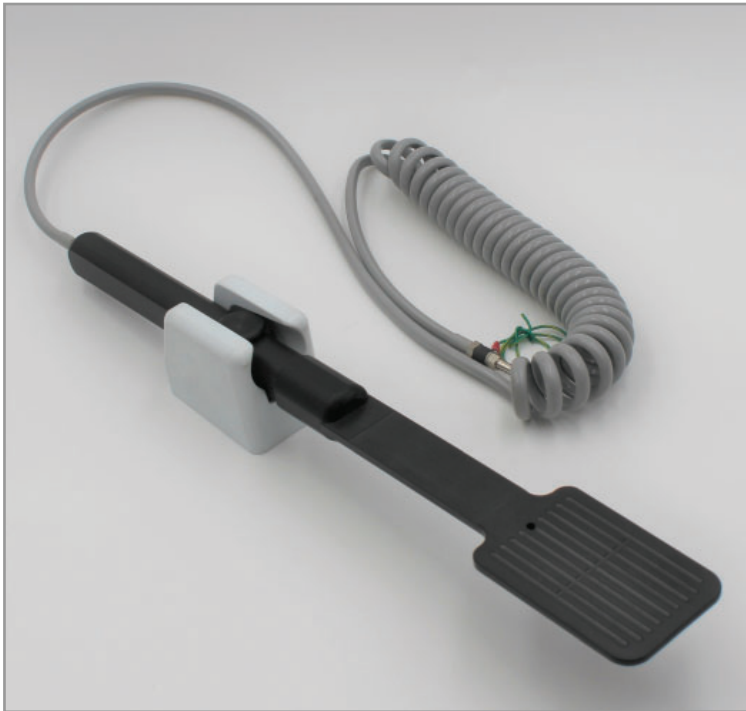# Vacuum Wands 300mm Wafer Handling

H-Square's 300mm vacuum wands are available as a house-facilities setup (tip + wand + coil cord + holder + ground adapter), or as a portable battery-operated Freedom Wand™ providing the flexibility to go anywhere in the fab and to be used for wafer rescue applications. 300mm vacuum wand tips are available in two materials - Antistatic PEEK, or Antistatic PEEK with a UHMW touchpad. Both materials are offered as straight (most common) or in a 45° offset orientation.

VWSET

300mm Vacuum Wand Sets

A common vacuum wand set for handling a 300mm silicon or glass wafers.
- T3PKAS1 (vacuum tip)
- NO3AS1 (wand handle)
- CC11SDS (coil vacuum cord)
- HSU3 (shutoff holder)
- CTA12 (grounding adapter)

Designed for ISO Class 3 (FS209E Class 1)
Antistatic construction, chemical resistant
This is a fixed set; no part substitutions

	Ordering Part Number
300mm	VWSET-A

FWCR Series

300mm Cordless Freedom Wands™

Self-contained 300mm cordless battery powered vacuum wand allows freedom from vacuum lines. Designed for wafer rescue or light-production. This standard handling kit ships complete with FWCR wand, 2-meter charging cord, charging stand, T3PKAS1 ESD safe PEEK vacuum tip for handling 300mm SEMI standard wafers.
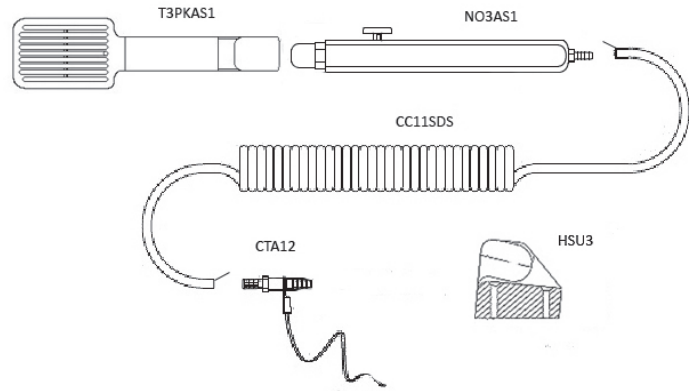
Designed for ISO Class 3 (FS209E Class 1)
T3PKAS1 vacuum tip included
This is a fixed kit; no part substitutions

	Ordering Part Number
300mm	FWCR3

NO3AS1 features a normally open (NO) flow valve. A shutoff holder is required. Setup designed to operate with 22"-24" hg of vacuum at approximately 0.5cfm (0.24 liters/sec) flow, facilities input.

T3PKAS1   NO3AS1

CC11SDS

CTA12   HSU3

300mm High Temperature Wands

RTP

Vacuum wand assembly, 300mm, special high temperature wafer handling for loading/unloading 300mm rapid thermal process tools. Assembly includes quartz tip, offset stainless steel tubing and wand handle. For use up to 800° C.

Designed for ISO Class 3 (FS209E Class 1)

	Ordering Part Number
300mm	NOP191-003
Holder	HSUPT
Coil Cord	CC11SDS

HSUPT holder and vacuum cord CC11SDS shown; purchased separately

300mm Freedom Wands™

FWA Series

Self-contained 300mm table-top battery powered vacuum wand allows freedom from vacuum lines. Designed for heavy-duty production. Features antistatic ESD-safe construction and SGI - safe grip indicator, green LED light shows operator wafer is safe to handle. Ships with external batteries (2) and a stand-alone charger unit. 300mm vacuum tip T3PKAS1 is included with purchase.

