



**Slovakia & Serbia's
centre of expertise:**

**Manufacturing, Body Chassis
Interiors Quality & Logistics
engineering**

www.segulatechnologies.com



SEGULA Technologies, a global engineering group

Serving the competitiveness of all major industrial sectors

15,000+
talent

30+
countries

140+
locations

300+
customers

200+
R&I projects every year



AUTOMOTIVE



AEROSPACE



RAIL



ENERGY



MARITIME



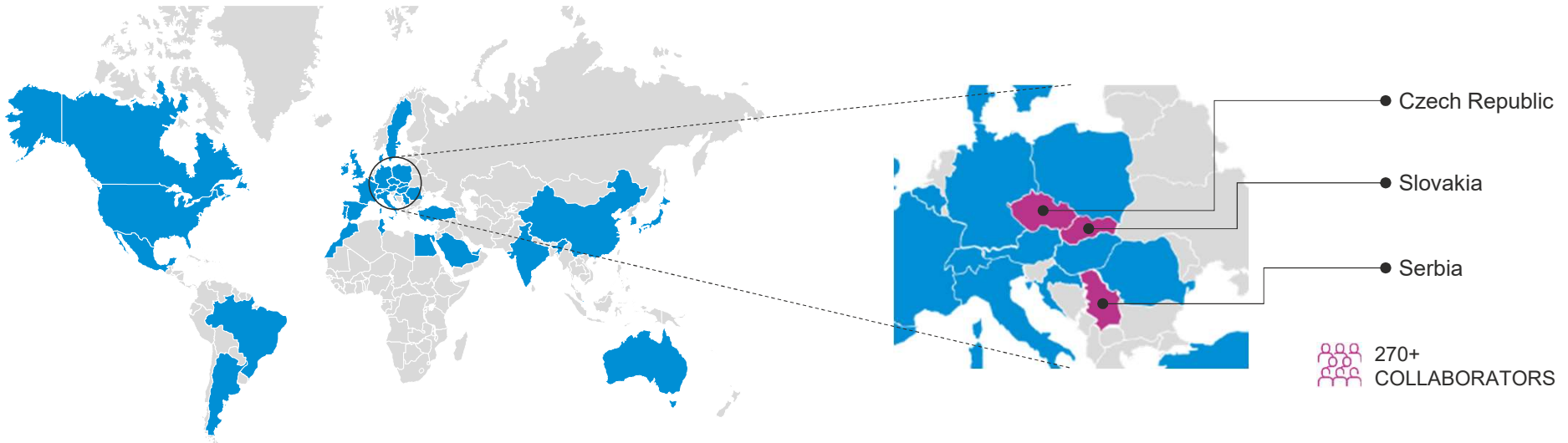
LIFE SCIENCES

RESPONSIVENESS

INNOVATION

AMBITION

PROXIMITY



Understanding manufacturing engineering challenges



Skills shortage

- Getting talent with the right technical expertise
- Setting a workforce of experienced process engineers for a specific project
- Having the shortest lead time to deliver according to ramp-up



Supply chain management

- Facing global supply chain issues
- Integrating innovative solutions to adapt to rapid technology changes
- Optimising logistics flows



Cost management

- Balancing development and production cost (CAPEX/OPEX) with quality and innovation
- Ensuring project delivery is on time and within budget

