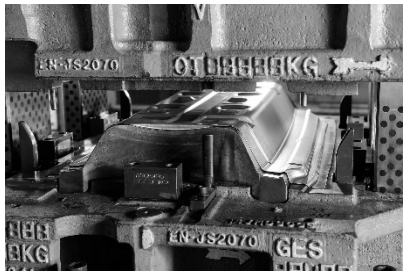
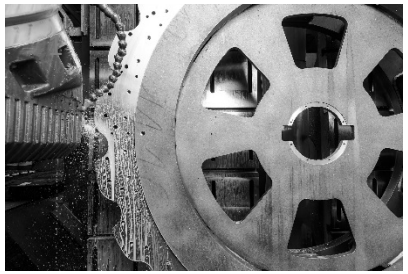
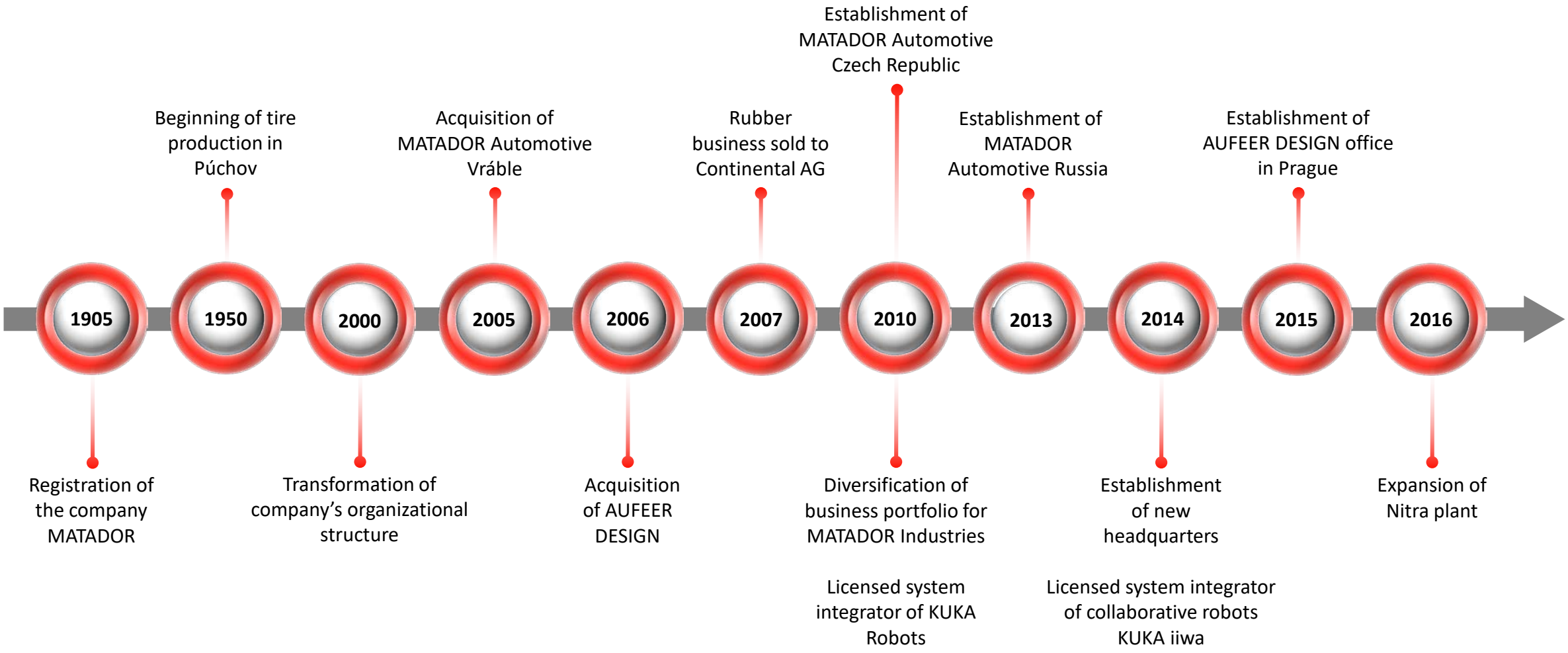
111 years 1905-2016

Matador® GROUP

INDUSTRIAL AUTOMATION


1905
Registration of the company MATADOR
1950
Beginning of tire production in Púchov
2000
Transformation of company's organizational structure
2005
Acquisition of MATADOR Automotive Vráble
2006
Acquisition of AUFEER DESIGN
2007
Rubber business sold to Continental AG
2010
Establishment of MATADOR Automotive Czech Republic
Diversification of business portfolio for MATADOR Industries
Licensed system integrator of KUKA Robots
2013
Establishment of MATADOR Automotive Russia
2014
Establishment of new headquarters
Licensed system integrator of collaborative robots KUKA iiwa
2015
Establishment of AUFEER DESIGN office in Prague
2016
Expansion of Nitra plant

Engineering & development

Stamping tools

Industrial automation

Mechanical engineering

Serial production

GROUP HEADQUARTERS

SLOVAKIA	Bratislava

ENGINEERING, RESEARCH & DEVELOPMENT

CZECH REPUBLIC	Prague Nový Jičín Mladá Boleslav
SLOVAKIA	Košice

SERIAL PRODUCTION

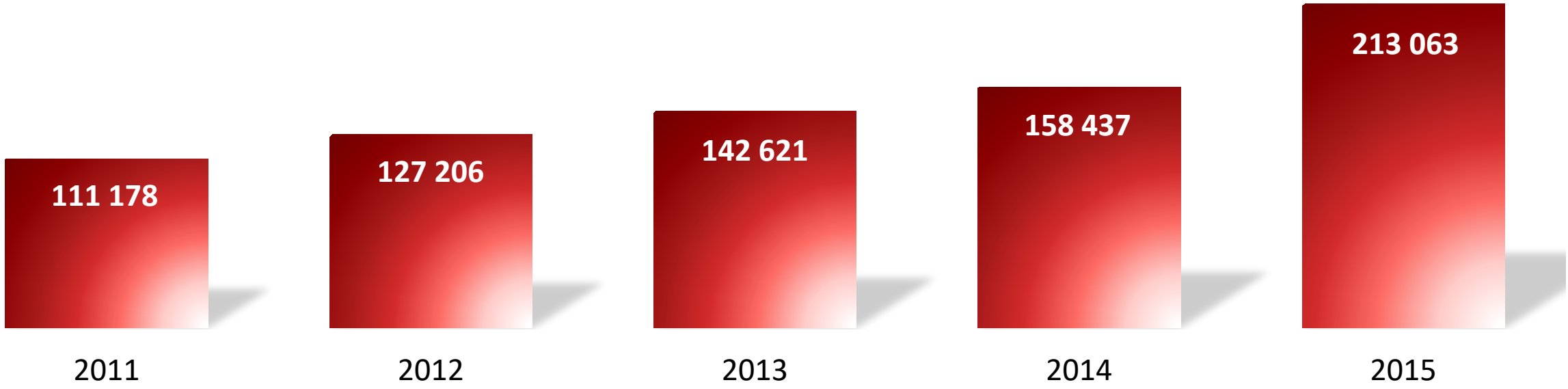
SLOVAKIA	Vráble Nitra
CZECH REPUBLIC	Liberec
RUSSIA	Nizhny Novgorod
FRANCE	Douvrin

