



JOT Automation



JOT AUTOMATION - THE INDUSTRY PIONEER

- Founded in **1988**, headquartered in Finland
- Today a partner for the **industry giants** manufacturing smart devices powered by all the major mobile operating systems
- Operates in **Americas, Asia** and **Europe**
 - Over 220 employees in 9 countries
 - In China since 2001
- **NO.1** for automated production testing of wireless products
 - Billions of smart devices have been manufactured with the help of our solutions.

“The collaboration between JOT Automation and Nokia began 25 years ago. Since then it has been a pleasure to watch the company develop and turn into a worldwide solutions provider.”

Risto Siilasmaa
Chairman of the Board of Directors
Nokia Corporation

SOLUTIONS OVERVIEW

TEST SOLUTIONS

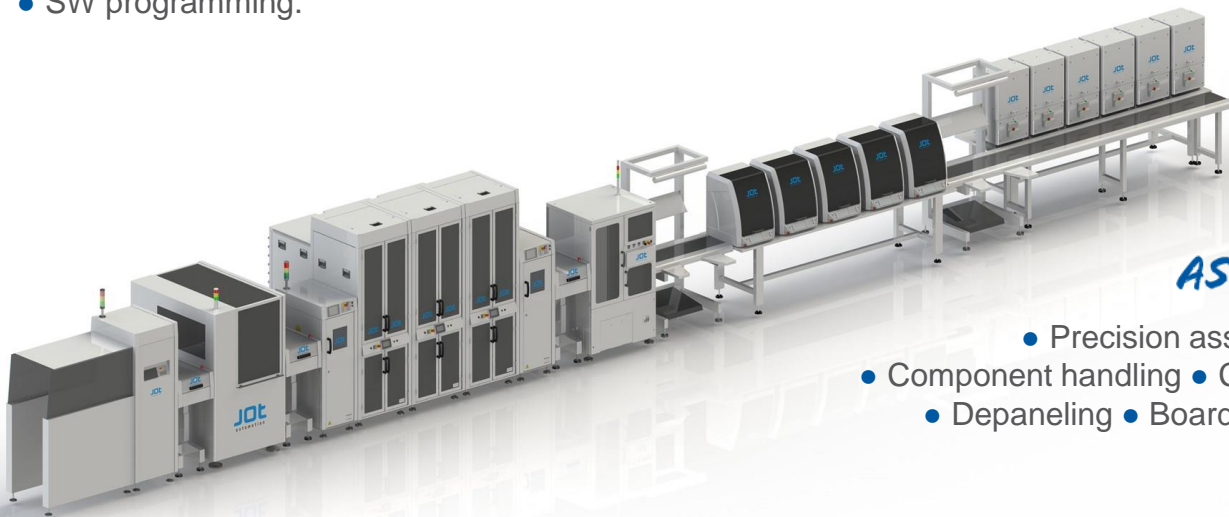
- Functional
- Performance
- Optical inspection
- SW programming.

“The company offering fully automatic tests is best positioned to achieve higher success over other participants in this highly competitive market.”

Frost & Sullivan

ASSEMBLY SOLUTIONS

- Precision assembly
- Component placement
- Component handling
- Component joining
- Traceability
- Depaneling
- Board handling
- Special applications



HOW WE WORK

TO WHO
LONG-TERM
PARTNER

WHAT
SOLUTIONS
PROVIDER

HOW
SOLUTIONS BASED
ON MODULES

WHERE
GLOBAL SERVICE
PROVIDER

FOR THE MOST
INNOVATIVE
COMPANIES

ROADMAPPING
TOGETHER
WITH
CUSTOMERS

INVESTING IN
OWN R&D

SUPPLY CHAIN
FOR LARGE
DEPLOYMENTS,
LOCAL SERVICES
GLOBALLY

"People don't quite appreciate how hard it is to manufacture something. It is really hard. I have great respect for people who manufacture large numbers of complex objects."

Elon Musk
Canadian American business magnate, engineer and investor

JOT WORLDMAP



Over 220 employees 2017



Net sales 75,0 MEUR 2017



JOT Service

OVER 60 SERVICE PROFESSIONALS
ON 4 CONTINENTS IN 15 LOCATIONS.

Headquarter in Oulu, Finland.

