



Expertise in automation

WE DESIGN

WE PRODUCE

WE ASSEMBLE

WE PROGRAM

2023

[www.asyst.videoton.hu](http://www.asyst.videoton.hu)

[www.tipa.hu](http://www.tipa.hu)

# CONTENTS

- **Videoton Group**
- VT ASYST / VT TIPA / SRB
- Applied Technologies
- References



- Privately owned, financially strong, vertically integrated industrial group in best-cost Europe
- One of the leading European EMS providers
- Turn-key & flexible contract manufacturing partner for both established multinationals and young innovative emerging companies
- Competent multi-commodity supplier of parts, modules and assemblies
- Complex service provider owning and operating industrial parks

# HIGHLIGHTS

Founded in

1938

Private since

1992

Revenue  
(2021)

617  
Mill €

Equity  
No debt since 2005

457  
Mill €

2021

1

... of the Most  
Valuable  
Company in  
HUN  
Ownership\*\*

11

Locations

9000

Employees\*  
(2021)

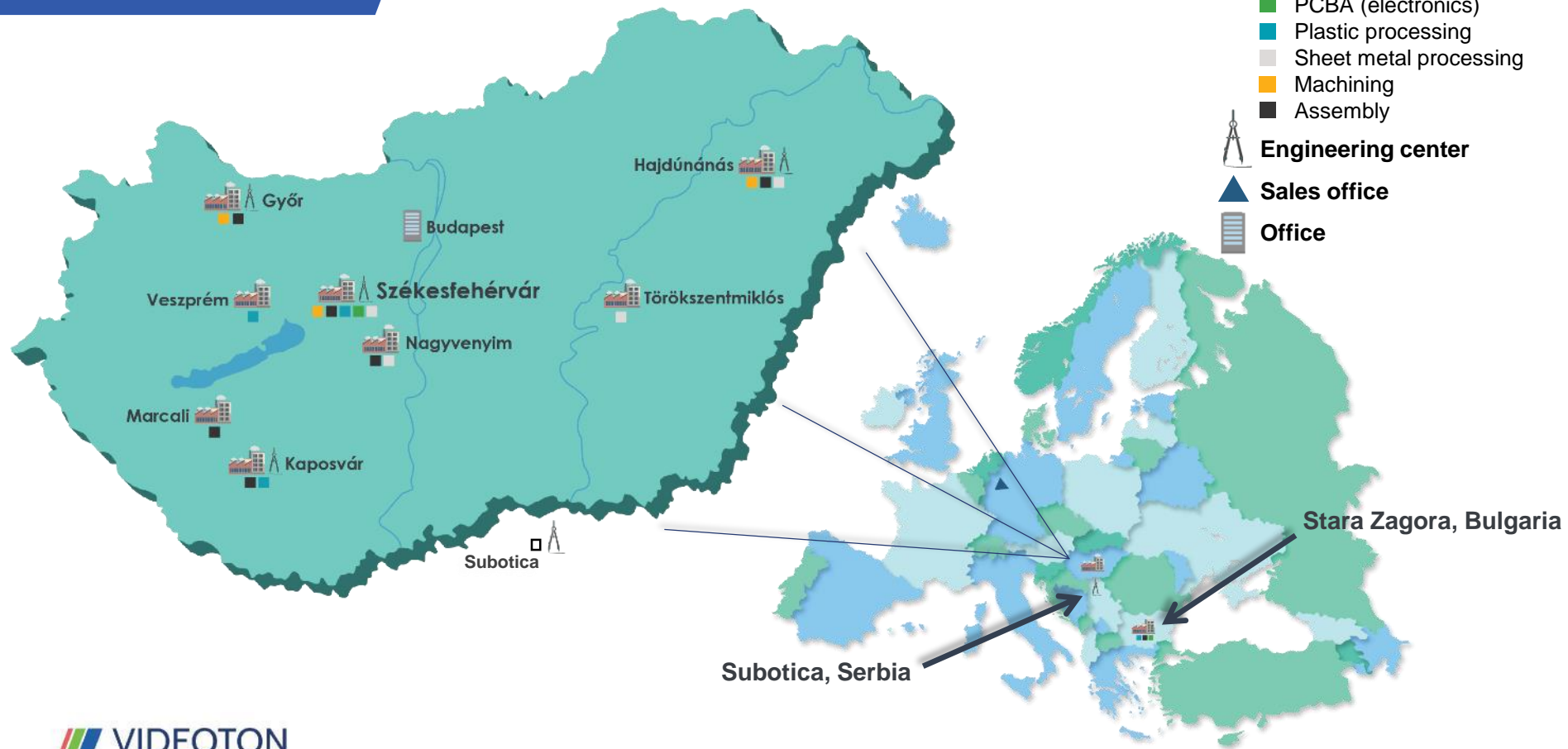
4<sup>th</sup>

Among EMS  
Companies HQ'd  
in Europe

*\* 2500 employees in services and temporary work*

*\*\* According to Forbes in 2021*

# LOCATIONS



# GROUP STRUCTURE

## VIDEOTON HOLDING

Property Mgmt

Controlling

Finance

HR

Legal

IT

Business Development

Sourcing

Design & Engineering

### Manufacturing Subsidiaries

PCBA & Box build assy.



**VT Automotive Electronics**  
Automotive EMS  
Box build assembly



**Videoton EAS**  
Non-automotive EMS  
Box build assembly



**Videoton EAS Bulgaria**  
Non-automotive EMS  
Box build assembly

Part mfg. & Box build assy.



**VT Elektro-PLAST**  
Assembly & box build  
Plastic injection moulding



**VT Battery Technology**  
Battery pack assembly



**VTES**  
Sheet metal fabrication  
Enclosure manufacturing  
Box build assembly



**VTBH (Bulgaria)**  
Electromechanical and mechanical  
assembly & box build services



**VT Mechatronics**  
High complexity assembly  
and machining



**VT ASYST**  
Robotized assembly lines  
Testers



**VT TIPA**  
Robotized assembly lines  
Testers

Part mfg. & Heavy duty assy.



**VT Plastic**  
Automotive-focused injection  
moulding



**VT Bulplast (Bulgaria)**  
Thermoplast injection and thermoset  
injection and compression moulding  
Tooling



**VT METAL**  
Medium to high volume machining  
Electroplating, KTL



**KVJ Muvek**  
Stamping w/ presses



**VT Precizios**  
Injection moulds



**VENTIFILT**  
Heavy-duty fans, filters  
Large steel fabs



**VT Systemtechnics**  
Shelter / container mfg.

### Services Subsidiaries



**Pannonjob**  
HR services



**Industrial Park**  
Building lease & services



**VT ARtrans**  
Logistics services



**Pannonfacility**  
Facility management



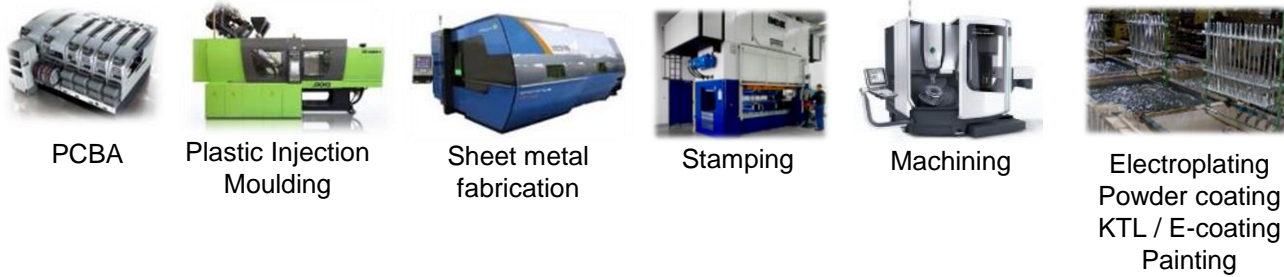
# INTEGRATED MANUFACTURING SERVICES

Value chain / Vertical integration

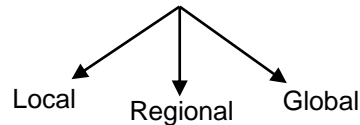
## Box build assembly & System integration



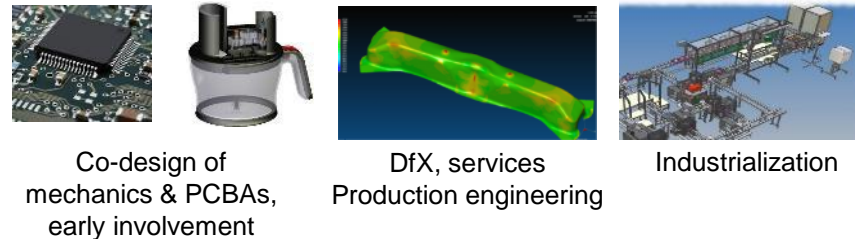
## Core technologies



## Supply chain



## Design & Engineering



# FURTHER MANUFACTURING COMPETENCES

**ROBOTIZED ASSEMBLY  
LINES, TESTERS**



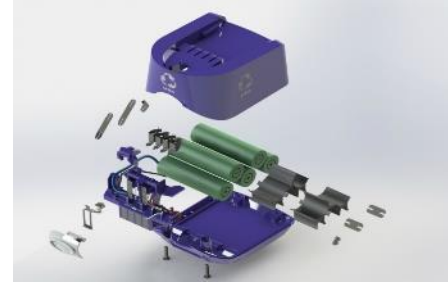
**HIGH PRECISION  
EQUIPMENT ASSEMBLY**



**CUSTOMER-SPECIFIC  
SHELTERS**



**BATTERY PACKS  
ASSEMBLY**



**LARGE WELDED  
STEEL CONSTRUCTIONS**





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# SUMMARIZED HIGHLIGHTS

Established

1995

VT TIPA

Established

1996

VT ASYST  
(as BU)

