SMDR10-SA -45° Angle -Reverse Action	120 mm – 4 ³ / ₄ "		
SMDR10A-SA -45° Angle -Reverse Action	120 mm – 4 ³ / ₄ "		
SMDR30-SA -15° Angle -Reverse Action	120 mm – 4 ³ / ₄ "		

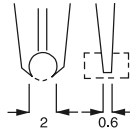
REVERSE ACTION SMD TWEEZERS

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



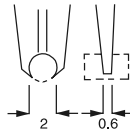
SMDR250-SA 115 mm – 4 1/2"

-Reverse Action



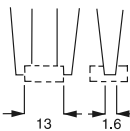
SMDR251-SA 115 mm – 4 1/2"

-45° Angle
-Reverse Action



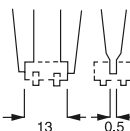
SMDR252-SA 115 mm – 4 1/2"

-Reverse Action



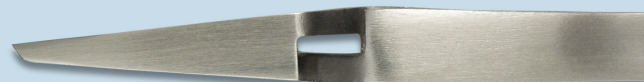
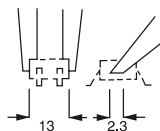
SMDR253-SA 115 mm – 4 1/2"

-Reverse Action



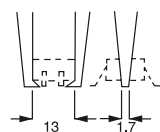
SMDR254-SA 115 mm – 4 1/2"

-45° Angle
-Reverse Action



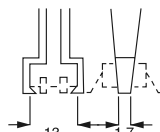
SMDR255-SA 115 mm – 4 1/2"

-Reverse Action



SMDR256-SA 115 mm – 4 1/2"

-Reverse Action



COMPONENTS HANDLING TWEEZERS

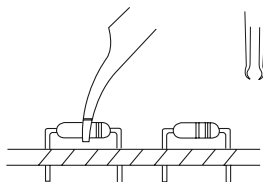
Stainless Antiacid Antimagnetic Steel
Insertion Extraction Tweezers



532B-SA-2

115 mm – 4 1/2"
* 2.00 mm – .078"

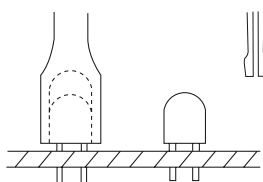
-For Components Ø 2mm – .078"



571-SA

120 mm – 4 3/4"
* 4.00 mm – .157"

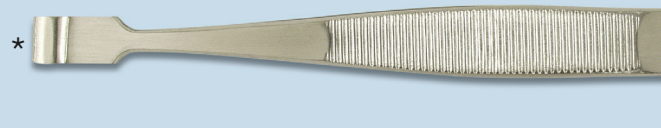
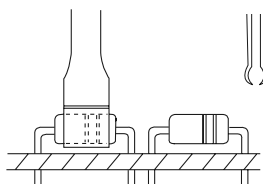
-For Components Ø 2.5mm – .1"
to 5 mm – .2"



572-SA

120 mm – 4 3/4"
* 6.40 mm – .251"

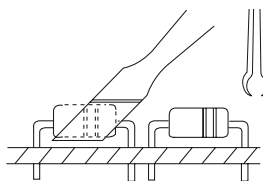
-For Components Ø 2.5mm – .1"
to 5 mm – .2"



573-SA

120 mm – 4 3/4"
* 6.40 mm – .251"

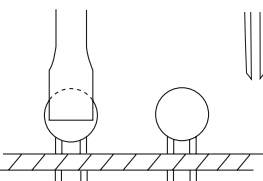
-For Components Ø 2.5mm – .1"
to 6 mm – .24"
-45° Angle



574-SA

120 mm – 4 3/4"
* 6.40 mm – .251"

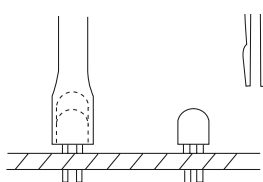
-Flat Tips



577-SA

120 mm – 4 3/4"
* 2.70 mm – .106"

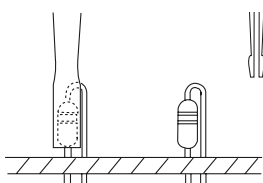
-For Components Ø 3 mm – .12"



577A-SA

120 mm – 4 3/4"
* 2.00 mm – .078"

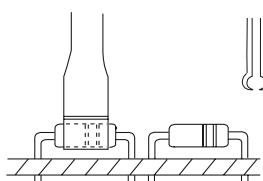
-For Components Ø 1.0 mm – .04"
to 1.5 mm – .06"



578-SA

120 mm – 4 3/4"
* 6.40 mm – .251"

-For Components Ø 2.5 mm – .1"



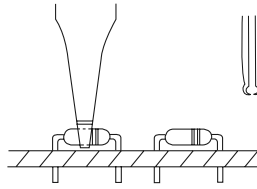
COMPONENTS HANDLING TWEEZERS

Stainless Antiacid Antimagnetic Steel
Insertion Extraction Tweezers



578A-SA 110 mm – 4 1/4"
* 2.30 mm – .090"

-For Components Ø 1mm – .04"
to 1.5 mm – .06"

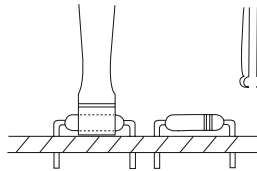


*



578B-SA 120 mm – 4 3/4"
* 6.40 mm – .251"

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

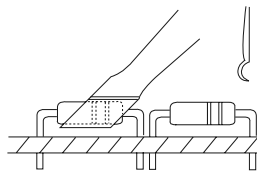


*



579-SA 120 mm – 4 3/4"
* 6.40 mm – .251"

-For Components Ø 2.5mm – .1"
-45° Angle

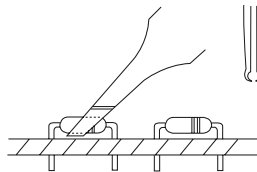


*



579A-SA 115 mm – 4 1/2"
* 2.30 mm – .090"

-For Components Ø 1.0mm – .04"
to 1.5 mm – .06"
-45° Angle

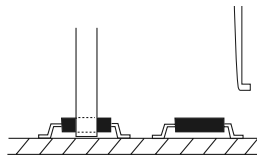


*



585-SA 145 mm – 5 3/4"
* 4.00 mm – .157"

-For Extraction



*



MICRO CUTTING TWEEZERS

MC Series, for Micro Wires
Stainless Antiacid Antimagnetic Steel



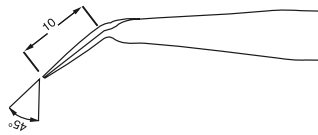
MC16-SA 120 mm – 4³/₄"

-For Micro Soft Wire



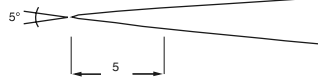
MC17-SA 120 mm – 4³/₄"

-For Micro Soft Wire



MC18-SA 120 mm – 4³/₄"

-For Micro Soft Wire



MC19-SA 115 mm – 4¹/₂"

-For Micro Soft Wire



MC20-SA 110 mm – 4¹/₄"

-For Micro Soft Wire



MC21-SA 110 mm – 4¹/₄"

-For Micro Soft Wire



MC22-SA 110 mm – 4¹/₄"

-For Micro Soft Wire



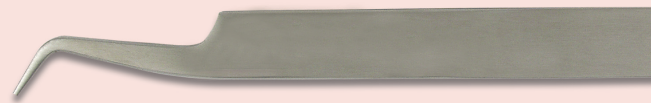
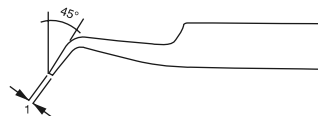
MC23-SA 110 mm – 4¹/₄"

-For Micro Soft Wire



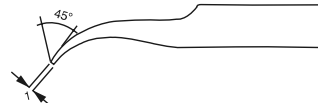
MC24-SA 110 mm – 4¹/₄"

-For Micro Soft Wire



MC25-SA 110 mm – 4¹/₄"