Designed for ISO Class 3 (FS209E Class 1)
Antistatic construction, chemical resistant
T3PKAS1 vacuum tip included
This is a fixed kit; no part substitutions
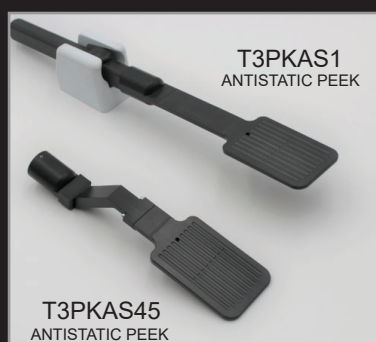
	Ordering Part Number
300mm	FWA3AS2

Vacuum Wands 300mm Wafer Handling

H-Square's vacuum wands are installed by combining five items - vacuum tip, normally open (NO) vacuum wand handle, shutoff holder (table-mount or pedestal tabletop), vacuum cord, and grounding adapter or quick disconnect. Advanced plastics are incorporated for cleanliness, longevity, and ESD safety. A vacuum test gauge VTG2 should be used to test installation performance periodically.

STANDARD TIP

T3PKAS1
ANTISTATIC PEEK

T3PKAS45
ANTISTATIC PEEK

UHMW / THIN TIP

T3PKUTF
UHMW / PEEK

T3PK45UTF
UHMW / PEEK

HANDLES

NO3AS1

100-300mm TIP COMPATIBLE

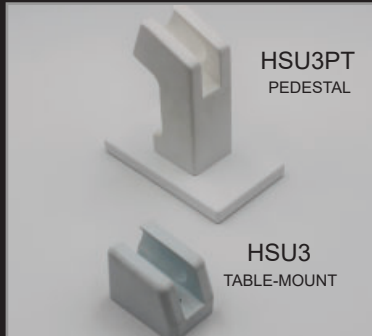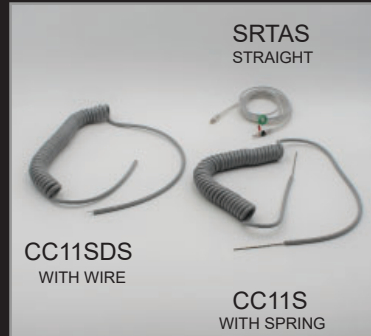| VACUUM TIP PART NUMBERS	DESCRIPTION
T3PKAS1 *	300mm standard vacuum tip, straight, antistatic PEEK
T3PKAS45	45° 300mm tip / adapter assembly, offset, antistatic PEEK
T3PKUTF	300mm vacuum tip, straight, PEEK with UHMW touchpad
T3PK45UTF	45° 300mm tip / adapter assembly, offset, PEEK with UHMW touchpad
VACUUM WAND PART NUMBERS	**DESCRIPTION**
NO3AS1*	press-fit, wand handle, normally-open flow, antistatic PVDF
HOLDER PART NUMBERS	**DESCRIPTION**
HSU3 *	table / wall mount, normally-open wand shutoff holder, Polypropylene
HSU3PT	tabletop weighted pedestal, normally-open wand shutoff holder, Polypropylene
VACUUM CORD PART NUMBERS	**DESCRIPTION**
CC11SDS *	heavy-duty, vacuum coil cord, wire, antistatic Polyurethane
CC11ESD1	heavy-duty, vacuum coil cord, wire + ground adapter, antistatic Polyurethane
CC11S	heavy-duty, vacuum coil cord, internal spring, antistatic Polyurethane
SRTAS	straight 6' (1829mm), vacuum cord, internal spring + ground adapter, Silicone
GROUND ADAPTER PART NUMBERS	**DESCRIPTION**
CTA12 *	dual hose barb with grounding wire
HBQDM	quick-disconnect, male, metal
CQDM	quick-disconnect, female, metal

* common selection for 300mm wafer handling

HOLDERS 300mm

HSU3PT
PEDESTAL

HSU3
TABLE-MOUNT

COIL CORDS

SRTAS
STRAIGHT

CC11SDS
WITH WIRE

CC11S
WITH SPRING

GROUND ADAPTERS

CQDM

HBQDM
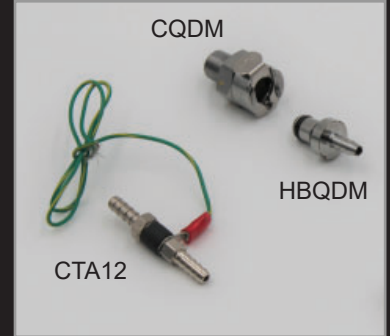
CTA12

Thin Wafer Packout Wands

Special application offset-angle "hoop" vacuum wand used for handling fragile thin wafers <350μ from a cassette, open-sided stage or shipping pack-out container. The end-effector is PFA Teflon® coated heat-treated aluminum. This product is antistatic and includes the complete assembly - tip, adapter, wand, holder and coil cord. The MISC1400 is designed for thin wafer handling and is not tested / certified with SEMI standard thickness wafer substrates.

Designed for ISO Class 3 (FS209E Class 1)

MISC1400-011
PICTURED

	Ordering Part Number
200-300mm 90°	MISC1400-004
150-200mm 90°	MISC1400-005
200-300mm 45°	MISC1400-011
100-150mm 90°	MISC1400-012

Vacuum Test Gauges

Wafer Size: 50-300mm. A standalone weighted base table-top vacuum testing gauge tool for checking vacuum strength (Hg") to determine vacuum wand tip and overall setup performance. Operator places the vacuum tip on the right side of the tower to quickly check the health of the vacuum wand tool. VTG2 features secondary tubing adapter for directly checking the input vacuum hose if necessary.

Designed for ISO Class 3 (FS209E Class 1)

	Ordering Part Number
50-300mm	VTG2

Vacuum Wands 100-200mm Wafer Handling

H-Square's 100-200mm vacuum wands are available as a house-facilities setup (tip + wand + coil cord + holder + ground adapter), or as a portable battery-operated Freedom Wand™ providing flexibility to go anywhere in the fab and to be used for wafer rescue applications. Vacuum sets are divided into two categories; Press-Fit NOASPF2 handle using molded press-fit antistatic PEEK vacuum tips, or Quick-Lock NOASQ2 handle using a machined vacuum tip, available in high-performance materials.

