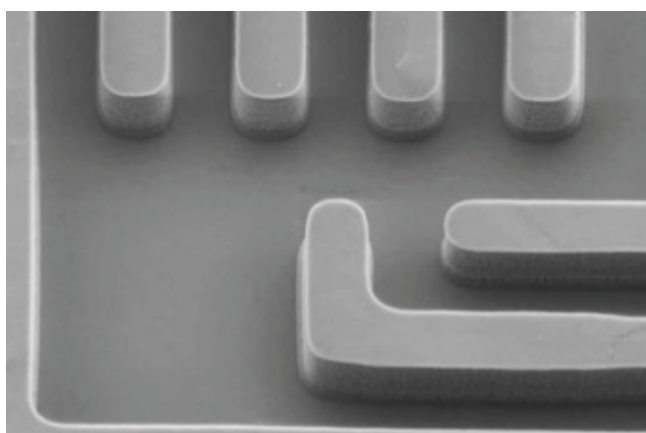


**CHEMICALS & SAFE
CHEMICAL HANDLING**

www.S3-alliance.co.uk



S3 ALLIANCE

S3 Alliance provides the network, and product portfolio that brings leading edge solutions to our customers.

Our supply and service solutions are tailored to meet our customers ever changing requirements, enabling them to be competitive in what is now a truly global marketplace.

We work closely with our clients to help them optimise their production processes and meet the high precision and quality requirements of advanced manufacturing technologies. In addition, we collaborate with several established business partners which enable us to offer quality products at the right price within the Chemicals & Safe Chemical Handling area of the Semiconductor industry.

page

Available Chemicals

4

Chemical Handling

12

High Purity Pumps

19

OUR PARTNERS



A premier supplier in the semiconductor chemistry market, with multiple cutting-edge manufacturing plants in Europe and over 24 global facilities in 14 countries. Technic's newly completed manufacturing facility in Amiens, opened in 2024 in France is Technic's fifth location in the country. The facility has undergone a complete redesign to accommodate the large-scale production of advanced, ultrapure chemicals and high-performance strip, etch, and clean processes for Semiconductor manufacturing.



With headquarters in Germany, Allresist offers a wide range of resists and process chemicals for all standard applications of photo and e-beam lithography which are required for the fabrication of electronic components. On the market since 1992, Allresist benefits from a comprehensive know-how gained in 30 years of resist research, and fabricates products to the highest quality (ISO 9001).



Millice Private Limited, established in 1979, is a Singapore-based company specialising in the distribution of equipment, materials, and services for the microelectronics and semiconductor industries. Over the years, Millice has evolved into a full-service distribution leader, offering solutions across various sectors, including semiconductor fabrication, raw ingot production, back-end assembly, printed circuit board assembly (PCBA), metrology, solar photovoltaics, and failure analysis tools.



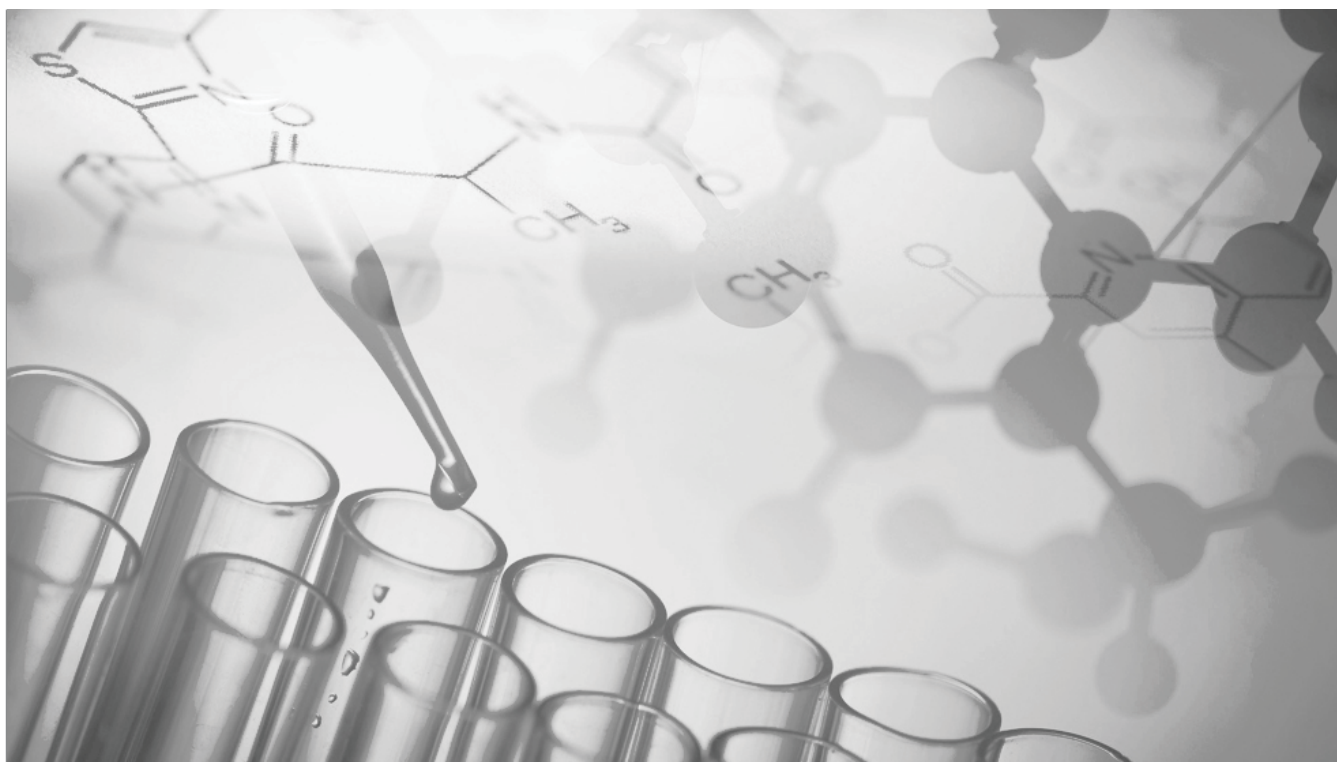
Established in 1987 as a manufacturer of high-tech pumps for drum emptying, AS has developed into a leading global specialist for safe dispensing and filling systems, with business partners in high-tech industries such as the semiconductor, pharmaceutical, chemical and solar industries. A dedicated team is constantly developing the portfolio at the family-owned company, which now includes smart IoT solutions for sustainable chemical handling as well as robotic systems for fully automated filling and emptying of containers.



