

WAFER Handling Tools & Accessories



MICROTRONIC MICROELECTRONIC VERTRIEBS GMBH

Virtual Industries, Inc.

WAFER HANDLING TOOLS



PORTA-WAND®

RECHARGEABLE BATTERY OPERATED WAFER HANDLING TOOLS

PORTA-WAND 220 VAC KIT

The PORTA-WAND 220V kit comes with a fixed internal 9.6V NiMH rechargeable battery, in-stand charger (P/N VPW6000-CHRG-220) and one wafer tip as listed below. Ideal for handling wafers, disk media or any item that has a flat, hard surface. Easily lifts over 500 grams. Rear exhaust of the pump air is standard on these units. The battery low indicator flashes red when the battery needs to be recharged. A PUSH-BUTTON provides easy on/off control. An internal air filter (VPW6000-FIL-5) is replaceable from the front of the tool, and an internal exhaust filter ensures better than Class 1 performance. An optional wall mounting bracket is also available (P/N VPW-WALL). Provided with CE approved power transformer.

Preis pro Stück in €

VI-VPW6000B-MW4-220E	Porta-Wand with PEEK wafer tip VMWT-A, handles up to 4" (100mm) wafers	1.600,00
VI-VPW6000B-MW6-220E	Porta-Wand with PEEK wafer tip VMWT-B, handles up to 6" (150mm) wafers	1.600,00
VI-VPW6000B-MW8-220E	Porta-Wand with PEEK wafer tip VMWT-C, handles up to 8" (200mm) wafers	1.600,00
VI-VPW6000B-TW4-220E	Porta-Wand with Teflon coated wafer tip VWT-100075PF, handles up to 4" (100mm) wafers	1.600,00
VI-VPW6000B-TW6-220E	Porta-Wand with Teflon coated wafer tip VWT-170110PF, handles up to 6" (150mm) wafers	1.600,00
VI-VPW6000B-TW8-220E	Porta-Wand with Teflon coated wafer tip VWT-250125PF, handles up to 8" (200mm) wafers	1.600,00

300MM WAFER HANDLING TIP

Designed for safely handling 300mm wafers. The large five inch (127mm) outside diameter provides the support required to securely hold the large wafer. The center hole helps reduce the wafer tip weight and minimizes contact area. The dual press fit adapter provides both inner and outer o-ring gripping areas for added handling security. This unique design allows connection to any one of our wafer handling tools.

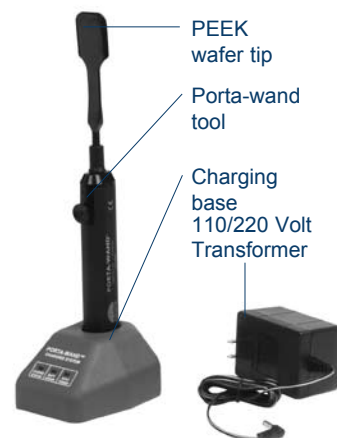
VI-VWT-5R	370,00
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Prices subject to change without notice.



Every PORTA-WAND is tested to meet Class I clean room particle contamination requirements. A serialized particle counter printout is provided with every tool. The press fit adapter provides for quick change for any of our wafer handling tips or accessories.

PORTA-WAND



300MM WAFER HANDLING TIP



PORTA-WAND® AND ACCESSORIES



Additional tools or chargers can be purchased separately. The wall mount bracket allows you to mount the battery charger stand conveniently on a wall. The intake filter should be replaced on an annual basis or more frequently as needed.

BATTERY CHARGER SYSTEM



Transformer

Charging stand



WALL MOUNTING BRACKET

PORTA-WAND TOOL



INTAKE AIR FILTERS



RECHARGEABLE BATTERY OPERATED WAFER HANDLING TOOLS

BATTERY CHARGER SYSTEM

This charger system is used with the VPW6000B, and VPW6300B series PORTA-WAND vacuum handling tools. The plug-in wall transformer is included. An optional wall mounting bracket is also available (VPW-WALL).

Preis pro Stück in €

VI-VPW6000-CHRG-220 for 220 VAC operation

475,00

CHARGER STAND WITHOUT TRANSFORMER.

VI-VPW6000-CHRG-XT

400,00

WALL PLUG TRANSFORMER ONLY.