-For Micro Soft Wire



FLUSH CUTTING TWEEZERS

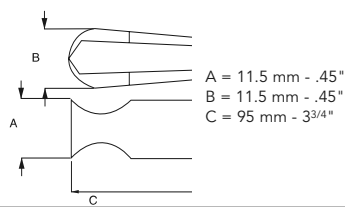
15A Series

Hardened Polished Carbon Steel



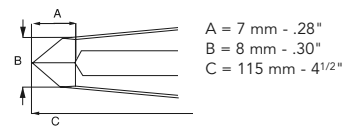
D

- Transverse End Cutting
- Nickel Plated Carbon Steel



15AC

- Flat Head
- Tip Cutting

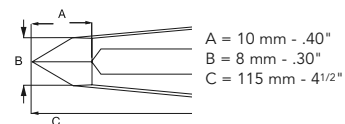


15AP

- Flat Head
- Parallel Cutting

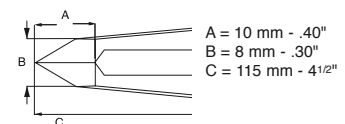
15AP-SA

- same as above
- Stainless Antiacid Antimagnetic Steel



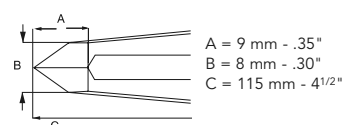
15AP-T

- Flat Head
- Parallel Cutting
- CARBIDE BLADES



15A-FW

- Flat Head
- Tip Cutting

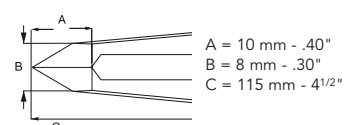


15A-GW

- Flat Head
- Tip Cutting

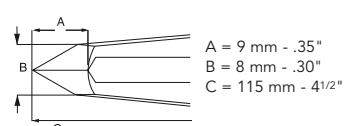
15A-GW-SA

- same as above
- Stainless Antiacid Antimagnetic Steel



15A-NW

- Rounded Head
- Tip Cutting



15A-SW

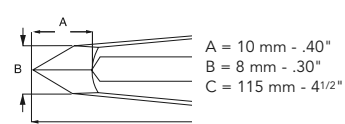
- Rounded Head
- Tip Cutting

15A-SW-SA

- Stainless Antiacid Antimagnetic Steel

15AP-SW

- Rounded Head
- Parallel Cutting



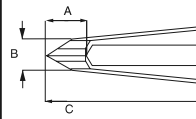
FLUSH CUTTING TWEEZERS

Miniature 215A Series
Hardened Polished Carbon Steel



215A

-Flat Head
-Micro Cut

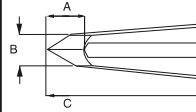


A = 5.5 mm - .22"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



215AS

-Rounded Head
-Micro Cut

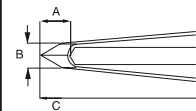


A = 5.5 mm - .22"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



215ASM

-Rounded Head
-Micro Cut

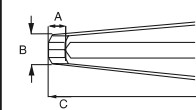


A = 3.5 mm - .10"
B = 6.5 mm - .25"
C = 115 mm - 4 1/2"



215B

-Flat Head
-Micro Cut



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

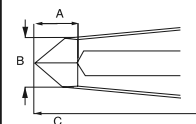


FLUSH CUTTING TWEEZERS

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

15AC-EZ

-Flat Head
-Tip Cutting
-Black Epoxy Coated

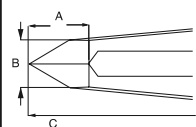


A = 7 mm - .28"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



15A-GW-EZ

-Flat Head
-Tip Cutting
-Black Epoxy Coated

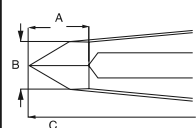


A = 10 mm - .40"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



15AP-EX

-Flat Head
-Parallel Cutting
-Black Epoxy Coated

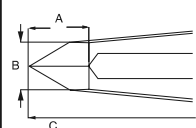


A = 10 mm - .40"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



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

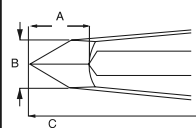
15A and Miniature 215A Series

Black Epoxy Coated With Patented EZ Lever



15A-SW-EZ

- Rounded Head
- Tip Cutting
- Black Epoxy Coated

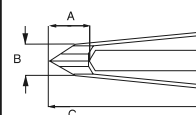


A = 10 mm - .40"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



215A-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated

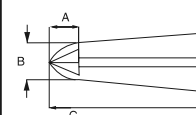


A = 5.5 mm - .22"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



215AB-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated

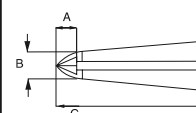


A = 4 mm - .16"
B = 4.5 mm - .18"
C = 115 mm - 4 1/2"



215AE-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated

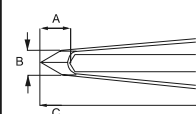


A = 2.5 mm - .10"
B = 3.5 mm - .18"
C = 115 mm - 4 1/2"



215ASM-EZ

- Rounded Head
- Micro Cut
- Black Epoxy Coated

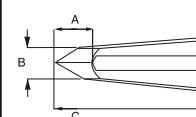


A = 3.5 mm - .14"
B = 6.5 mm - .25"
C = 115 mm - 4 1/2"



215AS-EZ

- Rounded Head
- Micro Cut
- Black Epoxy Coated

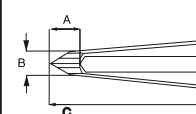


A = 5.5 mm - .22"
B = 8 mm - .30"
C = 115 mm - 4 1/2"



215AM-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated

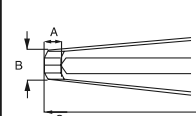


A = 3.5 mm - .14"
B = 6.5 mm - .25"
C = 115 mm - 4 1/2"



215B-EZ

- Flat Head
- Micro Cut
- Black Epoxy Coated



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



FLUSH CUTTING TWEEZERS

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



Switzerland

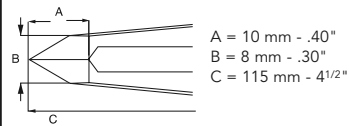
315AB-EZ

- Micro Strong Cut
- Black Epoxy Coated
- Red Dot



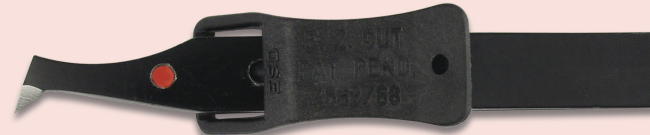
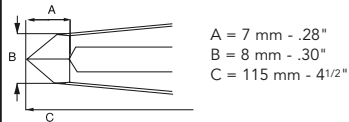
315A-GW-EZ

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



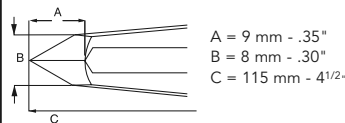
315AC-EZ

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



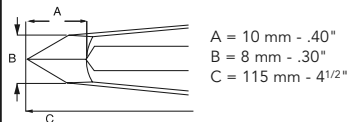
315A-NW-EZ

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



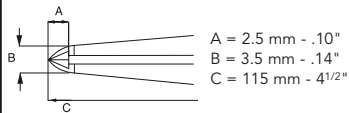
315A-SW-EZ

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



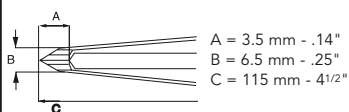
315AE-EZ

- Micro Strong Cut
- Black Epoxy Coated
- Red Dot



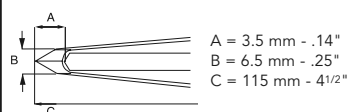
315AM-EZ

- Micro Strong Cut
- Black Epoxy Coated
- Red Dot



315ASM-EZ

- Micro Strong Cut
- Black Epoxy Coated
- Red Dot



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



* 1.80mm - .070"



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



* 2.00mm - .078"



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



* 0.60mm - .0236"