VWSET

100-200mm Vacuum Wand Sets

A common vacuum wand set for handling standard silicon or glass wafers.
- T693PKAS3 (vacuum tip)
- NOASPF2 (wand handle)
- CC11SDS (coil vacuum cord)
- HSU (shutoff holder)
- CTA12 (grounding adapter).

Designed for ISO Class 3 (FS209E Class 1)
Antistatic construction, chemical resistant
This is a fixed set; no part substitutions

	Ordering Part Number
100-200mm	VWSET-B

FWCR Series

100-200mm Cordless Freedom Wands™

Self-contained cordless battery-powered vacuum wand allows freedom from vacuum lines. Designed for wafer rescue or light-production. This standard handling kit ships complete with FWCR wand, 2-meter charging cord, charging stand, T693PKAS3 ESD-safe PEEK vacuum tip for handling 100-200mm SEMI standard wafers.
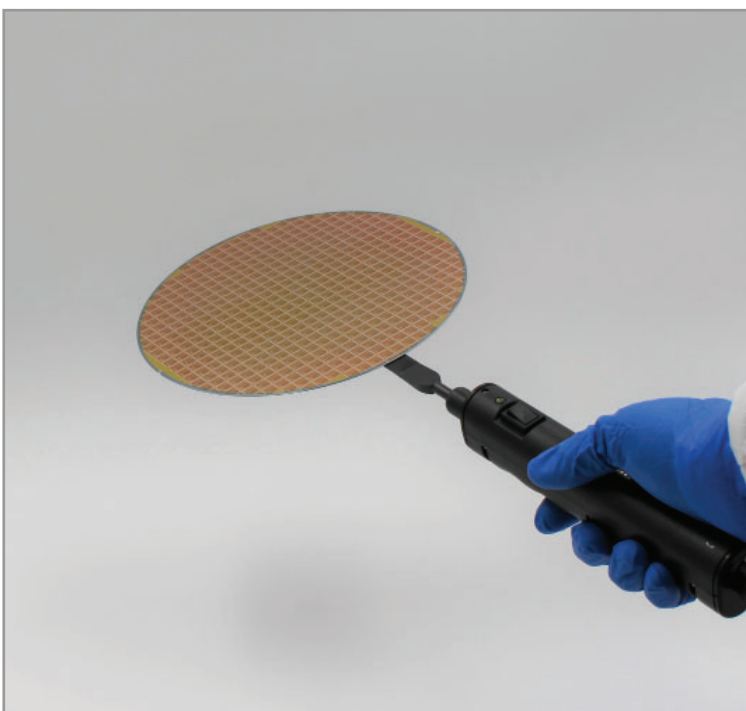
Designed for ISO Class 3 (FS209E Class 1)
T693PKAS3 vacuum tip included
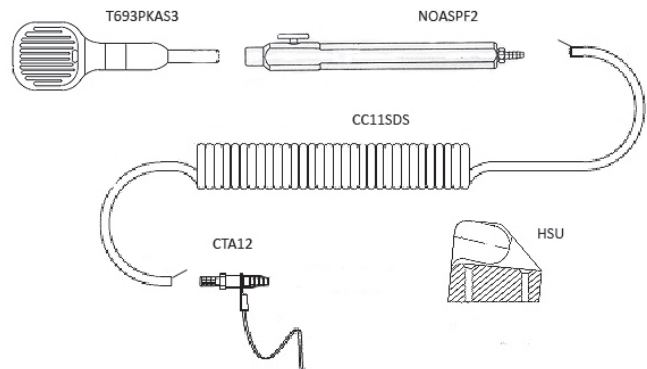This is a fixed set; no part substitutions

	Ordering Part Number
100-200mm	FWCR2

NOASPF2 features a normally open (NO) flow valve. A shutoff holder is required. Setup designed to operate with 22"-24" hg of vacuum at approximately 0.5cfm (0.24 liters/sec) flow, facilities input.

100-200mm Thin / Compound Vacuum Wand Sets

VWSET

A common vacuum wand set for handling thin silicon or compound wafers (150mm GaAs).
- T693PKAS3-001 (vacuum tip)
- NOASPF2 (wand handle)
- CC11SDS (coil vacuum cord)
- HSU (shutoff holder)
- CTA12 (grounding adapter).

Designed for ISO Class 3 (FS209E Class 1)
Antistatic construction, chemical resistant
This is a fixed set; no part substitutions

	Ordering Part Number
100-200mm	VWSET-C

100-200mm Freedom Wands™

FWA Series

Self-contained tabletop battery-powered vacuum wand allows freedom from vacuum lines. For handling 200mm and smaller wafers. Designed for heavy-duty production. Features antistatic ESD-safe construction and safe grip indicator (SGI); green LED shows operator wafer is safe to handle. Ships with external batteries (2) and a stand-alone charger unit. Vacuum tips are not included with the FWA-HAS2.

Designed for ISO Class 3 (FS209E Class 1)
Antistatic construction, chemical resistant
Vacuum tips sold separately

	Ordering Part Number
100-200mm	FWAHAS2

Vacuum Wands 100-200mm Wafer Handling

H-Square's vacuum wands are installed by combining five items - vacuum tip, normally open (NO) vacuum wand handle (Press-Fit or Quick-Lock), shutoff holder (table-mount or pedestal tabletop), vacuum cord, and grounding adapter or quick disconnect. Advanced plastics are incorporated for cleanliness, longevity, and ESD-safety. A vacuum test gauge VTG2 should be used to test installation performance periodically.
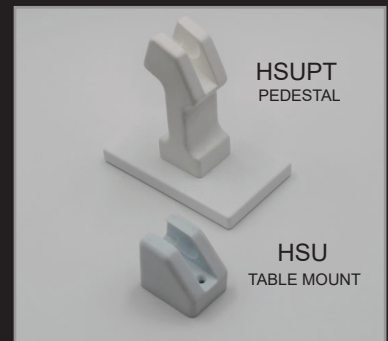
STANDARD TIP

