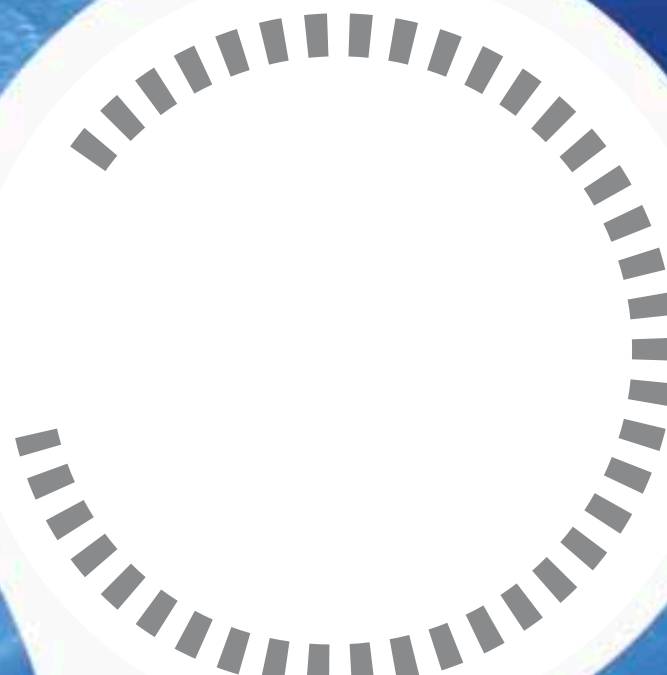


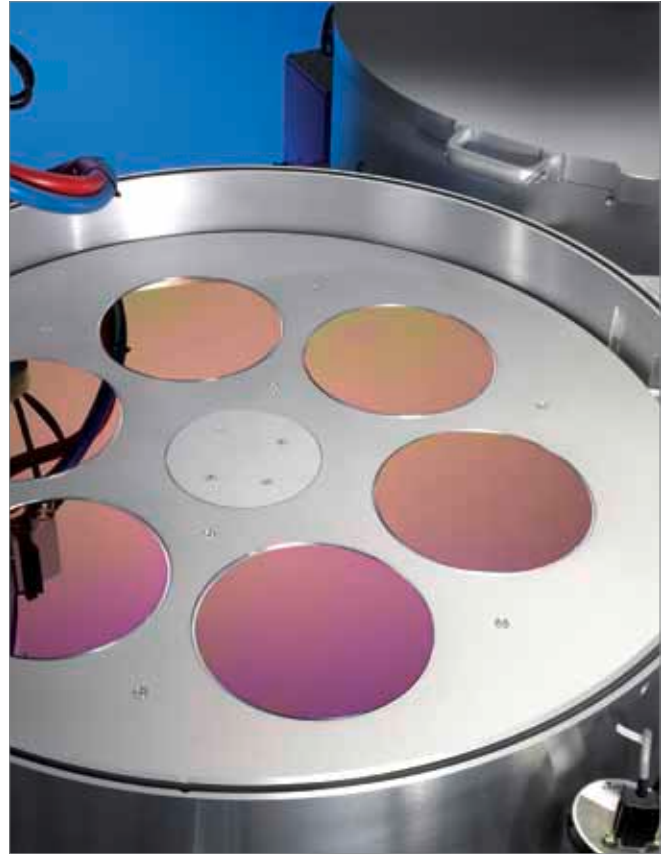
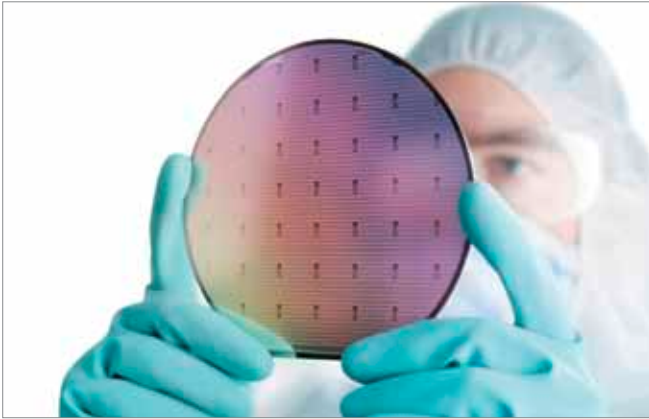
SEMICONDUCTORS/MEMS