INDUSTRIAL AUTOMATION, STAMPING TOOLS AND MECHANICAL ENGINEERING

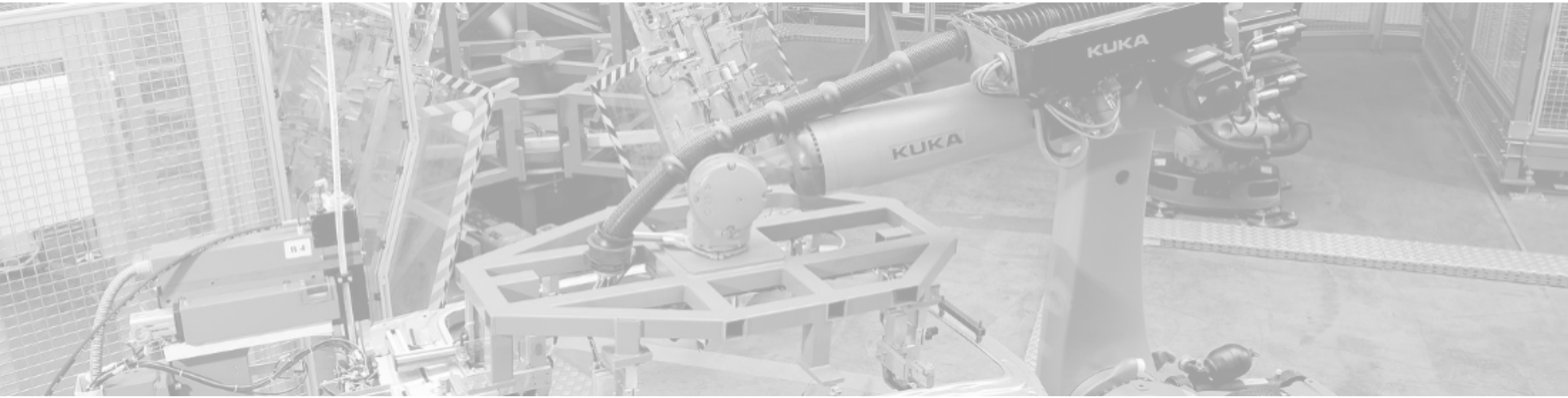
SLOVAKIA	Dubnica n. Váhom

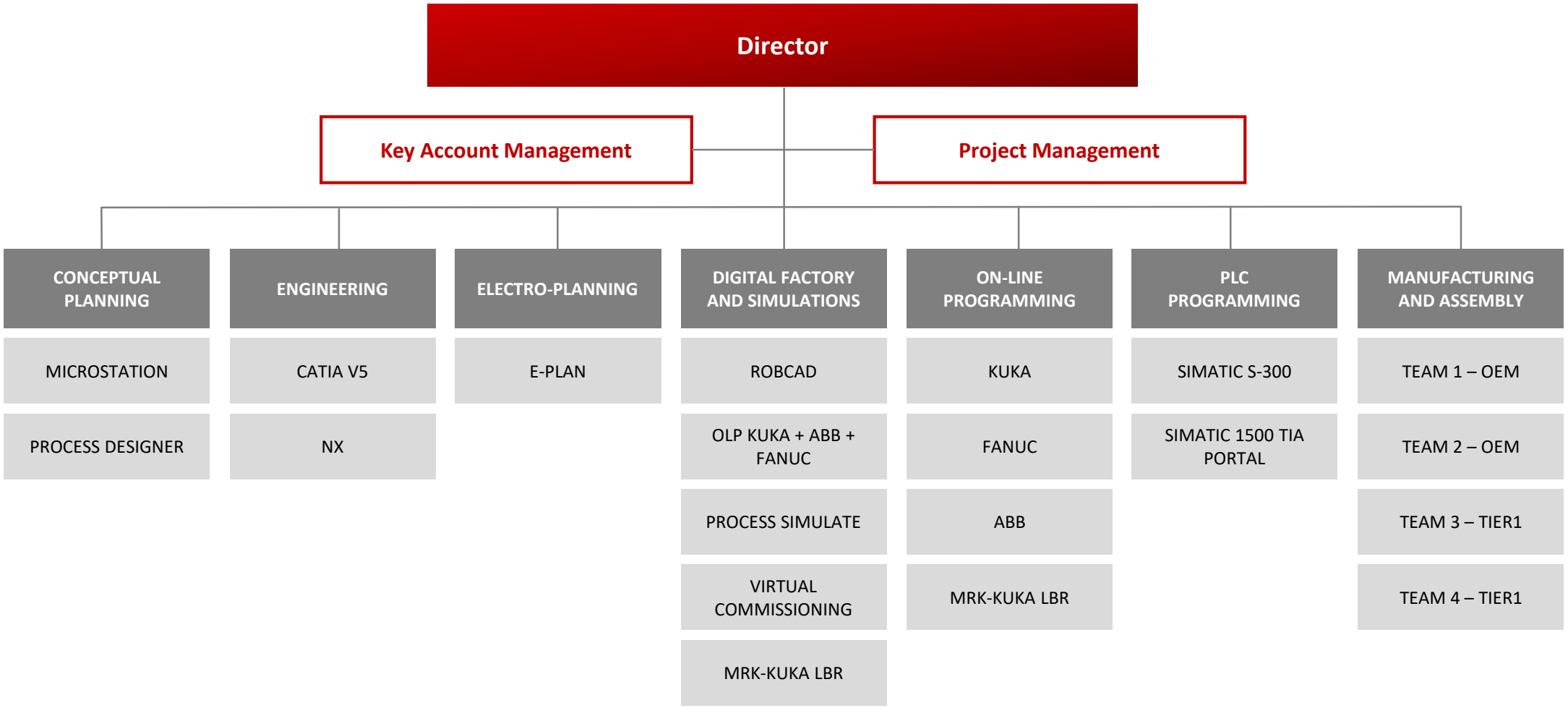
Sales (in tsd. EUR)