T693PKAS3
ANTISTATIC PEEK

T693PKAS-002
ANTISTATIC PEEK

UHMW TIP

T696PK
UHMW / PEEK

T696PK-001
UHMW / PEEK

HOLDERS

HSUPT
PEDESTAL

HSU
TABLE MOUNT

THIN / COMPOUND TIP

T693PKAS3-001
ANTISTATIC PEEK

T693PKAS3D-001
ANTISTATIC PEEK

STOP INSERTION TIP

T693PKAS3-007
ANTISTATIC PEEK

HANDLES

NOASQ2
QUICK-LOCK

NOASPF2
PRESS-FIT

UHMW THIN TIP

T696PK-002
UHMW / PEEK

T696PK-003
UHMW / PEEK

PLATEN 100-200mm TIP

T75051PKAS
ANTISTATIC PEEK

T75051V
VESPEL SP1

QUICK-LOCK

COIL CORDS

CC9SDS
WITH WIRE

SRTAS
STRAIGHT

CC11SDS
WITH WIRE

CC11S
WITH SPRING

HEAVY / BONDED TIP

T695PKAS
ANTISTATIC PEEK

T695PKAS3D-001
ANTISTATIC PEEK

PLATEN 100-150mm TIP

T75083PKAS
ANTISTATIC PEEK

T75040V
VESPEL SP1

QUICK-LOCK

GROUND ADAPTERS

CQDM

HBQDM

CTA12

VACUUM TIP PART NUMBERS	DESCRIPTION
T693PKAS3 *	standard vacuum tip - silicon / glass,3°straight,antistatic PEEK
T693PKAS-002	vacuum tip - silicon / glass,30°down bend T693PKAS3,antistatic PEEK
T693PKAS3-001 *	standard vacuum tip - compound / thin,3°straight,antistatic PEEK
T693PKAS3D-001	vacuum tip - compound / thin,30°down bend T693PKAS3-001,antistatic PEEK
T696PK-002	vacuum tip - silicon / compound / thin,3°straight,antistatic PEEK with UHMW touchpad
T696PK-003	vacuum tip - 30°down bend T696PK-002,antistatic PEEK with UHMW touchpad
T695PKAS	vacuum tip - silicon / glass / bonded / heavy,4°straight,antistatic PEEK
T695PKAS3D-001	vacuum tip - 30°down bend T695PKAS,antistatic PEEK
T696PK	vacuum tip - silicon/glass,3°straight,antistatic PEEK with UHMW touchpad
T696PK-001	vacuum tip - 30°down bend T696PK,antistatic PEEK with UHMW touchpad
T693PKAS3-007	vacuum tip - silicon/glass,3°straight, with backside bump, antistatic PEEK
T75051PKAS	vacuum tip - silicon / glass / compound,quicklock, lift spatula, antistatic PEEK
T75051V	vacuum tip - silicon / glass / compound,quicklock, lift spatula, Vespel SP1®
T75083PKAS **	vacuum tip - 150mm, silicon / glass,quicklock, knife-edge, antistatic PEEK
T75040V **	vacuum tip - 150mm,silicon / glass,quicklock, knife-edge, Vespel SP1®
T75082Q (not pictured)	vacuum tip - high temperature, silicon / glass,quicklock, with tubing, quartz

WAND HANDLE PART NUMBERS	DESCRIPTION
NOASPF2 *	press-fit, wand handle, normally-open flow, antistatic
NOASQ2	quick-lock, wand handle, normally-open flow, antistatic

HOLDER PART NUMBERS	DESCRIPTION
HSU *	table / wall mount, normally-open wand shutoff holder
HSUPT	tabletop pedestal, normally-open wand shutoff holder

VACUUM CORD PART NUMBERS	DESCRIPTION
CC11SDS *	heavy-duty, vacuum coil cord, wire
CC11ESD1	heavy-duty, vacuum coil cord, wire + ground adapter
CC11S	heavy-duty, vacuum coil cord, internal spring
CC9SDS	medium-duty, vacuum coil cord, wire
CC9ESD1	heavy-duty, vacuum coil cord, wire + ground adapter
SRTAS	straight 6' (1829mm), vacuum cord, spring + ground adapter

GROUND ADAPTER PART NUMBERS	DESCRIPTION
CTA12 *	dual hose barb with grounding wire
HBQDM	quick-disconnect, male, metal
CQDM	quick-disconnect, female, metal

* common selection for 125-200mm vacuum wand installations

** not compatible with 200mm wafers

Vacuum Wands 50-100mm Wafer Handling

H-Square's 50-100mm vacuum wands are available as a house-facilities setup (tip + wand + coil cord + holder + ground adapter), or as a portable battery-operated Freedom Wand™ providing flexibility to go anywhere in the fab and to be used for wafer rescue applications. Vacuum sets are divided into two categories; Press-Fit NOASPF2 handle using molded Press-Fit antistatic PEEK vacuum tips, or Quick-Lock NOASQ2 handle using a machined vacuum tip, available in 4 high-performance materials.

VWSET

50-100mm Thin / Compound Vacuum Wand Sets

A common vacuum wand set for handling small GaAs, InP, Si, and SiC wafers.
- T75072PKAS (tip)
- NOASQ2 (wand handle)
- CC9SDS (coil vacuum cord)
- HSU (shutoff holder)
- CTA12 (grounding adapter).

