# VACUUM PICK-UP TOOLS AND ACCESSORIES



Complete Program pages 56 to 77



## PEN-VAC® ORIGINAL

Self Contained Vacuum Handling Tools



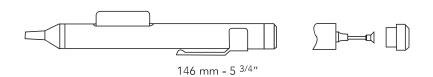
Blue Anodized Finish.

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

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

#### V8901

-Without Probe+Cup



#### 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



## PEN-VAC® ORIGINAL ESD SAFE

Self Contained Vacuum Handling Tools



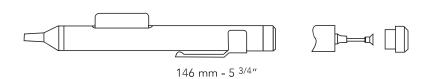
Clear Aluminum Finish.

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



#### V8901-L-ESD

With 2 Probes+Cups
-1ea V8904-LB
Bent Probe+Cup Ø 9.53 mm – 3/8"
-1ea V8904-LS
Straight Probe+Cup Ø 9.53 mm – 3/8"

#### V8901-M-ESD

With 2 Probes+Cups -1ea V8904-MB Bent Probe+Cup Ø 6.35 mm – 1/4" -1ea V8904-MS Straight Probe+Cup Ø 6.35 mm – 1/4"

#### V8901-S-ESD

With 2 Probes+Cups
-1ea V8904-SB
Bent Probe+Cup Ø 3.18 mm – 1/8"
-1ea V8904-SS
Straight Probe+Cup Ø 3.18 mm – 1/8"

#### V8901-A-ESD

With 4 Probes+Cups
-1ea V8904-LB
Bent Probe+Cup Ø 9.53 mm – 3/8"
-1ea V8904-MB
Bent Probe+Cup Ø 6.35 mm – 1/4"
-1ea V8904-MS
Straight Probe+Cup Ø 6.35 mm – 1/4"
-1ea V8904-SB
Bent Probe+Cup Ø 3.18 mm – 1/8"

#### V8901-LMS-ESD

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

#### V8901-LMS-D-ESD



## **PEN-VAC® JUNIOR**

Self Contained Vacuum Handling Tools



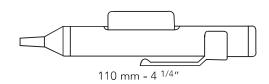
Red Anodized Finish.

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

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

#### V8920

-Without Probe+Cup



#### 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



## PEN-VAC® JUNIOR ESD SAFE

Self Contained Vacuum Handling Tools

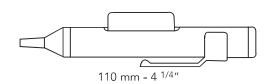


Clear Aluminum Finish.

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  $230^{\circ}$ C /  $445^{\circ}$ 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



# PEN-VAC® JUNIOR-E New Generation

Self Contained Vacuum Handling Tools

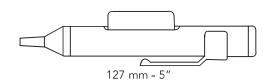
Switzerland

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  $250^{\circ}$ C /  $480^{\circ}$ F

#### V8920E

-Without Probe+Cup



#### 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



## PEN-VAC® JUNIOR-E ESD SAFE

New Generation. Self Contained Vacuum Handling Tools.

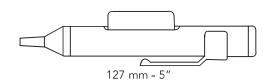


Clear Aluminum Finish.

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

#### 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



# 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-I MS-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  $\varnothing$  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 – 4<sup>5/8</sup>"

With 4 Probes+Cups -1ea V8904-LS

Straight Probe+Cup Ø 9.53 mm – 3/8"

-1ea V8904-MB

Bent Probe+Cup Ø 6.35 mm – 1/4"

-1ea V8904-SB

Bent Probe+Cup Ø 3.18 mm – 1/8"

-1ea V8904-SS

Straight Probe+Cup Ø 3.18 mm – 1/8"

Available Also in Version:

V9501-B Black Buna-N Static

Dissipative Non-Marking Material

V9501-X-ESD Without Probes and Cups



# **VACULA®** HP 300-ESD Easily Handles up to 500 Grams

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



# PINCH-VAC® ESD SAFE

Low Cost Vacuum Tool

#### **VACULA** ® VC-1-ESD

140 mm - 5<sup>1/2</sup>"

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<sup>1/4</sup>"

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<sup>3/4</sup>"

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<sup>7/8</sup>"

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 – 2<sup>3/4</sup>"



#### **HANDY-VAC®**

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



#### **HANDY-VAC®**

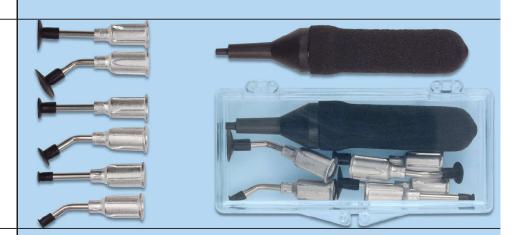
HV-SB-ESD (Bent Probe+Cup Ø 3.18mm − 1/8")
HV-SS-ESD (Straight Probe+Cup Ø 3.18mm − 1/8")
HV-MB-ESD (Bent Probe+Cup Ø 6.35mm − 1/4")
HV-MS-ESD (Straight Probe+Cup Ø 6.35mm − 3/4")
HV-LB-ESD (Bent Probe+Cup Ø 9.53mm − 3/8")
HV-LB-ESD (Straight Probe+Cup Ø 9.53mm − 3/8")
HV-HB-ESD (Bent Probe+Cup Ø 12.70mm − 1/2")
HV-JB-ESD (Straight Probe+Cup Ø 12.70mm−1/2")
HV-JB-ESD (Bent Probe+Cup Ø 15.88mm − 5/8")
HV-JB-ESD (Straight Probe+Cup Ø 15.88mm−5/8")
HV-KB-ESD (Straight 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-075-B