VI-VPW6000-TRANS 220 for 220 VAC operation

88,00

WALL MOUNTING BRACKET

This optional wall mount bracket is used with the above in-stand chargers. Includes four plastic anchors with screws and two screws to secure the charger to the bracket.

VI-VPW-WALL

64,00

PORTA-WAND TOOL

The PORTA-WAND comes with a fixed internal 9.6V NiMH rechargeable battery. Ideal for handling wafers, disk media or any item that has a flat hard surface. Easily lifts over 500 grams. Rear exhaust of the pump air is standard on these units. The battery low indicator flashes red when the battery needs to be recharged. A PUSH-BUTTON provides easy on/off control. An internal air filter (VPW6000-FIL-5) is replaceable from the front of the tool, and an internal exhaust filter ensures better than Class1 performance. This tool is for users who would like to select their own wafer tip and in-stand charger separately.

PORTA-WAND only. Requires a VPW6000-CHRG for proper operation.

VI-VPW6000B-X

1.300,00

INTAKE AIR FILTERS

Five pack of replaceable air filters for the PORTA-WAND.

VI-VPW6000-FIL-5

60,00

WAFER WANDS AND HOLDERS

ESD AND CLEAN ROOM SAFE

PUSH-BUTTON WAFER WAND

The lightweight push-button wafer wand is designed for connection to continuous vacuum systems. Operation is controlled by pushing the button. This tool can be used with an in-house vacuum system or with one of Virtual Industries high performance continuous vacuum systems. Can be used with all of our press-fit tips, adapters and vacuum hoses. Vacuum normally on – Push button to shut off vacuum to release wafer. Handling tool constructed from static dissipative delrin.

Preis pro Stück in €

VI-VWWB-2-SD-1/8 For 1/8" (3.18mm) ID hose

225,00

BENCH TOP WAFER WAND HOLDER

The bench top holder for the VWWB series has a slot that activates the control button to shut off the vacuum air when the tool is not in use. Soft rubber feet prevent it from sliding. The heavy duty base prevents the tool from tipping over when not in use.

VI-VBM-2

180,00

WALL MOUNT WAFER WAND HOLDER

The wall mount for the VWWB series holds the WAFER WAND when it is not in use. The wall mount has a slot that activates the control button to shut off the vacuum air when the tool is not in use. Two mounting holes are provided to attach the holder to a wall or the side of a bench.

VI-VWM-2

150,00

POLE MOUNT WAFER WAND HOLDER

The pole mount for the VWWB series holds the WAFER WAND when it is not in use. The pole mount has a slot that activates the control button to shut off the vacuum air when the tool is not in use. Two mounting holes and zip ties are provided to attach the holder to a pole.

VI-VPM-2 Photo not shown

150,00

SLIDE SWITCH WAFER WAND

The lightweight, slide switch wafer wand is designed for connection to continuous vacuum systems. Operation is controlled by sliding the switch forward to pick up a wafer and sliding the switch back which turns off vacuum and releases wafer. With the switch in the back position, vacuum is also blocked so that excess demand is not placed on the vacuum line system. This tool can be used with an in-house vacuum system or with one of Virtual Industries high performance continuous vacuum systems. Can also be used with all of our press-fit tips, adapters and vacuum hoses. Handling tool constructed from static dissipative delrin.

VI-VWW-2-SD-1/8 For 1/8" (3.18mm) ID hose

225,00

BENCH TOP WAFER WAND HOLDER

The bench top holder for the VWW series holds the WAFER WAND when it is not in use. Anti-skid pads prevent it from sliding. The heavy duty base prevents the tool from tipping over when not in use.

VI-VBM-1

150,00

WALL MOUNT WAFER WAND HOLDER

The wall mount for the VWW series holds the WAFER WAND when it is not in use. Two mounting holes are provided to attach the holder to a wall or the side of a bench.

VI-VWM-1

130,00

POLE MOUNT WAFER WAND HOLDER

The pole mount for the VWW series holds the WAFER WAND when it is not in use. Two mounting holes and zip ties are provided to attach the holder for a pole.

VI-VPM-1 Photo not shown

130,00

Prices subject to change without notice.

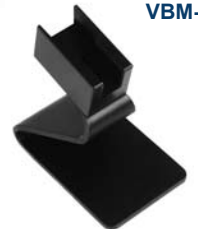


Our clean room safe wafer wands and holders are designed to be used with a continuous or in-house vacuum system.