Designed for ISO Class 3 (FS209E Class 1)
Antistatic construction, chemical resistant
This is a fixed set; no part substitutions

	Ordering Part Number
76-100mm	VWSET-D

FWCR Series

100-200mm Cordless Freedom Wands™

Self-contained cordless battery-powered vacuum wand allows freedom from vacuum lines. Designed for wafer rescue or light-production. This standard handling kit ships complete with FWCR wand, 2-meter charging cord, charging stand, T693PKAS3 ESD-safe PEEK vacuum tip for handling 100-200mm SEMI standard silicon wafers.
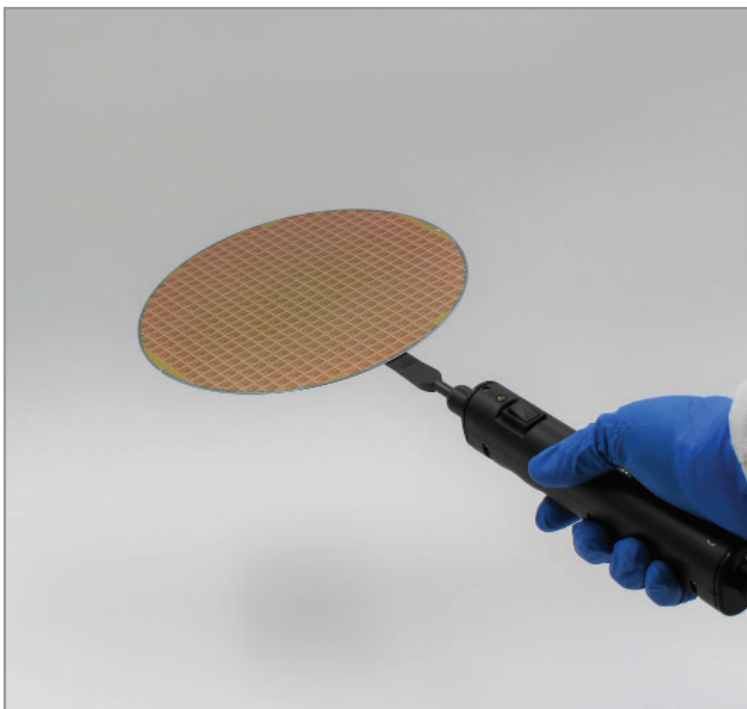
Designed for ISO Class 3 (FS209E Class 1)
Vacuum tip T693PKAS3 included
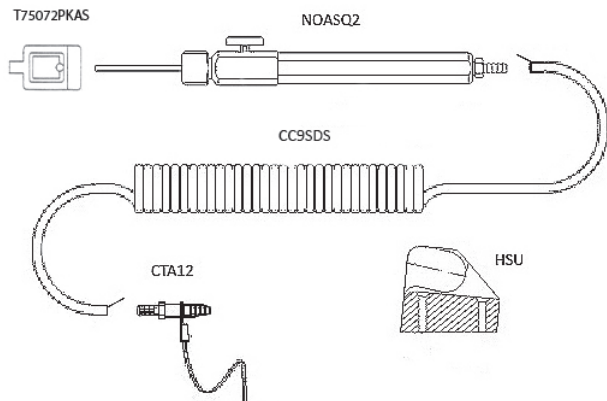This is a fixed set; no part substitutions

	Ordering Part Number
100-200mm	FWCR2

NOASQ2 features a normally open (NO) flow valve. A shutoff holder is required. Setup designed to operate with 22"-24" hg of vacuum at approximately 0.5cfm (0.24 liters/sec) flow, facilities input.

T75072PKAS   NOASQ2

CC9SDS

CTA12   HSU

50-100mm Thin / Compound Vacuum Wand Sets

VWSET

A common vacuum wand set for handling small GaAs, InP, Si, and SiC wafers.
*   T794PKAS (vacuum tip)
*   NOASPF2 (wand handle)
*   CC9SDS (coil vacuum cord)
*   HSU (shutoff holder)
*   CTA12 (grounding adapter).

Designed for ISO Class 3 (FS209E Class 1)
Antistatic construction, chemical resistant
This is a fixed set; no part substitutions

	Ordering Part Number
76mm-125mm	VWSET-E

50-200mm Freedom Wands™

FWTT Series

Self-contained tabletop battery-powered vacuum wand allows freedom from vacuum lines. For handling 200mm and smaller wafers. Designed for heavy-duty production. Features internal battery pack and an external charging power supply. Vacuum tips are not included with the FWTTA1.

Designed for ISO Class 3 (FS209E Class 1)
Chemical resistant
Vacuum tips sold separately

	Ordering Part Number
50-200mm	FWTTA1

Vacuum Wands 50-100mm Wafer Handling

H-Square vacuum wands are installed by combining five items - vacuum tip, normally open (NO) vacuum wand handle, shutoff holder, vacuum cord, and grounding adapter or quick disconnect. Advanced plastics are incorporated for cleanliness, longevity, and ESD safety. A vacuum test gauge VTG2 should be used to test installation periodically.
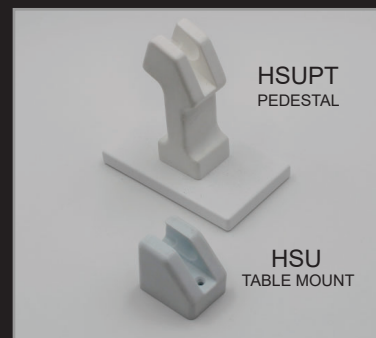
STANDARD TIP

