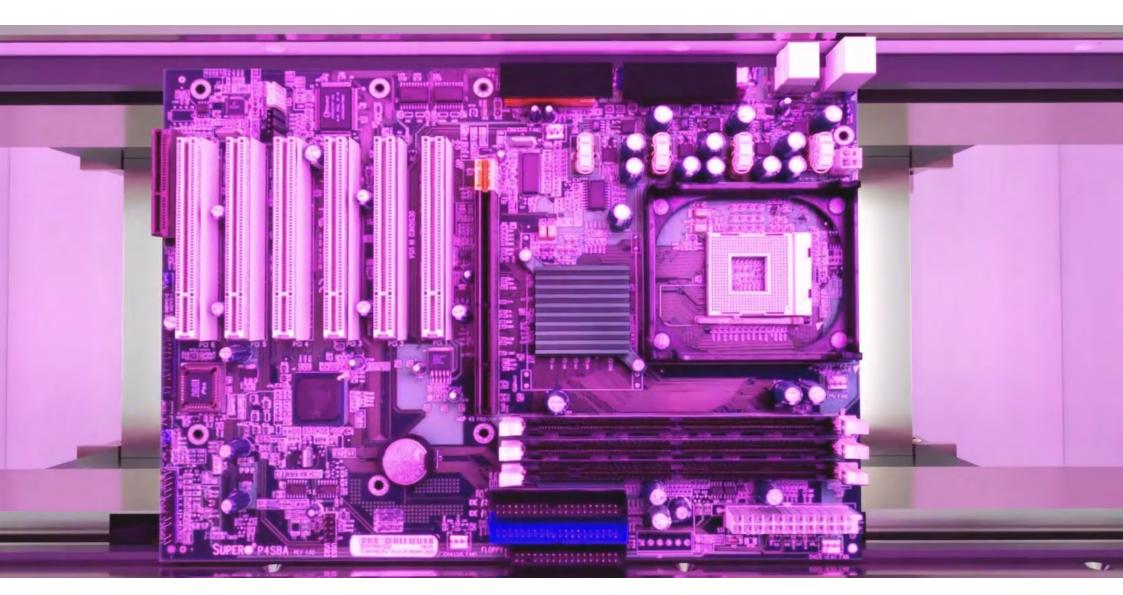


Pursuit of perfection Innovation | Precision | Performance

















Leaders in developing equipment and machinery for electronics manufacturing backend processes ith over 20 years of experience, founded in Korea in 1996, MSTECH begins offering automation solutions for the electronics industry specializing in depaneling, establishing ourselves as a leader in various sectors such as consumer electronics, mobile phones and automotive, exceeding expectations from even the most demanding standards e.g. from leading companies such as SAMSUNG, LG, KIA, Motors, Continental. Today we stand as leaders in developing equipment and machinery for electronics manufacturing backend processes, the only one able to provide an unmatched balance between high performance, precision and quality.





Well established in the Americas and Asia,

MSTECH is now present in Europe under the
name MSTECH EUROPE. With an unmatched
portfolio, MSTECH EUROPE offers unparalleled
possibilities to customize backend solutions with
the highest quality standards. We work hand
to hand with each customer case to design
customized solutions, resulting in the best
possible solution that will match the project
needs to perfection.

The most advanced automated solutions for outstanding performance



MSTECH KOREA HISTORY

DEPANELIST

MSTECH KOREA

2005 - Developed Dual inline Router System

Acquired ISO 9001: 2000 certificate

2006 - Established R&D Center

Developed Single inline Router System

2008 - Registered for Nokia's Global Supplier



2015 - Developed Auto Tray Function inline Router

2016 - Developed all Diagnostic Intellectual Dust Collector

Developed Automatic inline Router with Auto Tray and Shuttle Jig, Pallet Unloading System



2021 - Developed Depaneling offline Router Universal Checkmate

1996

2003

2008

2014

2016

2017

2021

1999 - Registered for Samsung Electronics

2003 - Registered for LG Electronics

2010 - Registered for Continental's Global Supplier

Registered for Flextronics' Global Supplier

2013 - Developed Saw (Wheel) Type Depaneling System

Developed Auto PCB Placing System

Developed Edge Detection function

2014 - Developed Auto Programming function

Developed PCB Sawing System



2017 - Automatic inline Sawing System Developed

Moebius offline Router Developed

Moebius inline System Developed

SSD Module inline Router Developed

Developed UV Laser Depaneling System and IR, Green

Laser Depaneling system



Depanelist





MSTECH EUROPE HISTORY

CURING + PROTECTION

MSTECH EUROPE



2019 - Developed Curing UVLED Benchtop XL



MSTECH AMÉRICA

Curing MSTECH Smart Infinity Curing Vertical Oven AOI (Automatical Optical Inspection)

2021 - Developed

AOI i.Top CAM AOI i.Bottom CAM AOI i.Slim CAM AOI i.Top SCAN AOI i.Bottom SCAN



2017

2018

2019

2020

2021

2022

2018 - Developed Curing UVLED 395



2020 - Developed Handling Curing Oven IR Reflow Oven MSTR Screen Printer MST



2022 - Developed PCB Protector Partners: Nordson Asymtek - Musashi Plasma Treatment





We PROVIDE

Our relationships are based on years of trust and support with a direct relationships with headquarters.





STAFF

MSTECH EUROPE staff has over 20 years experience in the Industry. Our main target is to help our customers and support our principals' growth.

OUR JOB

- Developing robust process solution
- To understand our customers' needs
- Smart engineer solutions matching customer request
- Managing customer accounts professionally
- Supporting our customers
- Delivering a clear message
- Facilitate and enrich communication

OUR EIGHT PRINCIPLES

- Adaptability
- Untiring Effort for Improvement
- Gratitude
- Courtesy and Humility
- Fairness and Honesty
- Cooperation and Team Spirit
- Contribution to Society
- Creativity and Innovation

OUR ADDED VALUE

- Experience
- Support
- Expertise





SUPPORT

What we do for our customers in terms of support:

For every new strategic account we open, we have a resident engineer dedicated to the customer.

We keep the engineer in our payroll and at the customer's service Engineers have specific expertise and support each other.

Our process expertise comes from years of experience implementing production solution in an highly demanding environment.

Our strategy helps us support our customers and have immediate response capabilities.



MSTECH EUROPE join forces to deliver thorough presence and support to our customers and principals.





EUROPE ORGANIZATION



Stéphane Etienne

R&D Strategic Innovation Manager

Fernando Rafols
3D Animation

Irene SomensonGraphic Design

& Marketing

Jaume Díaz CFO

Fernando Garriga Legal Services Airon Fernández

R&D TEAM

Jesús Martínez

PLC Developer

Alejandro Cruces

Electro Mechanic Designer

Raul Garcia

Mechanic Designer

SALES TEAM

Israel Ayala

Sales Nordic

Karol Sowa

Sales Eastern Europe

Jean Baptiste

Sales Spain

Khaled Amri

Sales North Africa

Christophe Valat

Sales France & Italy

Gonçalo Leitao

Sales Portugal & Brasil

Marie Kaing

Sales United Kingdom

CUSTOMER SUPPORT TEAM

Jesús Martínez FSE Depaneling

Ismael Vilar FSE AOI Expert

Khaled Amri FSE MES - FSI Software Expert

CEO FOUNDER

Christophe Valat FSE Backend Expert

FSE Material Management

Lyazide Oudjoudi Expert - Device Programming

and Test Expert

BACK OFFICE TEAM

Administrative Assistant,
Quotation, Back Office

Vázquez Equipments & Spare

Parts

Antia Vila Back Office Comission,

Services & Travel Agence

CFO - Finance

Jaume Díaz Controller, Laboral

and Preventive Risk





INTERNATIONAL MARKET MAP

Organizational representation by countries

Sales & Technical Support

Asia (Korea) - America (Brasil-EEUU) - Lyon (France) - Helsinki (Finland) - Portugal Stuttgart (Germany) - Tunisia (Tunisia)

Demo-showroom & Logistic Center

Cubelles, Barcelona (Spain)

Test Center

Madrillet, Normandie (France)

Key Account & Strategy Manager



Stéphane Etienne Germany Area Manager





Jean Baptiste Bénard Southern Europe Area Manager Spain-Italy



Christophe Valat France Area Manager



Marie Kaing European Product Manager for Consumables United Kingdom



Karol Sowa Eastern Europe Area Manager Bulgaria-Slovakia-Hungary Poland-Czech Republic-Ukraine



Israel Ayala Nordic Area Manager Estonia-Norway-Sweden Denmark-Finland



Gonçalo Leitao Portugal & Brasil Area Manager



Khaled Amri Northern and Southern Africa Area Manager Morocco-Algeria-Tunisia South Africa







GLOBAL EVOLUTION

Income Growth and Human Resources

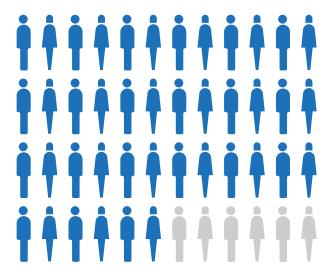
Evolution Human Resources

The group of territorial divisions of MSTECH has over 74 employees worldwide.