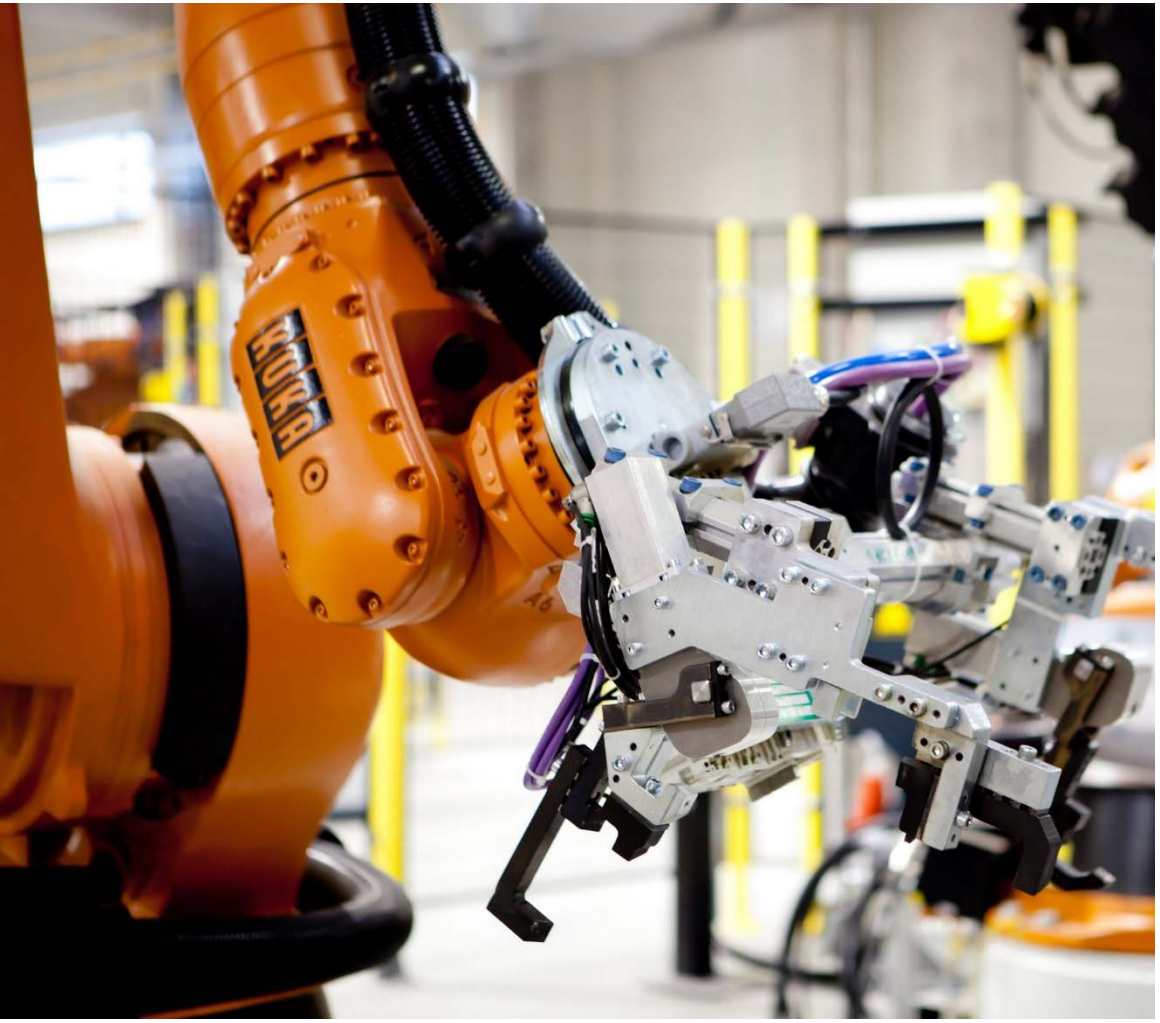
IFRS consolidated

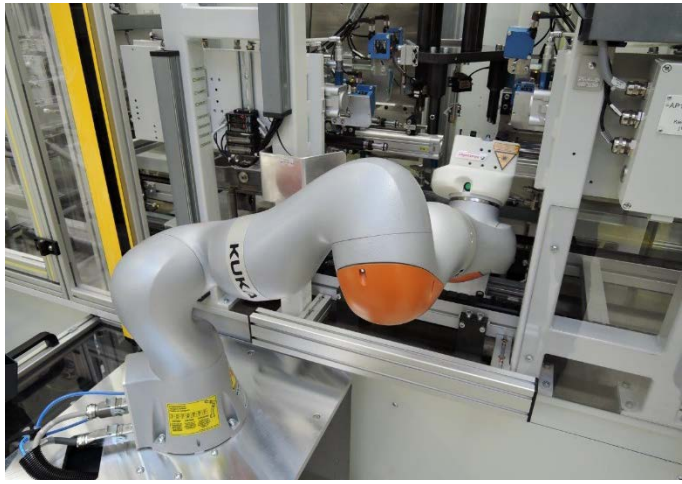


Industrial Automation

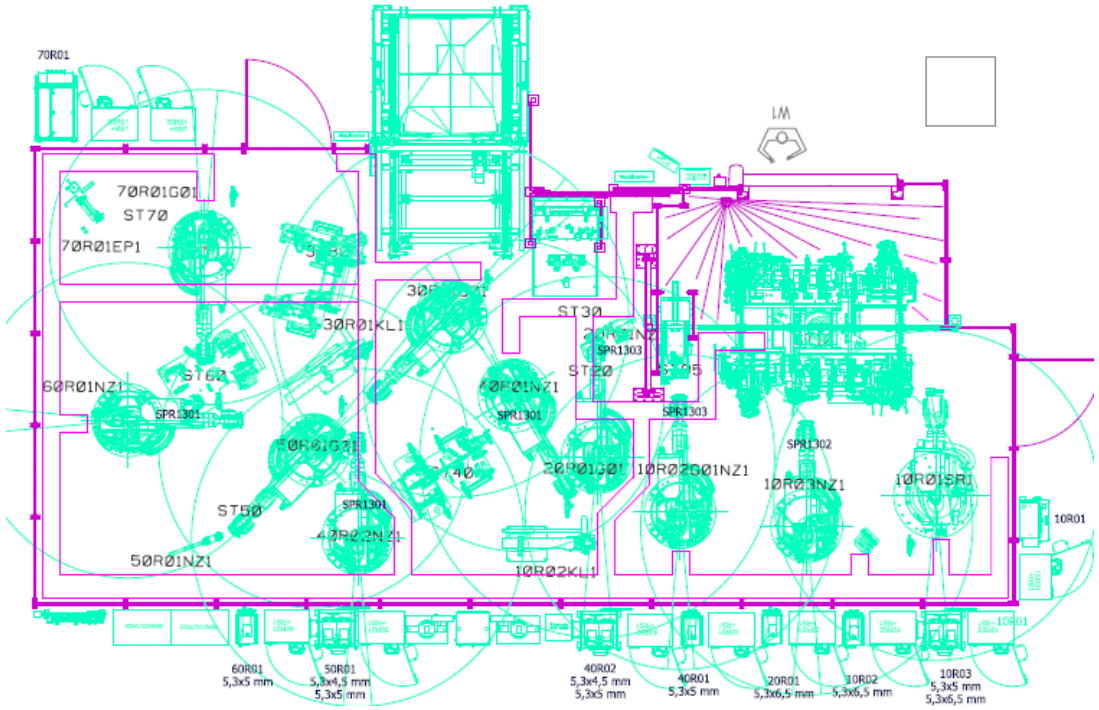



Director
Key Account Management
Project Management
CONCEPTUAL PLANNING
ENGINEERING
ELECTRO-PLANNING
DIGITAL FACTORY AND SIMULATIONS
ON-LINE PROGRAMMING
PLC PROGRAMMING
MANUFACTURING AND ASSEMBLY
MICROSTATION
PROCESS DESIGNER
CATIA V5
NX
E-PLAN
ROBCAD
OLP KUKA + ABB + FANUC
PROCESS SIMULATE
VIRTUAL COMMISSIONING
MRK-KUKA LBR
KUKA
FANUC
ABB
MRK-KUKA LBR
SIMATIC S-300
SIMATIC 1500 TIA PORTAL
TEAM 1 – OEM
TEAM 2 – OEM
TEAM 3 – TIER1
TEAM 4 – TIER1





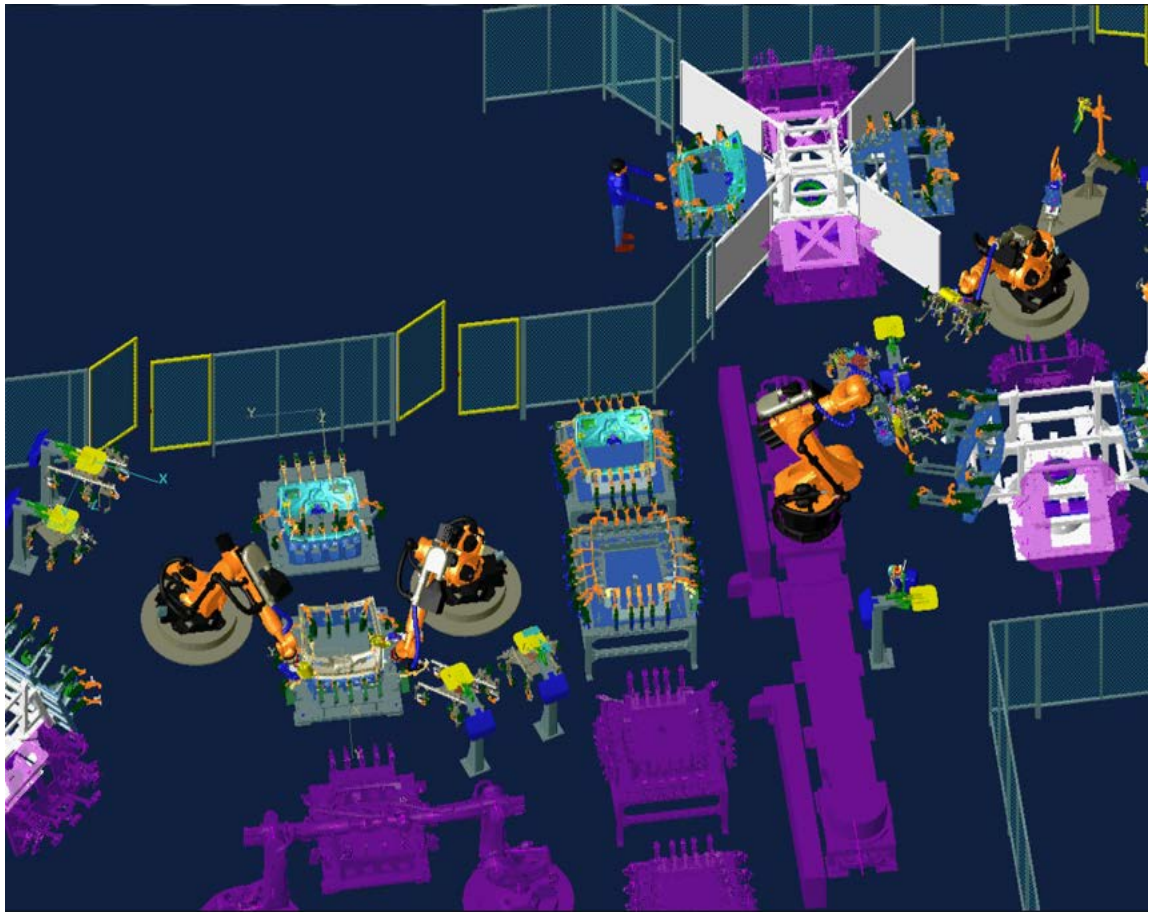
- Conceptual Planning
- Engineering, Simulations & Digital Factory
- PLC Programming
- Manufacturing & Assembly



Conceptual planning represents the initial step before the start of a new project and includes the calculation of cycle times, preparation of cost breakdowns and performance of technological analysis.