**BVJ-X-ESD** (without cup) 90 mm – 3<sup>1/2</sup>"

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")



(Black Buna cup Ø 19.05mm - 3/4")

## **VACUUM CUPS**

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





**V9013** Ø 3.18mm – 1/8"

**V9018** Ø 4.76mm – 3/16"





**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



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)

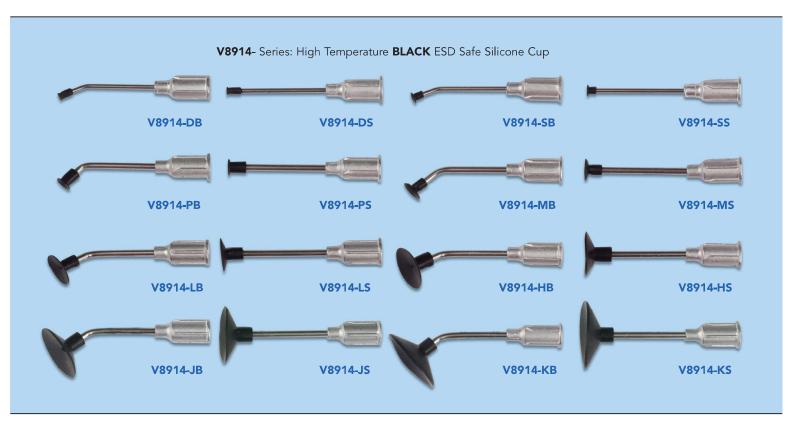
#### Add Suffix:

- -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 3.18 mm 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



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 6.35 mm - 1/4" Ø Cup and  $45^\circ$  Bent Probe -MS to order with the 6.35 mm - 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

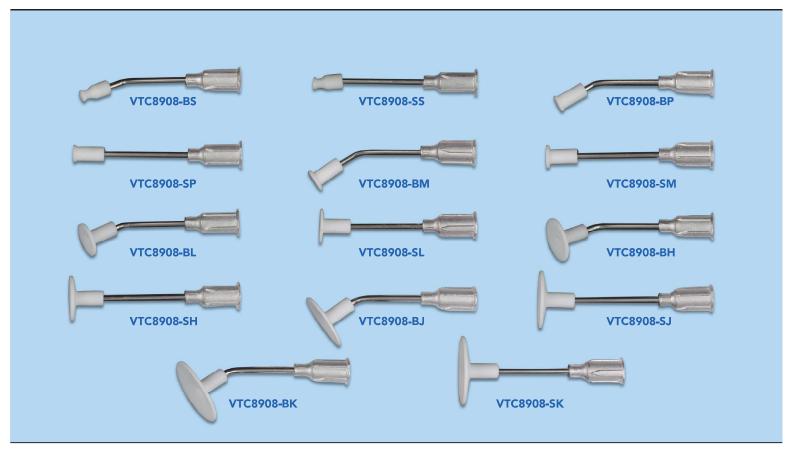
-KB to order with the 19.05mm − 3/4" Ø Cup and 45° Bent Probe

-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





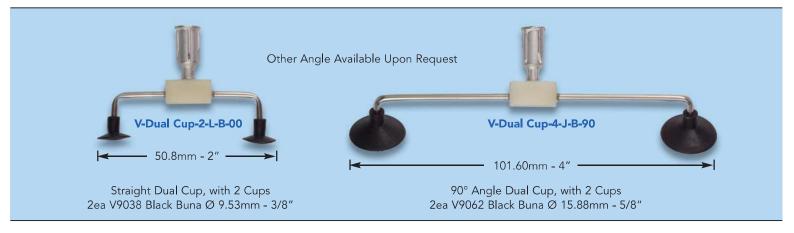
VTC8908-BS with 3.18mm − 1/8" Ø Cup and 45° Bent Probe VTC8908-SS with 3.18mm − 1/8" Ø Cup and Straight Probe VTC8908-BP with 4.76mm − 3/16" Ø Cup and Straight Probe VTC8908-SP with 4.76mm − 3/16" Ø Cup and Straight Probe VTC8908-BM with 6.35mm − 1/4" Ø Cup and 45° Bent Probe VTC8908-SM with 6.35mm −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

To order with  $90^{\circ}$  bent Probe, Add /90 to the P/N . Example: **VTC8908-BM/90** 