PUSH-BUTTON WAFER WAND



VBM-2



VWM-2



SLIDE SWITCH WAFER WAND



VBM-1



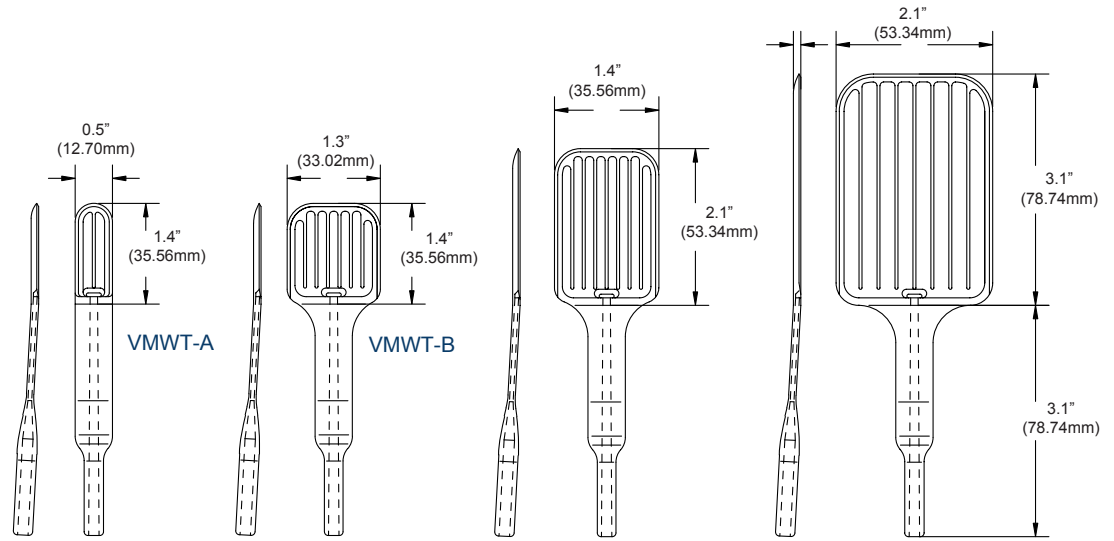
VWM-1



WAFER TIPS

PRESS-FIT MOLDED PEEK®

The PEEK® material selected for our molded wafer tips is an industry standard. They have excellent resistance to most chemicals. The non-sloughing carbon renders the wafer tips ESD safe.



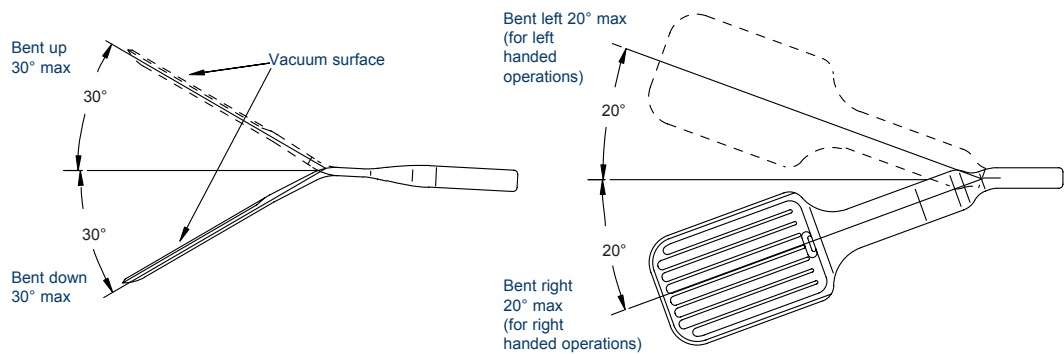
MOLDED PEEK WAFER TIPS

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.

VI-VMWT-A Recommended for handling up to 4" (100mm) wafers	95,00
VI-VMWT-B Recommended for handling up to 6" (150mm) wafers	95,00
VI-VMWT-C Recommended for handling up to 8" (200mm) wafers	95,00
VI-VMWT-D Recommended for handling larger sized wafers, (no left/right angles available)	115,00

Preis pro Stück in €

Prices subject to change without notice.