Levitronix® has been a key participant in the Microelectronics industry for over 20 years, providing ultrapure pump systems, mixers, and flow sensors that enable chip manufacturers globally to process smallest wafer structures. Levitronix® is the market leader in several applications, including single-wafer processing, CMP slurry delivery, or plating.

AVAILABLE CHEMICALS

We offer a range of ultra-high purity wet chemicals for semiconductor fabrication, including acids & bases, solvents and hydrogen peroxide.



Acids & Bases

Acetic Acid 99.9%

Ammonium Fluoride 40%

BOE 7:1

BOE 15:1

Citric Acid 30%

Hydrochloric Acid 37%

Hydrofluoric Acid 1%

Hydrofluoric Acid 49%

Hydrofluoric Acid 50%

Nitric Acid 69.5%

Phosphoric Acid 85%

Potassium Hydroxide 44%

Sulphuric Acid 96%

TMAH 24.9% and dilute ready to use developer solution.

Note: Other products, quality grades and pack sizes available on request.



Solvents

Acetone

Butyl Acetate

Cyclopentanone

Ethylene Glycol

Hexamethyldisilazane HMDS

IPA

Mesitylene

Methanol

Methyl Ethyl Ketone MEK

Methyl Isobutyl Keton MIBK

PGMEA

Note: Other products, quality grades and pack sizes available on request.

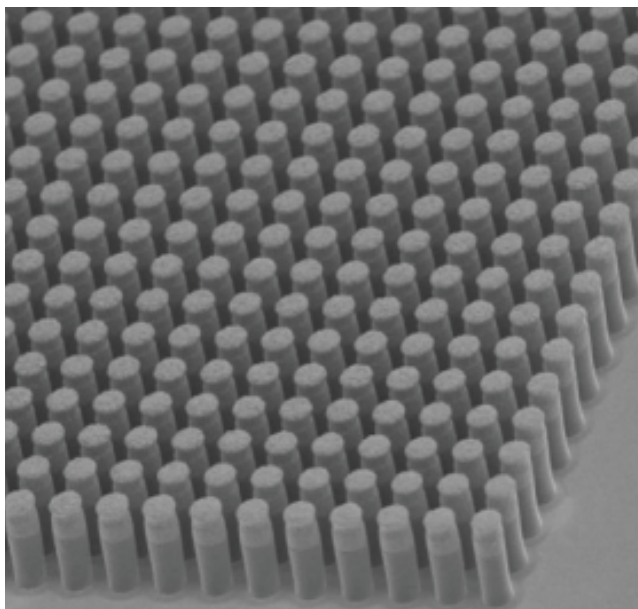
H₂O₂

Hydrogen Peroxide 30%

Note: Quality grades (including top semiconductor grade) and pack sizes available on request.

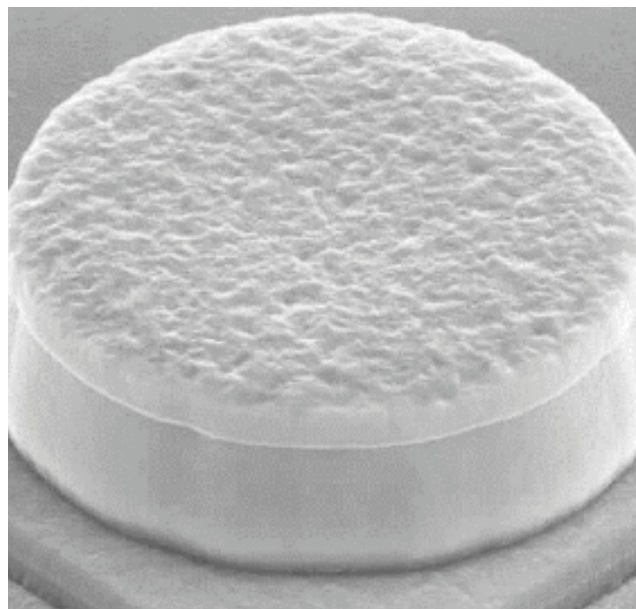
Strippers

The TechniStrip® series targets a wide range of applications to meet customer needs. It delivers complete photoresist dissolution, enabling shorter process times and higher throughput.



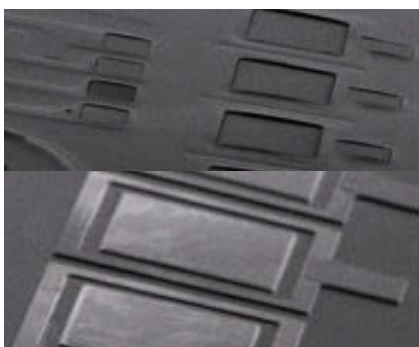
TechniStrip® NF52

Highly effective NMP-free negative-tone photoresist remover. This formulation delivers complete dissolution with excellent metal compatibility and high loading capacity. Also has the capability to remove laminated film.



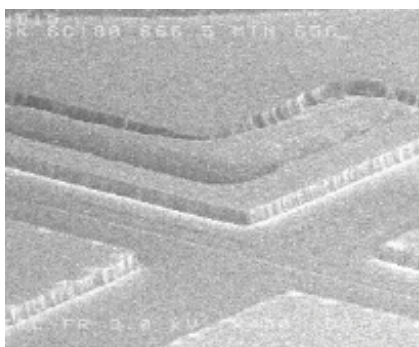
TechniStrip® PI331

NMP-free photoresist stripper suitable for a wide range of applications, from DUV resists to thick positive and negative resins, including passivation layer reworking.