PLASTIC TWEEZERS

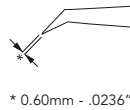
Light Weight - Light Cost

7 Models x 4 Different Materials = 28 Versions

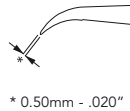


Switzerland

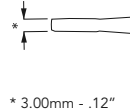
P6A-DEL White Delrin 500 118 mm – 4²/₃"
P6A-STD/G Grey Static Dissipative
P6A-STD Black Static Dissipative
P6A-ESD Black Conductive
 -Very Fine Angulated Tips



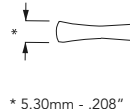
P7-DEL White Delrin 500 118 mm – 4²/₃"
P7-STD/G Grey Static Dissipative
P7-STD Black Static Dissipative
P7-ESD Black Conductive
 -Very Fine Curved Tips



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



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



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

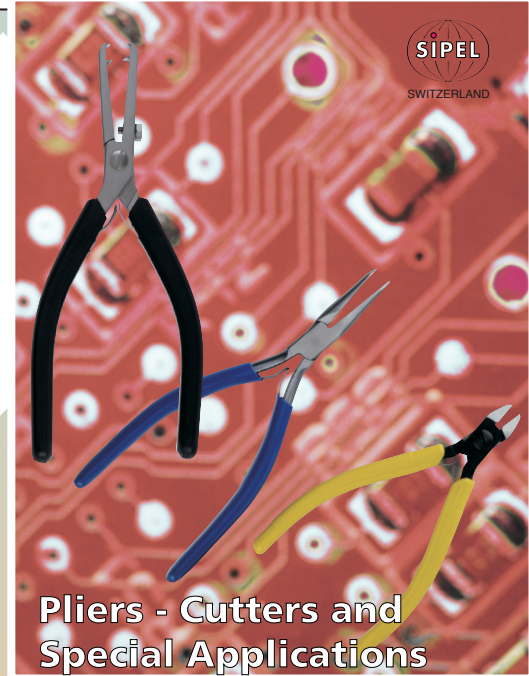
QUICK

CHANGE

NEW

CERAMIC TIPS
Hundreds of Models Available

HIGH TECHNOLOGY



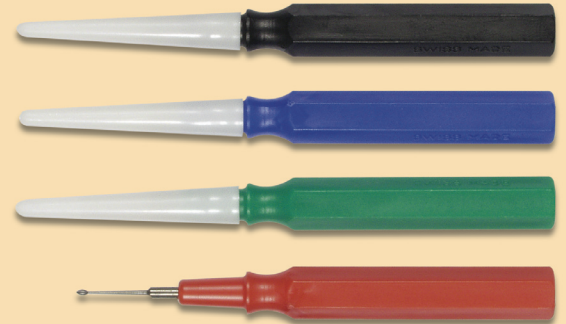
MINI SPATULAS - NEW ESD SAFE



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"



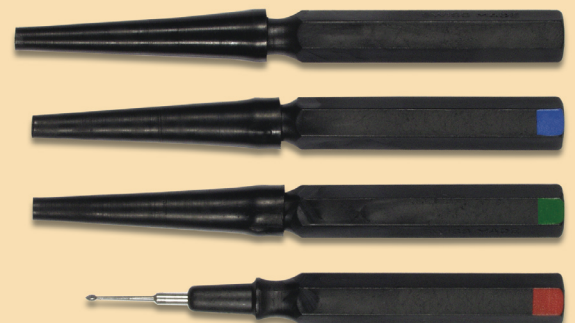
5 Pieces Set - White Cap

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

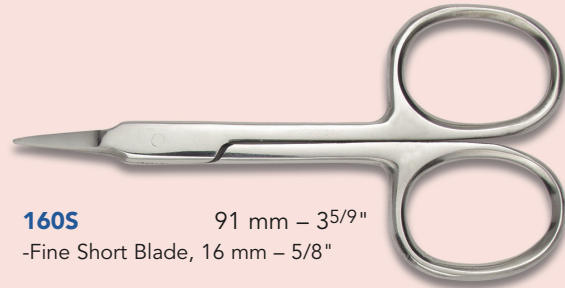
Stainless Steel
Shiny Polished



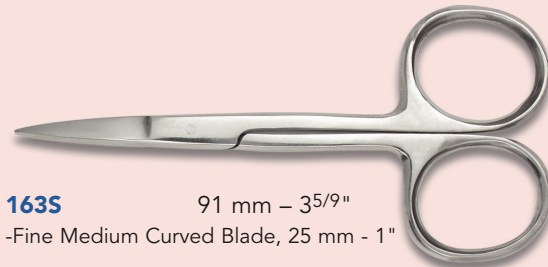
Switzerland



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"



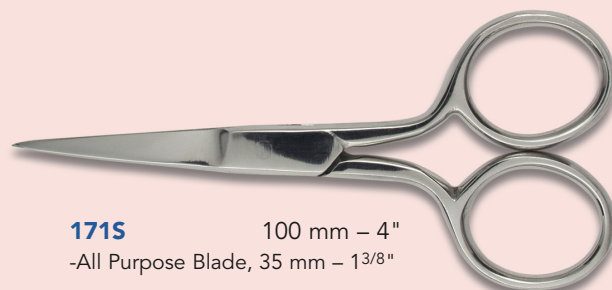
164S 115 mm – 4¹/₂"
-Straight Slim Blade, 30 mm – 1¹/₄"



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



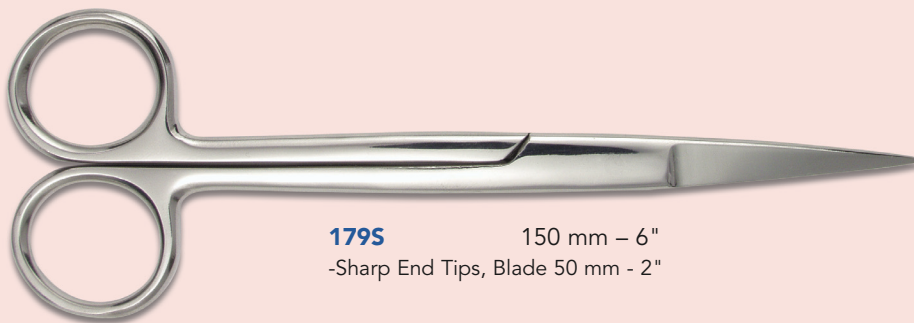
Switzerland



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 – 7 1/2"
-Bent Trimmer Scissors, Blade 73 mm – 2 5/6"



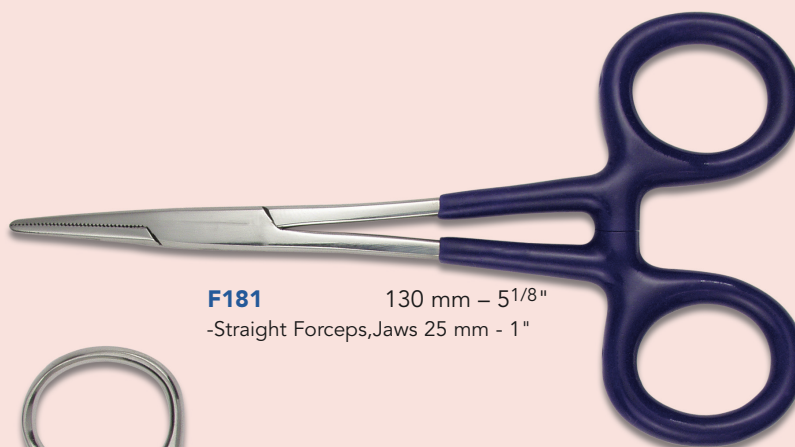
178S 200 mm – 8"
-Bent Trimmer Scissors, Blade 95 mm – 3 3/4"