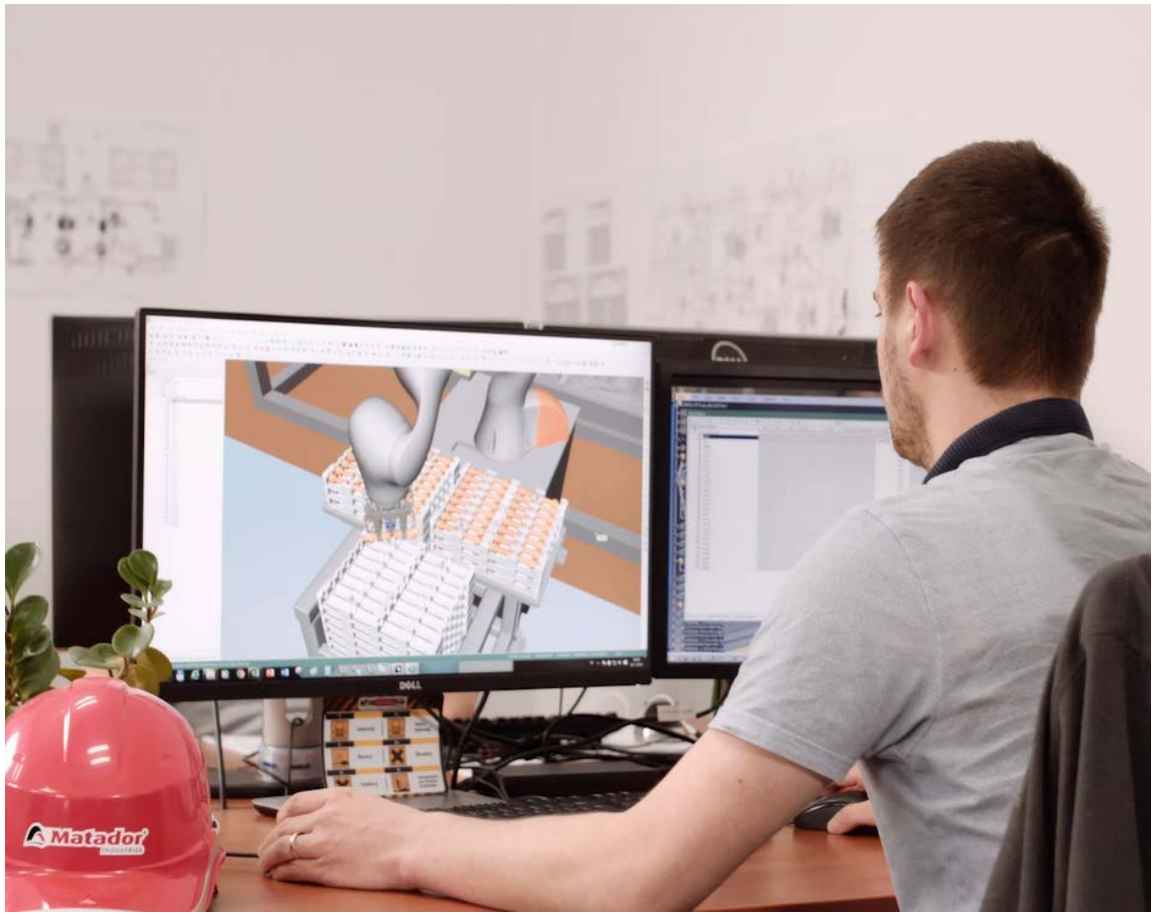
Use cases:

- Standardized application within each project
- Standalone service (e.g. SKODA Kodiaq in Russia – conceptual planning of all underbody automation lines and their sub-groups).



During the engineering phase we utilize a broad variety of software tools like Process Simulate, Process Designer, CATIA, AUTOCAD, MicroStation and EPLAN.

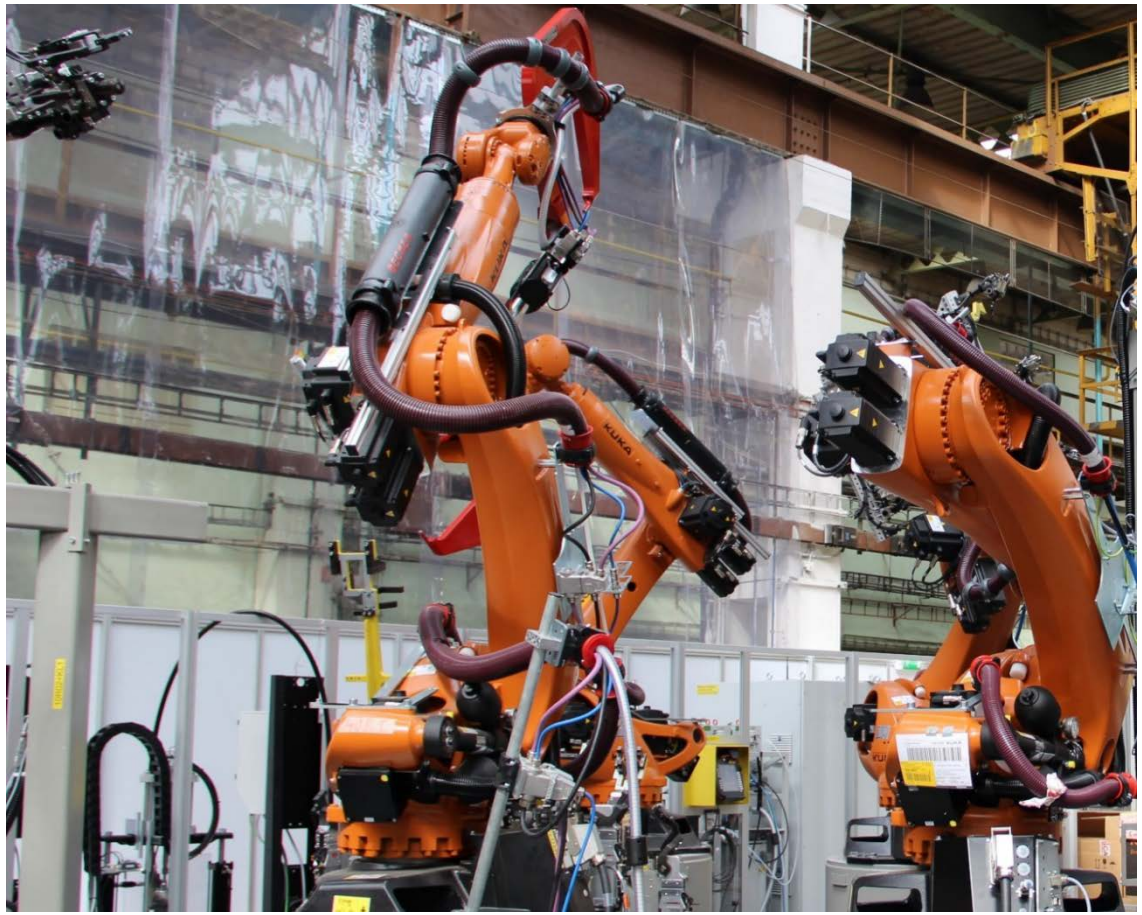
On top of that we optimize assembly processes, fine-tune commissioning times and prevent unexpected collisions during the assembly phase by means of virtual commissioning via Siemens Tecnomatix.



In-house developed PLC and robotics standards guarantee highest quality together with faultless operation.

We use the software TIA Portal and the PLC control system SIEMENS S7 - 1500 to develop and program our solutions.

During the last years we became fully proficient in object oriented programming (JAVA), which we use for our collaborative applications.



Our 2000 m^2 of assembly space guarantee seamless tryouts before the lines are delivered and installed at the production site of our customers.

Here our assembly teams with up to 40 people each ensure precise, efficient and failure free installations for our OEM or TIER 1 customers.