Revenue  
(2021)

11 mill €

ASYST + TIPA  
2021

93%

Automotive

Engineering

65

Engineers



Machining

20

Millers, turners

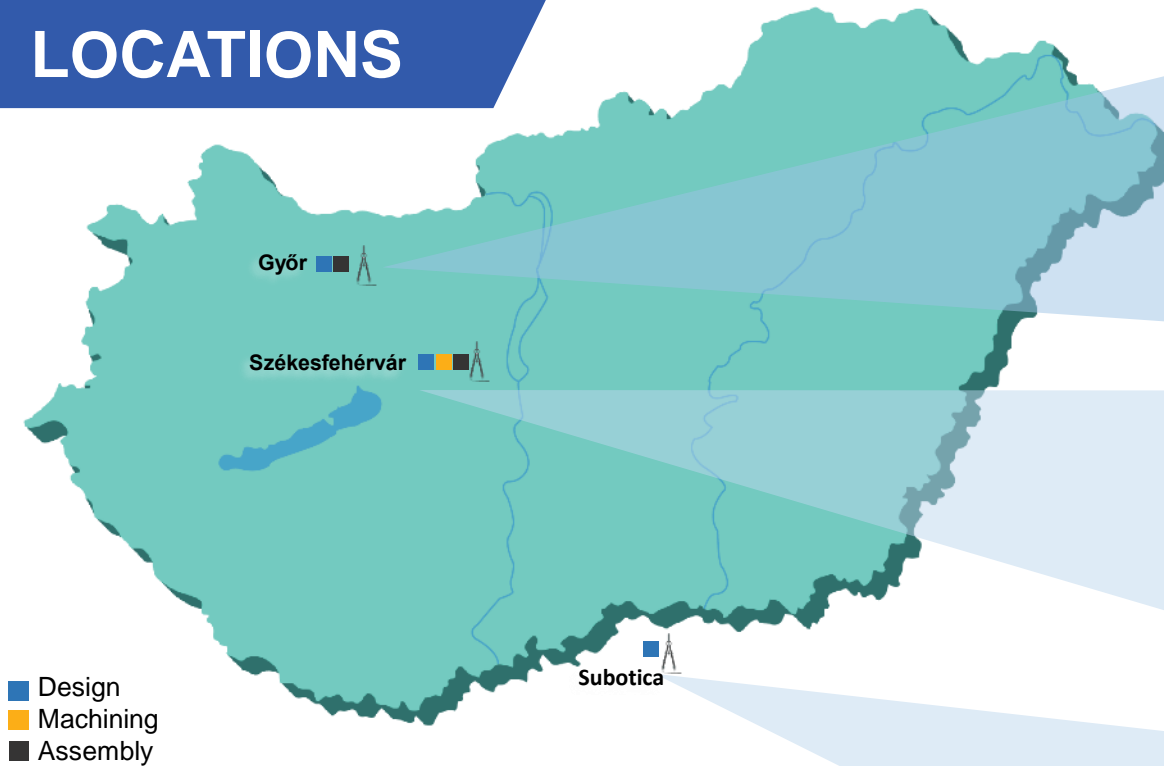
Assembling

31

Technicians

Engineering, machining, assembly, programming, installation. All parts of special machines production are in one hand. With a strong background support of VIDEOTON.

# LOCATIONS



3 Subsidiaries, 3 Locations, 3 Areas  
With the same way of thinking for one goal.

# DESIGN

- Mechanical design and control techniques
- 3D modelling, FEM simulation
- Robot simulation & integration
- Prototypes for technological test



<i>Engineers</i>	ASYST	TIPA	SRB
Mechanical Designer	12	13	6
Automat. Engineer (PLC)	8	8	-
Electrical Engineer	4	5	-
PC Software Engineer	4	2	1
Robot program Engineer	2	2	-

# PRODUCTION OF PARTS

The VT ASYST has its own tool shop, therefore we are able to manufacture the designed parts in-house. Our main machines are supported by CAM.



**Milling, Welding, Grinding, Turning, etc.**



**KUNZMANN**  
FRÄSMASCHINEN

**RENISHAW**  
apply innovation™

**HEXAGON**  
MANUFACTURING INTELLIGENCE

**vero edgecam**  
Software

We are able to produce all parts of our machines.

# ASSEMBLY

**Where parts become machines...**

- Mechanical-assy, electrical-assy, wiring, adjusting on ~1750 sqm
- Assembly is supported by engineers and 3D modell
- STATIC-ACCURACY MEASURING by portable measuring arm



**Only fully functional machines are delivered after Factory Acceptance Test (FAT).**





# PROGRAM

- PLC experiences
- Software design
- HMI design
- Robot programming
- Traceability (RFID)
- MES communication
- Data Acquisition



**SIEMENS**



**OMRON**  
Industrial Automation

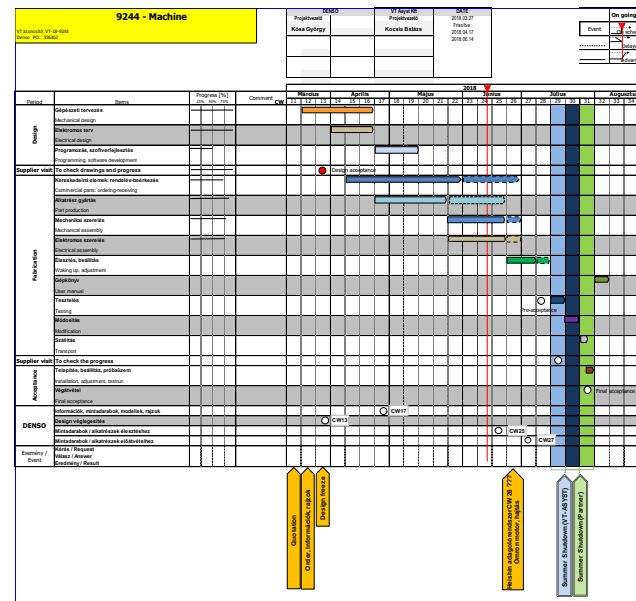
**BECKHOFF**

 **VIDEOTON**

# PROJECT MANAGEMENT

## Project management

- Surveying and negotiating customer needs in personal meetings, via email, using on-line business platforms
- Communication in four languages (English / German / Serbian / Hungarian)
- Detailed quotation, Schedule, Weekly report
- Customer care after order
- One person contact



# EDUCATION / TRAINING

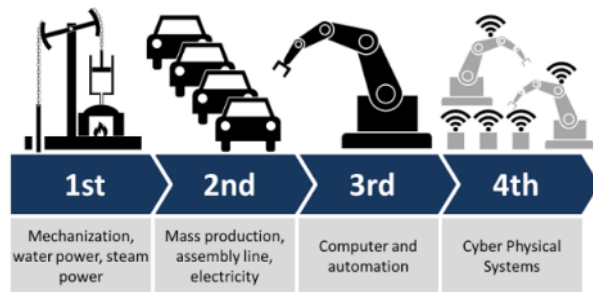


## Training (5.S - Shitsuke):

Training, education and different type of courses for every engineer in every month.

## Education:

We are in active cooperation with local universities, train skilled workers by ourselves and contribute to the Industry 4.0 National Technological Platform of Hungary.



# QUALITY ASSURANCE

## Quality Standard:

➤ ISO 9001:2015



# OUR PARTNERS



# CONTENTS

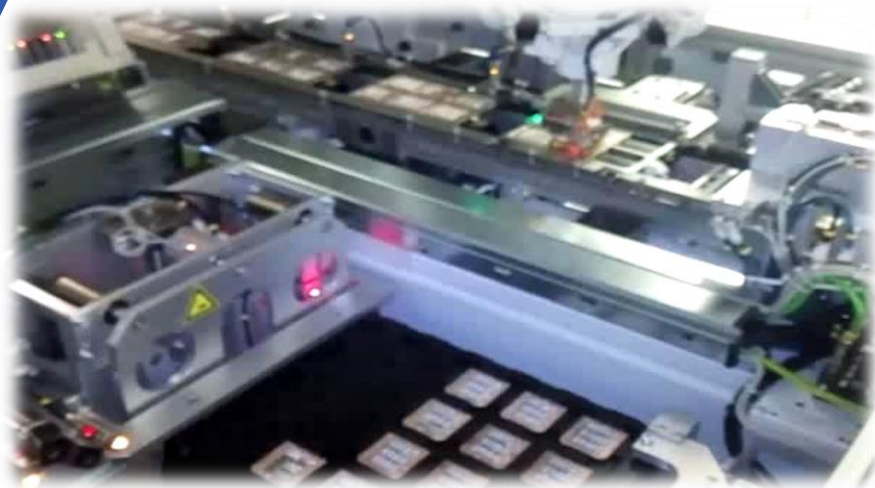
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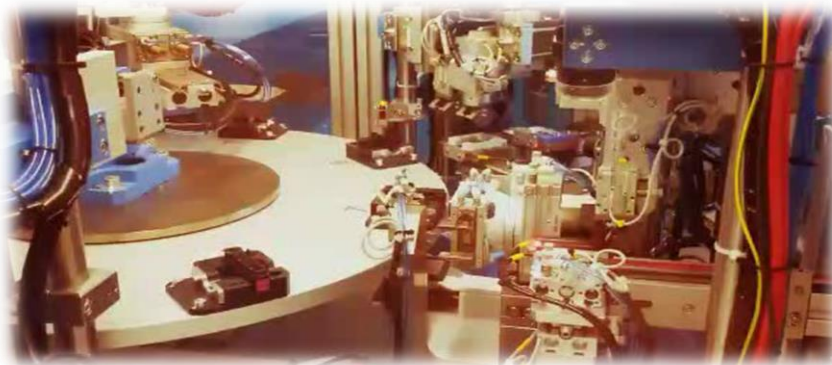
# APPLIED TECHNOLOGIES