FORCEPS

Stainless Steel
Shiny Polished
Plastic Coated Handles



Switzerland



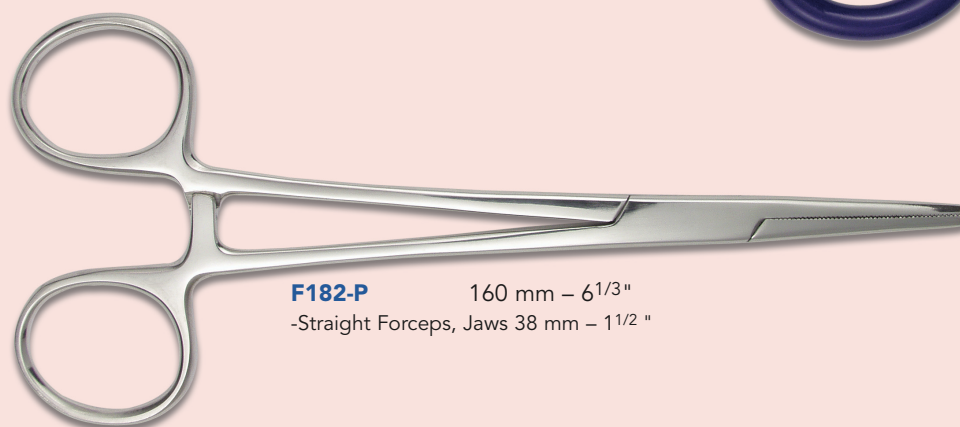
F181 130 mm – 5¹/₈ "
-Straight Forceps, Jaws 25 mm - 1 "



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



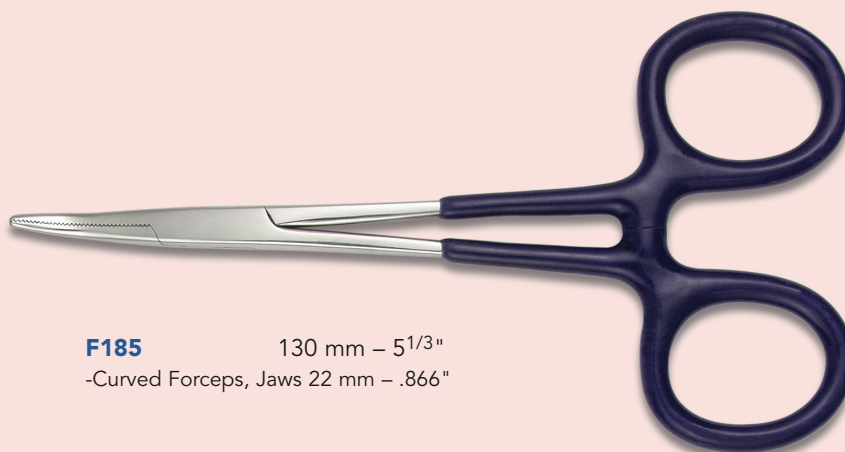
Switzerland



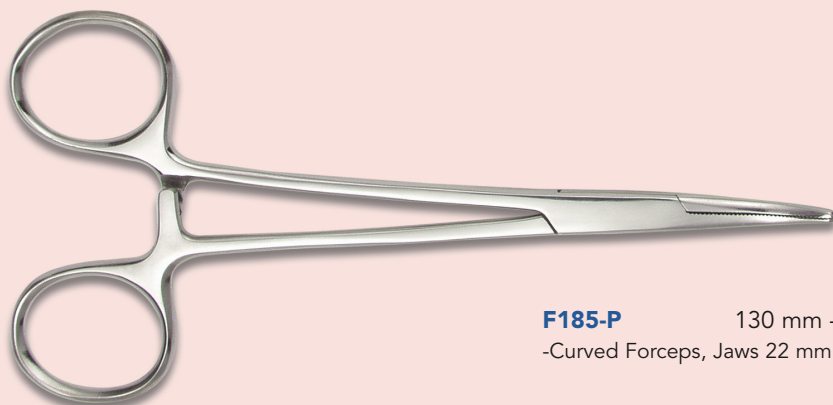
F183 200 mm – 8"
-Straight Forceps, Jaws 45 mm – 1⁷/₈"



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

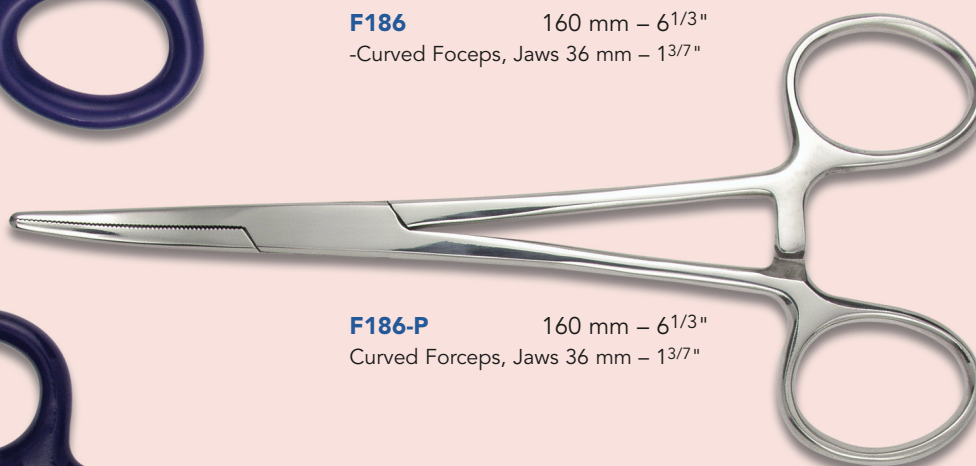
Stainless Steel
Shiny Polished
Plastic Coated Handles