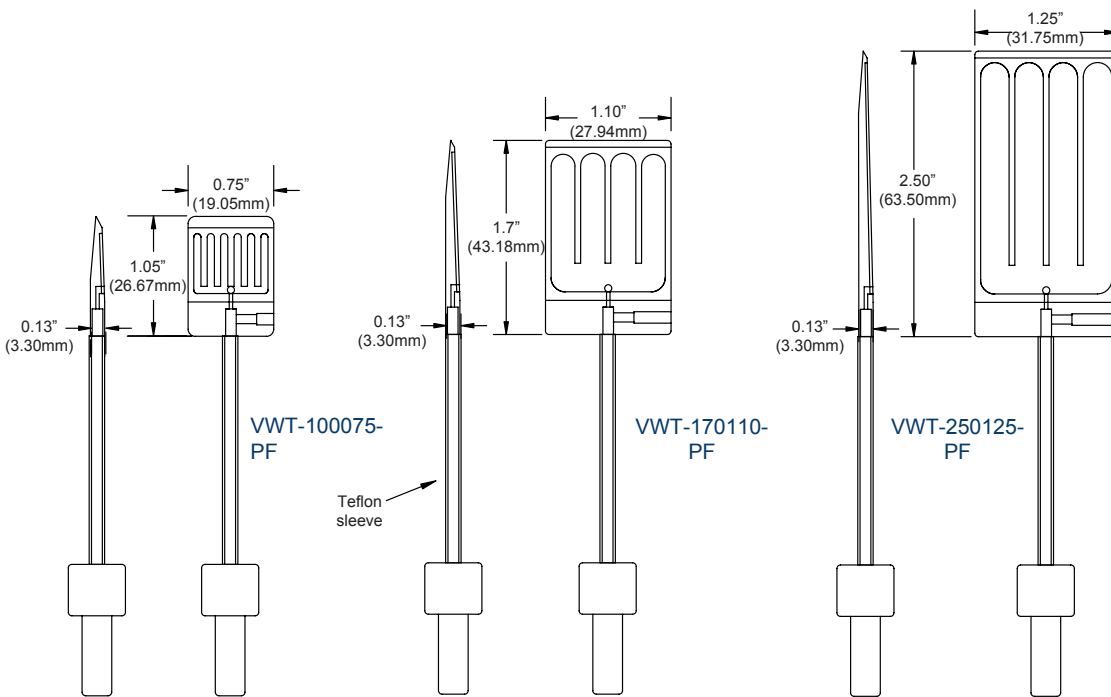


Molded wafer tips VMWT-A, VMWT-B and VMWT-C are available with a 10°, 20° or 30° bend in the up or down direction as shown in the left drawing above. To order a tip with the up or down bend, add the angle plus a "U" for up or a "D" for down to the part number. EXAMPLE: Part number VMWT-A20D is a VMWT-A wafer tip with a 20 degree bend in the down direction. Custom angles are available upon request. Pricing is as above.

Molded wafer tips VMWT-A, VMWT-B and VMWT-C are available with a 10° or 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 an "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. Custom angles are available upon request. Pricing is as above.

WAFER TIPS

PRESS-FIT, HIGH TEMPERATURE TEFLON® COATED ALUMINUM



These wafer tips are precision machined from high grade aluminum and are coated with a high temperature teflon. They are excellent for handling applications up to 500°F (250°C).

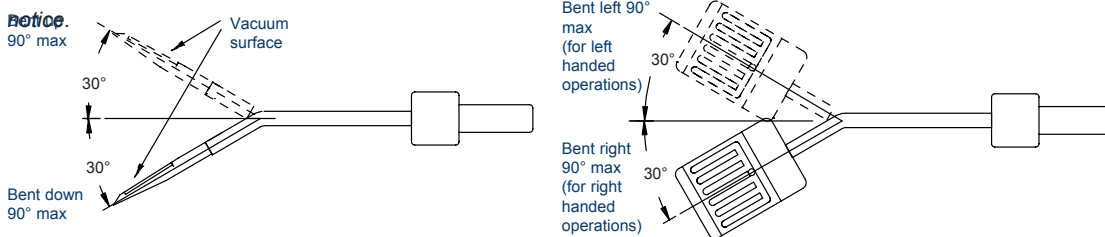
TEFLON COATED ALUMINUM WAFER TIPS

These wafer tips are Teflon coated aluminum for high temperature applications up to 250°C. The wafer handling tips come complete with a 3" (76.20mm) long, straight, stainless steel 0.094" (2.39mm) diameter tube and fitting to connect to press-fit wafer handling tools. See below for ordering special tube lengths and angles.