**Feeding**



**Palettizing**



**Assembly - Packaging**



**Handling**

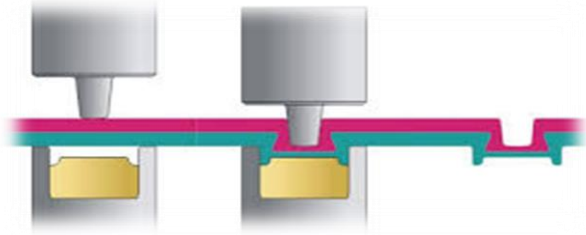
# APPLIED TECHNOLOGIES



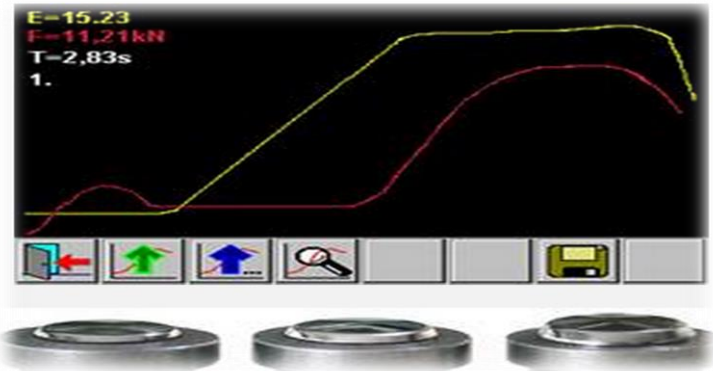
**Screwing**



**Press-Fitting**



**TOXing**



**Rivetting**



# APPLIED TECHNOLOGIES



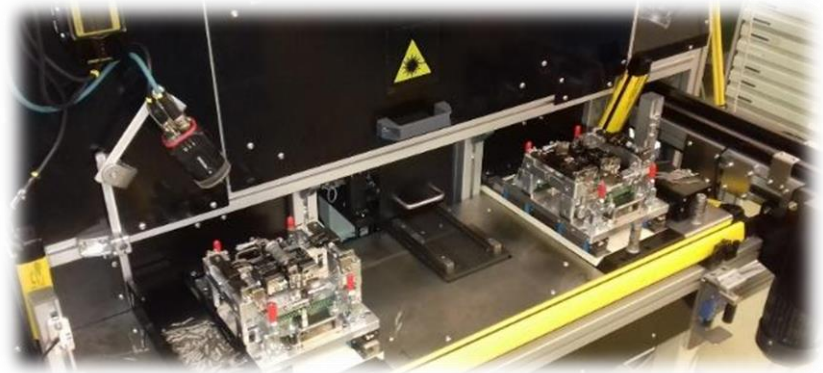
**Marking (laser, ink-jet, label)**



**Welding**



**Vision (measuring, recognizing, checking)**

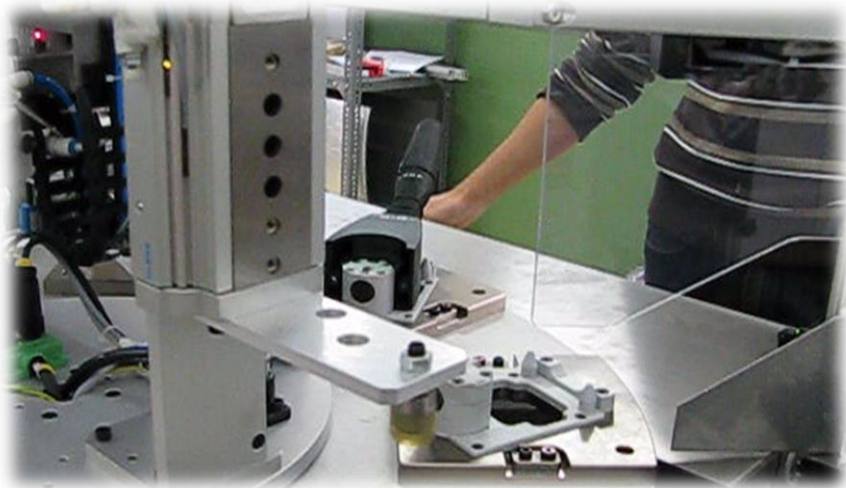


**Laser Welding**

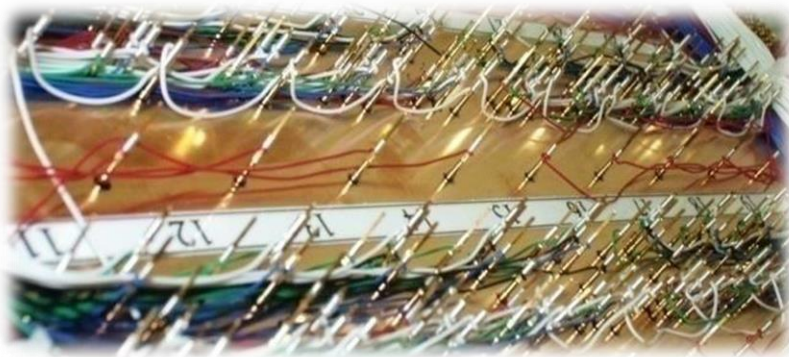
# APPLIED TECHNOLOGIES



**Electrical Function testing**



**Mechanical Function Testing**



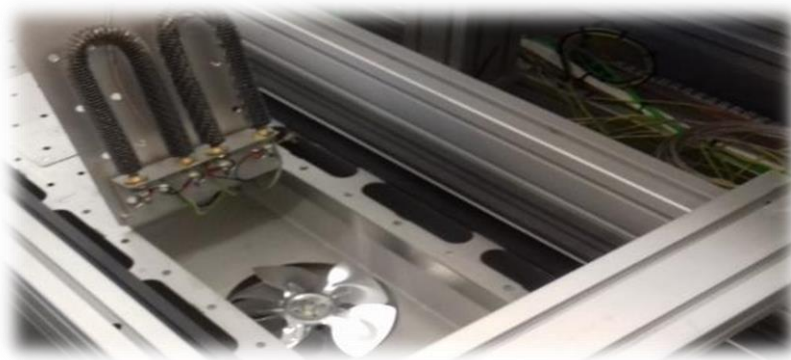
**PCBA Testing**



**Leakage testing**



# APPLIED TECHNOLOGIES



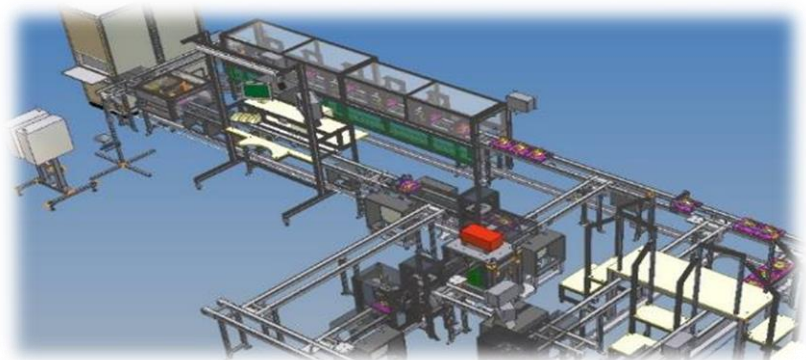