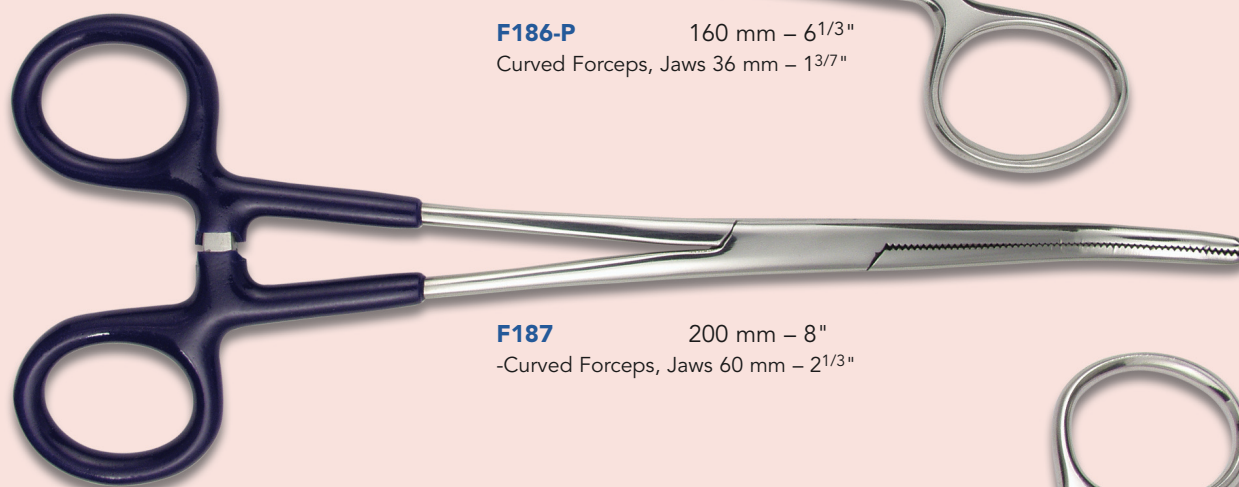
Switzerland



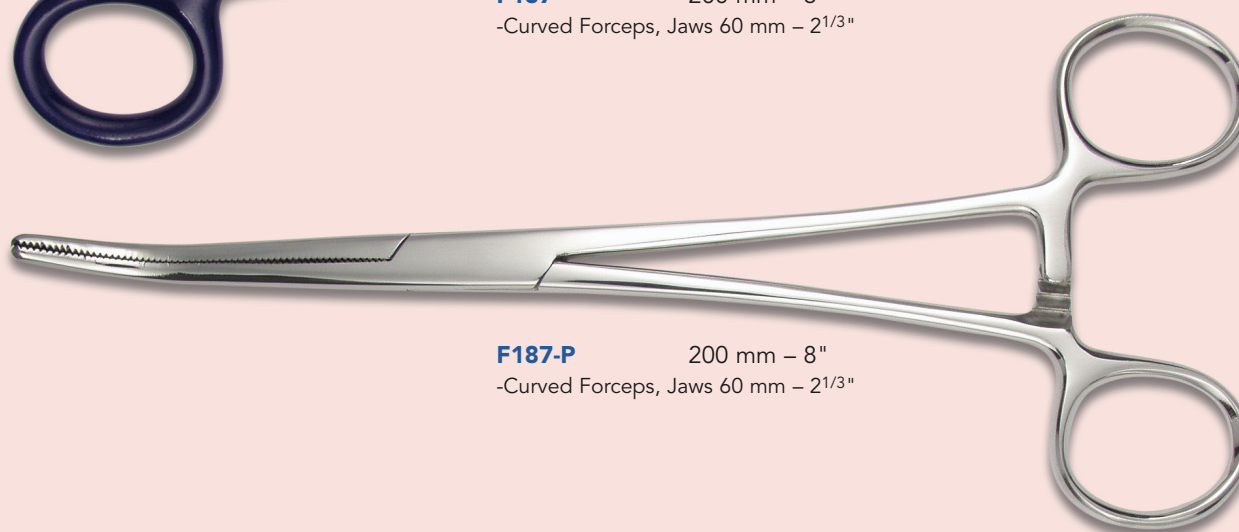
F186 160 mm – 6¹/₃"
-Curved Forceps, Jaws 36 mm – 1³/₇"



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

MULTI BLADE HANDLE

130 mm – 5 1/8"

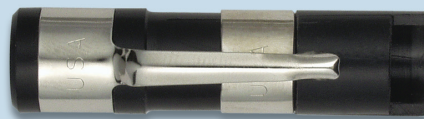
MULTI 34-SA

- 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



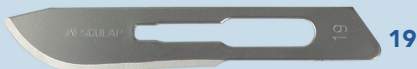
16



21



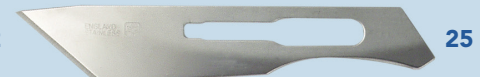
24



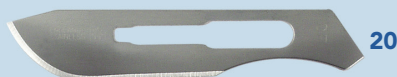
19



22



25



20



23



36

MISCELLANEOUS TOOLS

Stainless Steel
For General Purpose



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"



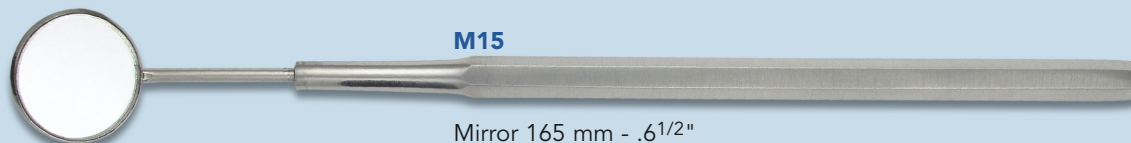
-Flexible Mixing Spatula
-Stainless Steel w/Wooden Handle

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 – 2 1/3"
-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.

7, chemin de la Pallanterie 1252 MEINIER / Geneva -Switzerland
Tél. +41 (0) 22 752 45 55 / 752 40 64 - Fax. +41 (0) 22 752 40 55
e-mail: sipel@sipel.ch - www.sipel.com

VACUUM PICK-UP TOOLS AND ACCESSORIES



Complete Program pages 56 to 77



PEN-VAC® ORIGINAL

Self Contained Vacuum Handling Tools



Switzerland

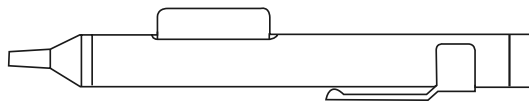
Blue Anodized Finish.

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

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



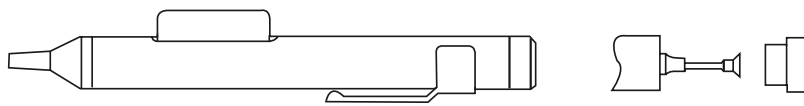
Clear Aluminum Finish.

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"

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

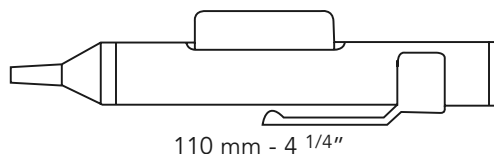
Red Anodized Finish.

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

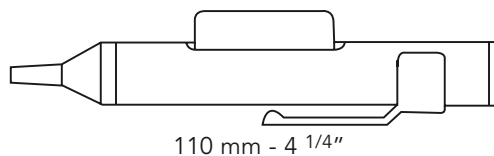
Clear Aluminum Finish.

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



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

Self Contained Vacuum Handling Tools



Switzerland

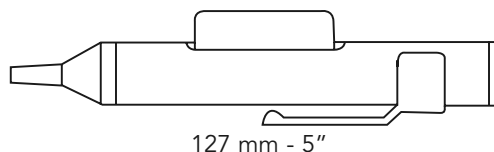
Red Anodized Finish.

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

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

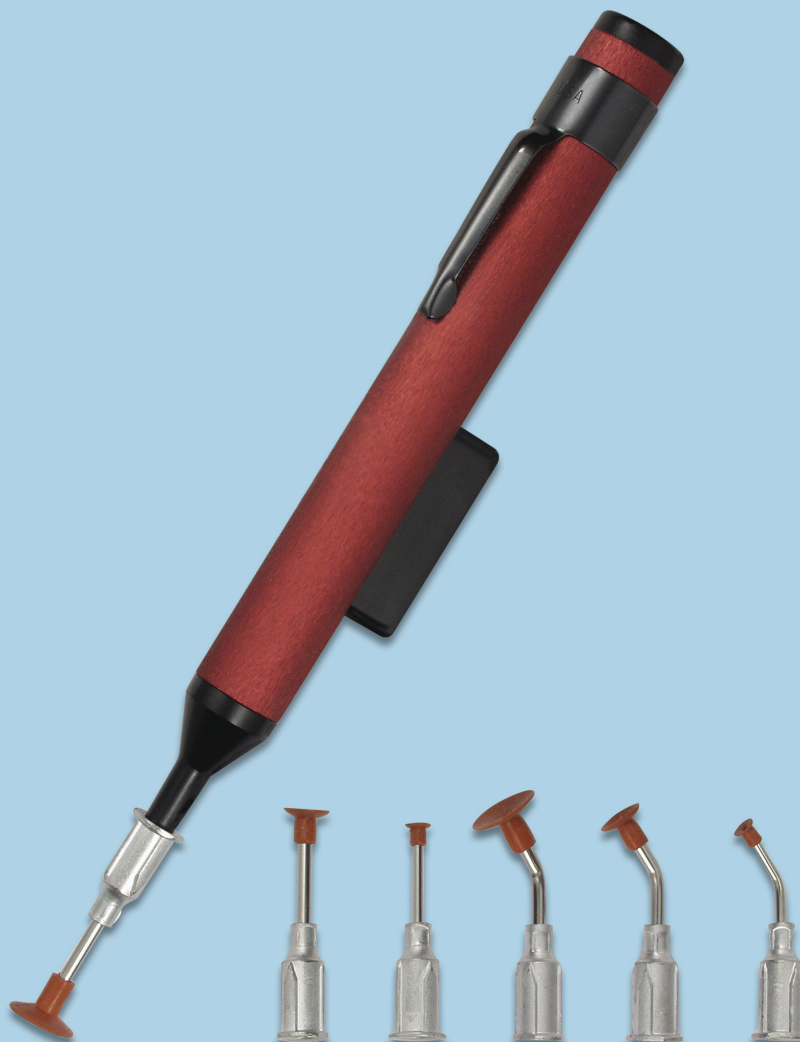
Bent Probe+Cup Ø 3.18 mm - 1/8"

-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.

Clear Aluminum Finish.

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

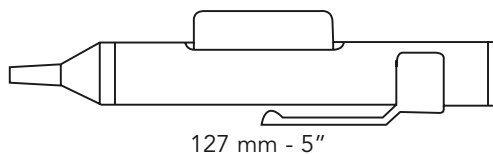
With High Temperature BLACK ESD Silicone Cups, Can Handle up to 230°C / 445°F



Switzerland

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



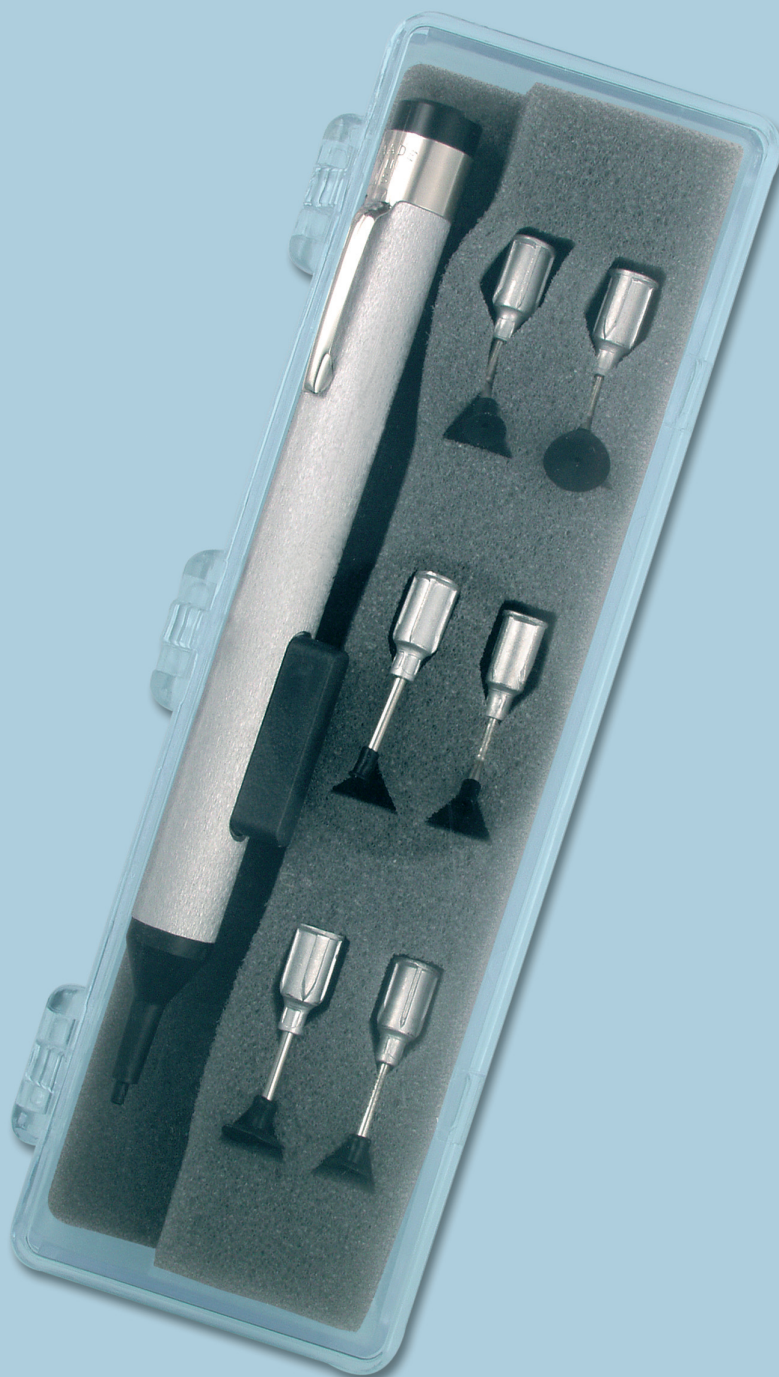
Hard Clear Plastic Box with Foam Location for Each Item

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



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-LB

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

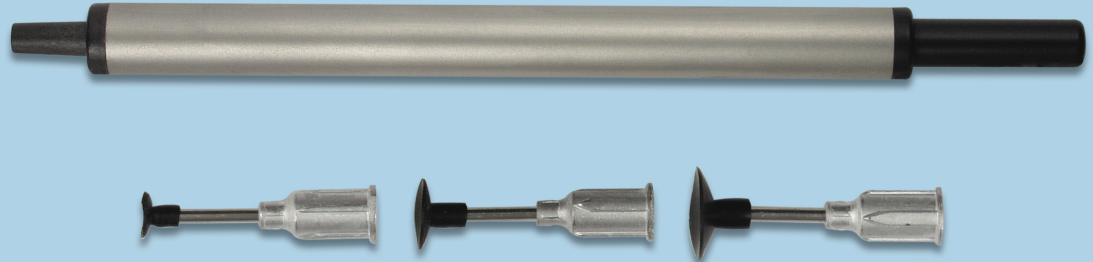
Straight Probe+Cup Ø 6.35 mm–1/4"

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"

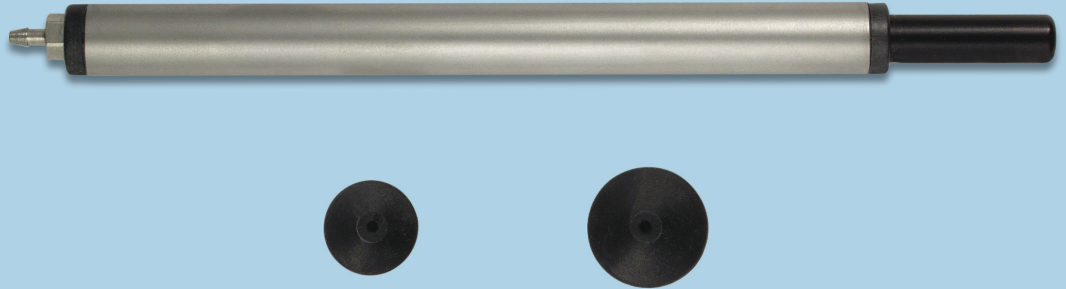
-1 ea V9050-ESD Ø 12.70 mm – 1/2"

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"

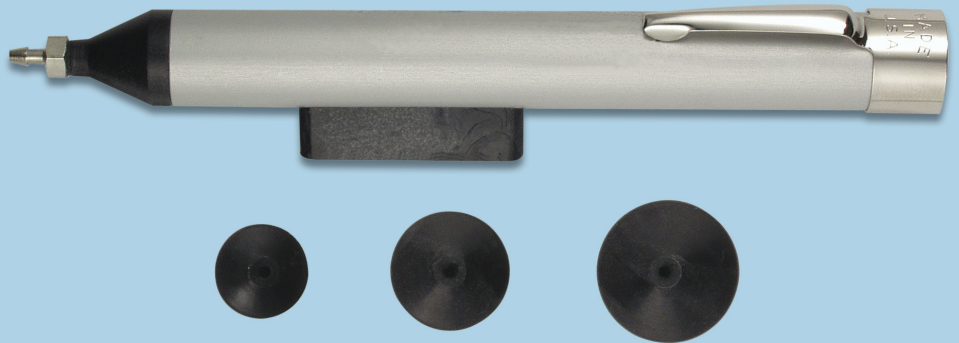
ESD Safe High Power Vacuum
Tool for Large Component
Easily Lifts up to 500 grams