Preis pro Stück in €

VI-VWT-100075-PF	Recommended for handling up to 4" (100mm) wafers	95,00
VI-VWT-170110-PF	Recommended for handling up to 6" (150mm) wafers	95,00
VI-VWT-250125-PF	Recommended for handling up to 8" (200mm) wafers	95,00

Prices subject to change without



To order a longer tube length, up to 8" (203.20mm) long, add a "-XL" to the wafer tip part number where "X" is the total length of the tube desired. To specify an angle to be included on the tube, add a "-YD" to the part number where "Y" is the angle that is required.

These wafer tips are available with a 10°, 20° or 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 VWT-100075-PF20D is a VWT-100075-PF wafer tip with a 20 degree bend in the down direction. Custom angles are available upon request. Pricing is as above.

These wafer tips are available with a 10° or 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 an "R" for right to the part number. EXAMPLE: Part number VWT-100075-PF20R is a VWT-100075-PF wafer tip with a 20 degree bend in the right direction. Custom angles are available upon request. Pricing is as above.



CLEANROOM-VS VAC SERIES

CLEAN ROOM SAFE VACUUM HANDLING TOOLS

Bench top wafer handling tools for situations where total portability is not an issue and vacuum is not available. All of our wafer handling tips fit these tools.



**CR-VAC™-VS KIT WITH
MOLDED PEEK TIP**
3" X 2 1/2" X 6"
(76mm X 64mm X 152mm)

CR-VAC™-VS KIT WITH MOLDED PEEK TIP

A special purpose vacuum handling tool that senses when the minimum acceptable. The low profile of the wafer tip head provides easy access to wafers in industry standard vacuum level for wafer handling is present in the system and lights up an LED on the front panel. The precision pump and motor generate over fifteen inches of mercury. This compact unit will handle many of the wafers used in industry today. The unit has a ground connection available on the rear of the unit. All units are tested for particle generation before leaving the factory. The CR-VAC-VS comes complete with the following features:

- 4 feet of straight vacuum hose, #VSH-1/16-4.
- 4 feet of coiled vacuum hose, #VCH-1/16-4.
- Molded wafer tip.
- A vacuum wand, #VWW-2-SD-1/16.
- 12 volt power source.
- Rubber no-skid feet.
- ESD connection on rear of unit.

		Preis pro Stück in €
VI-V8080-MW4	CR-VAC-VS, cleanroom safe bench top tool with VMWT-A for handling up to 4" wafer tip	930,00
VI-V8080-MW6	CR-VAC-VS, cleanroom safe bench top tool with VMWT-B for handling up to 6" wafer tip	930,00
VI-V8080-MW8	CR-VAC-VS, cleanroom safe bench top tool with VMWT-C for handling up to 8" wafer tip	930,00

CR-VAC™-VS KIT WITH HIGH TEMPERATURE TIP

Same tool as described above except it is provided with a teflon coated aluminum, high temperature wafer tip up to 250°C. Ideal for handling wafers, disk media or any item that has a hard, flat surface. The CR-VAC-VS comes complete with the following features:

- Teflon coated aluminum wafer tip.
- 4 feet of straight vacuum hose, #VSH-1/16-4.
- 4 feet of coiled vacuum hose, #VCH-1/16-4.
- A vacuum wand, #VWW-2-SD-1/16.
- 12 volt power source.
- Rubber no-skid feet.
- ESD connection on rear of unit.

VI-V8080-TW4	CR-VAC-VS, cleanroom safe bench top tool with VWT-100075-PF for handling up to 4" wafer tip	930,00
VI-V8080-TW6	CR-VAC-VS, cleanroom safe bench top tool with VWT-170110-PF for handling up to 6" wafer tip	930,00
VI-V8080-TW8	CR-VAC-VS, cleanroom safe bench top tool with VWT-250125-PF for handling up to 8" wafer tip	930,00

CR-VAC™-VS

The CR-VAC-VS can be used with all of our press fit tips, adapters and vacuum accessories.