**Thermal Processing (Heating / Cooling)**



**Dispensing / Potting / Glueing**



**Cutting / drilling/ taping**



**Assembly – Line building**

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# Powerbar welding unit



## Laser welding production line:

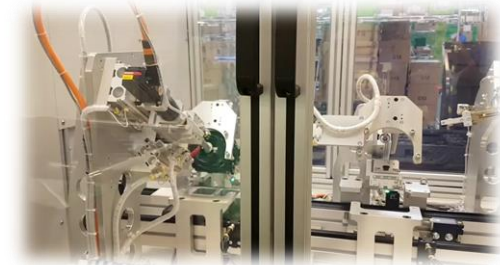
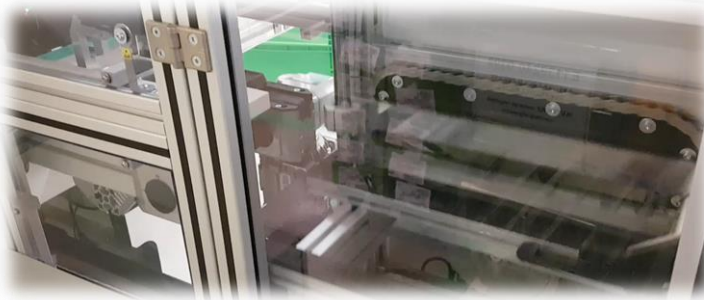
- Hot rivetting
- Laser welding
- Camera checking
- Eletrical testing

# WE MADE IT...

**VT ASYST**  
VIDEOTON Group



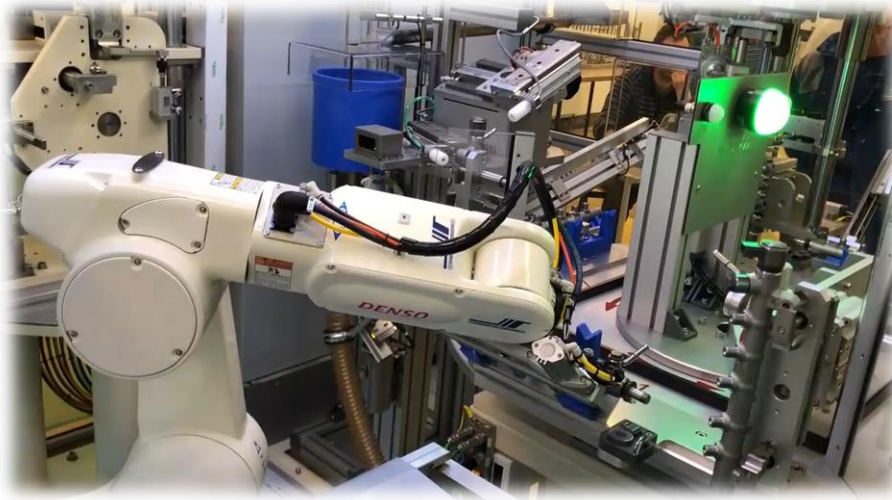
**VIDEOTON**



## Full automated TCM testing line:

- BOSCH transport system
- Electro-mechanical function testing (index, wiper, etc)
- force-way, torque-angle measuring
- laser marking, automatic scrap separator
- Data Acquisition by Beckhoff