Highlights of the partnership with KUKA robotics

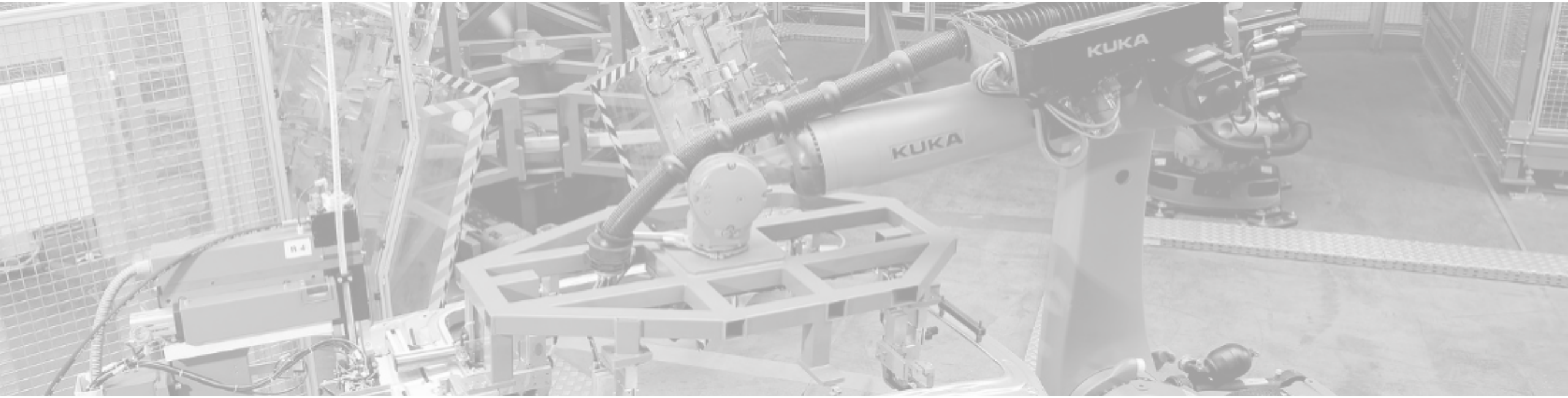
- 2011 – Matador became official system partner and integrator
- 2014 – First integration of KUKA LBR iiwa in Czech Republic and Slovakia

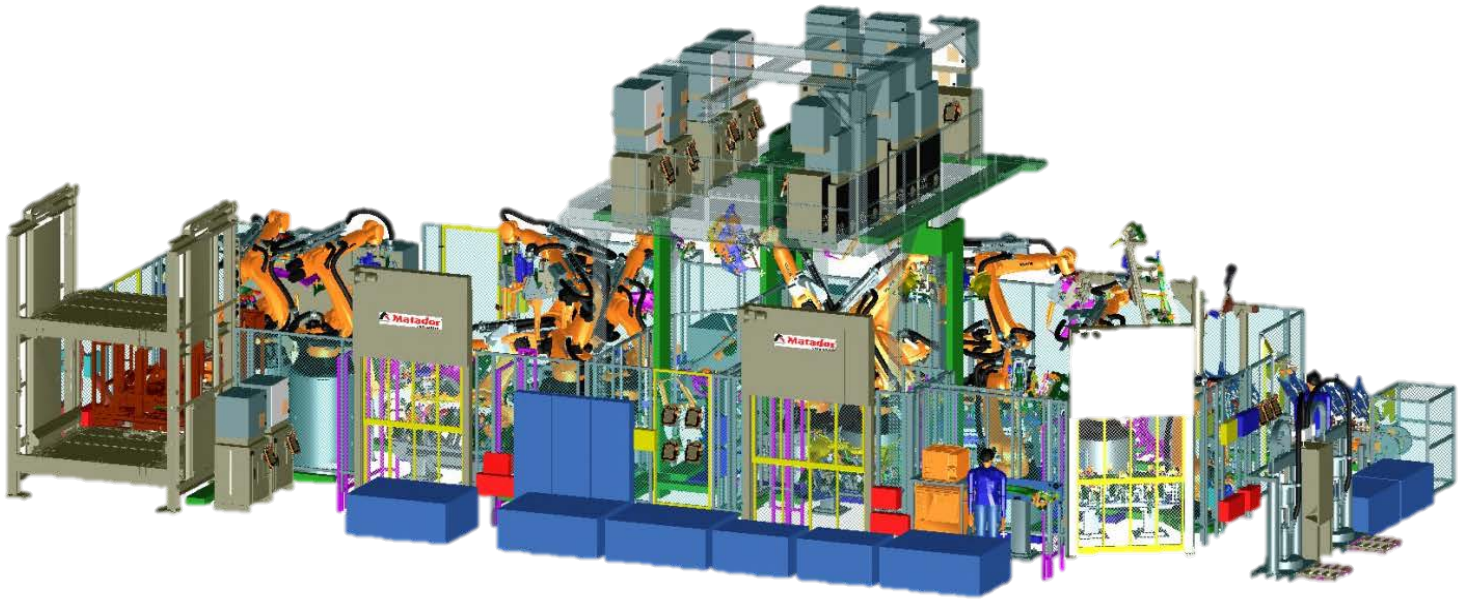
KRC		
Total Implementations	**Reference Projects**	**Key Customers**
More than 150 KRC robots	AUDI Q7, AUDI Q8, COLORADO II, COLORADO III	BMW, SUZUKI, KWD, TOWER

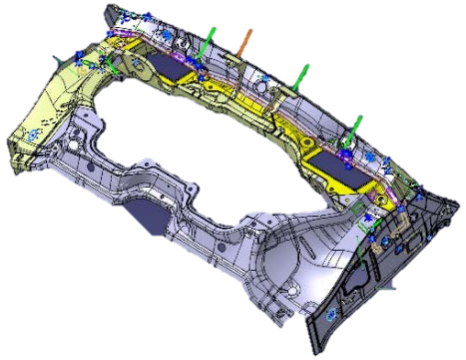
VKRC		
Total Implementations	**Reference Projects**	**Key Customers**
More than 180 VKRC robots	SEAT ATECA, ŠKODA KODIAQ, PORSCHE KTZ	ŠKODA, AUDI, PORSCHE

Industrial Automation

Selection of Reference Projects







Project Highlight

Challenging space conditions in the production area made it necessary to place the welding and robotics cabinets on the second floor above the welding line.