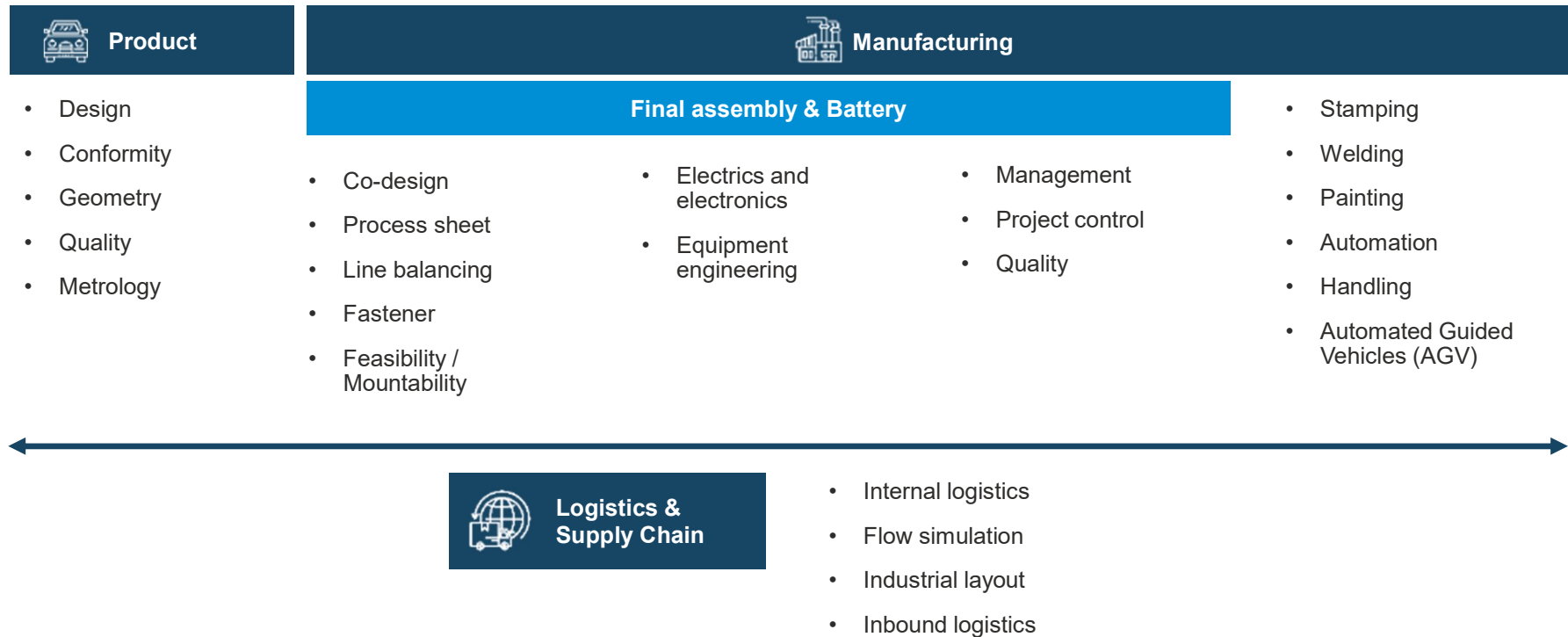


Performance

- Staying competitive in the global dynamic market
- Customising to meet various needs, requiring flexibility and adaptability

Core activities

Across **SEGULA Technologies Slovakia, Serbia and Czech Republic**



A trusted partner

With extensive automotive knowledge that can be transferrable in other industrial sectors

OEM's key partner in Slovakia & Serbia

- 55+ technical perimeters covered
- Field experience on a new platform designed to optimize and accommodate electric drive chain (Smart Car):
 - Transformation of the Trnava and Kragujevac factories to enable the production of new B-platform programs for the European market
- Recognised by the client for the quality of all our deliverables and awarded for the next program in Serbia
- Upskill in manufacturing and process engineering

We help accelerate the transition of vehicles to e-mobility.



An aerial photograph of a winding asphalt road through a lush green forest. A small car is visible on the road, driving away from the viewer. The road has white dashed lines and a white curb on the right side. The text "Manufacturing engineering" is overlaid on the left side of the road.

Manufacturing engineering

Body in White, Painting and Final Assembly

Smart Car program

Project scope

- Introduction of 3 new car models in Trnava plant (ICE, BEV & MHEV)
- Complete process engineering from design (Indian specifications) to start of production (Slovak team)

Activities

- Body in white: Time analysis, Equipment
- Painting: Preparation
- Final assembly: Equipment, Preparation, Line balancing, Fastener, Project Control
- Organisation:
 - Project management and coordination team (Slovakia + India)
 - Studies phase (Slovakia + India)
 - Industrialisation (Slovakia)



Chennai (India)
Trnava (Slovakia)



2020-2025



50 people in studies
50 people in industrialisation



Automation, Handling and AGV

Smart Car program

Project scope

- Introduction of 3 new car models in Trnava plant (ICE, BEV & MHEV) and 2 new models in Kragujevac plant (ICE, BEV & MHEV)
- Complete process engineering from design to start of production (Slovak and Serbian teams)

Activities

- Welding automation and handling
- Painting automation and handling
- Final assembly automation, handling and AGV
- Organisation:
 - Project management (Slovakia)
 - Studies and industrialisation (Slovakia + Serbia)



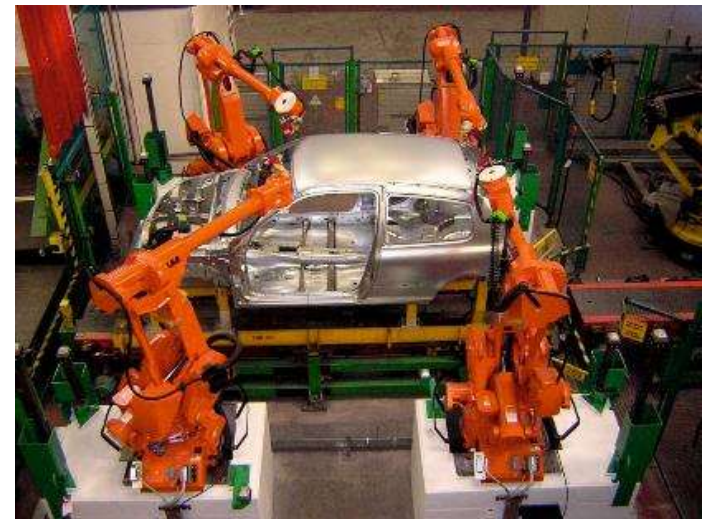
Trnava (Slovakia)
Kragujevac (Serbia)



2020-2025



20 people in studies and industrialisation



Final Assembly Equipment Engineering

Project scope

- GAPE/AEE (General Assembly Process Engineering/Architecture and Assembly Equipment Engineering) for STELLANTIS plants in 9 European countries for new vehicle projects and serial life.
 - +40 industrial projects
 - 13 European plants
 - +1000 equipment contracts

Activities

- Transversal activity for a new and carryover equipment for general assembly
- Organisation:
 - Project management and coordination team (Slovakia)
 - Studies phase (industrialisation countries + India)
 - Industrialisation (Europe)



Trnava (Slovakia) front office coordination, Chennai (India) back office, industrialisation countries (PL, DE, SP, UK, IT, SRB, FR, SK)



2021-2026



30 people in studies
65 people in industrialisation



An aerial photograph of a winding asphalt road through a lush green forest. A small car is visible on the road, driving away from the viewer. The road has white dashed lines and a white curb on the right side. The text "Body Chassis Interiors Quality" is overlaid in white on the left side of the road.

Body Chassis Interiors Quality

Product Design and Development

Project scope

- Product design and CAD support to Tier Plastic Omnium – Bumper design for USA OEM - Project Cruise , RSA and PSA .
- Development support to ZKW Lighting – Front and Rear lights for the BMW , Volvo and PSA .



Back Office : Tunisia and Morocco
Front Office : Trnava (Slovakia)



2021-2022



13+ people – Design & CAD.

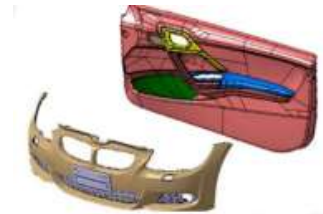
FORVIA

Activities

- Technical convergence with style and Feasibility study. – Exterior and Interior parts
- Design and CAD support – (Catia) Onsite and offshore .
- Product and process conformity monitoring .
- Process Tooling injection / Follow up
- Supplier convergence.

OUR ADDED VALUE

- Global approach .
- Multi-national and young dynamic team .
- Multi-OEM expertise .
- Mixed experience with seniority.