T75072PKAS
ANTISTATIC PEEK

T75072V
VESPEL SP1

PLATEN TIP

T75070V
VESPEL SP1

HOLDERS

HSUPT
PEDESTAL

HSU
TABLE MOUNT

COMPOUND WAFER TIP

T791PKAS
ANTISTATIC PEEK

T791PKAS3D
ANTISTATIC PEEK

PLATEN TIP

T75055V
VESPEL SP1

T75049V
VESPEL SP1

HANDLES

NOASQ2
QUICK-LOCK

NOASPF2
PRESS-FIT

COMPOUND WAFER TIP

T794PKAS
ANTISTATIC PEEK

T794PKAS3D-001
ANTISTATIC PEEK

HIGH-TEMP PLATEN TIP

T75033QV
VESPEL SP1 / QUARTZ

COIL CORDS

SRTAS
STRAIGHT

CC9SDS
WITH WIRE

UHMW / ULTRA-THIN TIP

T691PK
PEEK / UHMW

T691PK3D
PEEK / UHMW

SILICON / GLASS TIP

T694PKAS
ANTISTATIC PEEK

T694PKAS-001
ANTISTATIC PEEK

GROUND ADAPTERS

CQDM

HBQDM

CTA12
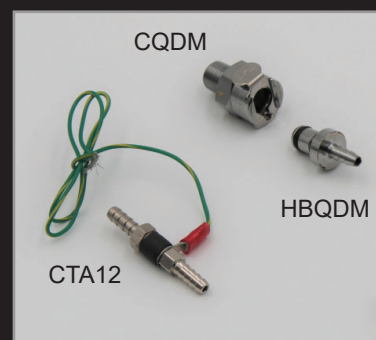
VACUUM TIP PART NUMBERS

Part Number	DESCRIPTION
T75072PKAS *	standard vacuum tip - silicon / glass / compound,quicklock, lift spatula, antistatic PEEK
T75072V *	standard vacuum tip - silicon / glass / compound,quicklock, lift spatula, Vespel SP1®
T791PKAS	vacuum tip - compound / thin,straight,antistatic PEEK
T791PKAS3D	vacuum tip - compound / thin,30°down bend T791PKAS,antistatic PEEK
T794PKAS *	standard 76-100mm GaAs vacuum tip - compound / thin,straight,antistatic PEEK
T794PKAS3D-001	vacuum tip - compound / thin, 30°down bend T794PKAS,antistatic PEEK
T691PK	vacuum tip - silicon / compound / thin,straight,antistatic PEEK with UHMW touchpad
T691PK3D	vacuum tip - 30°down bend T691PK,antistatic PEEK with UHMW touchpad
T75070V	vacuum tip - high temperature, quicklock, with knife-edge,Vespel SP1®
T75055V	vacuum tip - high-temperature, quicklock, with long-blade spatula,Vespel SP1®
T75049V	vacuum tip - high-temperature, quicklock, with short-blade Spatula,Vespel SP1®
T75033QV	vacuum tip - high-temperature, quicklock, with tubing, quartz with Vespel SP1®
T694PKAS	vacuum tip - silicon / glass,straight,antistatic PEEK
T694PKAS-001	vacuum tip - silicon / glass,30°down bend T694PKAS,antistatic PEEK

WAND HANDLE PART NUMBERS

Part Number	DESCRIPTION
NOASPF2 *	press-fit, wand handle, normally-open flow, antistatic
NOASQ2 *	quick-lock, wand handle, normally-open flow, antistatic

HOLDER PART NUMBERS

Part Number	DESCRIPTION
HSU *	table / wall mount, normally-open wand shutoff holder
HSUPT	tabletop pedestal, normally open wand shutoff holder

VACUUM CORD PART NUMBERS

Part Number	DESCRIPTION
CC9SDS *	medium-duty, vacuum coil cord, wire
CC9ESD1	heavy-duty, vacuum coil cord, wire + ground adapter
SRTAS	straight 6' (1829mm), vacuum cord, internal spring + ground adapter

GROUND ADAPTER PART NUMBERS

Part Number	DESCRIPTION
CTA12 *	dual hose barb with grounding wire
HBQDM	quick-disconnect, male, metal
CQDM	quick-disconnect, female, metal

* common selection for 50-100mm vacuum wand installations

Vacuum Wands Small Device / Die Handling

H-Square's small device vacuum wands are available as a house-facilities setup (cup / tip + hub needle + wand + coil cord + holder + ground adapter), portable battery operated Freedom Wand™, or as a self-contained portable pencil system. Small device handling cups (flexible) and tips (rigid) are available in a variety of sizes and materials.

VWSET

Small Device Vacuum Wand Sets

A common vacuum wand set for handling small device substrates, die, packages, and optics.

- DPNOAS2LA (wand handle)
- HSU (shutoff holder)
- CC4SDS (coil vacuum cord)
- CTA06 (grounding adapter)
- VCAS125 (0.125" vacuum cup)
- BCHN-16 (hub needle).

Designed for ISO Class 5 (FS209E Class 10)
Antistatic construction, chemical resistant
This is a set; no part substitutions

	Ordering Part Number
Small Device	VWSET-F

FWCR Series
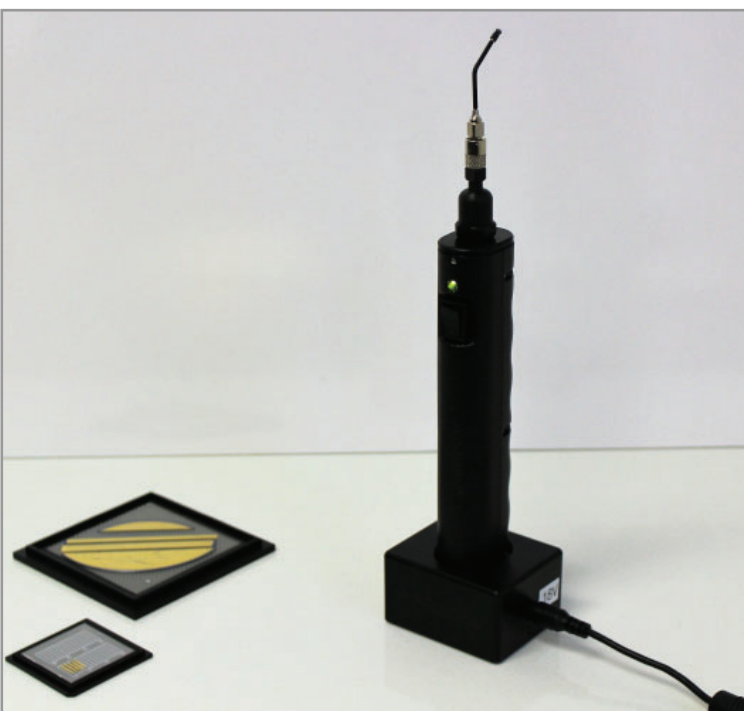

Small Device Cordless Freedom Wand™

A self-contained cordless battery-powered vacuum wand allowing freedom from vacuum lines. Designed for small device and die handling. This special die handling kit ships complete with FWCR wand, 2-meter charging cord, charging stand, Luer-lock adapter AASPFLLHNF, hub needle BCHN-16 and SCHN-16, hard vacuum tip VCC-020, and soft vacuum cups VCAS125 and VCAS246.