Project

ŠKODA Fabia

Locality

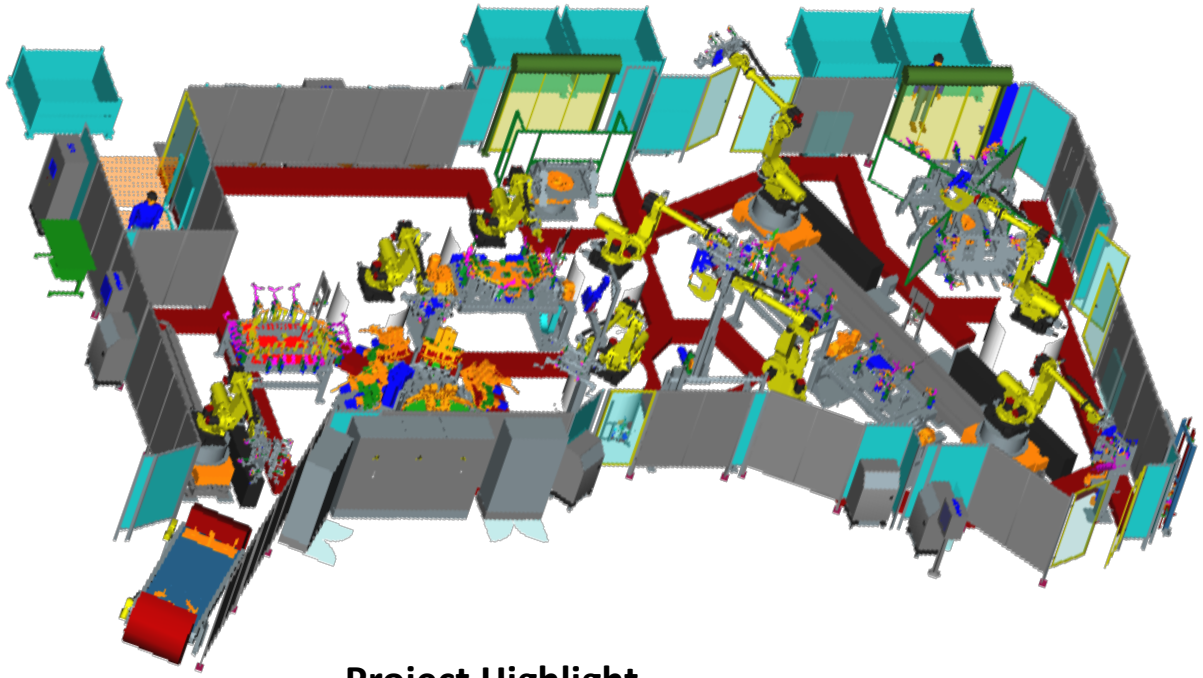
Mladá Boleslav, CZ

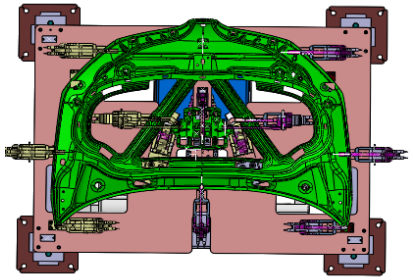
Part

Engine compartment

Total Number of Robots

13 robots





Project

ŠKODA Fabia

Locality

Mladá Boleslav, CZ

Part

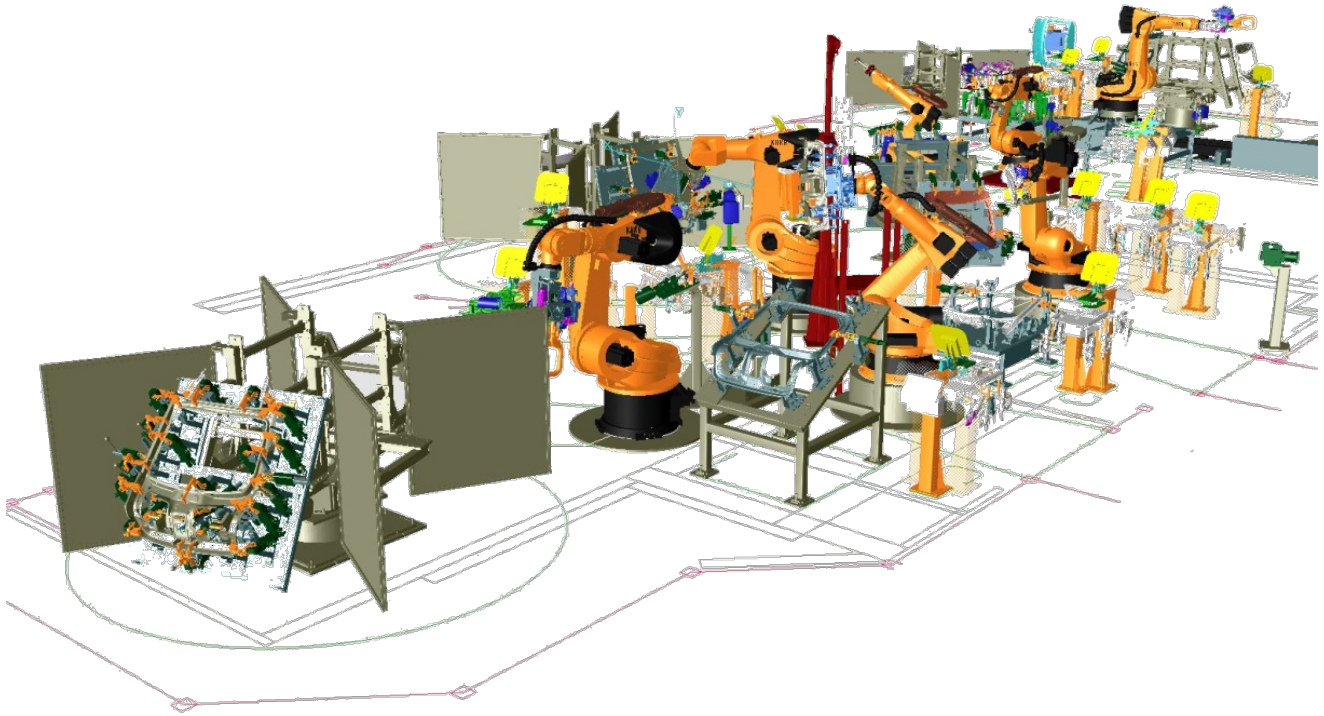
Front hood

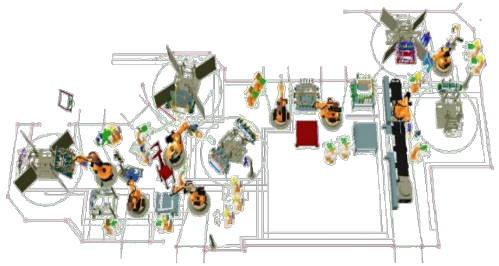
Total Number of Robots

9 robots

Project Highlight

First showcase of a conventional hemming operation via integration of an external stamping machine.





Project Highlight

Second showcase where fully automated roll hemming technologies were utilized.

Project

ŠKODA Superb Combi and Limousine

Locality

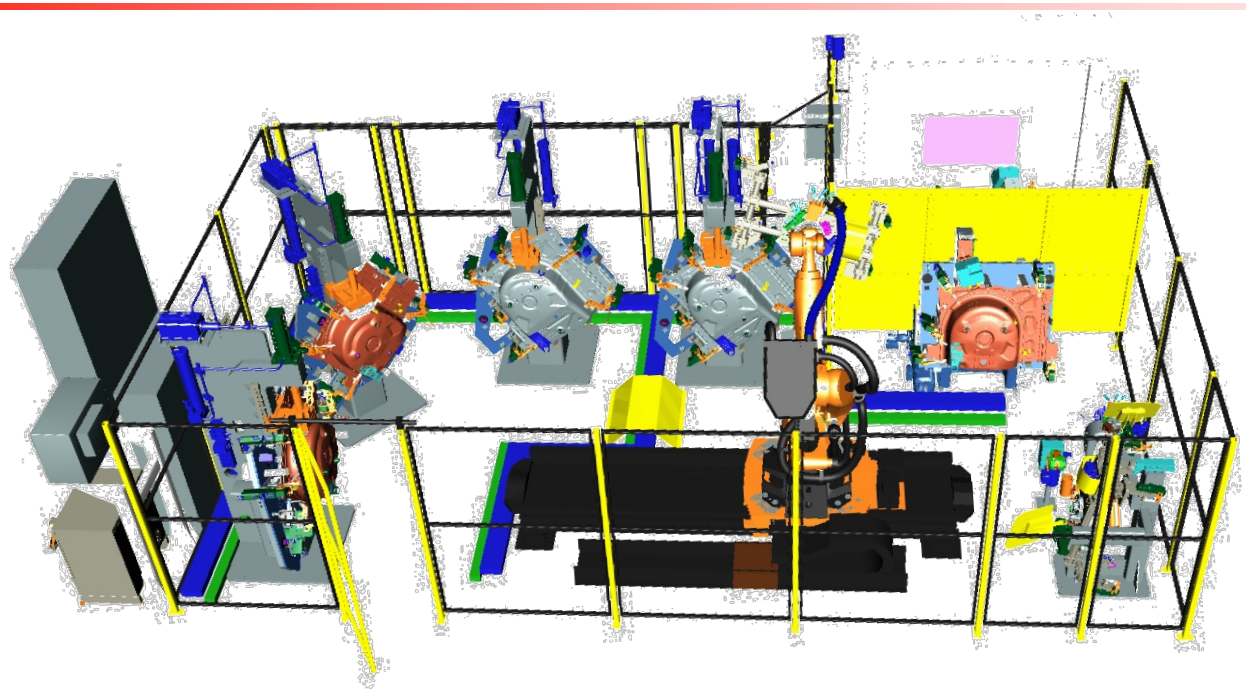
Kvasiny, CZ

Part

Tailgate

Total Number of Robots

8 robots



Project

ŠKODA Rapid

Locality

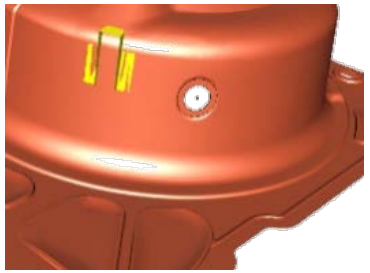
Liberec, CZ

Part

Spare tyre compartment

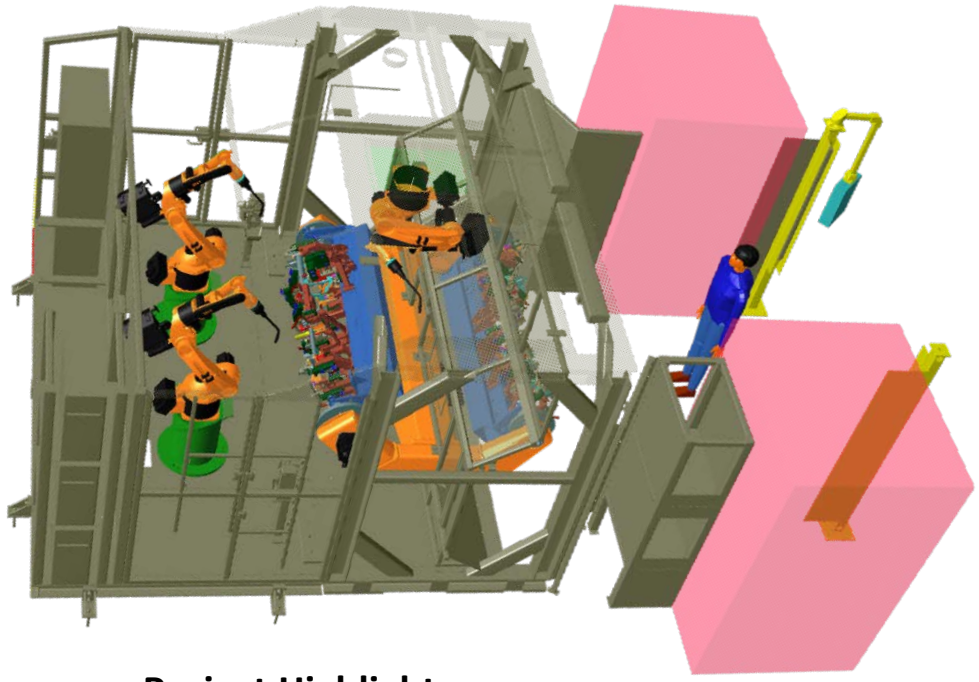
Total Number of Robots

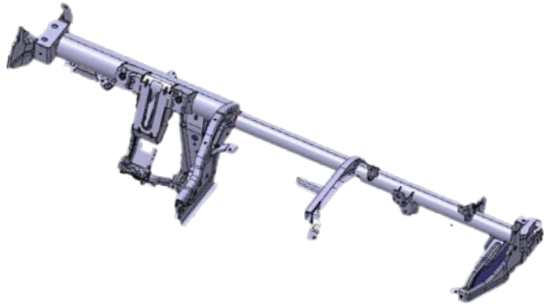
1 robot



Project Highlight

Changing the stamping tool during running production could be avoided – development of automated line with cutting and stamping operation.





Project Highlight

Modularization in every aspect – Cross car beam welding line solution made of standardized components - significant decrease of development and production time.

Project

ŠKODA Octavia, Yeti, Fabia, Rapid, VW Jetta, SUZUKI Swift and CITROEN C3 Picasso

Locality

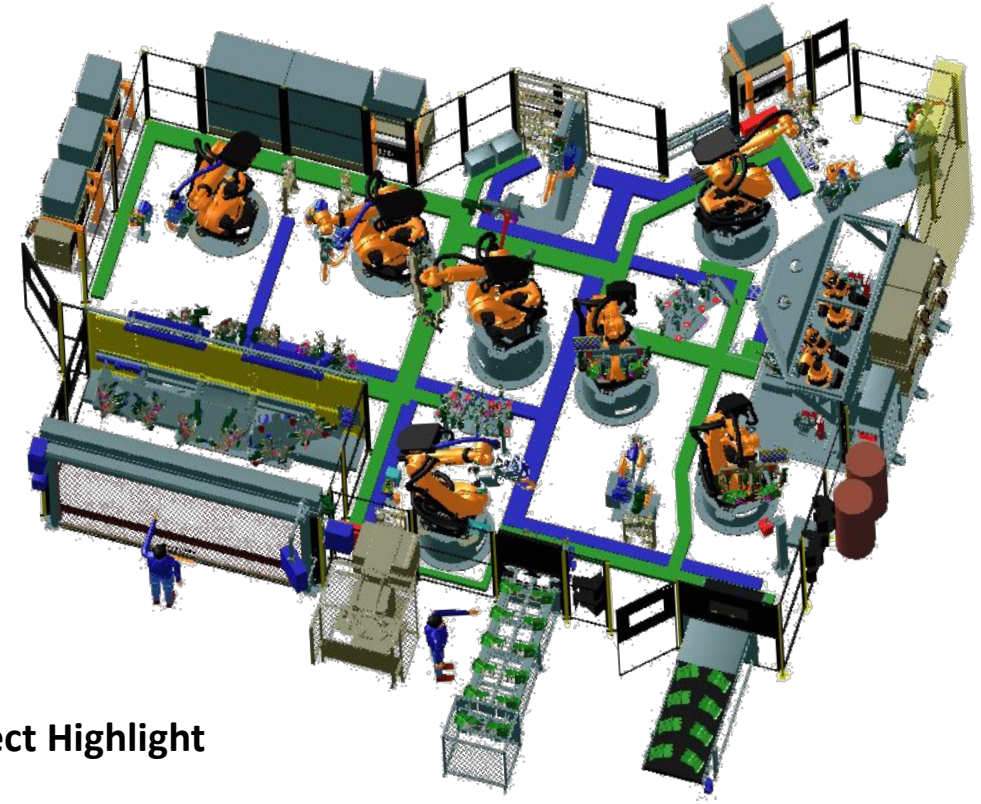
Vráble, SK; Liberec, CZ and Nizhny Novgorod, RUS

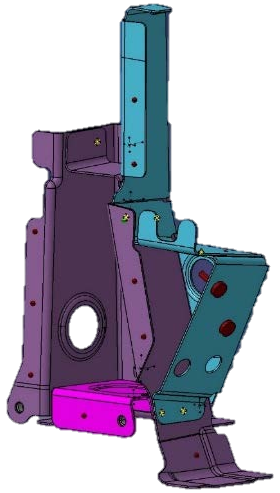
Part

Cross car beam

Total Number of Robots

3 robots





Project Highlight

Application of state of the art joining technologies such as SPR riveting and clinching for complex aluminum respectively steel assemblies.

