



## **Aalberts Surface Technologies Kft.**

Tatabánya, Hungary

High performing surface coatings  
for all key industries

# Aalberts Surface Technologies Kft.

## Content:

- Company data
- Our history
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# Aalberts surface technologies



- around **3.000 employees** at over **50 locations** in more than 14 countries generate more than **300 million euros** in turnover per year

more than  
**50 years of  
experience**

in improving component properties

- economically efficient coating of mass-produced small parts
- individual solution for demanding individual components
- extensive range of process chemicals for surface technology
- investment strength and financial strength of Aalberts
  - » realization of major projects of our global key accounts



# at home in all industries

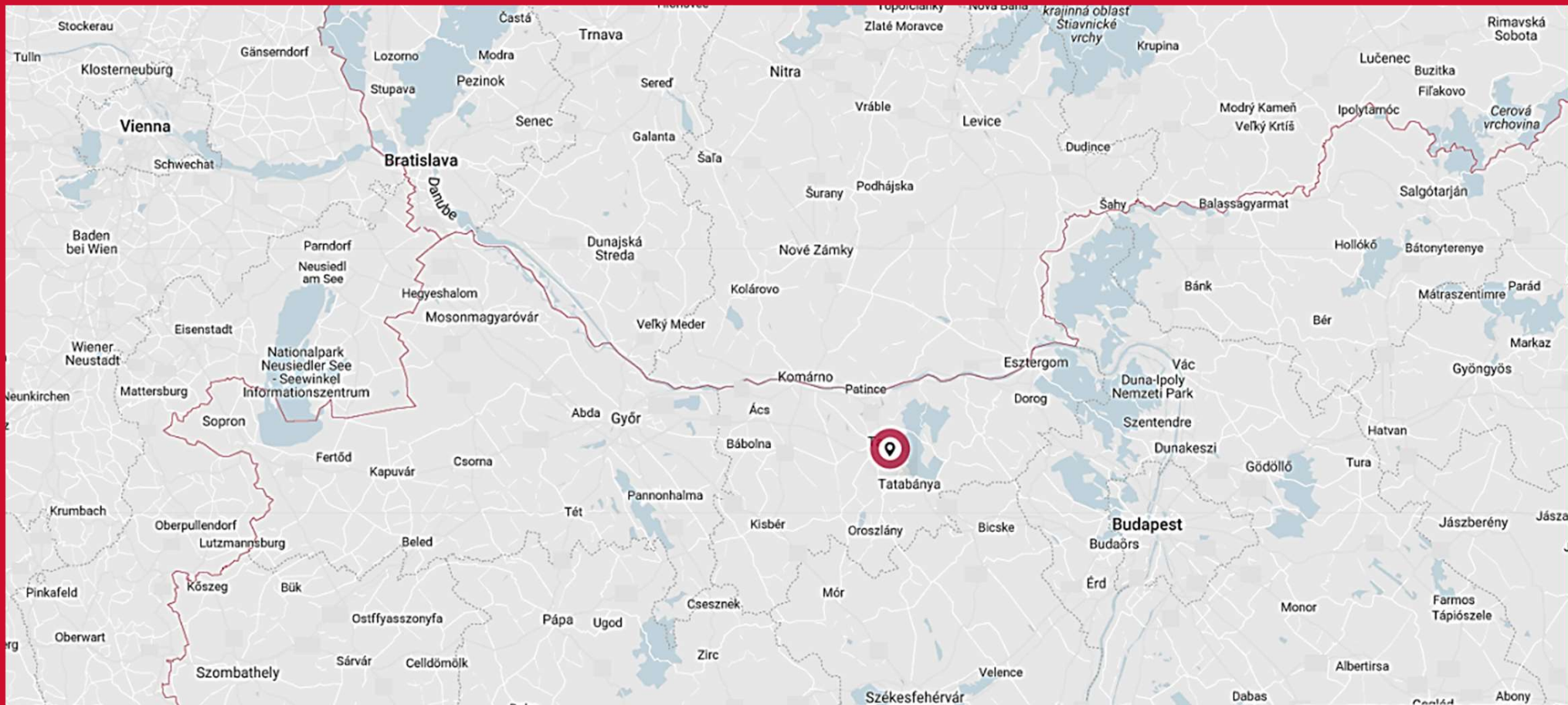
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We refine over one billion components per year  
for all key industries