Designed for ISO Class 5 (FS209E Class 10)
This is a set; no part substitutions

	Ordering Part Number
Small Device	FWCR-4

DPNOAS2LA features a normally open (NO) flow valve. A shutoff holder is required. Setup designed to operate with 22"-24" hg of vacuum at approximately 0.5cfm (0.24 liters/sec) flow, facilities input.

FWP
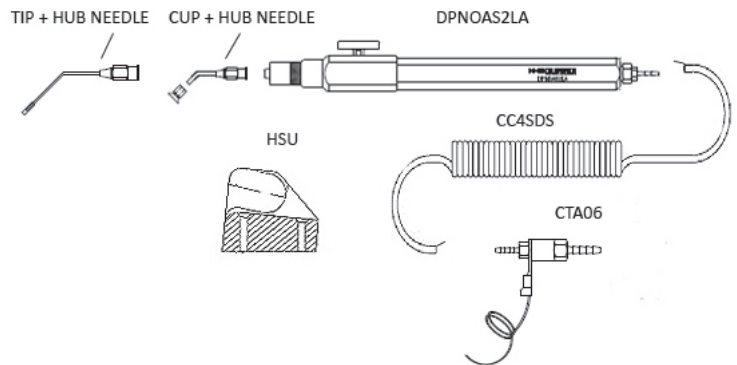
Small Device
Self-Contained Pencils

A small hand-held self-contained vacuum squeeze bulb die pencil allows for freedom from vacuum lines. This ESD-safe die handling kit ships complete with FWP pencil wand, two static-dissipative vacuum cups (BNCSD-25 and BNCSD-38) and two short hub needles. Operator should use ground strap to insure static discharge.

Designed for ISO Class 5 (FS209E Class 10)
Antistatic construction
This is a set; no part substitutions

|	**Ordering Part Number**
Small Device	FWP

FWTT Series

Small Device
Freedom Wand™

Self-contained table-top battery-powered vacuum wand allows freedom from vacuum lines. Features internal battery pack and an external charging cable. This special die handling kit comes complete with two bent hub needles (BCHN-16S and BCHN-21), and two vacuum cups (VCAS125 and MBNCSD-12) to make a complete die and package Freedom Wand™ starter package.

Designed for ISO Class 5 (FS209E Class 10)
Chemical resistant
This is a set; no part substitutions

	Ordering Part Number
Small Device	FWTTA1-AC-005
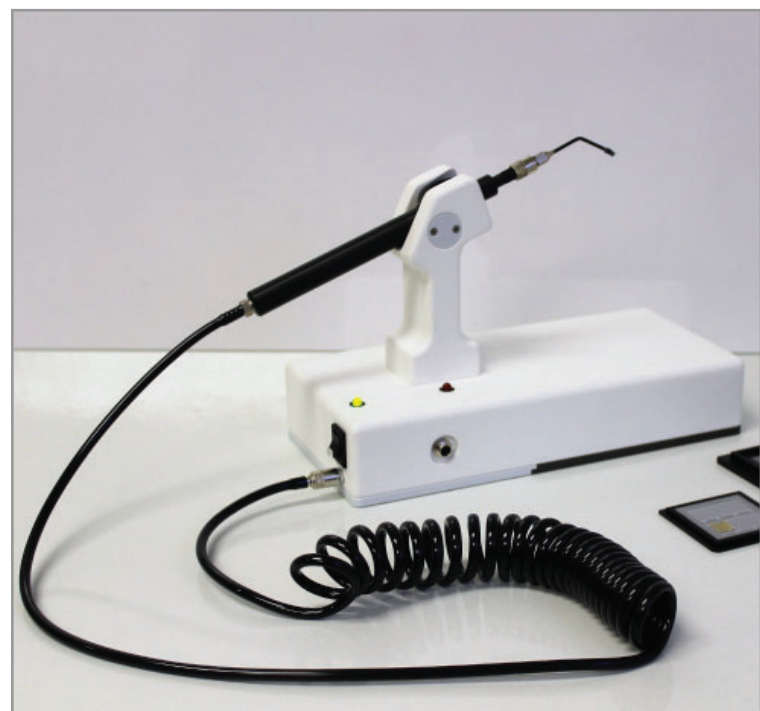
Vacuum Wands Small Device / Die Handling

H-Square's small device vacuum wands are installed by combining six items - vacuum cup or tip, hub needle (bent or straight), normally open (NO) vacuum wand handle, shutoff holder (table-mount or pedestal tabletop), vacuum cord, and a grounding adapter. Advanced plastics are incorporated for cleanliness, longevity, and ESD safety. Wand handles are available in two types - "LA" - luer-lock fitting- twist and locks the hub needle in place on the end of the handle, or "NA" - NST fitting- the hub needle slips over the tapered end of the NST fitting - keeping it on the end of the handle.
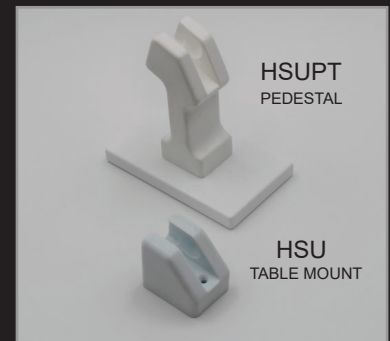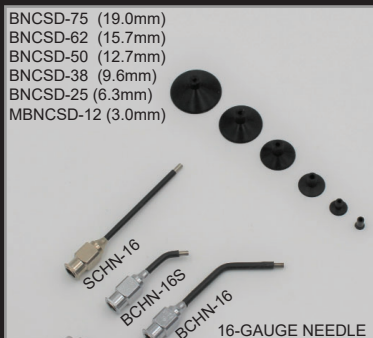
VCAS VINYL CUPS