### **NEW DUAL CUPS**

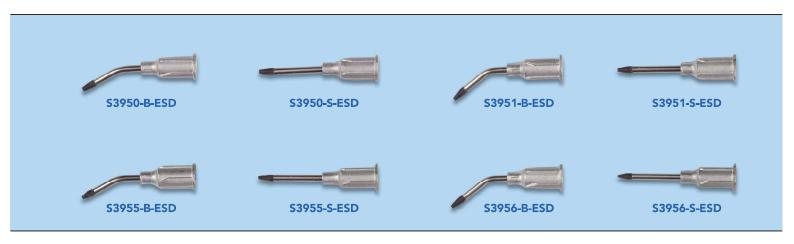
Additional Sizes And Information Upon Request





# **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"



\$3950-B...: Outside Ø 0.30mm - .011" - Inside Ø 0.14mm - .006", w / 45° Bent Probe \$3950-S...: Outside Ø 0.30mm - .011" - Inside Ø 0.14mm - .006", w / Straight Probe \$3951-B...: Outside Ø 0.80mm - .031" - Inside Ø 0.50mm - .012", w / 45° Bent Probe \$3951-S...: Outside Ø 0.80mm - .031" - Inside Ø 0.50mm - .012", w / Straight Probe \$3955-B...: Outside Ø 1.00mm - .039" - Inside Ø 0.40mm - .015", w / 45° Bent Probe \$3955-S...: Outside Ø 1.00mm - .039" - Inside Ø 0.40mm - .015", w / Straight Probe \$3956-B...: Outside Ø 1.27mm - .050" - Inside Ø 0.86mm - .034", w / 45° Bent Probe \$3956-S...: Outside Ø 1.27mm - .050" - Inside Ø 0.86mm - .034", w / Straight Probe

Available in Following Materials. Add Suffix:

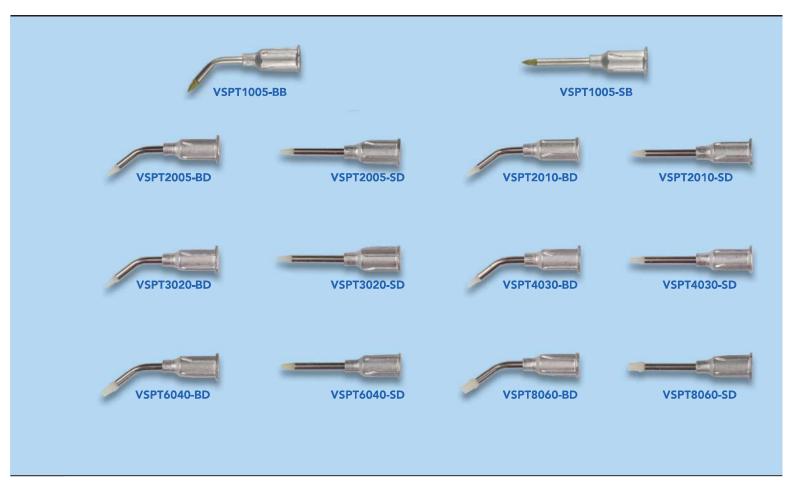
-ESD BLACK ESD Safe Carbon Fibre. See Above (Heat Resistance up to 230°C / 445°F)
 -STD GREY Static Dissipative Carbon Fibre (Heat Resistance up to 230°C / 445°F)

**-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

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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 0.25mm - .010", w / 45° Bent Probe vSPT2010-B...: Outside Ø 0.51mm - .020" - Inside Ø 0.25mm - .010", w / 45° Bent 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 / 45° Bent 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 / 45° Bent 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 / 45° Bent Probe vSPT8060-B...: Outside Ø 1.52mm - .060" - Inside Ø 1.02mm - .040", w / 45° Bent Probe vSPT8060-S...: 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 / 45° Bent Probe vSPT8060-S...: 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 / 45° Bent Probe vSPT8060-S...: 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 / 45° Bent Probe vSPT8060-S...: Outside Ø 2.00mm - .080" - Inside Ø 1.52mm - .060", w / 45° Bent 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-VACTM-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-VACTM**

#### **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

VEVVOUODE-IVIVVO/220V Handling up to 6 Waters

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-MW8/110V 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



# CONTINOUS 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.	
	<b>V3020-RF-1/16"</b> (for 1/16" ID Hose)	— — — — — — — — — — — — — — — — — — —
	<b>V3020-RF-1/8"</b> (for 1/8" ID Hose)	
	STANDARD VACUUM PEN WITHOUT CONTROL HOLE, NO FILTER	
	For Continuous Vacuum Handling Systems	- I man
	<b>V3021-1/16"</b> (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 InHouse 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 InHouse Vacuum Systems or With one of V8000 Series Continuous Vacuum Systems. VWWB-2-SD-1/16" (for 1/16" ID Hose) VWWB-2-SD-1/18" (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



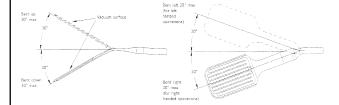
Molded Wafer Tips VMWT-A, VMWT-B and VMWT-C are Available With 30° Bend in the Up or Down Direction as Shown in the Left Drawing Above. To order a Tip With the Up or Down Bend, Add the Angle Plus a "U" for Up or a "D" for Down to the Part Number.

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.	