# Aalberts Surface Technologies Szolgáltató Kft.

## Tatabánya Industrial Park



## Company data

- Owner, main shareholder Aalberts N.V. (NL)
- Managing director Mr. Ferenc Pusztta
- Production areas 3
- Number of employees ca. 160
- Number of working shifts 3
- Number of customers > 200
- Number of articles > 2.000
- Main Export relations: Germany, Austria, Slovakia, Romania, Slovenia, Poland

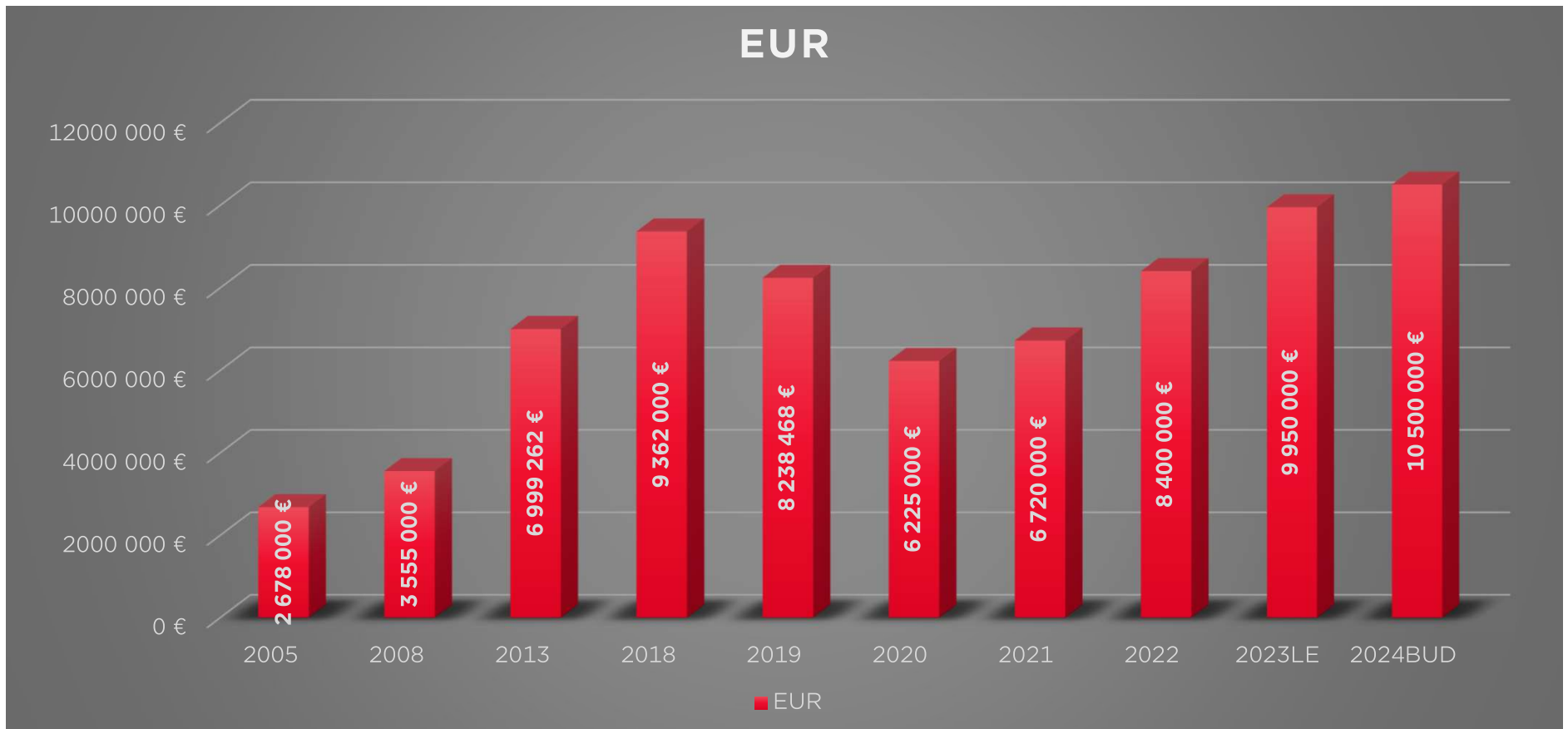
## Milestones of Aalberts Surface Technologies Kft.

| Milestone                                            | Year      |
|------------------------------------------------------|-----------|
| Year of foundation Impreglon Hungary in Tatabánya    | 1999      |
| Beginning of production (dip-spin)                   | 2000      |
| Introduction of wet- and powder spraying technology  | 2005      |
| Warehouse extension                                  | 2006/2012 |
| Intorduction second dip-spin system                  | 2006      |
| Extension of facility and KTL technology launching   | 2008      |
| Shotblasting machine (rack system) installation      | 2009      |
| New powder cabin startup                             | 2009      |
| Change of ownership from Impreglon to Aalberts group | 2014      |
| New dip-spin system                                  | 2018      |
| Complete merging into Aalberts group                 | 2019      |
| New shelf system in warehouse + new manual           | 2021      |

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# Sales Turnover



## Local Technologies

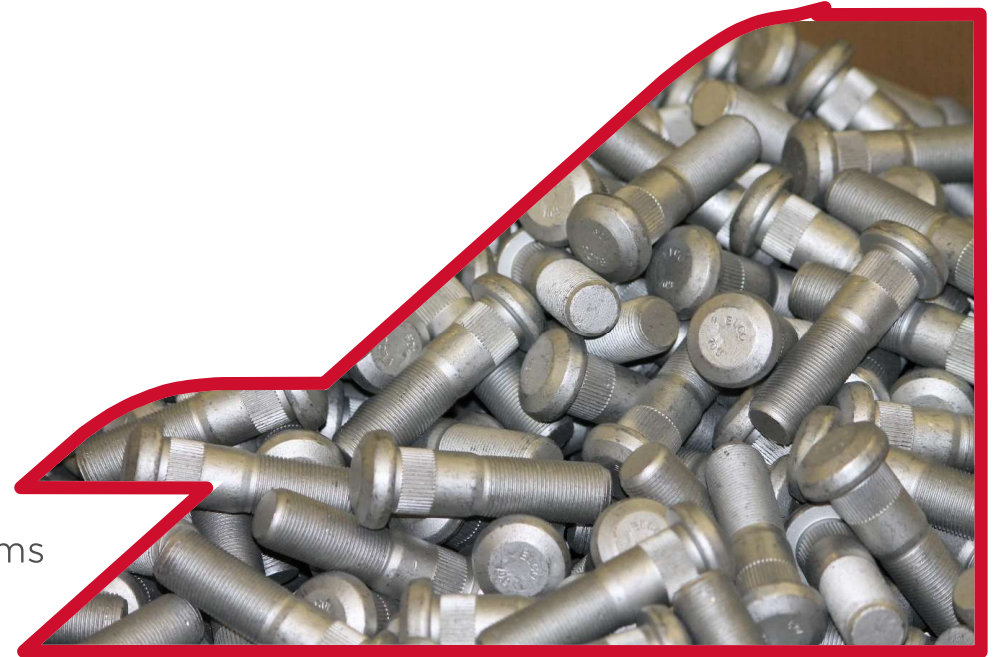
- ~8000 m<sup>2</sup> production area
- Modern surface treatment technologies
- High quality fully automatic machines for big series and volume
- Primarily metal parts coating over 60 % for Automotive sector
- Efficient processes with big capacity for our customers
- **DipSpin:**  
zinc-flake coating for mass and small parts in bulk condition
- **Paint spraying:**  
wet- and zinc-flake coatings  
powder coatings for indoor and outdoor application  
wet- and zinc-flake coatings by manual spraying
- **KTL:**  
cathodic dip painting for internal application

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## Dip Spin - Line I

- Production start in 2000
- Fully automatic program control
- Barrel system, for bulk parts
- 33 barrels
- High capacity (up to 1,5 To/h)
- 3 shifts operation (5 WD)
- Zinc flake coatings: Dörken Delta MKS Systems
  - » Delta Protekt KL100
  - » Delta Seal GZ silver / black
  - » Delta Protekt VH 301



## Dip Spin – New Line II

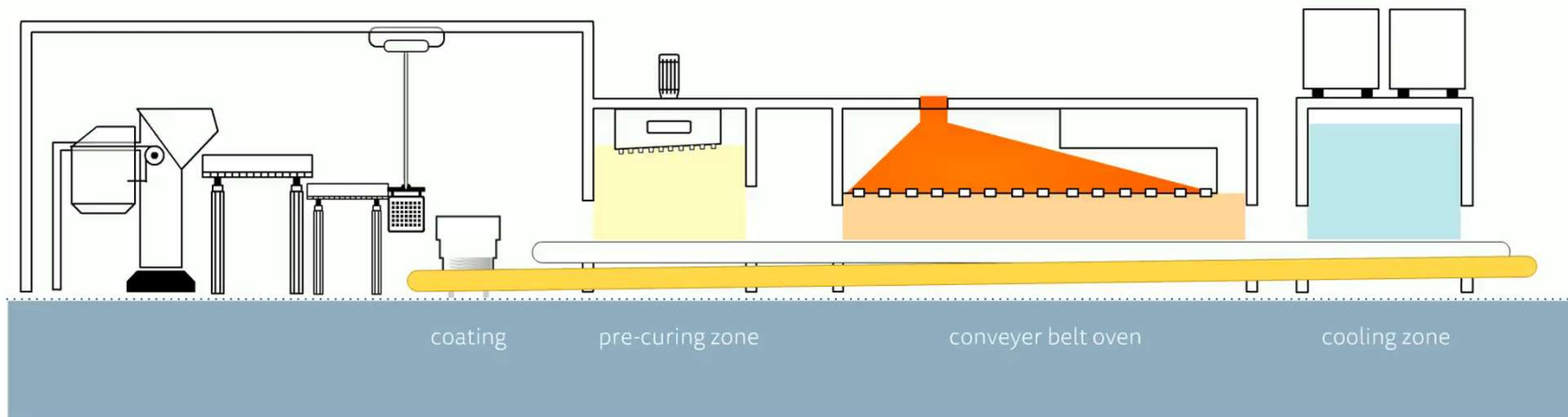
- Production start in 2019
- Fully automatic program control
- Barrel system, for bulk parts
- 22 barrels
- High capacity (up to 1,5 To/h)
- 3 shifts operation (5 WD)
- Zinc flake coatings: Dörken Delta MKS Systems
  - » Delta Protekt KL100
  - » Delta Seal GZ silver / black
  - » Delta Protekt VH 301



# Dip Spin Process

## DIP SPIN COATING MACHINE

**DÖRKEN MKS**  
THE CORROSION EXPERTS



## Dip Spin

Application: Brake shoes

- Tier: Federal Mogul
- System: Delta Protekt KL100
- Quantity: >1.700.000 pcs / year
- Requirement:
  - » Corrosion resistance 480h



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Application: Brake spring components

- Tier: Continental
- System: Delta Protekt KL100
- Quantity: >16.500.000 pcs / year
- Requirement:
  - » Corrosion resistance 720h



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## Dip Spin

Application: Safety belt elements

- Tier: Autoliv, ZF
- System: Delta Protekt KL100 + Delta Seal GZ
- Quantity: >15.000.000 pcs / year
- Requirement:
  - » Corrosion resistance 72 h
  - » Uniform surface



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Application: Brake spring

- Tier: Knorr Bremse
- System: Delta Protekt KL100
- Quantity: >5.200.000 pcs / year
- Requirement:
  - » Corrosion resistance 480h



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## Paint spraying – spraying line

- Production start in 2005
- Fully automatic program control
- High capacity (up to 1,5 To / h)
- Frame size: 1550 x 810 mm
- 3 shifts operation (5 WD)
- **Coating systems:**
  - » Wet Painting: Zinc flake coatings (Dörken Delta MKS, Magni), Tempcoat and Chemcoat own brands), different wet paints (water or solvent based)
  - » Powder coatings



## Spraying line

Applications: Railway parts

- Tier: Knorr Bremse
- System: Delta Protekt KL100 + Delta Seal
- Quantity: >460.000 pcs / 300 types
- Requirement:
  - » Corrosion resistance 480h
  - » Masking



## Spraying line

Applications: Belt deflectors

- Tier: Autoliv
- System: Tempcoat 7510
- Quantity: >8.400.000 pcs / year
- Requirement:
  - » Wear resistance
  - » Low noise operation
  - » 100% failure-free surface



## Paint spraying – manual spraying

Manual wet spray coating

Application: Winter tyre mold

- Tier: various tyre manufacturers
- System: Tempcoat 2008F (Aalberts brand)
- Quantity: ca. 30 sets per year
- Requirement:
  - » Tight film thickness tolerances
  - » Anti-fading properties
  - » Non-defect surface
  - » Abrasion resistance



## KTL – cathodic dip-painting

- Production start in 2008
- Multimetallic (aluminium, steel & other alloys)
- Normal and thick film (up to 60µm)
- Rack size: 2.100 x 1050 x 790 mm  
(l x h x w)
- Maximum rack space: 22m<sup>2</sup>
- Plant capacity: 150 – 200 m<sup>2</sup>/h
- Applied materials: Chemetall, Axalta
- No UV-resistance



## KTL – cathodic dip-painting

Application: Housing LED

- Tier: HELLA
- System: KTL + Powder coating
- Quantity: >430.000 pcs / year (several types)
- Requirement:
  - » 1.200h corrosion resistance
  - » 100% failure-free surface
  - » ESD packaging



## KTL – cathodic dip-painting

Application: Front grille tractors and construction machinery

- Tier: Fendt / Liebherr / JohnDeere / CAT
- System: KTL + Powder coating
- Quantity: >200.000 pcs / year (several types)
- Requirement:
  - » 720h corrosion resistance
  - » 100% failure-free surface
  - » Custom colours



## Pretreatment possibilities

### **Zinc-flake coating**

- Degreasing
- Shot blasting
- Conversion layer

### **KTL**

- Degreasing
- Zn Phosphating
- Oxsilan
- Shot blasting

### **Powder coatings / Wet paints**

- Combinable with KTL
- Degreasing
- Shot blasting
- Conversion layer

## Certification

- ISO 50001
- ISO 14001
- IATF 16949





## Quality Assurance



- Incoming parts control
- Continuous process tests
- Final checks in house
- Cross-cut test
- Thickness measurements of each application
- Threaded parts inspection by gauges
- Annual corrosion tests, 3 test chambers
- Salt spray test DIN EN ISO 9227
- Condensate test DIN EN ISO 6270
- Climate change test PV 1210
- 3 laboratories in house
- Red rust, white rust, blistering
- Adhesion test
- TESA test according DIN EN ISO

## References



**BOSCH**

**CLAAS**



**FENDT**

**FIAT**



**KNORR-BREMSE**



Mercedes-Benz





surface  
technologies