Geometry - Welding and (BCIQ) body chassis & interiors, quality)

Project scope

- Complete geometry engineering support from product and process - geometry design / development to SOP.
- Supplier management with all product as per geometry needs.
- Secure Launch of the vehicles with aesthetic and functional quality.

Activities

- Product and process conformity monitoring .
- Geometrical quality assurance.
- Supplier convergence.
- Jig and Fixture geometry assurance on the welding tools for the parts.
- Organisation:
 - Conception and design phase (offshore – back office)
 - Industrialisation (Onsite in the plant)



Back Office : Chennai (India),
Front Office Trnava (Slovakia),
Kragujevac (Serbia)



2020-2025



14 People in studies and design.
95 People in industrialisation.

OUR ADDED VALUE

- Global approach .
- Multi-national and young dynamic team .
- Multi-OEM expertise .
- Mixed experience with seniority.
- Flexible team in the field to adopt the role in the geometry area.



Metrology with Scan arms

Project scope

- Metrology measurements – scan / reports with Hexagon scan arm and highlight the assembly defects .
- For the mapiex/cubing and assembly parts scanning.
- Assembly and welding dept. support for scanning parts and reports with Polywork software .
- Hexagon - ABSOLUTE 8535 - 7 axes + scanner AS1

Activities

- Metrology investigations scanning and reports support for the parts .
- Geometrical quality assurance with metrology scope .
- Supplier convergence for defective parts.
- Expertise team support on the Polywork software .

OUR ADDED VALUE

- Global approach
- Polywork Expertise team.
- Knowledge with Scan arm handling .
- Availability of the 2 Qty scan arms to support the any region with skilled engineers .



Trnava (Slovakia), Kragujevac (Serbia)



2020-2024



8 people Metrologist
4 people Project Planning



An aerial photograph of a winding asphalt road through a dense green forest. A single car is visible on the road, driving away from the viewer. The road has white dashed lines and a white curb on the right side. The text "Internal Logistics, Supply Chain and Flow Simulation" is overlaid in white on the left side of the road.

Internal Logistics, Supply Chain and Flow Simulation

Flow Simulation and Industrial Layout

Project scope

- Industrial, optimisation and innovation projects
 - Layout tool : AutoCAD
 - Flow Simulation tool : Plant Simulation Tecnomatix
- Logistics, Painting Shop, Body Shop, General Assembly Shop, Battery Shop, Inter-Shop

Activities

Volvo Truck US

- Initialization of the battery shop in a plant in US

RATP (Parisian railway)

- Optimisation of a train maintenance plant in Paris

Stellantis

- Service Center covering all the Stellantis plants worldwide



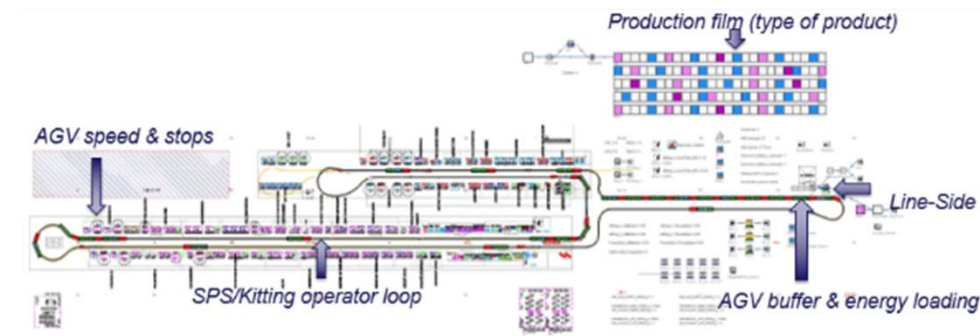
Remote
(Slovakia and Serbia)



2021-ongoing



5 people in flow simulation
1 person in layout



Energy Autonomy / Decarbonization

Project scope

- Support customers to deploy action plans to reduce their ecological footprint:
 - Photovoltaic, wind turbine, geothermal, biomethane, etc...



Remote (Serbia)



2023-ongoing



2 people

Activities

- Support on the Project Management aspects (PMO)





Looking forward to our partnership

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