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

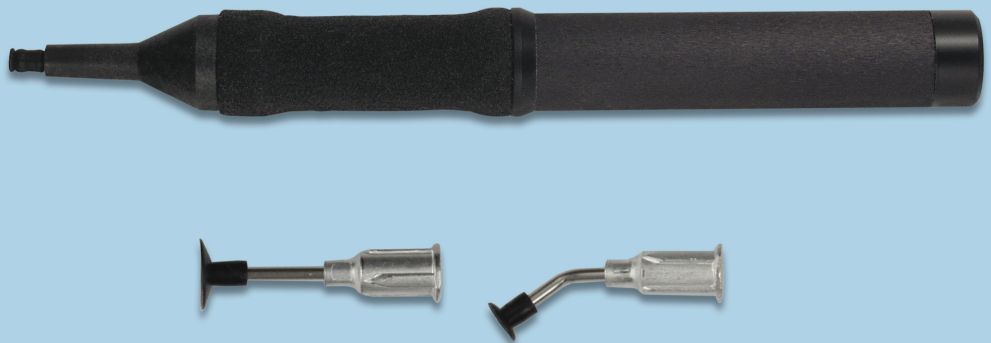
Ø3.18mm–1/8"

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)

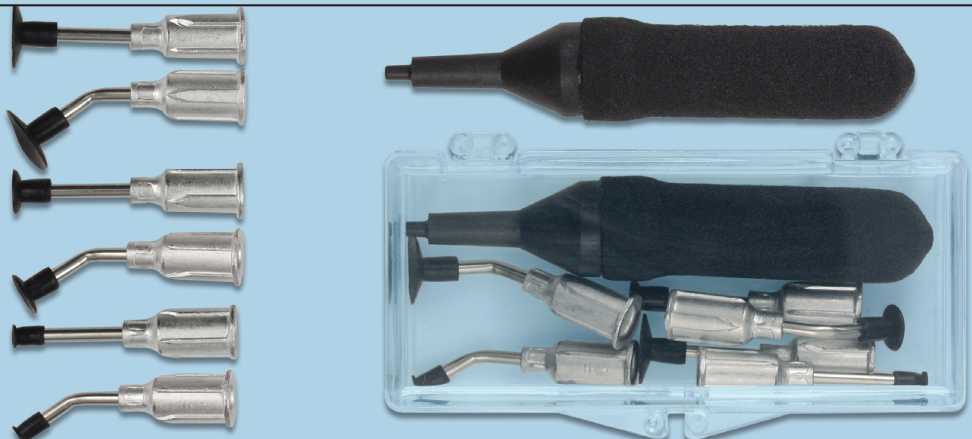
V8904-LB/LS/MB/MS/SB/SS

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



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



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



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

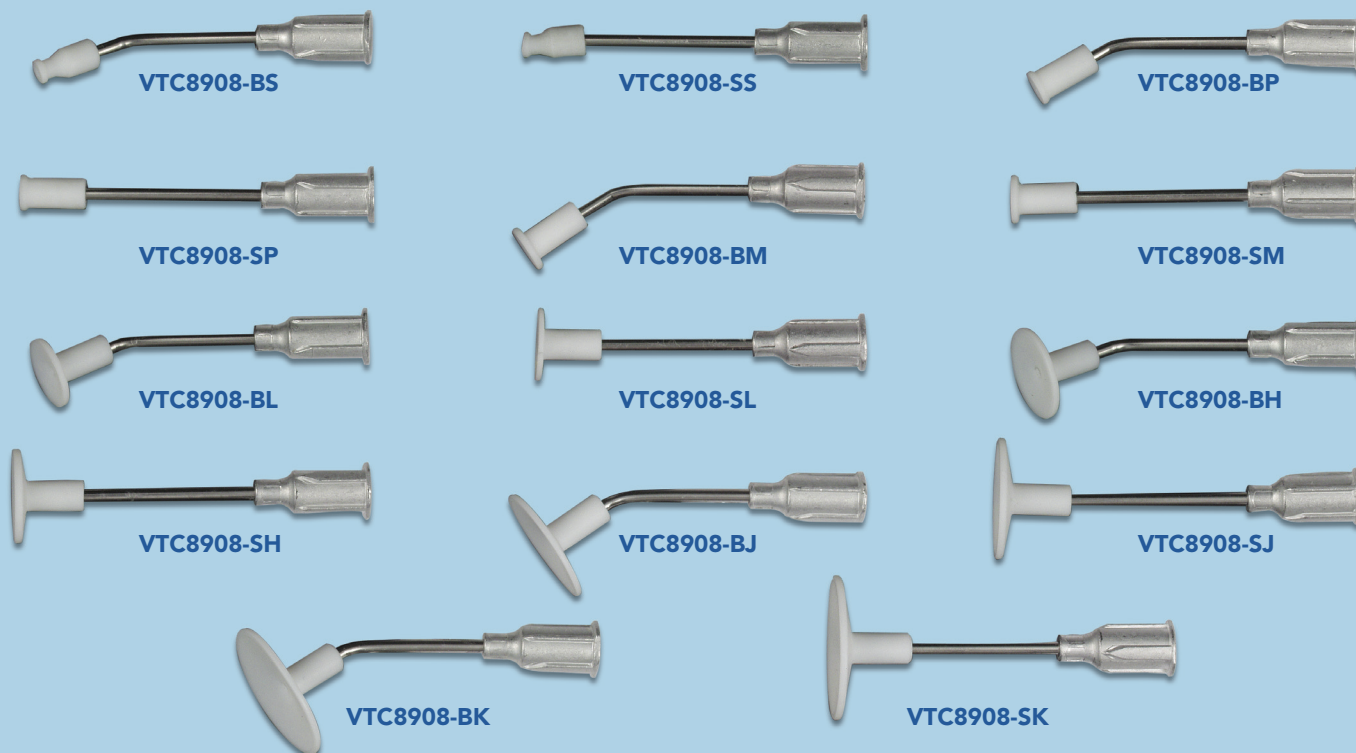
- V8912- RED** High-temperature Silicone cups (up to 250°C / 480°F)
- V8913- BLACK BUNA-N** Static Dissipative Non-Marking Cups (up to 120°C / 250°F)
- V8914- BLACK** High Temperature ESD Safe Silicone Cups. See Above (up to 230°C / 445°F)
- V8915- WHITE** Silicone Cups (up to 250°C / 480°F)
- V8916-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