AMERICAS

USA Cupertino, Austin, Dallas

BRAZIL Campinas, Manaus

EUROPE

ESTONIA Tallinn

FINLAND Oulu, Salo

HUNGARY Győr

ITALY Arezzo

ASIA

CHINA Beijing, Shenzhen, Dongguan, Suzhou

VIETNAM Hanoi



Business Administration

Martti Kivelä
Finance, HR, IT

CEO
Petri Halonen

Quality

Karin Soo

CUSTOM AUTOMATION

Juha Lampela

Sales and Key Accounts

Program Management

R&D

Operations

After Sales

PRODUCTS

Janne Piikivi

Sales and Marketing

Mikko Kannelsuo

Products

Ville Vatanen

R&D

Antti Kaihua

Operations and After Sales

Pasi Röppänen

Core competencies

AUTOMATION

- Control architecture design
- Machine safety
- Sensors, sensor integration

APPLICATIONS

- DUT UI & interface testing
- HW electrical test
- Integration of 3rd party tools & systems (such as US-welding, dispensing, heat staking, plasma systems, screw drivers etc.)
- Laser depaneling & cutting
- Pick & place, accurate assembly
- Plasma pre-curing
- RF tests
- Routing
- Screw insertion
- Small, odd shaped objects packing
- Vision based assembly & test
- Vision based measurements

HW

- Adapter board design
- Audio amplifying & switching
- BUS controlling
- CAN
- Control electronics for test mechanics

- Designing and manufacturing customer product specific interface electronics
- Embedded control
- Embedded instrumentation HW
- High frequency signal measurement HW
- HW design skills
- Logic level shifted IO controlling
- Power switching
- RF coupling solutions
- Signal analysis, audio, RF, high speed digital signaling
- Special flashing interface HW design
- UARTlevel shifting & switching
- USB switching

MANUFACTURING

- Global sourcing
- Manufacturing transfer management
- Rapid prototyping
- Small series manufacturing
- Volume ramp up & ramp down

MECHANICS

- Application interfaces between DUT & machine
- CAD/CAM
- Design for manufacturability
- DUT contacting mechanics
- Machine safety
- Robust automation machine design for assembly & test applications

PROCESSES

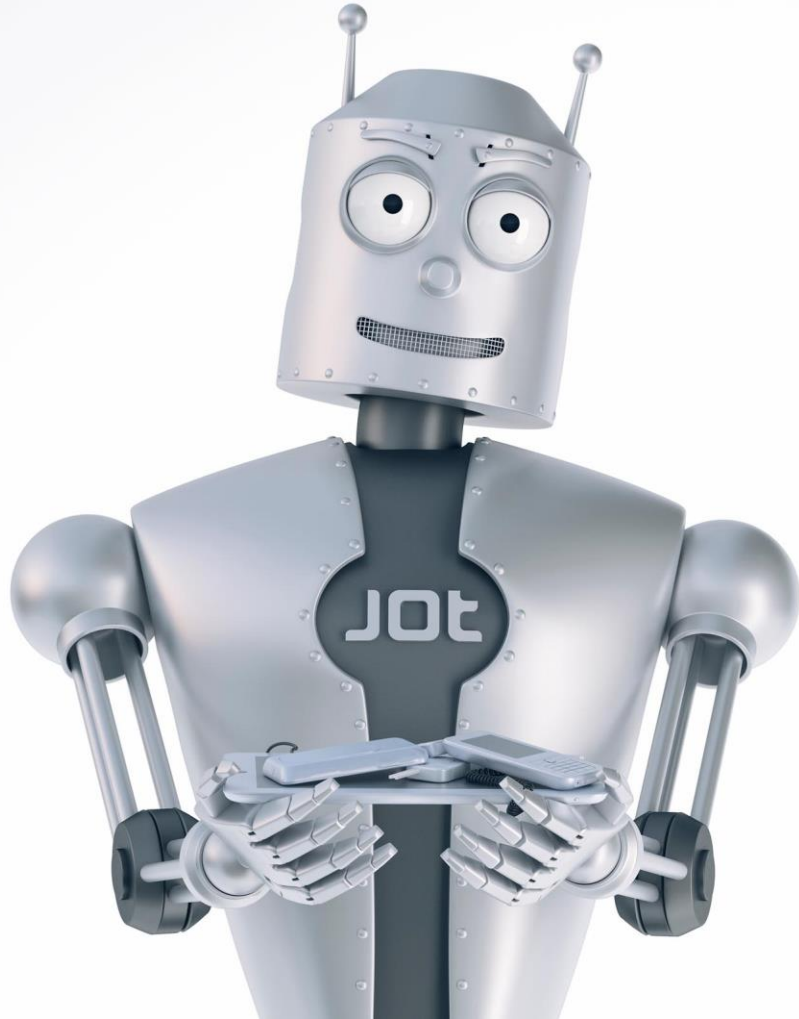
- Concurrent engineering in multi- site setup
- DFA, DFT, DFM
- FMEA, SPC, risk assessment
- Line automation & logistics design
- Machine & line simulations
- Material & work piece handling in different manufacturing concepts
- NPD
- NPI
- Product verification processes (such as strain gauge etc.)

PROGRAM MANAGEMENT

- End to end program planning
- Experienced program managers
- Management of 3rd parties
- Multi-cultural team building
- Turnkey programs

SW

- Embedded control
- Machine automation
 - PC based
 - PLC
 - Robots, robotics, robot controllers
- Vision applications
- Test scripting, test automation software
- UI programming



THANK YOU.

Jot
automation