# WE MADE IT...



## Robot applications:

- Robot Handling
- Additional technologies (oiling, screwing, measuring, leaktest, etc.)



# WE MADE IT...



## Pipe press fitting:

- Feeding,
- Camera checking
- Press-fitting with force-way measuring
- Length measuring by touching probes
- Diameter measuring by laser
- Palettizing



# WE MADE IT...

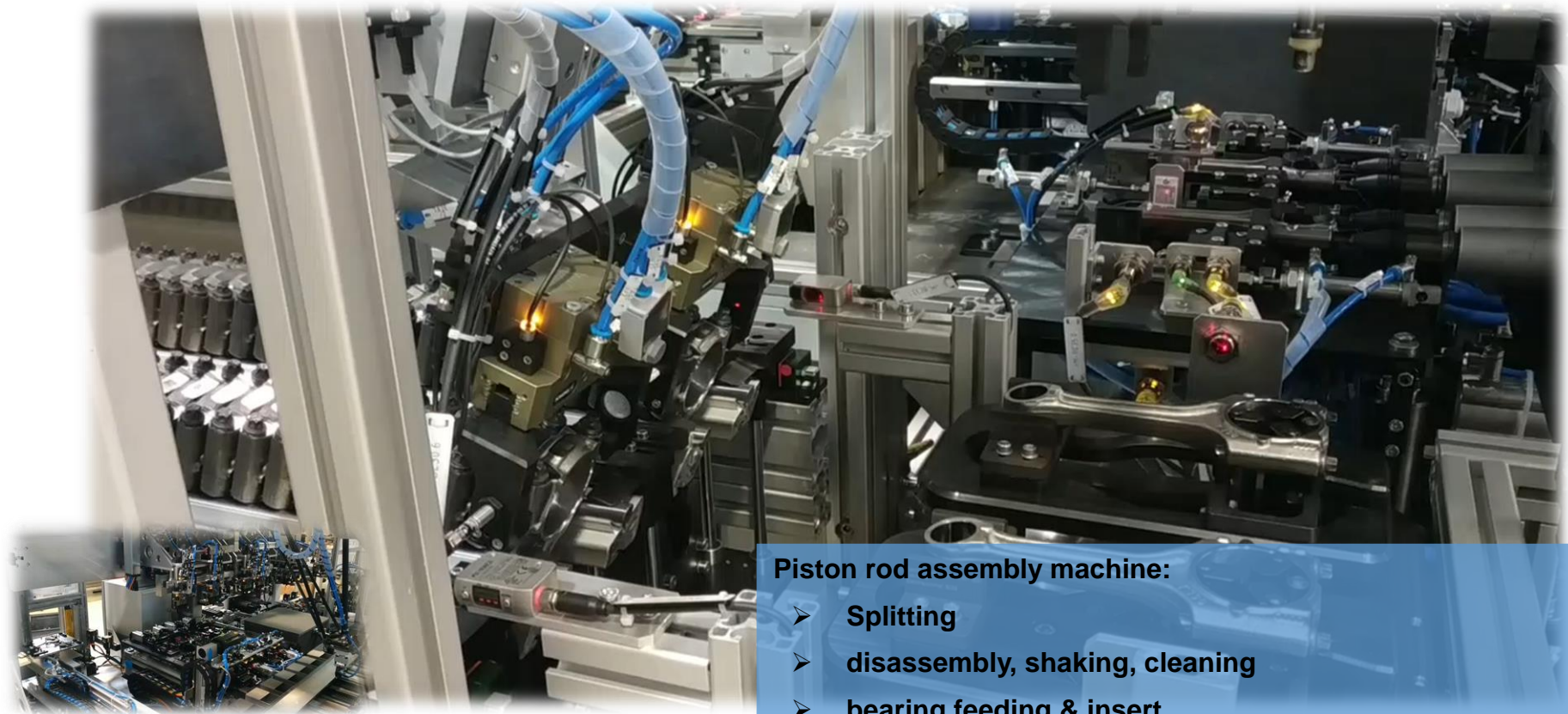


## IC cutting, welding & packaging:

- Automatic material handling, cutting, welding, palettizing
- IC cutting, IC pin performing
- Heat staking, welding
- Cycle time: 5,5 sec, 3 types



# WE MADE IT...

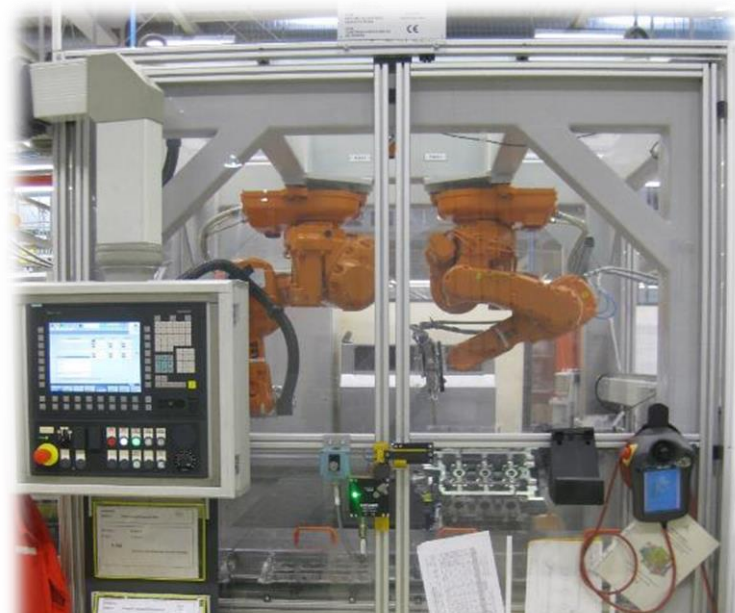
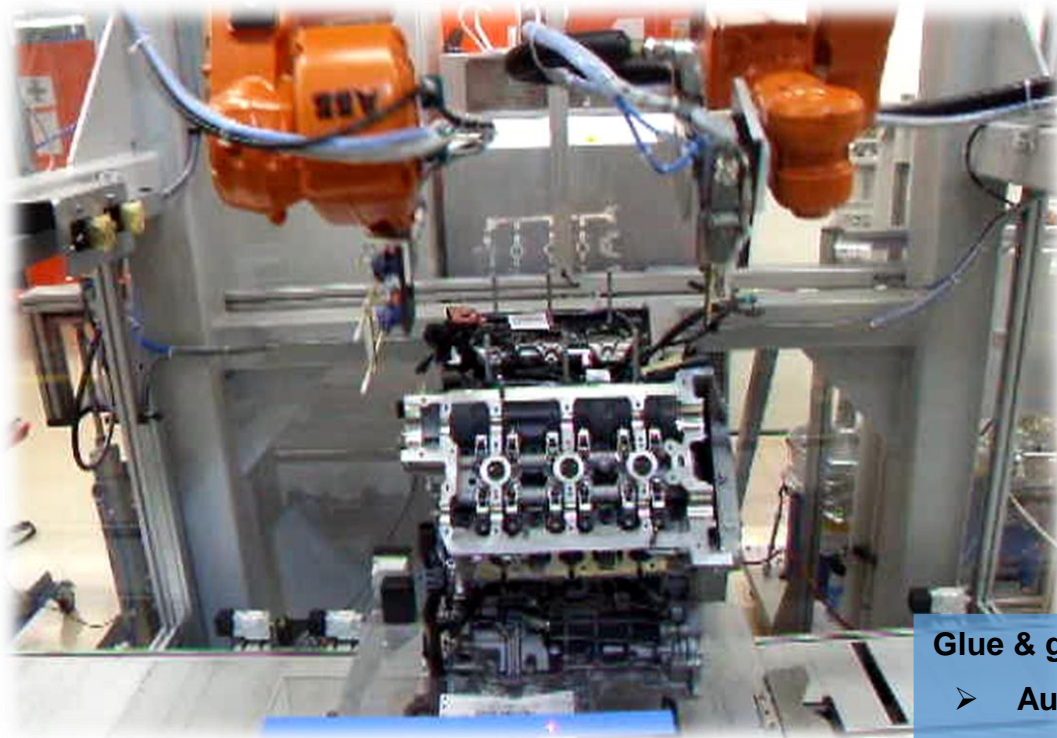


## **Piston rod assembly machine:**

- **Splitting**
- **disassembly, shaking, cleaning**
- **bearing feeding & insert**
- **Cycle time: 14 sec, rods: 2 types / bearings: 7 types**



# WE MADE IT...



## Glue & grease feeding:

- Automatic material dispensing
- Paralell robot movement
- High precision weight scale
- Cycle time: 50 sec, 5 types

# THANK YOU FOR YOUR KIND ATTENTION!



**VT ASYST Kft.**  
8000 Székesfehérvár  
Berényi út 72-100.  
Tel.: +36 22 533-620  
[info@asyst.videoton.hu](mailto:info@asyst.videoton.hu)



**VT TIPA Kft.**  
H-9027 Győr  
Juharfa út 4.  
Tel.: + 36 96 510 940  
[info@tipa.hu](mailto:info@tipa.hu)