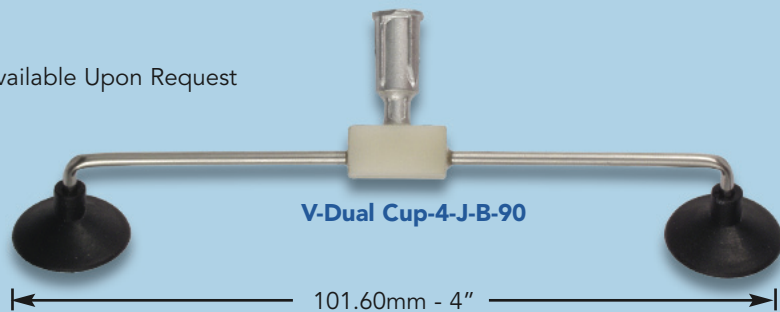


Switzerland



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

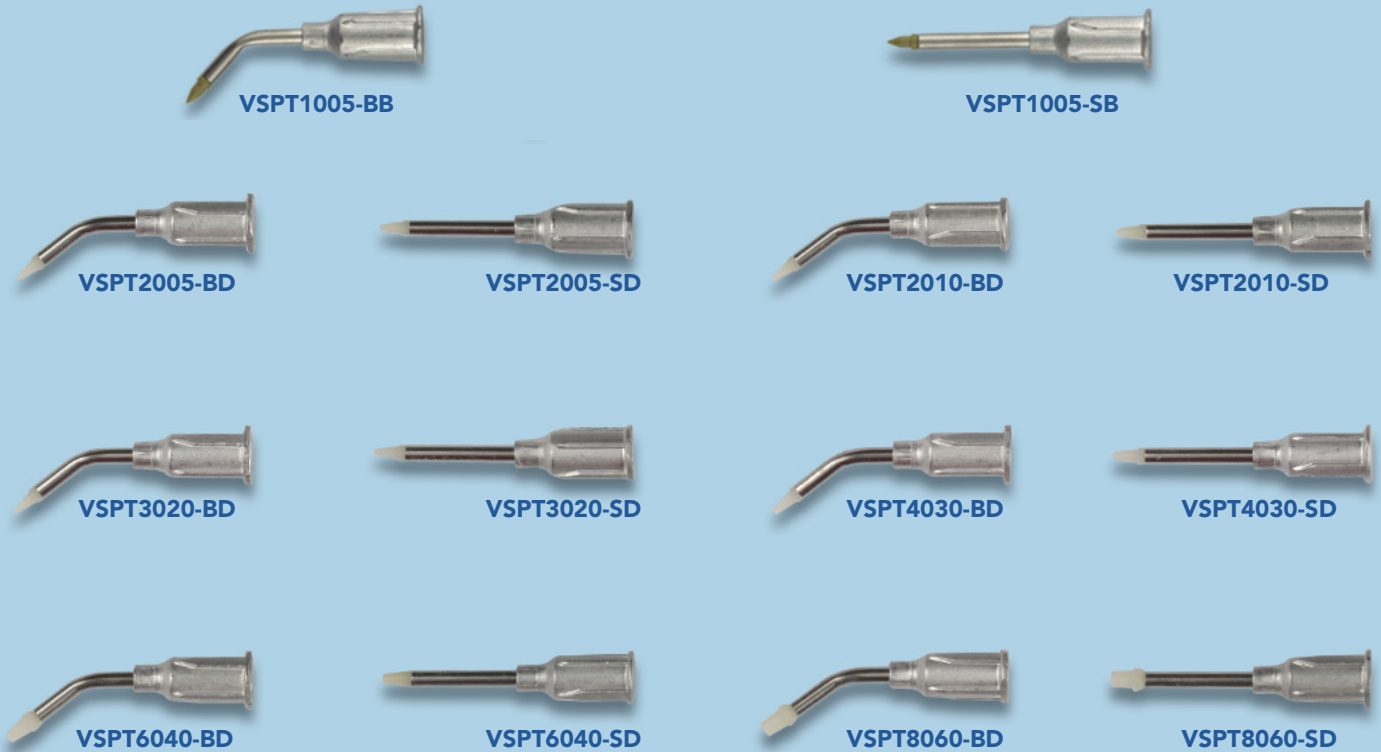
Available in Following Materials. Add Suffix:

-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.

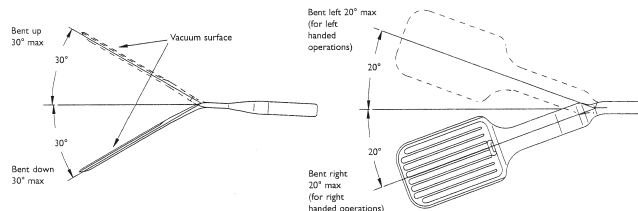
Example: Part Number VMWT-C20R is a VMWT-C Wafer Tip With a 20 Degree Bend in the Right Direction.

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.



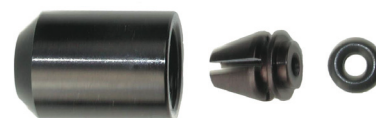
V2404

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



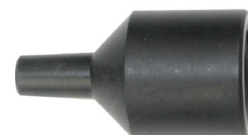
V2407

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.



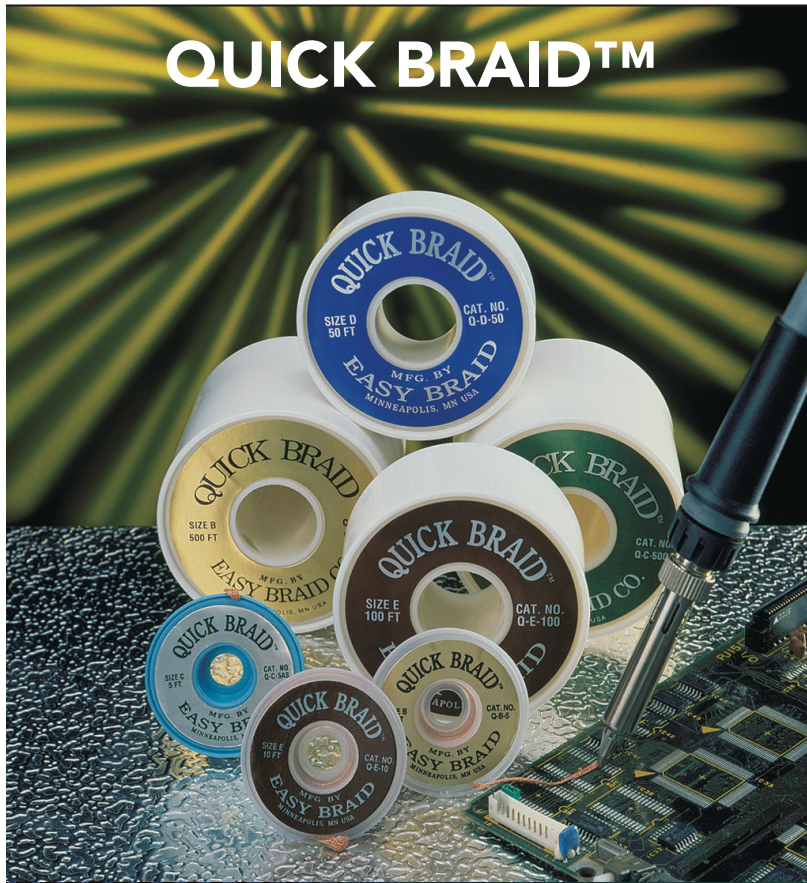
DESOLDERING BRAIDS

Four Answers to your Desoldering Problems



Switzerland

QUICK BRAID™



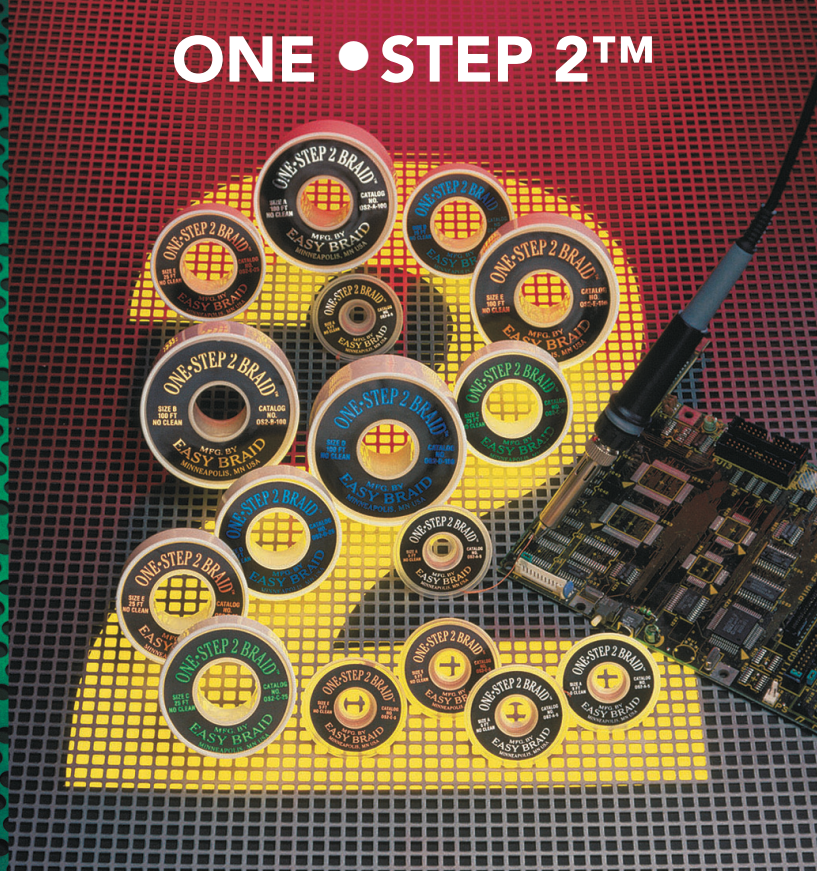
SEA BRAID™



ONE • STEP™



ONE • STEP 2™



Ask for Additional Information and Catalog

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
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