VCAS199 (5.05mm)
VCAS196 (4.97mm)
VCAS160 (4.06mm)
VCAS125 (3.17mm)

SCHN-16
BCHN-16S
BCHN-16

16-GAUGE NEEDLE

BNHD HUB+ TEFLON TIP

BNHD-19 (1.09mm)
BNHD-24 (0.60mm)

HOLDERS

HSUPT
PEDESTAL

HSU
TABLE MOUNT

BNCSD NITRILE CUPS

BNCSD-75 (19.0mm)
BNCSD-62 (15.7mm)
BNCSD-50 (12.7mm)
BNCSD-38 (9.6mm)
BNCSD-25 (6.3mm)
MBNCSD-12 (3.0mm)

SCHN-16
BCHN-16S
BCHN-16

16-GAUGE NEEDLE

SRC SILICONE CUPS

SRC-38 (9.65mm)
SRC-25 (6.35mm)

SCHN-16
BCHN-16S
BCHN-16

16-GAUGE NEEDLE

HANDLES SMALL DEVICE

DPNOAS2NA
NST FITTING

DPNOAS2LA
LUER FITTING

VCC VESPEL TIPS

VCC-31 (7.87mm)
VCC-25 (6.3mm)
VCC-12 (3.0mm)
VCC-060 (1.5mm)
VCC-040 (1.0mm)
VCC-020 (0.5mm)
VCC-015 (0.8mm)

SCHN-16
BCHN-16S
BCHN-16

16-GAUGE NEEDLE

VCAS58 NST MOUNT CUP

VCAS58 (14.7mm)

USE NST WAND HANDLE

COIL CORDS

CC4SDS

TC PTFE TIPS

TC-25 0.25" (6.35mm)
TC-19 0.19" (4.82mm)

SNHN-15
BNHN-15

15-GAUGE NEEDLE

MP POLYURETHANE TIP

MPCSD-06 (1.5mm)

BCHN-21

21-GAUGE NEEDLE

ADAPTERS

CTA06

AASPFLLHNF

VACUUM CUP PART NUMBERS	DESCRIPTION
VCAS125	5-pack antistatic rubber vinyl cup, use 16-gauge hub needle
VCAS160	5-pack antistatic rubber vinyl cup, use 16-gauge hub needle
VCAS196	5-pack antistatic rubber vinyl cup, use 16-gauge hub needle
VCAS199	5-pack antistatic rubber vinyl cup, use 16-gauge hub needle
VCAS58	5-pack antistatic rubber vinyl cup, use NST vacuum wand
MPCSD-06	10-pack Antistatic rubber polyurethane tip, use 21-gauge hub needle
MBNCSD-12	10-pack antistatic rubber Nitrile Buna-N cup, use 18-gauge hub needle
BNCSD-25	10-pack antistatic rubber Nitrile Buna-N cup, use 16-gauge hub needle
BNCSD-38	10-pack antistatic rubber Nitrile Buna-N cup, use 16-gauge hub needle
BNCSD-50	10-pack antistatic rubber Nitrile Buna-N cup, use 16-gauge hub needle
BNCSD-62	10-pack antistatic rubber Nitrile Buna-N cup, use 16-gauge hub needle
BNCSD-75	10-pack antistatic rubber Nitrile Buna-N cup, use 16-gauge hub needle
VCC-015	1-pack antistatic Vespel® tip, use 16-gauge hub needle
VCC-020	1-pack antistatic Vespel® tip, use 16-gauge hub needle
VCC-040	1-pack antistatic Vespel® tip, use 16-gauge hub needle
VCC-060	1-pack antistatic Vespel® tip, use 16-gauge hub needle
VCC-12	1-pack antistatic Vespel® tip, use 16-gauge hub needle
VCC-25	1-pack antistatic Vespel® tip, use 16-gauge hub needle
VCC-31	1-pack antistatic Vespel® tip, use 16-gauge hub needle
TC-19	1-pack PTFE Teflon® tip, use 15-gauge hub needle
TC-25	1-pack PTFE Teflon® tip, use 15-gauge hub needle
BNHD-19	5-pack, bent, plastic hub needle with epoxy mounted PFA Teflon® tube tip
BHHD-24	5-pack, bent, plastic hub needle with epoxy mounted PFA Teflon® tube tip
SRC-25	10-pack rubber silicone cup, high-temperature, use 16-gauge hub needle
SRC-38	10-pack rubber silicone cup, high-temperature, use 16-gauge hub needle

WAND HANDLE PART NUMBERS	DESCRIPTION
DPNOAS2LA *	luer-lock fitting, wand handle, normally-open flow
DPNOAS2NA	NST fitting, wand handle, normally-open flow

HOLDER PART NUMBERS	DESCRIPTION
HSU *	table / wall mount, normally-open wand shutoff holder
HSUPT	tabletop pedestal, normally-open wand shutoff holder

VACUUM CORD PART NUMBERS	DESCRIPTION
CC4SDS *	light-duty, vacuum coil cord, wire

GROUND ADAPTER PART NUMBERS	DESCRIPTION
CTA06 *	dual hose barb with grounding wire

ADAPTER PART NUMBERS	DESCRIPTION
AASPFLLHNF	adapter , convert press fit wand / Freedom Wand™ to hub needle mount