S3Alliance

SUPPLY . SERVICE . SOLUTIONS

www.s3-alliance.com



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 source and offer quality products at the right price within the following areas:

	page
Equipment	3
Metrology & Handling	6
Parts & Consumables	8
Service / Cleaning and Facility	10

CMP/Grinding/ Scrubbing Systems



New CMP Tool: CAPSTONE

- DIWO/DIDO
- 2 platen up to 4 carriers
- Multiple Multi zones carriers available for different applications

Refurbished CMP Platform

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

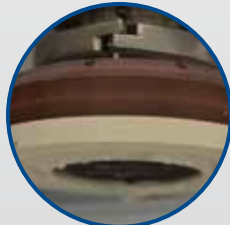


Post CMP Scrubbers

- 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

CMP & Cleaning Systems for R&D



CMP

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

Post CMP Cleaners

- Semi-automated (4"-12") or fully automated 3" to 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



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

Tailored Wet Processing Systems



Linear Wet Benches

- Semi to Fully Automated

Upgrade Programs

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



New SRD Systems

- Tabletop, Single or double Stack Stand Alone
- Plating Tools

Inception Single Wafer Spray

- manual or automated
- 2-4 chemical process tanks



Applications

- Advanced Metal Etch
- Metal Lift Off
- Resist Strip
- Advanced Cleaning

www.rena-na.com
www.meillc.com

Atomic Layer Deposition (ALD)



Technology

- Showerhead Type ALD / CVD Process
- Traveling Wave Type ALD Process
- Furnace Type Batch ALD Process
- High Film Uniformity & 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

Spray Coating Systems



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

Gaseous Asher Equipment



Remanufactured Asher equipment

- Gasonics L3510 Plasma Asher, Plasma Resist Strip and Etch tools
- Unique innovative upgrades
- cost-effective technical solution

Applications

- Semiconductor, MEMS
- Biomedical
- Nanotechnology & LED Industries

www.esi-semi.com

Critical Point Dryers (CPD)



Critical Point Dryers (CPD)

- Semi to Fully Automated

Products for cleanroom and non-cleanroom

- Research chemicals Supplies
- Accessories and instruments for the electron microscopy and analysis laboratory

Applications

- FOM, Aerogel, MEMS, SEM Preparation

www.tousimis.com

Room Temperature Wafer Bonder



Principle surface activation
Room Temperature
Vacuum
Void-free high yield rate bonding can be realized

Applications

- Si / Si
- SiO₂ / SiO₂
- Si / Quartz, Quartz / Quartz
- Cu / Cu
- Wafer Level Pack. for MEMS (Acc. sensor)

www.nidec.com

Manufacturer of Plasma (RIE/ICP) Systems



RIE, ICP Etch

- Phantom III
- Minilock

PECVD

- Titan
- Minilock Orion
- Oracle III

Resist Strip / Descum

- Apollo (single chamber)
- Gemini (multi chamber)

www.triontech.com

Scribe and Break



DTX Scribe and Break

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

DXB Wafer Bonders

DXE Wafer Expanders

Consumables:

Wafer Grip Adhesives, StripAid X Solvent, Diamond Tools, Tapes, Protective Overlays, Hoops and Carriers

Applications

- Semiconductor, MEMS
- OptoElectronics Devices
- Biomedical

www.dynatex.com

Spin Coater



High-Precision Spin Coating System

Multiple Vacuum Chucks available, up to 3000 rpm

ACE-200

Up to 6 inches

TOP-8

Up to 8 inches

Applications

- All typical coating applications

www.spincoater.net

Ultra Violet Lights for Clean Room



Detect particles as small as 30 microns that are not visible to human eye and prevent contamination. Easy to use.

Applications

- Cleanroom incoming parts control after cleaning by external cleaning subcontractors
- UV inspection prior to assembly in Clean Room
- UV inspection during assembly in a Cross Flow Cabinet
- UV inspection after cleaning

www.labino.com

Scanning Electron Microscope



(Germany)

Tabletop SEM

- Compact & Light
- High-Resolution (*200k@30kV)
- 100% motorized stage & 4Ch BSE as a basic model
- Fast and Easy Operations (ready in 90s)
- 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

Non-invasive Flow Measurement & Bubble Detection



(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

Ion Sputter Coater



(Germany)

Ion Sputter Coater G20

- Easy Operation with 7" Touch Screen
- Vacuum-Auto Coating-Vent One
- Touch Operation
- 7 Sample holder (F14mm) Together in Chamber
- Minimize Footprint with Compact Product Size
- Very Good Uniformity with Pirani Gauge Inside