VI-V8080	Without wafer tip	840,00
VI-V8080-XH	Without vacuum wand or wafer tip	620,00
VI-V8080-XT	Without wall transformer or wafer tip	800,00
VI-V8080-TRANS	For 110 VAC	70,00
VI-V8080-220-TRANS	For 220 VAC	105,00

Prices subject to change without notice.

CLEANROOM-EE VAC SERIES

CLEAN ROOM SAFE VACUUM HANDLING TOOLS

CR-VAC™-EE KIT WITH MOLDED PEEK TIP

The precision pump and motor generate over fifteen inches of mercury. The compact low profile of the wafer tip head provides easy access to wafers in industry standard tower design takes up a very small footprint on the bench. This tool has an electric eye pen holder on the side automatically shuts the unit off when the vacuum pen is placed in it. All units are tested for particle generation before leaving the factory. The CR-VAC-EE comes complete with the following features:

- 4 feet of straight vacuum hose, #VSH-1/16-4.
- 4 feet of coiled vacuum hose, #VCH-1/16-4.
- Molded wafer tip.
- A vacuum pick-up wand, #VWW-2-1/16.
- 12 volt power source.
- Automatic vacuum pump ON/OFF control.
- Rubber no-skid feet.
- ESD connection on rear of unit.

		PREIS PRO STÜCK IN €
VI-V8088-MW4	CR-VAC-EE, cleanroom safe bench top tool with VMWT-A for handling up to 4" wafer tip	930,00
VI-V8088-MW6	CR-VAC-EE, cleanroom safe bench top tool with VMWT-B for handling up to 6" wafer tip	930,00
VI-V8088-MW8	CR-VAC-EE, cleanroom safe bench top tool with VMWT-C for handling up to 8" wafer tip	930,00

CR-VAC™-EE KIT WITH HIGH TEMPERATURE TIP

Same tool as described above except it is provided with a teflon coated high temperature tip up to 250°C aluminum wafer tip. Ideal for handling wafers, disk media or any item that has a hard, flat surface. The CR-VAC-EE comes complete with the following features:

- 4 feet of straight vacuum hose, #VSH-1/16-4.
- 4 feet of coiled vacuum hose, #VCH-1/16-4.
- Teflon coated aluminum wafer tip.
- A vacuum pick-up wand, #VWW-2-1/16.
- 12 volt power source.
- Automatic vacuum pump ON/OFF control.
- Rubber no-skid feet.
- ESD connection on rear of unit.

VI-V8088-TW4	CR-VAC-EE, cleanroom safe bench top tool with VWT-100075-PF for handling up to 4" wafer tip	930,00
VI-V8088-TW6	CR-VAC-EE, cleanroom safe bench top tool with VWT-170110-PF for handling up to 6" wafer tip	930,00
VI-V8088-TW8	CR-VAC-EE, cleanroom safe bench top tool with VWT-250125-PF for handling up to 8" wafer tip	930,00

CR-VAC™-EE

The CR-VAC-EE can be used with all of our press fit tips, adapters and vacuum accessories.

VI-V8088	Without wafer tip	840,00
VI-V8088-XH	Without vacuum wand or wafer tip	620,00
VI-V8088-XT	Without wall transformer or wafer tip	800,00
VI-V8080-TRANS	For 110 VAC	70,00
VI-V8080-220-TRANS	For 220 VAC	105,00

Prices subject to change without notice.



Bench top wafer handling tools for situations where total portability is not an issue and vacuum is not available. All of our wafer handling tips fit these tools.



CR-VAC™-EE KIT WITH MOLDED PEEK TIP
3" X 6" X 2 1/2"
(76mm X 152mm X 64mm)



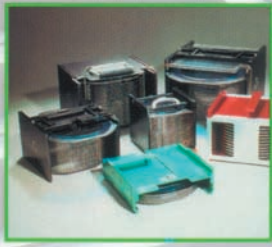
CR-VAC™-EE KIT WITH HIGH TEMPERATURE TIP
3" X 6" X 2 1/2"
(76mm X 152mm X 64mm)



