

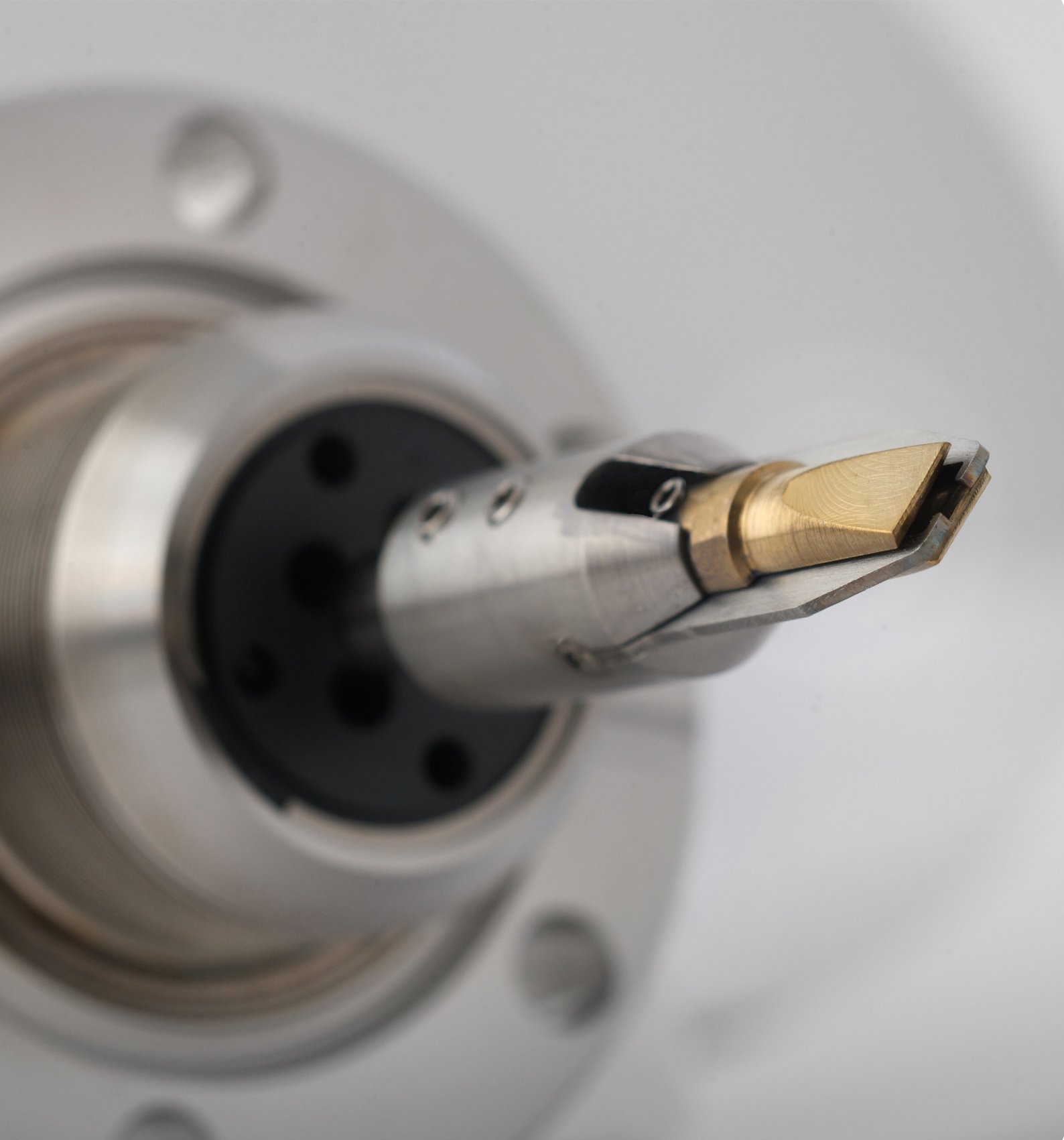


Wobble Sticks

Precise Manual Sample Transfer



Wobble Sticks



The UHV Design wobble stick range offers ultimate versatility for your bespoke applications.

Our slimline modular concept benefits from UHV Design's cutting-edge high power magnetic coupling technology. Plus, each series is offered with a choice of stroke lengths and optional end effectors to suit your requirements.

Why choose our Wobble Stick?

The UHV Design wobble stick is a slimline modular concept benefiting from UHV Design's high power magnetic coupling technology.

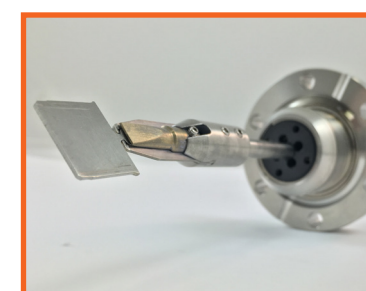
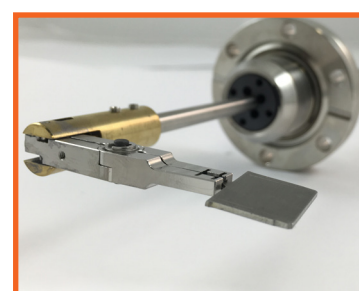
The coupling eliminates the need for long edge-welded bellows stacks, typically employed with conventional wobble stick designs. This reduces the risk of leaks, particularly for deposition applications such as MBE where particulates or deposition between bellows convolutions can reduce lifetimes or cause rapid and catastrophic failure. Also, unlike a bellows-sealed device, the wobble stick is not subject to the thrust due to vacuum, resulting in smooth, free-moving operation.

The WS40 wobble stick series is available with a range of end effectors while the WSG40 series comprises an additional hand-operated trigger mechanism to activate the end gripper. In-line and right-angle versions are available with end effector options for flag, puck and the ESCA stub.



KEY ADVANTAGES

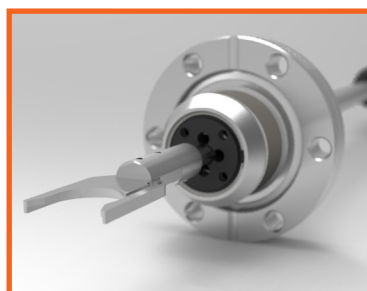
- » In-line and right-angled versions
- » +/-22° tilt
- » 100-350mm stroke range (available in 50mm increments)
- » Bakeout to 250°C without the need to remove the outer magnet assembly
- » Available with or without end-effector
- » Choice of end effectors for flag, puck and ESCA stub



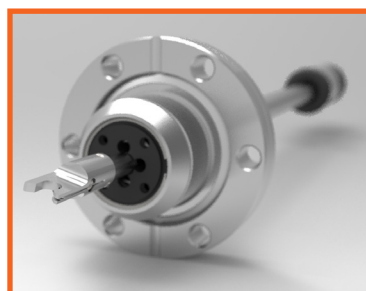
THE WS40 SERIES

The WS40 series of wobble sticks has been designed to offer precise manual manipulation of various sample holders using UHV Design's high power magnetic coupling technology.

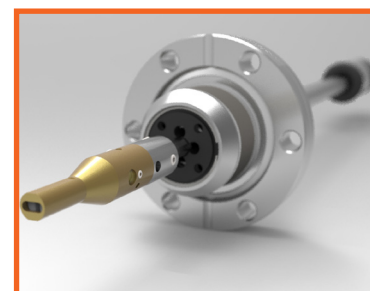
- 100-350mm stroke range (available in 50mm increments)
- $\pm 22^\circ$ tilt
- Bakeout to 250°C without the need to remove the outer magnetic assembly
- Choice of in-line and right-angled end-effector options for Flag, Puck and ESCA stub
- Linear breakaway thrust: 40N
- Rotary breakaway torque: 0.4Nm



WS40 with in-line Puck Style end effector option.



WS40 with in-line ESCA Stub end effector option.



WS40 with in-line Flag Toggle end effector option.

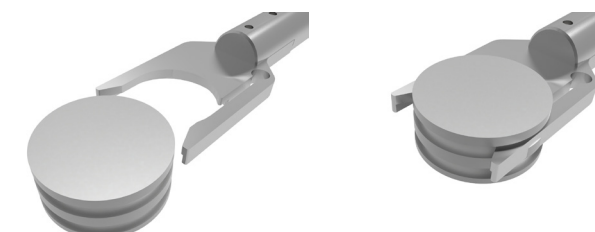
Standard WS40 supplied without end-effector



WS40 end-effector options

Puck Style

In-line or right angled fork to transport Puck style sample holders for WS40 wobble sticks.



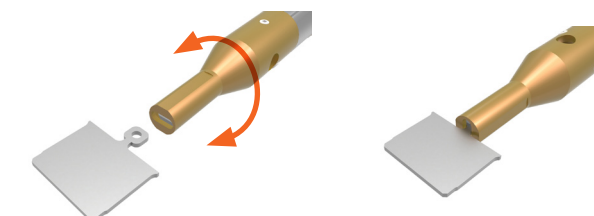
ESCA Stub Style

In-line or right angled fork to transport ESCA Stub style sample holders for WS40 wobble sticks



Flag Toggle

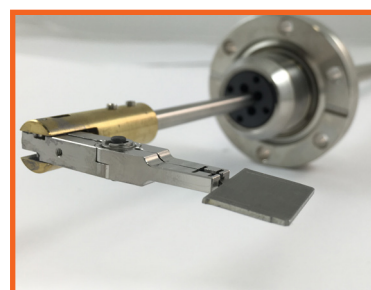
In-line 90° 'twist and lock' mechanism for flag style sample holders for WS40 wobble sticks.



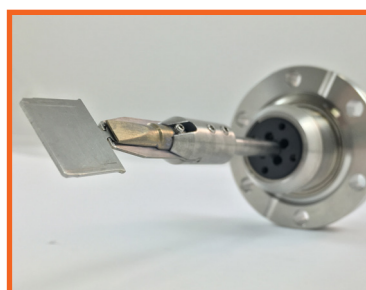
THE WSG40 SERIES

The WSG40 range of wobble sticks include an inner shaft that provides 5mm of independent linear motion when the trigger grip is actuated. In addition, a choice of end effector options is available.

- Integrated trigger grip with spring loaded action
- 100-350mm stroke range (available in 50mm increments)
- $\pm 22^\circ$ tilt
- Bakeout to 250°C without the need to remove the outer magnetic assembly
- Choice of in-line and right angle Flag end-effector options
- Linear breakaway thrust: 40N
- Rotary breakaway torque: 0.4Nm



WSG40 with right-angle Flag Jaws end effector option.

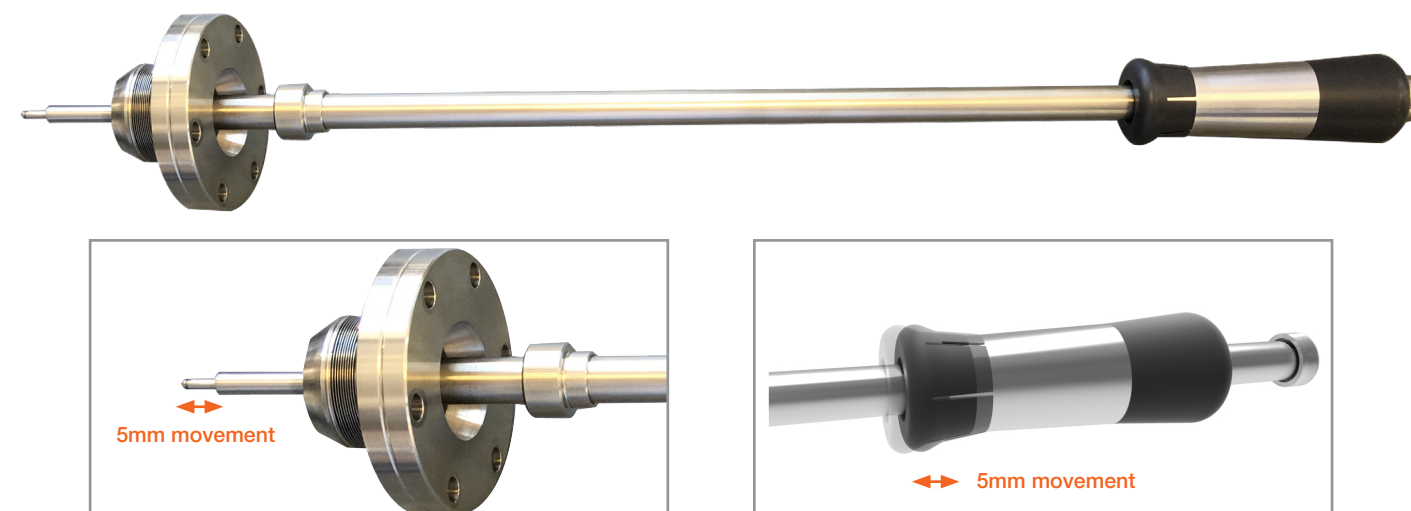


WSG40 with in-line Flag Blade end effector option.



WSG40 with in-line Flag Blade end effector option.

Standard WSG40 supplied without end-effector

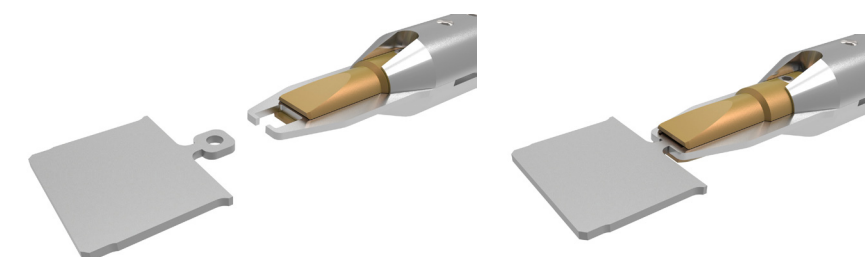


The WSG40 series of wobble sticks provides 5mm of independent linear motion of an inner shaft when the trigger grip is actuated. This can be used to actuate a custom built end effector or can be supplied preconfigured with a standard WSG40 end effector.

WS40 end-effector options

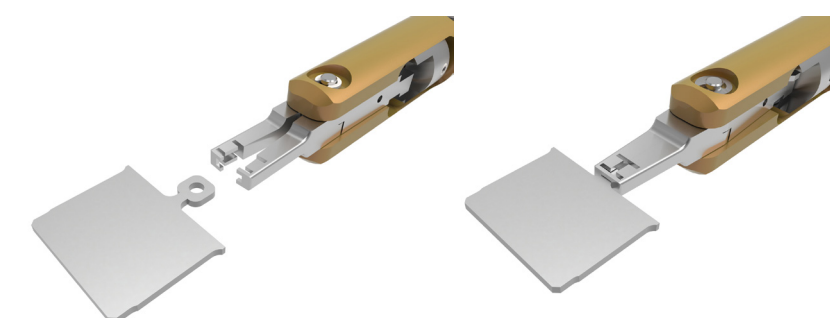
In-line Flag Blade

In-line clamping option for flag style sample holders for WSG40 wobble sticks.



Flag Jaws

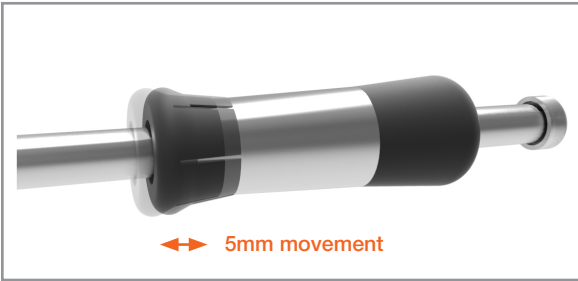
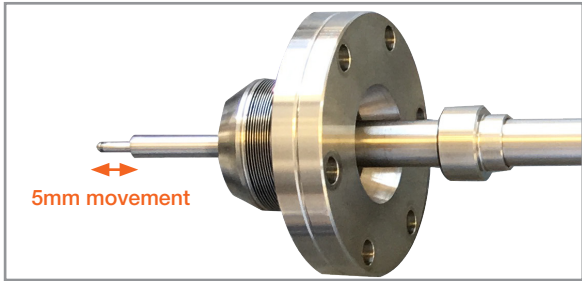
In-line and right-angle jaws option for flag style sample holders for WSG40 wobble sticks.



WS40 TECHNICAL SPECIFICATIONS



WSG40 TECHNICAL SPECIFICATIONS



WS40 SPECIFICATION	VALUE
Mounting flange	FC38 (2 3/4") with clear holes
Angular sweep	+/-22°
Magnetic rotary breakaway torque	0.4Nm
Magnetic linear breakaway thrust	40N
Available stroke range	100mm to 350mm (50mm increments)
Bakeout temperature	250°C
Shaft radial runout	1mm
Maximum cantilevered moment	0.5Nm
Maximum axial load	25N
Trigger Axial stroke	Not applicable
Default configuration	Supplied without end effector
End Effector options	Flag, Puck, and ESCA stub sample holders

WSG40 SPECIFICATION	VALUE
Mounting flange	FC38 (2 3/4") with clear holes
Angular sweep	+/-22°
Magnetic rotary breakaway torque	0.4Nm
Magnetic linear breakaway thrust	40N
Available stroke range	100mm to 350mm (50mm increments)
Bakeout temperature	250°C
Shaft radial runout	1mm
Maximum cantilevered moment	0.5Nm
Maximum axial load	25N
Trigger Axial stroke	5mm
Default configuration	Supplied without end effector
Gripper options	Blade type and Jaws type for Flag stye sample holders



Contacts

UK, EIRE, REST OF WORLD

UHV Design Ltd
Judges House, Lewes Road, Laughton
East Sussex, BN8 6BN, UK.
T +44 (0) 1323 811188
F +44 (0) 1323 811999
E sales@uhvdesign.com
www.uhvdesign.com

ARGENTINA

VEQ S.A.
T/F +54 11 4382 5558
E mdeferrari@veqsa.com.ar
www.veqsa.com.ar

POLAND, CZECH REPUBLIC, NETHERLANDS

Kurt J. Lesker Company®
Telephone: +44 1424 458100
Fax: +44 1424 458103
Email: sales@lesker.com
Web: www.lesker.com

BRAZIL

MM Vacuo
T +55 11 3791 7281
M +55 11 98371 1367
E mmvacuo@mmvacuo.com.br
www.mmvacuo.com.br

CHINA

Kurt J. Lesker (Shanghai) Trading Company
T: +86 21 50115900
F: +86 21 50115863
E: china@lesker.com
www.china.lesker.com

DENMARK

VACPRO APS
T: +45 70 26 88 05
E: info@vacpro.dk
W: www.vacpro.dk

FINLAND

SV VACUUMSERVICE OY
T: +358 9 774 55 30
E: info@vacuumservice.fi
W: www.vacuumservice.fi

FRANCE

ALTEC Equipment SARL
T +33(0)139156985
M +33(0)632420769
E a.aubert@altec-equipment.com
www.altec-equipment.com

GERMANY & AUSTRIA

picovac
T: +49 6128 799 33 36
E: sales@picovac.de
W: www.picovac.de

INDIA

VT Vacuum Technologies (P) Ltd
T +91 80 23603253 / +91 80 41748063
F +91 80 23605664
E contact@vtvacuum.com
www.vtvacuum.com

ISRAEL

ISRAEL SCIENTIFIC INSTRUMENTS LTD.
T: +90 212 500 34 18
E: isi@isil.co.il
W: www.isil.co.il

ITALY

Flamar
T +39 (0) 2 36 52 45.56
F +39(0)236525244
M +39 335 62 10 146
E claudio.bellotti@amarweb.com
www.amarweb.com

JAPAN

Technoport Ltd
T +81 3 5825 3559
F +81 3 5825 3589
E hoshino@technoport-jp.com

KOREA

KCMC (Korea Coating Materials & Components Co., Ltd.)
T: +82-31-8065-5283
E: youngii2@kcmc.biz
W: www.kcmc.biz

RUSSIA & CIS

Intech Analytics, JSC
T +7(812)4932480/4932481
F +7 (812) 493 24 82
E info@intech-group.ru
www.intech-group.ru

SINGAPORE

Portdown Scientific Pte Ltd
T +65 93821401
E graham@portdownsci.com.sg
www.portdownsci.com.sg

SPAIN

Avactec Abatement & Vacuum Technology
T +34918286158
F +34916321929
E info@avactec.es
www.avactec.com

SWEDEN

Rowaco AB
T +46 (0) 13 138010
F +46 (0) 13 311335
E kristian@rowaco.se
www.rowaco.se

TAIWAN

Omega Scientific Taiwan
T +886 2 2793 0033
F +886 2 2791 5570
E jimmy.chen@omega-cana.com.tw
www.omega-cana.com.tw

THAILAND

WINGSSERV TECHNOLOGY CO. LTD
T: +662 932 3488-9
E: wichan@wingsserv.co.th
W: www.wingsserv.co.th

TURKEY

INOVAC
T: +90 212 500 34 18
E: contact@inovac.com.tr
W: www.inovac.com.tr

USA & CANADA

Kurt J. Lesker Company®
T +1 412 387 9200
F +1 412 384 2745
E sales@lesker.com
www.lesker.com