Applications

- SEM Preparation
- Metal thin film coating of non and slightly conductive Specimens (Au, Pt)

www.koreasem.com

Metrology



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

Automation & Metrology



WL-200 / WL-200S

- 3" – 8" Auto-handler with Macro inspection and with or without Micro inspection (also available for NIKON, OLYMPUS, ...)
- Windows based Touch Panel PC inside
- Easy of Use : User-friendly Windows Interface, few buttons
- Stable ultra-thin wafer handling capability
- Macro / Micro (Tilting, back side/center) inspection
- Footswitch function for loading/unloading

Other Handling systems also available

www.koviseng.com

Automated Wafer Handling Loader / Unloader

JABIL

Standard wafer handling solutions for non-standard wafer handling requirements (OEM, end-users)

- From 50mm to 450mm
- Bridge tool capability with no tooling change-over
- Non-standard wafer handling solutions (thin, warped, glass, thick, film frame)
- For all types (SMIF, FOUP or open cassette)
- SIM (Standard Interface Module)
SIM 500, SIM 1000



www.jabil.com

Automatic Wafer / Package Inspection / Laser Marking Systems

ATI

Advanced Technology Inc.

2D and 3D Vision with Micro and Nano Pixel Imaging
Surface Defect Inspection for:
Contamination, Foreign Material, Scratch, Etch Residue, Discoloration

- Post Wafer thinning and Dicing Crack Inspection
- Wafer Macro defect inspection Tool:
2D, 3D Bump, die to die and
Cracks inspection kerf, Edge trim Inspection

Laser Marking Tool
Reticle Inspection Tool
LED 2D and 3D Inspection Tool



www.ati2000.co.kr

Automatic Batch Wafer Systems

R2D INGENIERIE

(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 Standard Technology Corp.

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



www.stc.tw

Retaining Ring & Customized Plastic Parts



Retaining Ring available in different materials

- PEEK, PPS, PBN
- available for AMAT Mirra, Reflexion, Ebara FREX Others

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

www.willbesnt.com

Back Grinding Wheel, CMP Pad Contitioner

SHINHAN DIAMOND



Diamond CMP Pad Conditioner

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

Backgrinding 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 Parts & Services



- Development and Manufacturing of CMP Parts for AMAT & EBARA parts
- Silicone and Rubber parts for CMP, Etch and Other
- CMP Parts and CMP Repairs

www.warde.com.sg

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

<http://www.ivt.com.tw>

Materials for Cleaning Critical Surfaces



Materials

- ScrubPads
- Foams
- Microfiber Wipers
- Swabs
- 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.foamtecintlcc.com

Diaphragm Pumps & Heaters



(CH, CZ, D, France, Italy, PL, Russia)

- High Purity PFA Chemical Pumps
- High Purity Di Water Quartz Heater
- High Purity Chemical Heaters
- New Flexible Chemical Heaters

www.treborintl.com

Wafer Cassette



Wafer Cassette

- o PEEK from 4" to 8"
- o Teflon/PFA, PP from 2" to 12"

Shipping Box from 2" to 8"

Single Wafer Carrier 2", 3", 4", 5", 6" made of PP

Mask package, Reticle SMIF POD

Plastic or Metal Film Frame

FOUP for Thin Wafer

www.ckplas.com

Products for Silicon Wafer Handling



Products for Silicon Wafer Handling:

- o Wafer carrier
- o Storage Boxes
- o Wafer Shipping Products
- o All handling plastic items

New from remaining stock of Entegris or other Brands or Reclaimed and fully quality controlled.

www.redstonetechnical.com

Bearingless Pumps



(UK & Ireland)



For following applications:

- o Slurry mixing and dispense
- o Electro Chemical Deposition (Au, Cu, Permalloy, Solder)

www.levitronix.com

Dicing Saw & Blades



Chuck Tables

- o New and Refurbished

Dicing Saw

Dicing Blades

- o Resin, Electro formed, Metal, vitrified Bond

High Temperature UV Tape

www.npmt.com.tw

O-Rings



Assortment for hot and plasma Applications

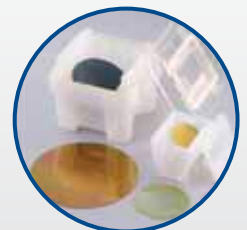
- o O-Rings for high temp applications
- o Based on the material DUPRA
- o Better performance and significantly lower Costs compared to KALREZ
- o Customization for specific tasks is possible

Applications

- o CVD
- o Diffusion
- o Etch and other plasma applications

www.eseltech.com

Ultra Thick Thermal Oxide SOI Wafers



Ultra Thick Film Thermal Oxide Technology

- o Thick Thermal Oxidation for PLC
- o SOI wafers
- o Cavity SOI wafer

Applications

MEMS Devices

- o Pressure Sensor
- o Microphone
- o Micro Mirror

Power Devices

www.kst.seiren.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

- Aligners, Brooks, PRI, Equipe Genmark, Rorze

Head Platen Motors

- Kollmorgen

CVD Vaporizer / LMFM Unit Repair / Overhaul

- Source Material: TEOS, TDMAT, TE, TMCTS, BCHD

www.greenspec.co.kr

Hydrogen Separators, Analyzers, Generators



Hydrogen Analysis

- HEMS – Hydrogen Elimination Mass Spectroscopy ppb qualification of Hydrogen

Hydrogen Generation

- Fuel Cell-Ready Hydrogen

Hydrogen Separation

- Reforming fuels
- Gas or Liquid, Fossil or Bio

www.powerandenergy.com

Yaskawa and Kawasaki Robot Repair Service



Yaskawa Robot Repair and Service

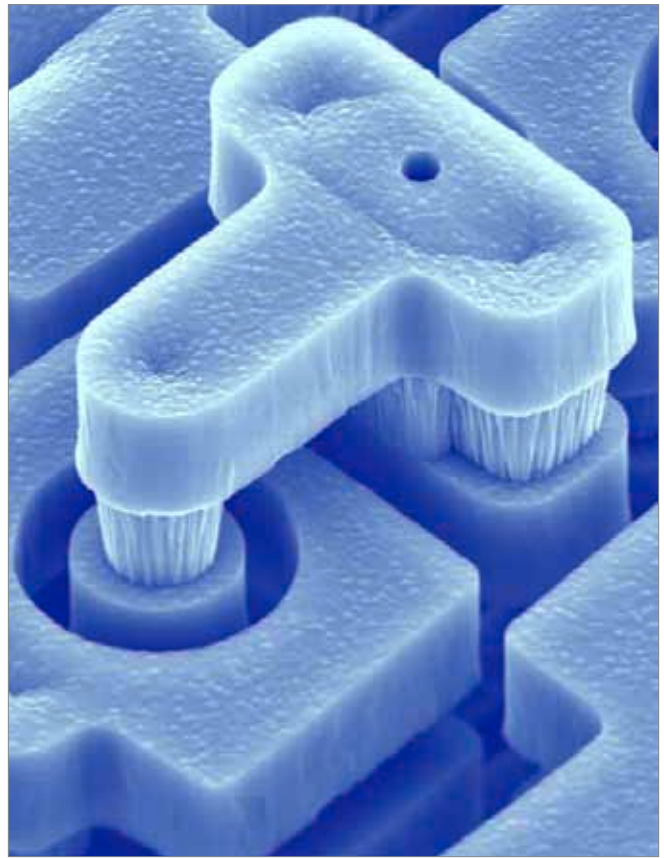
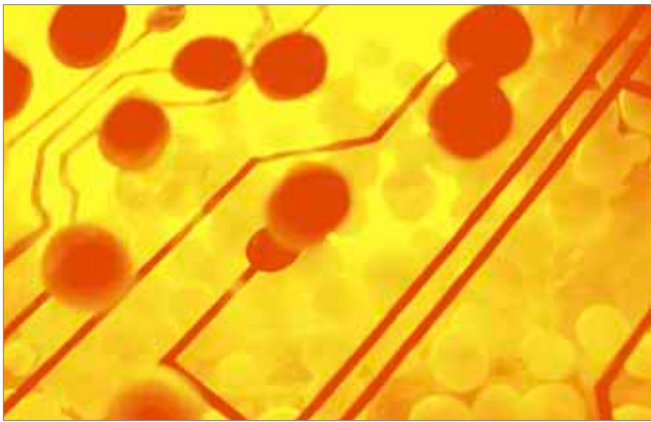
- Robot Maintenance & Service Contract
- Robot and Controller Repair Service

Kawasaki Robot Repair

- Receiving Robot
- Visual Inspection
- Disassembly, Assembly, Function Test
- Final Assembly & Torque Test

www.cektech.com

ABOUT S3 ALLIANCE



Customer service is the key driving force behind our company and the reason our customers keep coming back to us.

We strive to ensure customer satisfaction at all times by maintaining permanent communication, keep our staff well trained, work closely with suppliers if technical support is needed. And having market adapted conditions (pricing, response time,...)

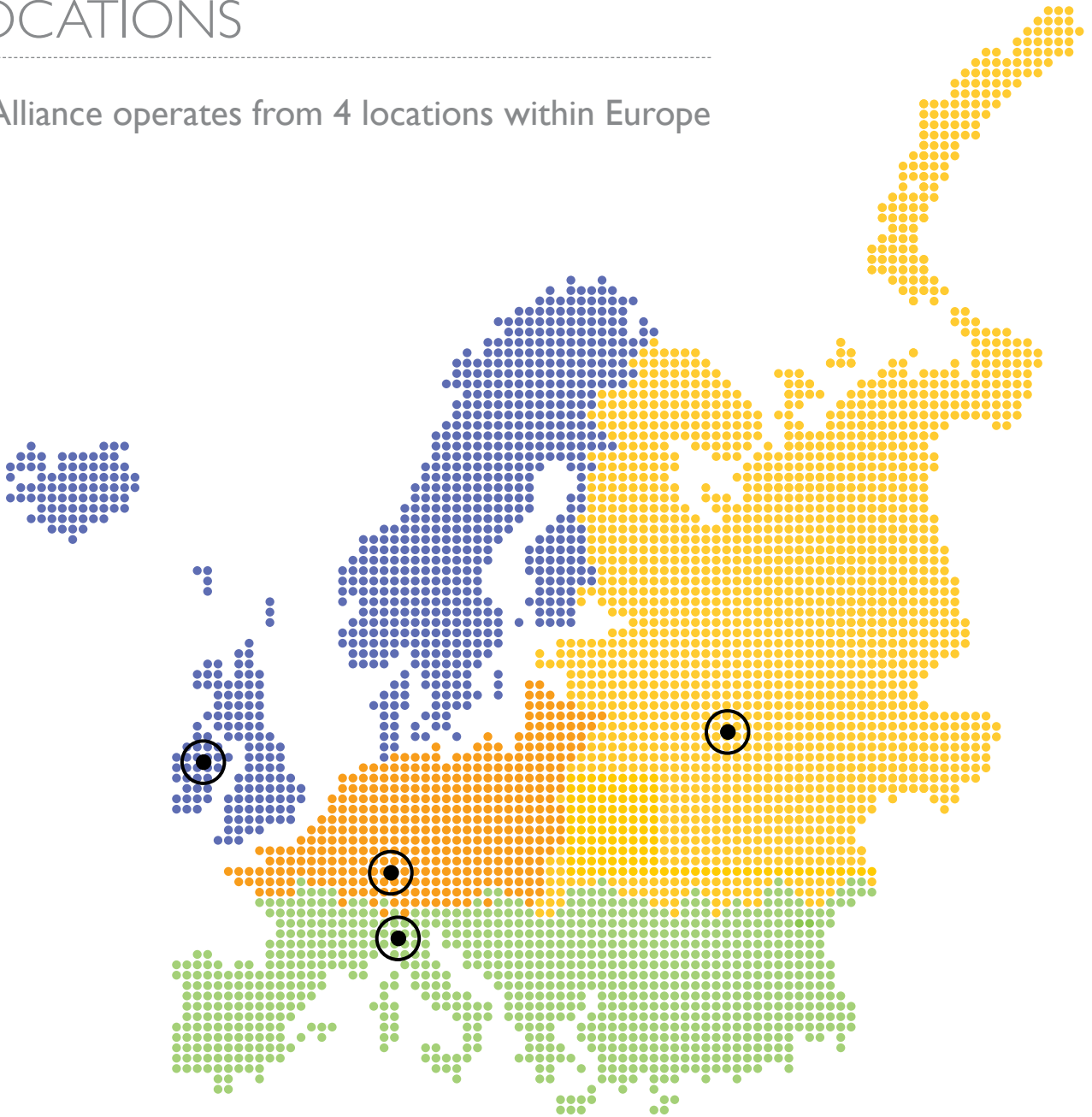
We provide warranty on all our tools and services, offer onsite support where necessary and often accommodate what would be traditionally defined as out of hours support.

Different service contracts are proposed with preventive and/or corrective maintenance up to Full service contract.

We also apply an escalation policy in order to have different level of reaction based on the criticality of the situation.

LOCATIONS

S3 Alliance operates from 4 locations within Europe



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