MSTECH employees:

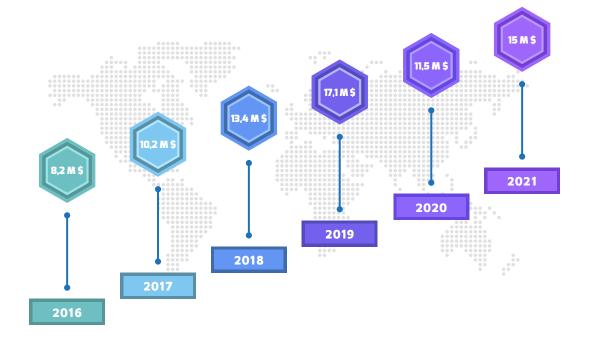
Manufacturing Asia: 35

Engineering & Manufacturing Europe: 11 Support US: 8 - Asia: 11 - America: 9



Evolution Financial Resources

Billing progressive growth in recent years.
*Limited to genuine MSTCH product





BUILDING SPACE PRODUCTION AREA



2017: 90 / **2018:** 120 / **2019:** 170

2020: 100 / **2021**: 130 sets





PARTNERS



- Routing and Depanelist Solution
- Electronic Assembly Solution
- Handling Solution
- PCB test Solution (SPI and AOI 3D)
- Soldering Solution (Oven and Wave)
- Lean Pick & Place Machines
- Optical Bonding
- Consumables
- Material Management
- MES and Industry 4.0 Solution
- Device Programming and Test Equipments







SUPERIOR FUNCTION DESIGNS

Custom possibilities SMT Full Process Line

HANDLING

02

DEPANELING

03

SYSTEM

DUST COLLECTING ELECTRIC TEST & FLASH

05

PCB'S **PROTECTION**

CURING

06

SYSTEM

80

VISION INSPECTION LEAK TEST

SYSTEM

AUTO TRAY UNLOADING SYSTEM





AOI CAM



Ultrafast AOI Top Bottom ready to integrate in any inline/offline equipment

Single system for inspection of objects

- Test in less than 2 seconds of a panel or product with measurement report
- Typical tests include confirmation of the mechanical assembly, presence, placement and orientation of plugs, stickers, fixings, reading of barcodes and data matrix codes
- Inspection of workers process flow
- Glue and coating inspection
- Cutting, potting process, encapsulation and underfill

AOI SCANNER



System for single-sided top inspection for THT or Conformal Coating printed circuit boards

- Combination of different inspection tasks such as SMD placement, THT solder joints, conformal coating and full screening for solder beads (solder balls)
- Capture of any number of barcodes and data-matrix codes on the multi PCB
- Resolution: 600 1200 dpi, 42μm 21μm
- Color depth 3 x 12 bit internal, 3 x 8 bit external
- Light source: multi-LED illumination
- UV LED Cluster focused





CURING UVLED395



The high performance surface light source is integrated into our fully integrated Modular System with a simple flexible control system transport conveyors and a range of options and accessories to meet every need.

The **UV irradiation** source has world best efficiency using high power LED'S. Frequency is tuned to 395nm.

Integrated, programmable forced air cooling over the entire 500mm \times 400mm area.

The small footprint is fully ready for simple integration into any automated line, full SMEMA compatibility & Industry 4.0 data export functions give extraordinary capability & traceability.

FEATURES

FLEXIBILITY ON DIMENSIONS

BOARD DETAILS

NO INFRARED RADIATION

TECHNICAL DETAILS

• Wavelength: 395nm.

Options: 365nm, 385nm, 405nm

• Electric Power: 1800w

Curing Area: 500x400mm (option curing area 800x500mm)

• **Curing Side**: Top side (option top and bottom) in top conveyor or return conveyor

• Best Curing Distance: 50-150mm

Power Intensity: 1000mW/cm2 (at 15cm of working distance)

Cooling method: Fans cooling

Humidity Control: Air conditioner (humidity & T°C control closed loop) (option)

No need to warm up after power on: Instant turn on/off. It reaches
the maximum light intensity instantaneously, increasingly lamp
lifetime









3 FUNCTIONS IN 1 EQUIPMENT IN LESS THAN 30 SECONDS







MST Smart Infinity allows three functions which are usually managed separately.

- Flipper
- UV Led
- Automatic Optical Inspection of Coating (scanner control)

The **MST Smart Infinity** saves space in the manufacturing production floor and increases production speed with only one operator.

The equipment can be integrated into a production line of electronic PCBA's production equipment at the customer's request.

Other versions will be developed: UV Oven / Laser Marking / Cleaning and Surface Activation.