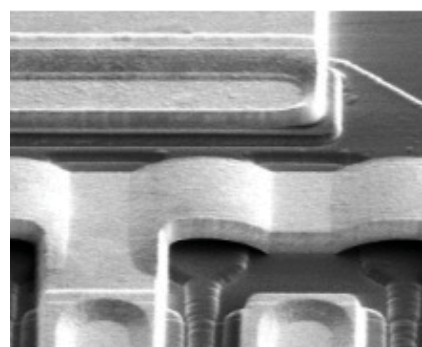
TechniStrip® MLO 07 & Micro D2

Capability to perform metal lift off. MLO 07 - DMSO-based formulation designed for efficient removal of negative and positive photoresists. Micro D2 - NMP-free solution formulated for selective photoresist stripping, with good metal compatibility.



TechniStrip® Micro NGA II

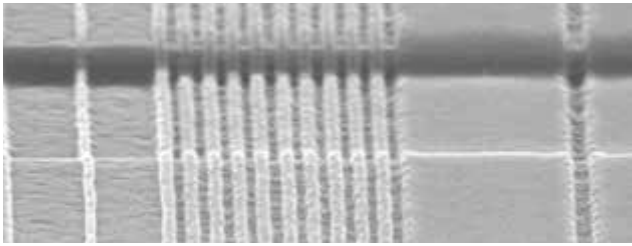
Organic stripper developed to achieve rapid and complete removal of resilient organic films such as rubber-like resins (SCI80, SC420), epoxy, grease, and wax.



TechniStrip® AK360

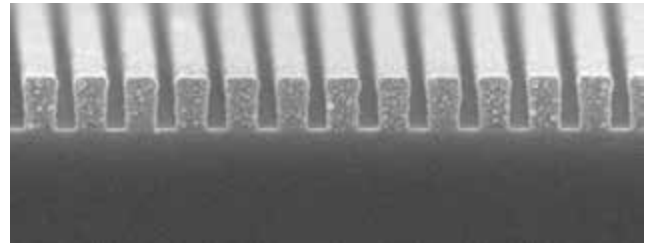
NMP, DMOS, TMAH free solution formulated for selective photoresist stripping, with good metal compatibility.

Positive E-Beam Resists



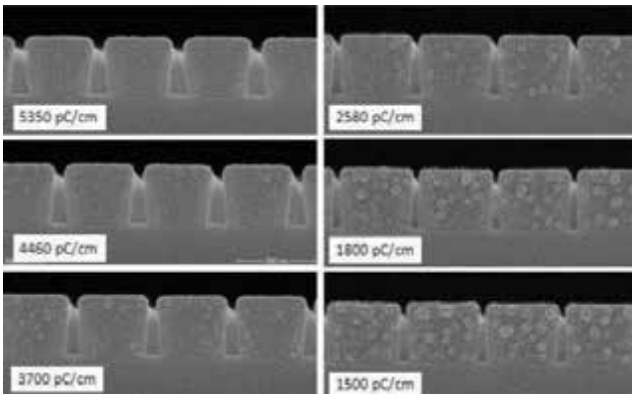
AR-P 617 Series

Resists for nanometre lithography, highest resolution, Copolymer 33% MA, Solvent: methoxypropanol.



AR-P 6200 (CSAR 62)

Highest resolution, suitable for lift-off. Higher sensitivity and dry-etch resistance than PMMA.



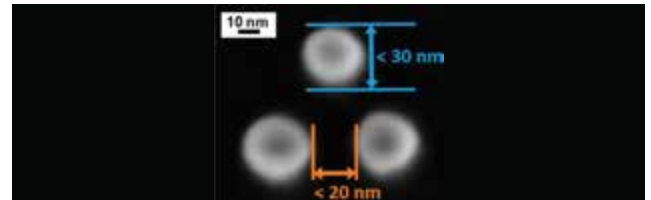
AR-P 632 Series, AR-P 639 Series, AR-P 641 Series, AR-P 642 Series, AR-P 649 Series, AR-P 661 Series, AR-P 662 Series, AR-P 669 Series, AR-P 671 Series, AR-P 672 Series, AR-P 679 Series

PMMA resist series 50K – 950K for the production of integrated circuits and masks.



AR-P 6510 Series

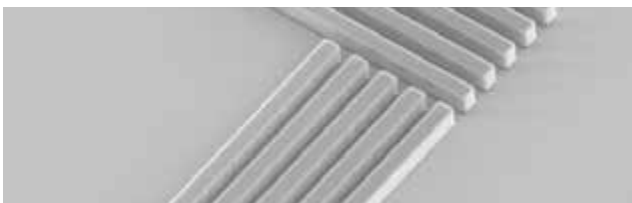
Thick positive resists for the production of micro components.



AR-P 8100 Series (Phoenix 81)

High contrast, thermolabile resist for integrated circuits and holographic structures.

Negative E-Beam Resists



AR-N 7520 new series

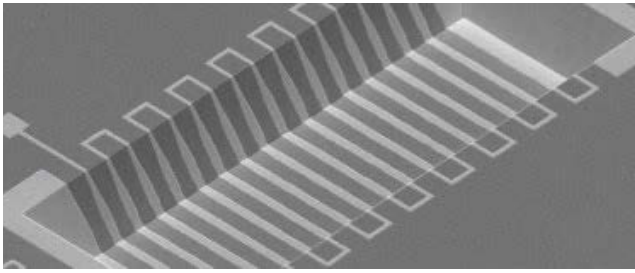
Highest resolution and highly sensitive resist for mix & match.



SX AR-N 8400 series (Medusa 84 SiH)

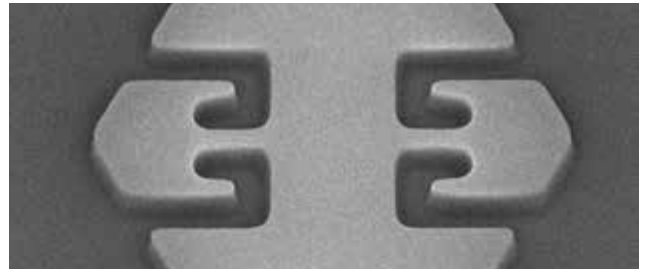
Alternative to HSQ with improved stability and shelf life.

Positive Photoresists



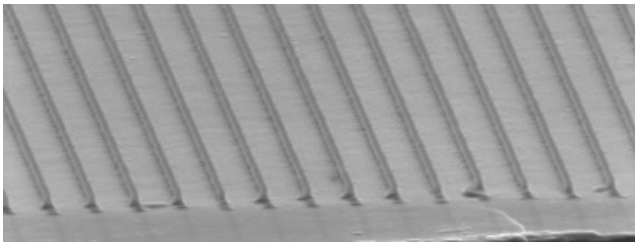
AR-P 1200 Series

Ready to use positive spray resists for various applications.



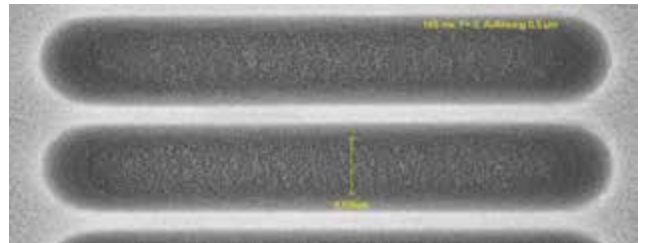
AR-P 3500 (T) Series

Sensitive positive-tone standard resists for the production of integrated circuits.



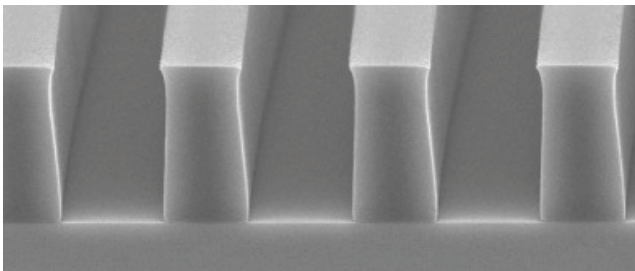
AR-P 3100 Series

Adhesion-enhanced positive resists for the productions of masks and fine scale divisions.



AR-P 3740

Sensitive positive-tone standard resists for the production of highly integrated circuits.



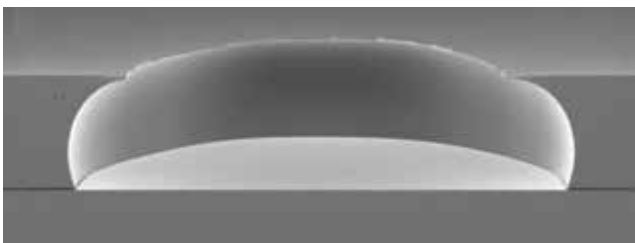
AR-P 3200 Series

Thick positive resists for electro-plating and microsystems technology.



SX AR-P 3500/8

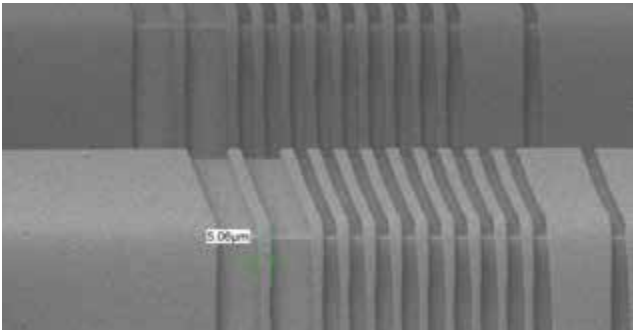
Positive photoresist for high-temperature application up to 300 °C.



AR-P 5300 Series

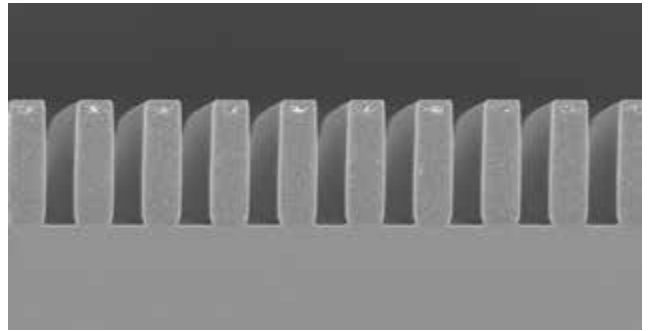
Sensitive resists for the production of vapour deposition patterns by lift-off.

Negative Photoresists



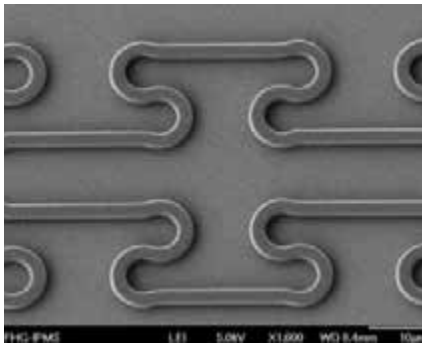
AR-N 2200 Series

Ready to use negative spray resists for various applications.



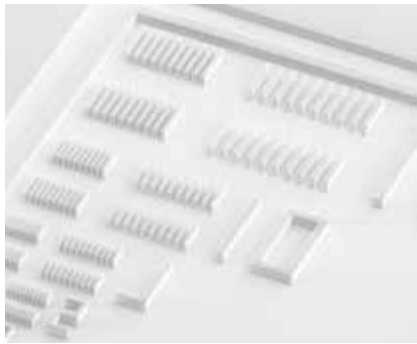
AR-N 4600 Series (Atlas 46)

Thick negative resists for electro-plating, microsystems technologies and LIGA < 20µm.



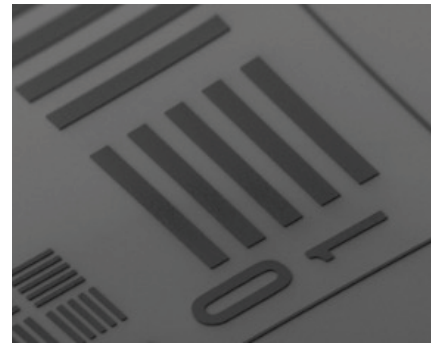
AR-N 4340 (CAR)

Highly sensitive negative resist for the production of integrated circuits.



AR-N 4400 Series

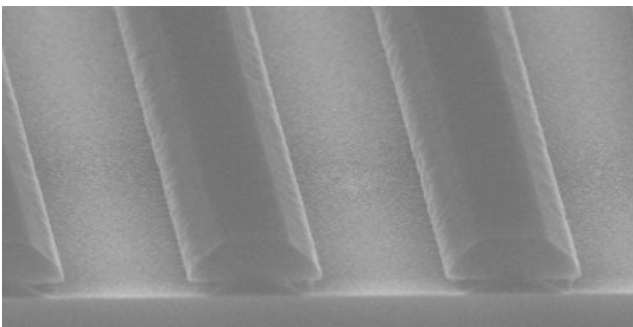
Thick and very thick negative resists for electroplating, microsystem technology and LIGA.



SX AR-N 4340/7

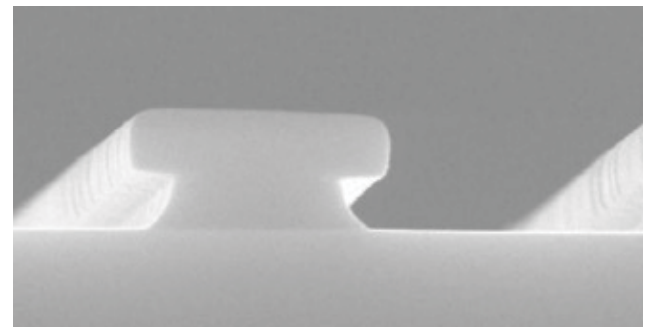
Negative photoresist for one and two layer systems, thermostable up to 300 °C.

Bottomresists



AR-BR 5460

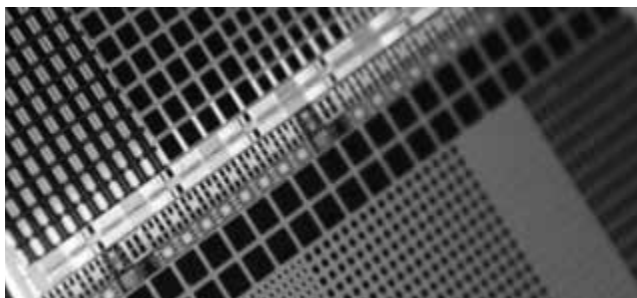
Positive or negative system for optically transparent and thermally resistant structures.



AR-BR 54b0

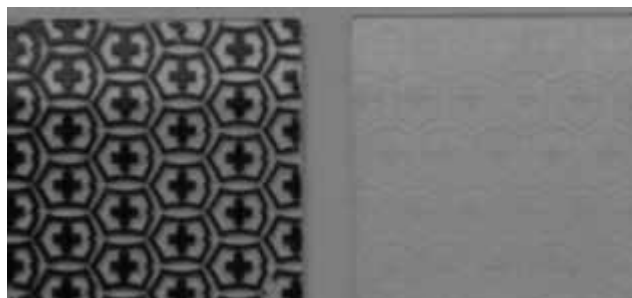
Positive or negative system for optically transparent and thermally resistant structures.

Protective Coating



AR-PC 5040

Wafer backside protection during front side etchings for the productions of deep structures in silicon.

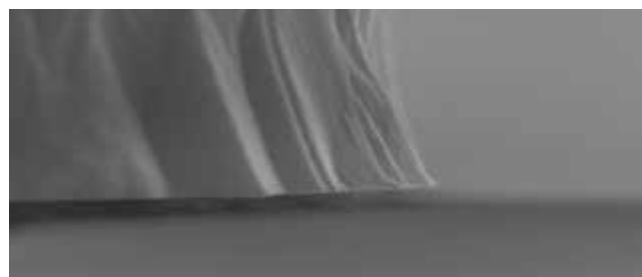


SX AR-PC 5000/4I

KOH and HF resistant protective coating for wafer backside protection.

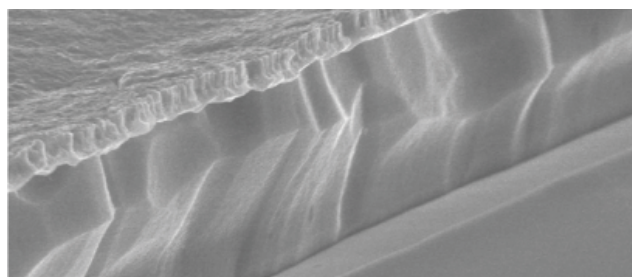
Metal Etchants

The TechniEtch series supports a broad range of applications, including UBM, pillar, RDL, μ LED, RF, and filter processes.



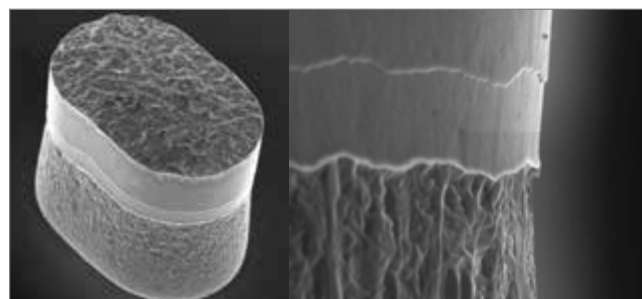
TechniEtch TBR38

Fluoride-free aqueous formulation for selective removal of Ti and Ti-alloy barriers (TiN, TiW), compatible with UBM, copper pillar materials, glass, and organic substrates in far-backend interconnect applications.



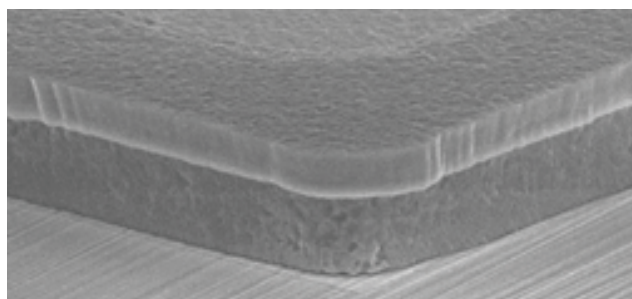
TechniEtch Al80

Standard acidic aqueous mixture for Al etching, offering high stability even in the presence of metal contamination and tunable etch rates (ER).



TechniEtch CuSelect

Acidic copper etchant formulated with unique additives to improve stability and metal loading in RDL (Redistribution Layer) applications, outperforming conventional oxidative acidic solutions. Copper seed layer and selective removal for Pillar, RDL.



TechniEtch AC100F

Iodine-based chemistry designed for Au patterning, offering stable etch rates, high loading capability, and excellent wetting on Au surfaces.

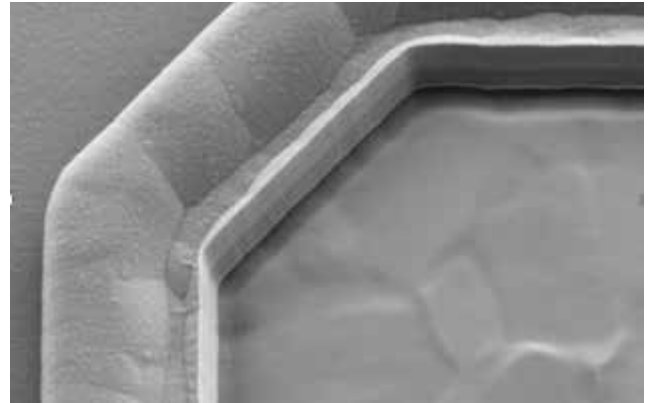
Cleaners

TechniClean products are formulated to remove a wide range of residues, including post-ashing resin, organometallics, and oxide residues.



TechniClean BOS390

Versatile cleaner developed to remove both post-Bosch fluoropolymer residues and P and N-tone photoresist in one step.



TechniClean CA25 & CA585

Semi-aqueous cleaners designed for fast and selective removal of Post- Etch Residues (PER) from Al, Cu, W with high selectivity. Validated alternatives to legacy PER solutions on interconnections, vias, pads, etc.

CA585 – selective CuOx removal making suitable for hydride bonding.

Dicing Surfactant

KerfAid

Is designed to improve the dicing process in semiconductor manufacturing. It plays a crucial role in ensuring clean, efficient, and damage-free wafer cutting, directly impacting yield and production efficiency.



Speciality Solvent

StripAid

Is a biodegradable hydrocarbon used for debonding the temporary adhesive WaferGrip. The non-hazardous formulation makes StripAid a popular choice for production processes where operator health and safety are of concern. StripAid can be used at ambient or elevated temperature and with ultrasonic agitation.



CHEMICAL HANDLING

No more dangerous dripping and escaping gases. Dispense chemicals safely and contact-free.

QC Dispense and Fill Heads Options:

The right Dispense or Fill Head for every application. From simple sample dispensing and practical mobile systems to high-flow versions. Also designed for automated processes.





QC2 Dispense and Fill Heads

Dispense and Fill Heads from the QC2 product line are the all-rounders and feature a wide variety of adaptation possibilities and options. Flow rates of up to 25-50 l/min.



G-Series

With a construction based on the QC2 product line, the larger design of the G-Series Dispense and Fill Heads enables even higher flow rates of up to 150 l/min.



QC3

The QC3 product line enables the container to be dispensed, recirculated and ventilated at the same time with a single head.

Flow rates of up to 25-50 l/min.



M-Series

The compact Dispense Heads of the M-Series are designed for low flow rates of less than 2 l/min and thus ideally suitable for dosing applications.

QC Dip Tubes

Over 1000 standard variants. Custom-made and preinstalled. For virtually every length, for every container. With and without bellow for virtually complete emptying.



QC2 Dip Tubes

Dip tubes from the QC2 product line are impressive due to their high number of adaptation possibilities to any container and due to a variety of materials and options.



QC3 Dip Tubes

Dispensing, recirculation and ventilation of the container through a single dip tube with the QC3 product line.

Additional Options

Combine Dip Tubes of the different product lines with the suitable option for your application.



Bellows

The flexible bellows at the end of the dip tube can sit on the bottom of the container and thus enables the container to be completely emptied.



Electrically Conductive Dip Tubes

Dip tubes made of electrically conductive plastic, for dispensing flammable liquids and for use in explosive atmospheres.

Only to be used in conjunction with electrically conductive Dispense and Fill Heads.



Manual Insertion

If the container is not transported with the dip tube, the dip tube can also be inserted manually by hand.



Check Valve

Dip tubes with an integrated check valve seal the container up to the connection of the Dispense Head.



Mixing Nozzels

Using mixing nozzels on recirculation dip tubes, suspensions such as slurries can be optimally prepared below the liquid level.

Closures

Choose the right closure for your dip tube from a large variety.

QC-Guard

The QC-Guard's flat, low-profile design reduces its footprint above your container; minimizing the risk of contact with a forklift and other operations.

Its compact design and tight seal prevent contamination from dirt and dust.

A customizable logo provides reliable identification of the chemical's origin.



QC Accessories

There is comprehensive accessories for QC Dispense Heads and dip tubes which include:

Docking Stations

Safe and reliable storage unit for dispense and fill heads during container change.



Sampling Cube

Enables safe + contamination free sampling of corrosive and neutral liquids without any contact with the operator or the environment



Universal Drum Wrench

For safely opening, closing and fitting dip tubes and screw plugs.



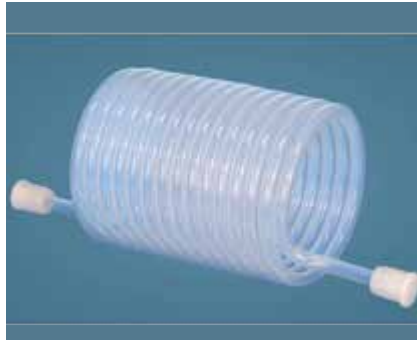
PFA Tubing

Flexible convoluted corrugated tubing and dual hoses made of PFA - also in elec. conductive.



Dual Hose System PFA/PVC

For the ultimate in safety and flexibility using "tube in tube system" and kink free Flare connections.



Convoluted PFA tubing

For a stress-free installation and flexible handling of the QC system. Ideal for vertical installation of the suction line.



Corrugated PFA Tubing with Antistatic Outer Layer

Co-extruded Corrugated tubing with antistatic outer layer enable ultra-flexible handling of the QC-System. Ideal for vertical and horizontal installation of the suction line.

Tank Coupling

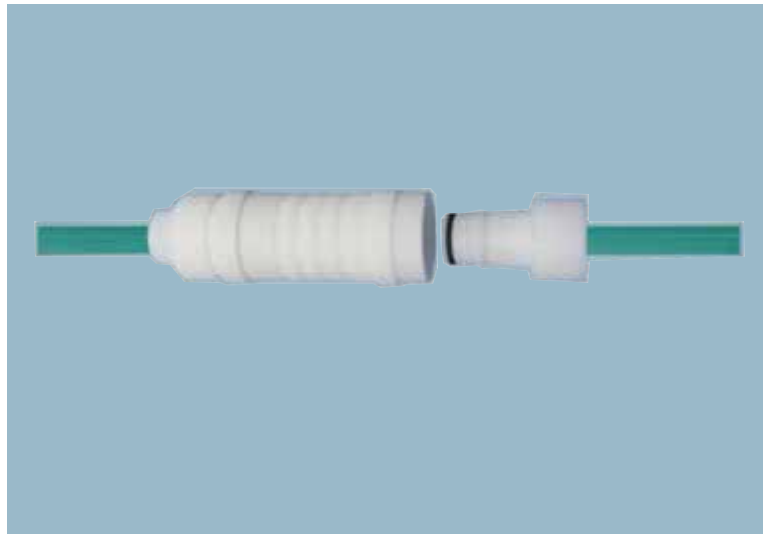
The AS Quick Coupling for ISO tank containers is a state-of-the-art liquid coupling device, engineered for the efficient and safe transfer of high-purity chemicals. Constructed from premium-grade ultra pure plastics, this coupling is specifically designed to meet the rigorous demands of the semiconductor and chemical industries.



Quick Couplings

Chemically resistant quick couplings made of PTFE/PFA - self-sealing, free of dead spaces and contamination.

Our unique couplings are resistant to even highly aggressive chemicals used in the chemical industry.



Level Measurement and Overfill Protection

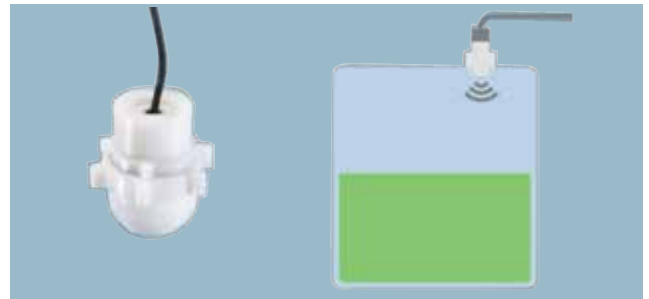


Level Measurement

Capacitive and simple level measurement from outside - without contacting chemicals.

Our supports for level measurement consist of a pedestal, which is fitted to the container; as well as a 3-axis sensor bracket.

Suitable for Schütz 1000-litre IBCs, plastic 200-litre barrels, Rikutec IBCs, and Promens Varibox.



Overfilling Protection

Practical overfilling protection for screwing into the container bung - without the sensor contacting the chemicals.

Ready-To-Use Complete Systems

Pump Station PS40

The stationary and ready-to-use dispensing station allows maximum safety and flexibility.

Designed for safe and efficient dispensing of chemicals - the perfect addition for the QC-System.



Mobile Systems

Mobile supply or transfer filling stations incl. pump, hoses, control system and the QC-System



Supply Trolley

Customised supply trolley for mobile and safe chemical supply. We can construct supply trolleys tailored to your process, incl. pump, Dispense and Fill Head, valves and hose lines.

Example application: Dosing from 60 l drum into wet bench.

- Dispense Head with integrated air driven membrane pump dispenses from 60 l drum
- Fill Head connected to wet bench
- Pre-setting of the dispensing quantity
- Docking stations fitted on trolley for Dispense and Fill Head



Transfer Filling Trolley

Ready-to-connect transfer filling trolley including control system for your process.

For example, for transferring from transport containers like barrels or IBCs into a reactor or intermediate tank.

- Outputs up to 130 l/min
- Automatic shut-off device possible when empty or if pump is leaking

HIGH PURITY PUMPS

Microelectronics Pumps

The Levitronix® BPS pumps are designed for ultrapure processing of delicate fluids in microelectronic wet applications. Based on active magnetic levitation, the pump impeller is suspended and driven by the motor's magnetic field. The wide gap ensures there is no mechanical contact between moving parts and, therefore, no wear. There are no bearings to wear out or seals to break down.

The impeller and casing are both made from chemical-resistant high purity fluoropolymer resins. Fluid flow rate and pressure are precisely controlled by electronically regulating the impeller speed.



BPS-i30

Max flow: 7.4 lpm / 2 gpm

Max diff. pressure: 1.5 bar / 22 psi



BPS-i30 HP

Max flow: 3.8 lpm / 1 gpm

Max diff. pressure: 2.8 bar / 40 psi



BPS-i30 HF

Max flow: 14.7 lpm / 3.9 gpm

Max diff. pressure: 1.1 bar / 16 psi



BPS-i100

Max flow: 20 lpm / 5.3 gpm

Max diff. pressure: 2 bar / 29 psi



BPS-200

Max flow: 21 lpm / 5.5 gpm

Max diff. pressure: 2.6 bar / 37.7 psi



BPS-300

Max flow: 58 lpm / 15.3 gpm

Max diff. pressure: 2.5 bar / 36.2 psi



BPS-600

Max flow: 75 lpm / 20 gpm

Max diff. pressure: 3.2 bar / 46 psi



BPS-2000 HF

Max flow: 140 lpm / 37 gpm

Max diff. pressure: 4.2 bar / 61 psi



BPS-2000 HP

Max flow: 80 lpm / 21 gpm

Max diff. pressure: 6.9 bar / 100 psi



BPS-4000

Max flow: 280 lpm / 74 gpm

Max diff. pressure: 6.5 bar / 94 psi

Microelectronics Pumps (Solvent Applications)



BPS-200 AS

Max flow: 21 lpm / 5.5 gpm

Max diff. pressure: 2.6 bar / 37.7 psi



BPS-600 AS

Max flow: 75 lpm / 20 gpm

Max diff. pressure: 3.2 bar / 46 psi



BPS-2000 AS

Max flow: 140 lpm / 37 gpm

Max diff. pressure: 4.2 bar / 61 psi



BPS-600 ST

Max flow: 75 lpm / 20 gpm

Max diff. pressure: 3.1 bar / 45 psi



BPS-2000 ST

Max flow: 80 lpm / 21 gpm

Max diff. pressure: 6.2 bar / 90 psi

Microelectronics Flow Controllers



BPS-iF30

Max flow: 7.4 lpm / 2 gpm
Max diff. pressure: 1.5 bar / 22 psi



BPS-iF30 HP

Max flow: 3.8 lpm / 1 gpm
Max diff. pressure: 2.8 bar / 40 psi



BPS-iF100

Max flow: 20 lpm / 5.3 gpm
Max diff. pressure: 2 bar / 29 psi

Microelectronics Flow Sensors

The LEVIFLOW® inline and clamp-on flowmeters are designed for non-invasive flow measurements of high purity fluids.