MAGAZINES AND CARRIERS FOR PROCESS HANDLING SOLUTIONS



Film Frames



Film Frame Magazines



Film Frame Shippers



Grip Rings



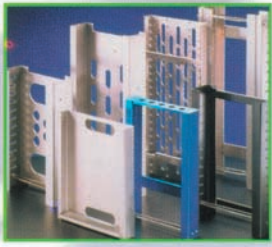
Grip Ring Magazines



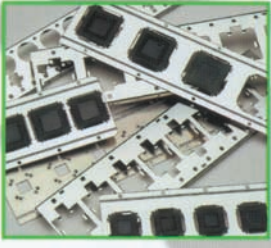
Grip Ring Shippers



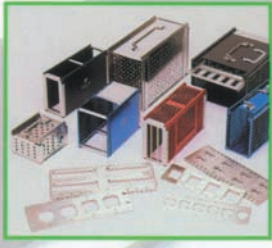
Lead Frame Magazines - F.O.L./E.O.L.



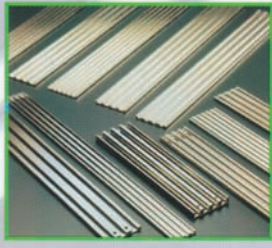
Stack Magazines - E.O.L.



Process Carriers (Boats)



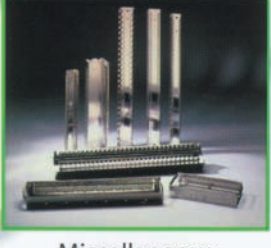
Boat Magazines



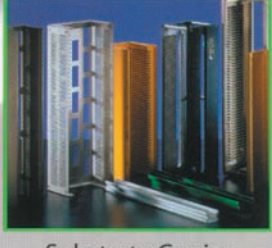
I. C. Trays - Multi-Channel



I. C. Tubes and Rails



Miscellaneous Magazines



Substrate Carrier Magazines



TO Tapes & Magazines



Wafer Carriers

Accept Nothing Less.

WAFER MOUNTING STATION TAPE



FEATURES

Accepts up to 6" wafers (Models 960-6) or 6" and 8" wafers (Models 960-8)

Compatible with standard or interleaved tape

Vacuum stage wafer holddown

Programmable heated vacuum stage

Built-in tape cutter separator system

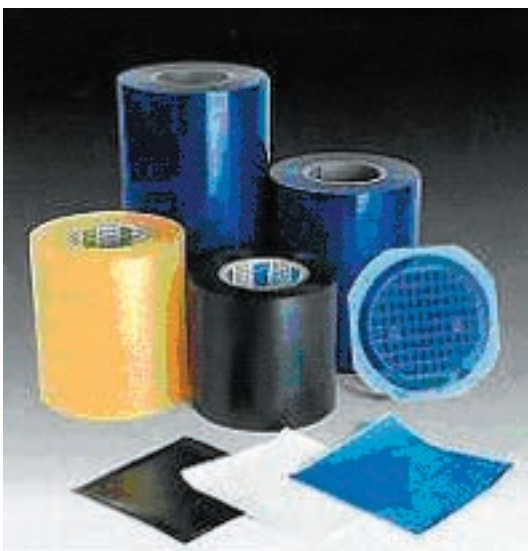
Captive roller assembly for consistent wafer/film frame contact pressure

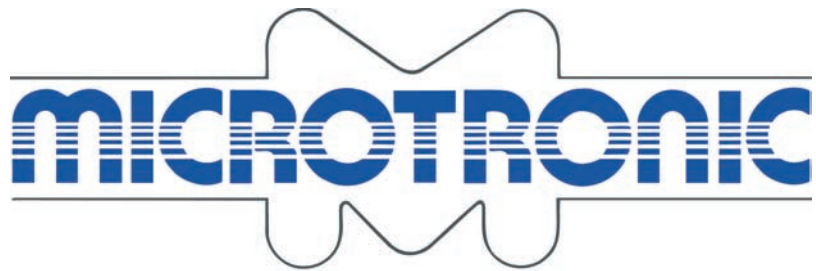
Adjustable spring loaded platten for optimum contact pressure



There is a Tape that is Perfect for Your Application

Wafer Dicing Tape is a flexible PVC with synthetic acrylic adhesive bonded to one side. It is tough, has high tear strength and elongation. It is used extensively for Wafer Sawing, Scribing, Expanding. These tapes are available in rolls suitable for all automatic and manual wafer mounting systems where the wafers are being mounted onto tape and film frames.





MICROTRONIC MICROELECTRONIC VERTRIEBS GMBH

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Überreicht durch:

