

VT ElektroPlast VT Battery

ONE COMPANY - INFINITE POSSIBILITIES

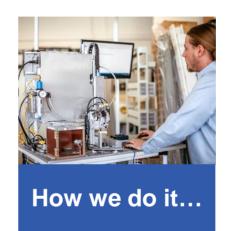
DYNAMISM
PROGRESS
STABILITY

2020

VIDEOTON KAPOSVÁR - MARCALI









- History
- Facts & figures
- Org chart

Mission, Vision,
 Values, CSR

- Certificates
- Business model

- Our portfolio
- Referencies
- Closing slide



HISTORY

1970-1997

- establishing the plant
- TUNGSRAM electron tubes
- Plastic injection moulding (1990)
- MBKE Kft. ('93-'97)

1998

start of household appliances production

2008

 Marcali acquisition for our battery assembly activities

2017

- automatized battery assembly
- on-line data collection system

















1997

- VIDEOTON acquisition
- 1997-2002 battery assembly started in Kaposvár

2004

 expanding customer base

2013

- establishing clean room production area
- ESD protection area in Marcali

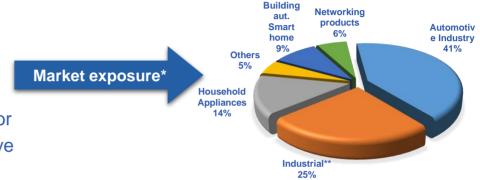
2019

- Factory of the Year in Innovation category
- self developed semi-automated assembly lines



GENERAL INFORMATION ABOUT VIDEOTON HOLDING

- 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





^{*} Turnover without Services



^{**} Including Electrical safety, Power generation, UPS, Instrumentation & Measurement, Semiconductor industry, Photovoltaics, Terminals & vending machines, Commercial and Industrial HVACR, LED Lighting, 3D printers, Robotics, Water treatment, Elevators, Power tools, Professional floor care machines

HIGHLIGHTS OF HOLDING

Founded in 1938

Private since 1992

Revenue (2019) **586** Mill € Equity
No debt since 2005

429

Mill €

1 st

Most Valuable
Company in HUN
Ownership*

11 Locations 8600 Employees** (December 2019)

Among EMS
Companies HQ'd
in Europe



* According to Forbes in 2017 and 2018 ** 2100 employees in Services

GROUP STRUCTURE OF HOLDING

VIDEOTON HOLDING

Property Mgmt

Controlling

Finance

HR

Legal

IT

Business Development

Sourcing

Design & Engineering

Manufacturing Subsidiaries

Services 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



TIPA

Robotized assembly lines Testers



VT-ASYST

Robotized assembly lines Testers



VT Plastic

Part mfg. & Heavy duty assy.

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.



Pannonjob HR services



Industrial Park

Building lease & services



VT ARtrans

Logistics services



Pannonfacility

Facility management



FACTS AND FIGURES

number of employees

turnover (2019)

planned turnover(2020)

production area (Kaposvár)

production area (Marcali)



pcs products

million

assembled batteries

cca. 1 500

127 mill EUR

112 mill EUR

34 500 m²

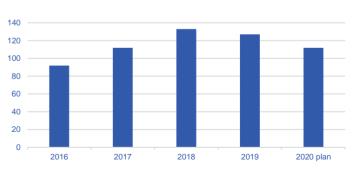
9 000 m²





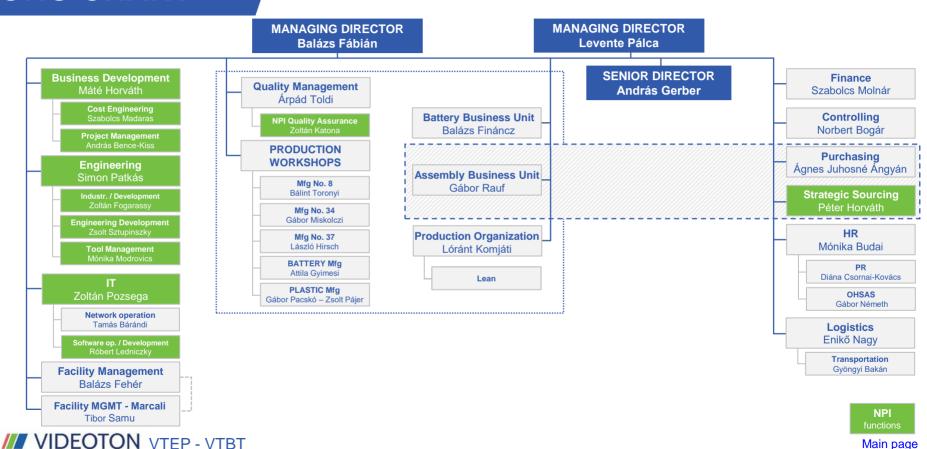






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ORG CHART



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HOW WE THINK...

MISSION

provide full service from
product design through
sourcing, industrialization,
in-house injection moulding
to mass production and
delivery

VISION

 to be a worldwide wellknown and recognized manufacturing partner in the field of plastic-based products and battery driven appliances

VALUES

- tradition and innovation
- proactive mindset
- customer oriented organisation

CSR POLICY

- we are sensitive to environmental changes
- we protect our employees from negative effects
- we maintain company culture based on a 50-year history CSR activities



CERTIFICATES

ISO 9001:2015

(VTEP-VTBT)





ISO 14001:2015

(VTEP - VTBT)





ISO 13485:2016

Street and Toron Technical Clab discovery (SSE)

OHSAS 18001:2007

(VTEP - VTBT)





ISO 50001:2011 (VTEP)



AEOF 2014 (VTEP - VTBT)

BUSINESS MODEL



VIDEOTON VTEP - VTBT

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PRODUCT DEVELOPMENT

- industrial / common design for product components with customers
 - design plastic and material components, sub-assembly
 - design electronics
- product renewing, facelift
 - products re-design, additional functions
- creating 2D and tolerance chain calculation, 3D doc
- feasibility studies, CFMEA, DFMEA, PFMEA, patent research, risk assessment
- creating prototype parts and devices 3D printer (Objet3)
- 3D scanner for product and tool approbation
- special pre-approbation test devices, jigs
- pre-approbation tests in internal and external labs
- product approbation (TÜV Rheinland InterCert Hungary)





TESTLAB

- infrared camera
- product design tests
- product release test
- product functionality-related
- product performance-related test
- battery related tests charging, discharging, capacity tests, short circuit analysis
- RoHS compliance (XRF tester)
- pre-approbation tests
- internal test for investigation of quality problems





INDUSTRIALIZATION

- state-of-the-art technologies
- process automation
- single-purpose machines
 - life-span and function testers
 - traceability systems
 - assembly fixtures, jigs
- high voltage testers
- assembly lines from simple to automated





SOURCING

Tool management (more than 10 partners)

- supplier selection
- price negotiation
- regular site visits
- time tracking

Strategic sourcing and procurement

- available supplier base more than 500 vendors
- supplier development (co-operation, price negotiation)
- specialized commodity sourcing
- building strategic partnerships, seeking and qualifying new suppliers





INJECTION MOULDING

- thermoplastic injection moulding
- 104 pcs PIM machines,15-650 t clamp force (vertical, horizontal and 2K)
- on-line real time data collection and evaluation system
- automation, robotized production cells
- smart solutions: tool positioning system
- tampo printing, hot stamping, laser engraving
- welding technologies (IR, mirror, ultrasonic, friction)









2600 t annual resin consumption



1100 active injecti

active injection moulding tool





ASSEMBLY

- engineering samples, mass production and service parts
- different country and colour versions
- customized, personal solutions production cells to assembly lines
- self-made and purchased components
- wide range of complex sub-assemblies / end-products
- assembly, testing, late customizing





ASSEMBLY – BATTERY PACKS

- Li-ion, Ni-MH, Li-metal batteries
- single cells and complete battery packs
- enormous diversity and usage
- types according to its forms: cylindrical, prismatic, button
- technologies: blistering, shrinking, soldering, resistance welding, laser welding, screwing, charging, testing (complex), tampo printing, laser marking, packaging
- a member of the European Battery Alliance since 2018







LOGISTICS

- 2600 tons of processed resin per year
- 11 000-pallet storage capacity
- 40 incoming trucks / week
- 25 outgoing trucks / week
- handling all Incoterms from EXW to DDP for incoming and outgoing goods





QUALITY MANAGEMENT

- customers satisfaction first
- excellent quality products
- high level of services
- fulfillment of ISO standards and legislation
- continuous improvement
- strong supplier base





PORTFOLIO

Household appliances



Personal care / Mother & child care



Batteries



Industrial appliances



Automotive parts



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Referencies

Closing slide

REFERENCES

































THANK YOU FOR YOUR KIND ATTENTION!





VT Battery

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