SEMICONDUCTORS / MEMS



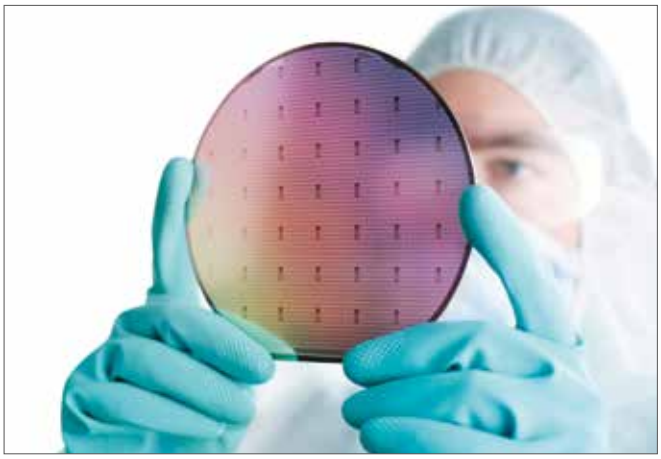
www.s3-alliance.com

S3Alliance

SUPPLY . SERVICE . SOLUTIONS

WWW.S3-ALLIANCE.COM

www.s3-alliance.com









FROM GLOBAL LEADERS TO EUROPEAN MARKETS

S3 Alliance provides the network, and product portfolio that brings leading edge solutions to our customers in the semiconductor, MEMS, life sciences, and green energy sectors.

Customer service is the key driving force behind our company and the reason our customers keep coming back. We strive to ensure satisfaction at all times by maintaining permanent communication, keeping our staff well trained, to provide technical support when needed. 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 source and offer quality products at the right price within the following areas:

PAGE

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PARTS & CONSUMABLES 6

SERVICE / CLEANING AND FACILITY 9

CMP & Cleaning Systems for R & D

GaP TECHNOLOGY

CMP
- Semi-automated CMP Systems from 2"–12"

Post CMP Scrubber
- Semi-automated (4"–12") or fully automated (3"–6")

GNP Process group provides also:
- Consumable development evaluation
- Process development and optimization
- Throughput enhancement
- Additional CMP Options Characterization like: MEP, OEP
- Comprehension of CMP characteristics







www.gnptech.com

Tape / Detape / Wafer Mounting / Systems

TEIKOKU

Semi or Fully Automated Tape Lamination or Detape System

Wafer Mounting

UV Irradiation System

Edge Contact Handling and Processing

Applications
- BG Tape Lamination
- DFR Lamination for MEMS and SAW / BAW, Microfluidics
- Backside Coating Lamination
- Vacuum Lamination for Trench Filling, Via Filling
- BG Tape Remove, Cover Film Remove
- Dicing Tape Mount w / BG Tape Remove
- De-Mount / Reverse Wafer Mounting
- Regular Dicing Tape Mounting
- UV Irradiation







www.teikoku-taping.com

New CMP & Post CMP Scrubber, Remanufactured Systems

AXUS TECHNOLOGY

(only UK)

New CMP tool: CAPSTONE
- DIWO / DIDO
- 2 platen up to 4 carriers
- Mutliple Multi Zones Carriers available for different applications

New Post CMP Scrubber: AQUARIUS

Refurbished CMP Platform
- AMAT / Mirra, Mirra Mesa
- IPEC Surface, 472, 372M
- Auriga, 676, 776
- Strasbaugh / 6EC, 6DSSP

Refurbished Post CMP Scrubber
- Ontrack / DSS 100, 200
- Synergy

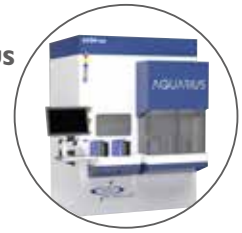
Grinders
- Strasbaugh (7AF), Disco (DFG 841), Okamoto

Foundry Services for CMP, Backgrinding and Cleaning processes

CMP and Backgrinding Upgrades

Process Integration







www.axustech.com

Tailored Wet Processing Systems

R|E|N|A|.

(only UK)

Linear Wet Benches
- Semi to Fully Automated

Spray Acid Tool (SAT)
Spray Solvent Tool (SST)

New SRD Systems
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- manual or automated
- 2–4 chemical process tanks

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- Metal Lift Off
- Resist Strip
- Advanced Cleaning







www.rena-na.com

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Tools for surface treatments Plasma Cleaning, Activation, Etching, and Parylene Coating.

VITA Series
- Vacuum plasma systems for precise RIE, offering automated operation and uniform processing.

VITA-HVICP
- High-vacuum ICP-RIE system combining ICP and RIE power for advanced, high-precision etching applications.

www.femtoscience.co.kr

Atomic Layer Deposition (ALD)



Technology
- Showerhead Type ALD / CVD Process
- Traveling Wave Type ALD Process
- Furnace Type Batch ALD Process
- High Film Uniformity and Quality

Applications
- Available Materials: Metal, Metal oxide, Metal nitride, Metal sulfide, Laminate and mixed materials
- Application fields: Semiconductor, Display, Solar cell, LED, MEMS, Optical-, Bio-, Nano- and flexible devices

www.cn-1.co.kr

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New E3511 Asher Equipment

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Unique innovative Upgrades

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- Nanotechnology and LED Industries
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Critical Point Dryers (CPD)
- Semi to Fully Automated

Products for cleanroom and non-clearoom
- Research chemicals Supplies
- Accessories and instruments for the electron microscopy and analysis laboratory

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www.tousimis.com

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Nozzle-less ultrasonic spray head technology
- Sprays thin, uniform films down to sub-micron thickness
- Variety of precision coating platforms available from **bench-top to large format**

Applications
- Coating applications include display, semiconductor
- Photoresist, Polyimide
- Conductive Coating
- Metal Coating (EMI Shield)

www.ultraspray.com

Scribe and Break System & Wafer Expander

4JET



DTX Scribe and Break
The automatic diamond scribe and break and break only systems can manage diverse, precision processes.

DXE Wafer Expander

Applications
- SiC, GaN, GaAs, Glass
- MEMS
- OptoElectronics Devices
- Biomedical

www.4jet.de

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(Europe except UK and Ireland)



QuantumNXT Stand-alone UPW Heater up to 288 kW
- Exceptional temperature response (quick, accurate)
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Inline Heater up to 18 kW for UPW and Chemistry available

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millice
THE MILLICE GROUP OF COMPANIES



HiSpec Injector Systems
Compact systems for precise dosing of dicing fluid in wafer dicing processes.
- Saw-side HiSpec Injector for precise dosing
- Inline HiSpec Injector for direct DI water line dosing

DXB 880 Wafer Bonder
- Compact, fully automated for fast, void free, and reliable bonding

Applications
- Semiconductor, MEMS
- Optoelectronic Devices
- Biomedical

www.millice.com.sg

Dry Cleaning System & Laser Applications

iMT Co.,Ltd.
Innovative Manufacturing Technology



Laser Cleaner Applications
- Frontend: Wafer Backside cleaning
- Backend: Probe Card and Socket cleaning
- General Cleaning: Rust and Residue removal, Mold cleaning, others

CO_2 Cleaner Applications
- Dry cleaning technic (soft dry ice with specific nozzles)
- MicroJet: Glass cleaning
- Snow: Dust and Ash removal after Laser processing
- Super Snow: Mold cleaning (precise plastic mold, Press mold)
- Pellet: Metal parts cleaning, Stone parts cleaning

www.imt-c.co.kr

METROLOGY & HANDLING

Non-invasive Flow Measurement & Bubble Detection

SONOTEC



(except UK)

Ultrasonic Measurement

SEMIFLOW clamp-on flow sensor
- Real-time instantaneous flow measurement
- Reliable flow measurement up to 400 L/min
- Accuracy of ± 2 %
- 8 different sensor sizes

SONOCHECK air bubble detector
- Non-invasive measurement method directly through the tubing wall
- Fitting for a wide range of plastic tubing types

www.sonotec.eu

Scanning Electron Microscope

EMCRAFTS



(Germany)

Tabletop SEM
- Compact and Light
- High-Resolution (*200k@30kV)
- 100 % motorized stage and 4Ch BSE as a basic model
- Fast and Easy Operations (ready in 90 s)
- No gun alignment required
- Integrated EDS from every maker (option)

Applications
- Semiconductors and electronics
- Microsystems, Solar Cells, Carbone Nano Tubes
- Materials Science, Energy, Biology, Insects

www.emcrafts.com

Metrology

KOVIS TECHNOLOGY



RT-3500
All in one wafer metrology System;
Following non contact measurement combinable:
- Thickness, bow and warp
- Step height and roughness
- Film thickness

www.koviseng.com

Chemical concentration measurement

RHOSONICS
Proven Process Insights



Ultrasonic conductivity and temperature technology for simultaneous monitoring of chemical concentrations in real time during the production process.

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- Photoresist and Stripping
- Etching
- CMP

www.rhosonics.com

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fastmicro



(only Central Europe)

Microscale surface particle cleanliness validation and real-time particle deposition monitoring for high-performance processes and cleanroom compliance.

Sample Scanner
- Measure sub-micrometer surface particle contamination levels from 0.5 µm using indirect tape-lift samples.

Fallout Scanner
- Monitors particle deposition rates from 0.5 µm in real time, also available for high-vacuum environments.

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Wafer Sorting and Handling solutions with integrated Options for Inspection, Metrology and Stocking.

N Series Open Carrier Sorter
- Up to 6 open carrier platforms for max 200 mm

T Series 300 mm Bridge Wafer Sorter
- With up to 8 FOUP/FOSB loadports for max 300 mm

Plus EFEMs, Bare Wafer Stockers, and many options available.

www.nadatech.com

AMHS Solutions for New and Legacy Fabs

GYRO



Autonomous Mobile Robots (AMRs)
- for transporting FOUPs, FOSBs, SMIF pods, and open cassettes

E-Racks and Stockers
- for efficient material storage and handling

SEMI E84 Solutions
- for legacy equipment without native E84 support

Intelligent Logistics Controllers and AI Simulation
- for optimized, safe fleet management and material flow

Scalable, Budget-Friendly Automation
- tailored to your fab's needs and investment budget

OHT Solutions and Integration
- for seamless overhead transport connectivity

www.gyrobot.com

Automatic Batch Wafer Systems

R2D automation

(Italy and UK)



- **Single Batch Transfer**
- **2/3 Station or Vertical Transfer**
- **Sorters, OCR Sorters**
- **OCR Readers**

www.r2d-automation.com

Wafer Handling Tools

STC SINCE 1988



- **Manual Wafer Transfer** from 2"–8"
- **Auto Wafer Transfer** from 2"–8"
- **Manual Flat/Notch finder**
- **Auto Flat/Finder**
- **Manual Wafer Lifter** from 2"–8"

www.stc.tw

CONSUMABLES

Retaining Ring & Customized Plastic Parts



Retaining Ring available in different materials
- PEEK, PPS, PBN
- available for AMAT Mirra, Reflexion, Ebara FREX and others

Parts for CVD and ETCH Producer, Speed, Endura, Centura

www.willbesnt.com

CMP Pad Contitioner & Back Grinding Wheels



Diamond CMP Pad Conditioner
- Flexible and accurate diamond arrangement
- ARIX Technology (extended Lifetime) Defectivity Reduction
- CVD Type Technology (LASER Processing)

Back Grinding Wheels
- Available for all Type of Grinders, DISCO, OKAMOTO, TSK, Strasbaugh,
- Super Polish Wheels for Low Roughness and low Sub surface Damage

www.shinhandia.co.kr

CMP Pads



CMP Polyurethane Pads
- Controlled pore size and distribution using Single Mold Technology
- Window Pad available for EPD
- All types of grooves

Applications
- Oxide, STI, W, Cu
- Sapphire, Glass, Quartz

www.ivt.com.tw

CMP Parts & Services



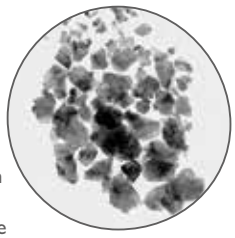
CMP Parts
- for AMAT and EBARA
- Development and Manufacturing

Plastic Parts
- for CMP, Etch and other

CMP Part Repairs
- such as Rotary Unions, Motors, ...

www.warde.com.tw

CMP Slurry



Ceria Slurry
- Used to chemically and mechanically polish the film on the surface. Selective polishing is possible according to the type of additive films such as Ceria Slurry.

Silica Slurry
- For the Metal Contact / Plug & Poly stages of the CMP process

Post CMP Cleaning Chemical
- Functional cleaning chemical that can effectively remove the polishing residues on wafers after CMP.

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Greene Tweed



Engineered to withstand the harshest environments, Greene Tweed solutions deliver proven performance, unmatched reliability, reduced downtime, and enhanced efficiency for leading semiconductor fabs, foundries, and OEMs.

Applications
- Dielectric and Conductor Etch
- PECVD/PEALD
- Wet Processing
- SubFab

www.gtweed.com

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CKplas



Wafer & Frame Cassettes
- PFA, PEEK, PP, Metal, 2"–12"

Wafer, Frame and Coin Boxes
- for Storage and Shipping

Single Trays
- for Wafers & Frames

FOUP, FOSB & SMIF Pods

Metal & Plastic Film Frames

Reticle SMIF Pods & Mask Package Boxes

Box Pallets, Crystal Packs, Clamps, Vacuum Wands and others

www.ckplas.com

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Applied Quantum Materials Inc.



High quality, versatile photoresist
- Electronic grade hydrogen silsesquioxane (HSQ) based resin
- Electron beam, NIL, He-ion, EUV, dielectric, and conformal coating applications
- Ultra-high resolution below 10 nm to 2 µm features
- Superior etch and ion milling resistance

www.aqmaterials.com

Consumables for: bonding, grinding, dicing, cleaning

millice
THE MILLICE GROUP OF COMPANIES

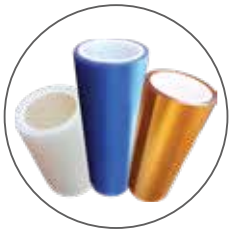


High performance materials and application equipment
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NDS



High Temperature UV Tape

Dicing Blades
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Chuck Tables
- New and Refurbished

UV Curing System
- Automated thermal curing
- For 6", 8" and 12" wafer frames
- Compact desktop design

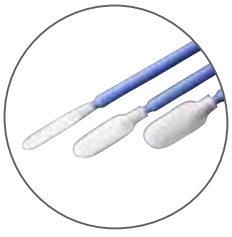
Wafer Mounter
- For 6", 8" and 12" wafer frames
- Compact desktop design

Polishing Template

www.nds-tw.com

Materials for Cleaning Critical Surfaces

Foamtec International
Wilshire Contamination Control Division
cleaning critical surfaces
(Europe except UK and Ireland)



Materials
- ScrubPads
- Foams
- Microfiber Wipers
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- Ergonomic Tools (ScrubPen, tips...)
- Control Wiper Polycheck

Chamber Cleans
- CVD, HDP chamber from AMAT, LAM
- ETCH from LAM, AMAT, TEL
- VOC Free PM Wiping Change tent
- Implant, Photo

www.foamtecintlwcc.com

Diaphragm Pumps & Heaters

TREBOR®

(Europe except UK and Ireland)



- **High Purity PFA Chemical Pumps**
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Excellent mechanical strength and chemical resistance while preserving fluid purity.

HP PVDF:
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- Tee Fitting
- Pipes
- Elbow

www.asianvalve.com

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High-performance valves for industrial and semiconductor vacuum control
- Different communication interfaces

APC Butterfly Valve in Regular- and Eco-Version
- Flange Size: DN025 up to DN320

APC Pendulum Valve
- Flange Size: DN025 up to DN320
- Ultra-High Vacuum Capability
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www.novasen.net

UHP Gas Delivery Components

ASFLOW
Advanced Solutions in Flow Control



Valves and Regulators
- Leak-tight diaphragm and bellows designs for UHP gases
- Fast, precise control with long cycle life

Filters and Diffusers
- 2.5 nm particle retention for ultra-clean processes
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Fittings
- Mirror-polished, high-integrity connections
- 100 % helium-leak tested; compatible with global UHP standards

www.asflow.com

Bearingless Pumps

LEVITRONIX®

(UK and Ireland)



For following applications:
- Slurry mixing and dispense
- Electro Chemical Deposition (Au, Cu, Permalloy, Solder)

www.levitronix.com

Vacuum Pump and Power Supply Repair / Exchange



- **Cryo Pump Repair, Refurbishment or Exchange**
- **Power Generators / Supply Repair and Refurbishment**
- **Refurbished turbo and mechanical pumps**

www.ptbsales.com

Atmospheric and Vacuum Robot Repair / Exchange



Robots and Aligner Services
- Brooks, PRI, Equipe Genmark, Rorze

Head Platen Motors
- Kollmorgen

CVD Vaporizer / LMFM Unit Repair / Overhaul
- Source Material: TEOS, TDMAT, TEP, TMCTS, BCHD

www.greenspec.co.kr

Trebor Pumps Repair



(Europe except UK and Ireland)

Signature Service Provider
- S3 Alliance GmbH is a certified Signature Service Provider (SSP) for Trebor Products, specializing in the repair of all Trebor Diaphragm Pump Models
- We have the facilities (wet bench, compressor) and toolsets for this service, as well as a variety of rebuild kits available for immediate repair out of our stock

www.s3-alliance.com

OEM-Grade Quality Services for Yaskawa & Kawasaki



- **OEM Experienced Engineering**
- **New OEM Replacement Parts only**
- **100 % OEM identical Service and QC**
- **Comfortable Service and short Lead Times**
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www.cektech.com

Ozone Generators Repair



Repair of:
- Ozone Generators
- Megasonic Amplifiers
- High-performance semiconductor equipment

Infusion Systems – easy to install stand alone and fully integrated.
- ZEUS – Ozone Gas Delivery System
- Cronus DIO3 Delivery System
- Semitool Hydrozone Systems Support

Ozone Infusion System Products

www.ozoneinfusion.com

CMP Parts Repair

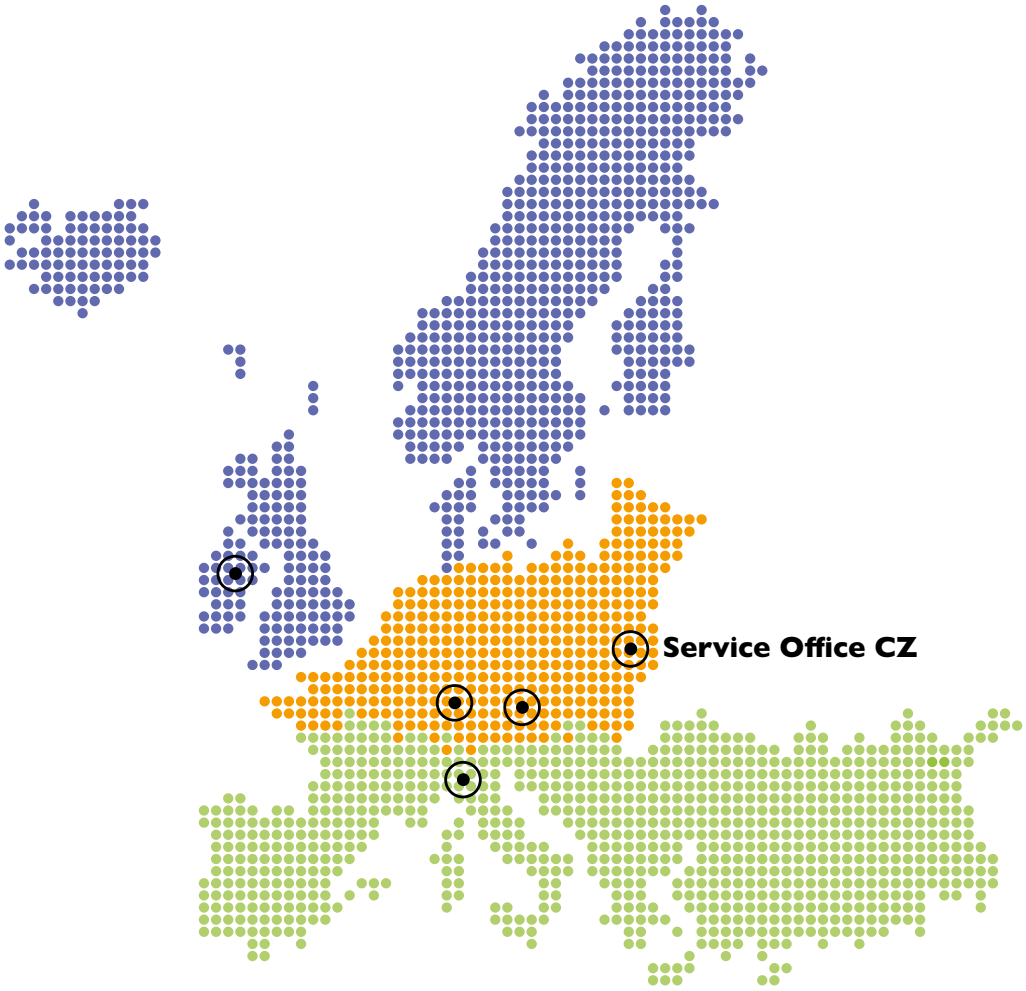


Repair of AMAT / EBARA:
- Rotary Union
- Motors
- Pad Conditional Hub Assembly
- Polishing Head Spindle Assembly
- Gear Box Modification and Overhaul

www.warde.com.sg

LOCATIONS

S3 Alliance operates from several 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 Main 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

Sales Office

S3 Alliance GmbH
Schaezlerstraße 32
D-86152 Augsburg
Germany

Tel.: +49 821 596 576

E-mail: salesgmbh@s3-alliance.com



Italian Office

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