Inline

6 different products ranging from 0 – 80 l/min depending on your requirements.



Clamp-On

7 different products ranging from 0 – 320 l/min depending on your requirements.

Microelectronics Pump Tank Mixers

This feature from Levitronix joins two functions in one system: Mixing a liquid and pumping out of a tank.



PTM-200

Max flow: 20 lpm / 5.3 gpm
Max diff. pressure: 1.6 bar / 23.2 psi



PTM-600

Max flow: 75 lpm / 20 gpm
Max diff. pressure: 3.1 bar / 45 psi

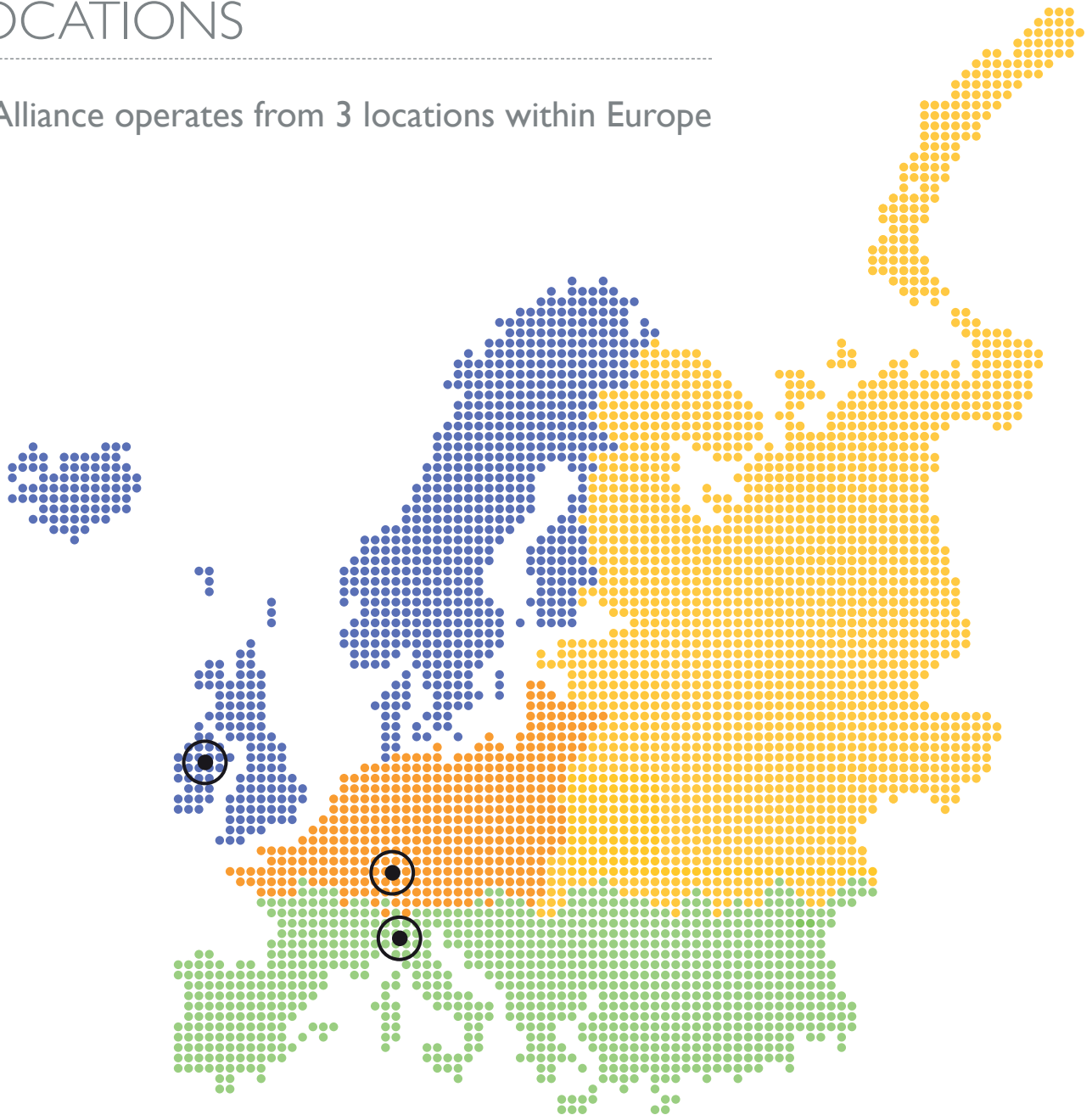


PTM-2000

Max flow: 120 lpm / 32 gpm
Max diff. pressure: 4.1 bar / 59.5 psi

LOCATIONS

S3 Alliance operates from 3 locations within Europe



UK - Ireland Office

S3 Alliance Ltd
85A Ledwidge Avenue,
Londonderry, BT47 6GZ
N. Ireland

Tel.: +44 2871 357 760
Fax: +44 2871 357 744
E-mail: salesuk@s3-alliance.com



German Office

S3 Alliance GmbH
Mahdenstraße 23
D-72138 Kirchentellinsfurt
Germany

Tel.: +49 7121 16 777-0
Fax: +49 7121 16 777-10
E-mail: salesgmbh@s3-alliance.com



Italian Office

S3 Alliance SRL
Via Rossini 4
21052 Busto Arsizio (VA)
Italy

Tel.: +39 033 143 0295
Fax: +39 033 1430295
E-mail: salesit@s3-alliance.com



www.s3-alliance.com