- High precision camera: Recognizes PCB fiducial mark, PVB hole & fixture hole, etc.
- Max. PCB size: <=330 x 440mm. Field of view.
- Max. PCB Thickness: = 5µm 8mm
- Max. component height: Up to 70mm
- Color: Recognition of color, black and white of fixtures
- Checking conformal coating coverage area: tolerances: >= +/- 0,1 mm with 21µm (20 sec. max / 430x330mm) or >= +/-0,2 mm 42µm resolution (10 sec. max / 430x330mm)
- Conformal coating thickness: Able to check automatically by calibrated topologic view
- Cosmetic defects: Able to check per IPC. Our Conformal Coating AOI recognize bubbles bigger than 50µm. Smaller ones are usually dust or other pollution.
- Thickness: Able to check for IC seagull leg, by calibrated topologic view
- Record: all inspection results
- Link to statistic system: Our engineer can program the interface.
 Customer specifications needed





SOFTWARE SOLUTION PROCESS TRACKER





PPE PRODUCT PROCESS EXPERTISE

Our wish to stay atop our sector, set trends and offer only state-of-the-art solutions will take MSTECH EUROPE to develop a new brand Product Process Expertise (PPE) which will be based in Lyon, where we will have a comprehensive Showroom where the manufacturing processes will be designed based on the customer requirements. This way the user will be able to witness how each Backend process is validated, from depaneling to the final assembly.

Moreover, we will offer a specialized lab focused on the cleaning and protective processes which the circuit boards undergo to guarantee their quality and performance, and finally, there will be a center designed to perform all the required acceptance and performance tests. The combination of all of these processes will allow the customer to achieve a well-rounded integral solution only available and possible through our Product Process Expertise.





SERVICES

Trust and professional care for your project and needs



Technical Support

MSTECH EUROPE is committed to each and every customer. Our team of qualified professionals will carefully listen to your needs and will build a tailored proposal responding to your needs and designed to exceed your expectations.

Instalation and Commisioning

We are fully committed to your success. Our team of qualified professionals will see through a thorough and successful installation, whereby we will meet your process and performance expectations, delivering what is expected

User Training

Our technologies and interfaces are designed to be clean, lean and practical, so that learning them is simple and efficient. Our team of qualified professionals will look after delivering thorough training in the use, programming, functionality and processes.

After Sales Service

Our goal is to be your added value partner. Our commitment goes well beyond projects. We make an extra effort to stay in close contact with our customers and provide technical support of the highest quality both remote and onsite.

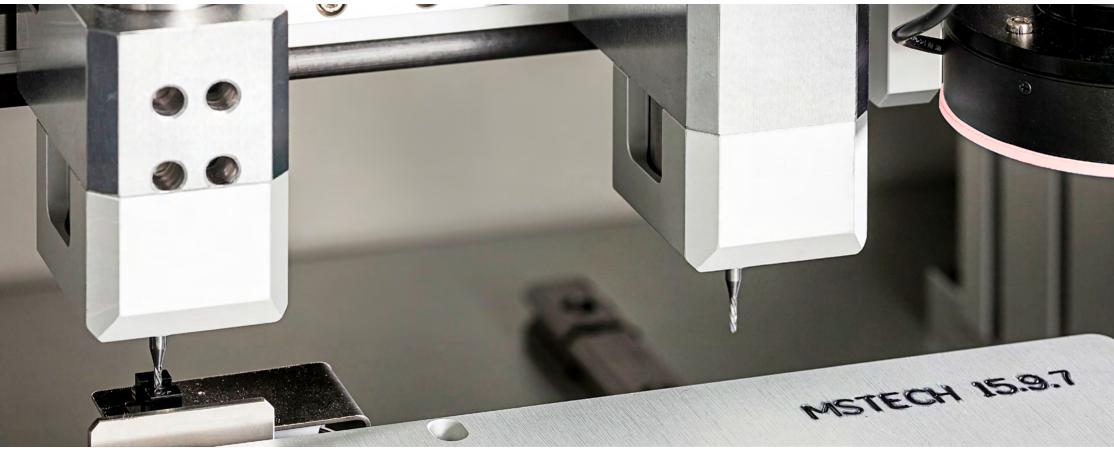
Maintenance

We offer the highest quality maintenance services to balance the stress the equipment is put under, on a daily basis. From scheduled inspections, specialized maintenance routines to parts replacement, our main goal is to achieve optimum performance of our technologies.





Provider of equipment solutions for all sectors

















Mobile Phone















Automotive Electronics



















Home Elec. & Computer









EMS

MAJORS

CUSTOMERS















Elec. Controller & Component









OEM









Global Network



DEMOFACTORYCENTERSPAIN

Pol. Industrial Les Planes, nave 20 08880 Cubelles Barcelona - Spain

director@mstechcorp.eu

BUSINESSCENTER

AMERICA - FINLAND - GERMANY POLAND - PORTUGAL - KOREA - TUNISIA

sales@mstechcorp.eu services@mstechcorp.eu

DEMOLABCENTER FRANCE

ZA La Rivoire, 1230 Route de la Porte 38630 Corbelin - France

lab@mstechcorp.eu