Project

AUDI Q7

Locality

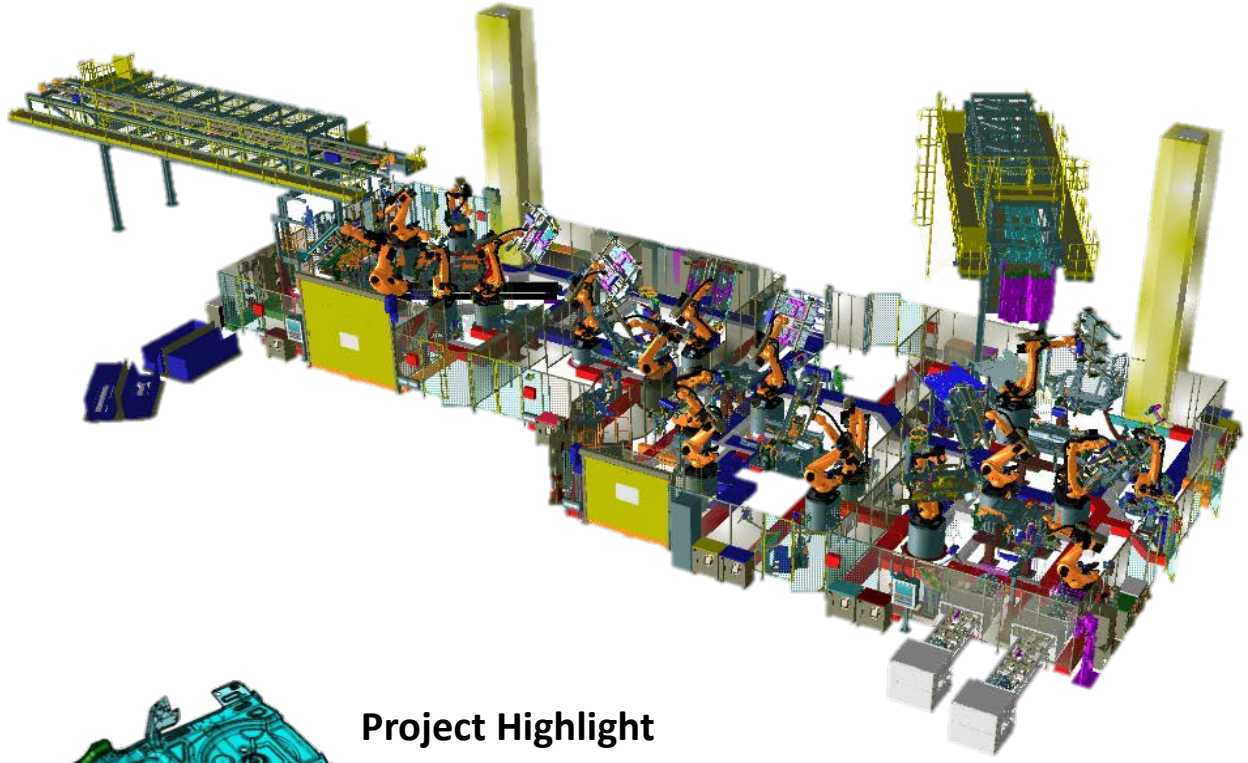
Vráble, SVK

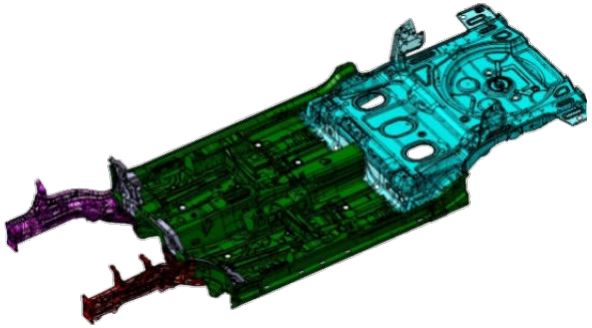
Part

Reinforcement / structural part

Total Number of Robots

9 robots





Project Highlight

The largest automation project in the history of the company. We have built up joining lines for the complete underbody of new SUV models of SKODA and SEAT.

Project

ŠKODA Kodiaq, SEAT Ateca and ŠKODA Yeti

Locality

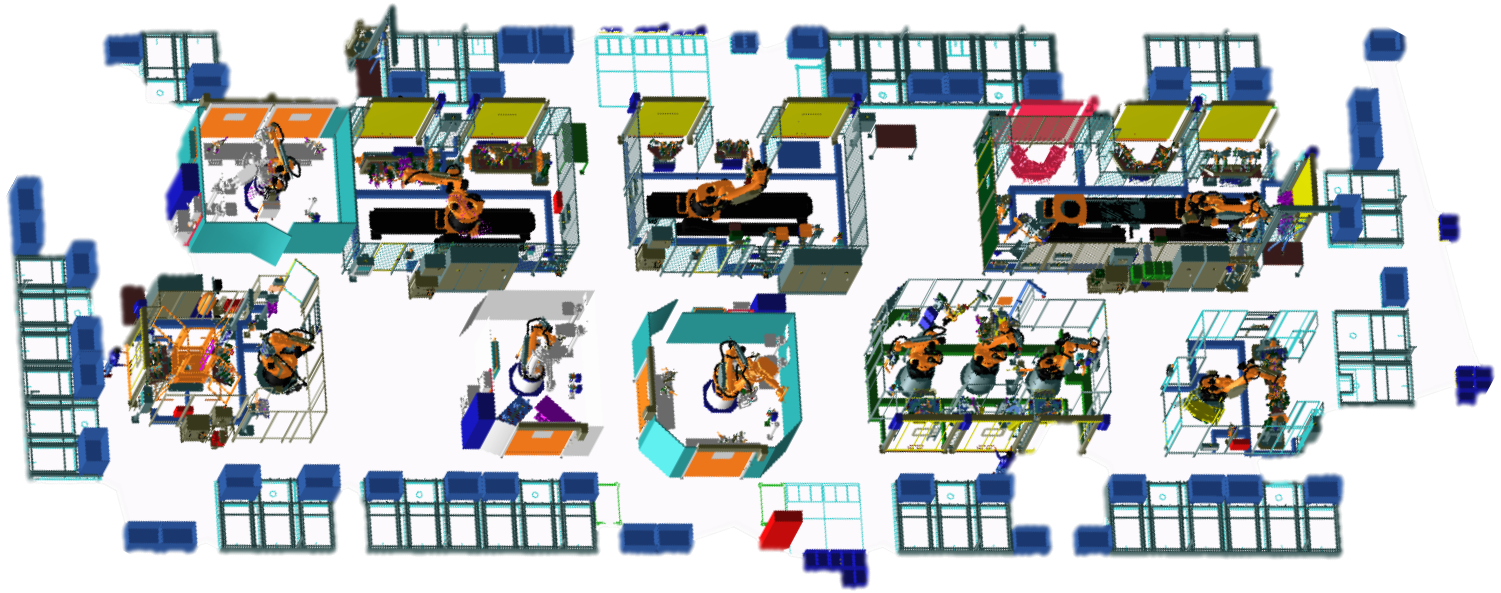
Kvasiny, CZ

Part

GEO UB 1.1 & UB 1.2 (rear & front floor, tunnel)

Total Number of Robots

110 robots



Project

PORSCHE PANAMERA

Locality

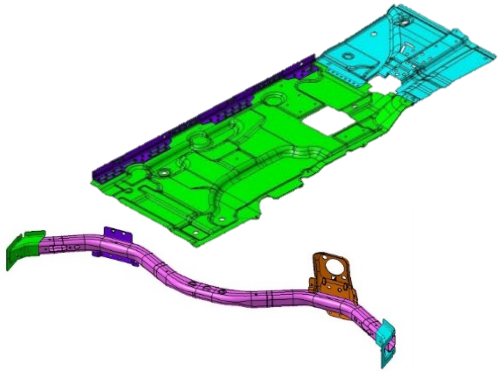
Leipzig, DE

Part

Small parts

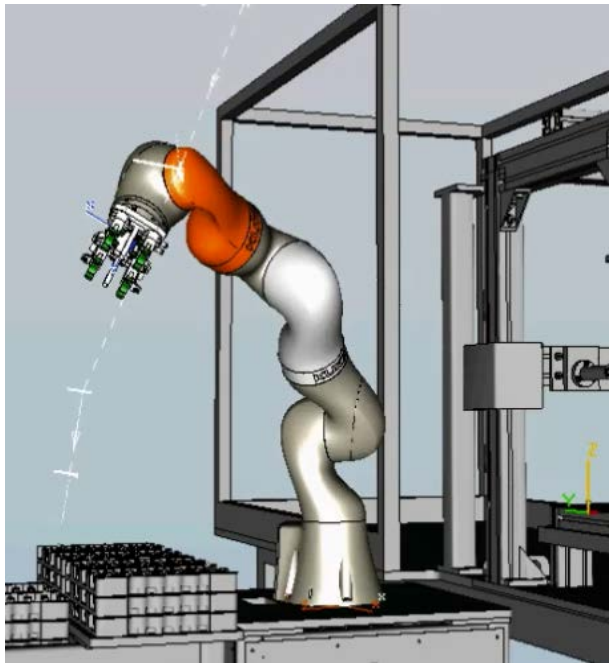
Total Number of Robots

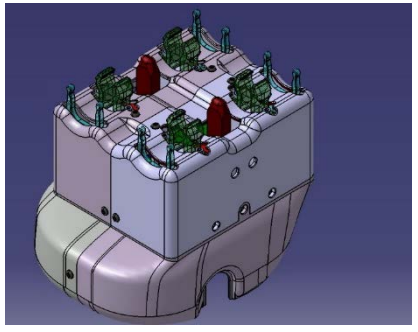
27 robots

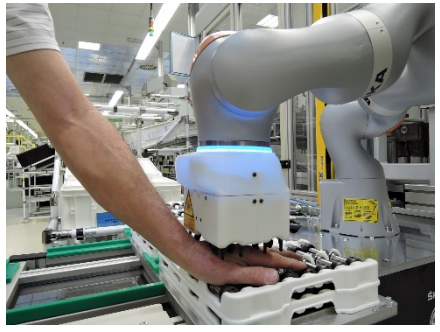


Project Highlight

First successful project for Porsche in Leipzig to equip the Kleinteilezentrum with various state of the art joining technologies.







Project

Integration of collaborative robotics

Locality

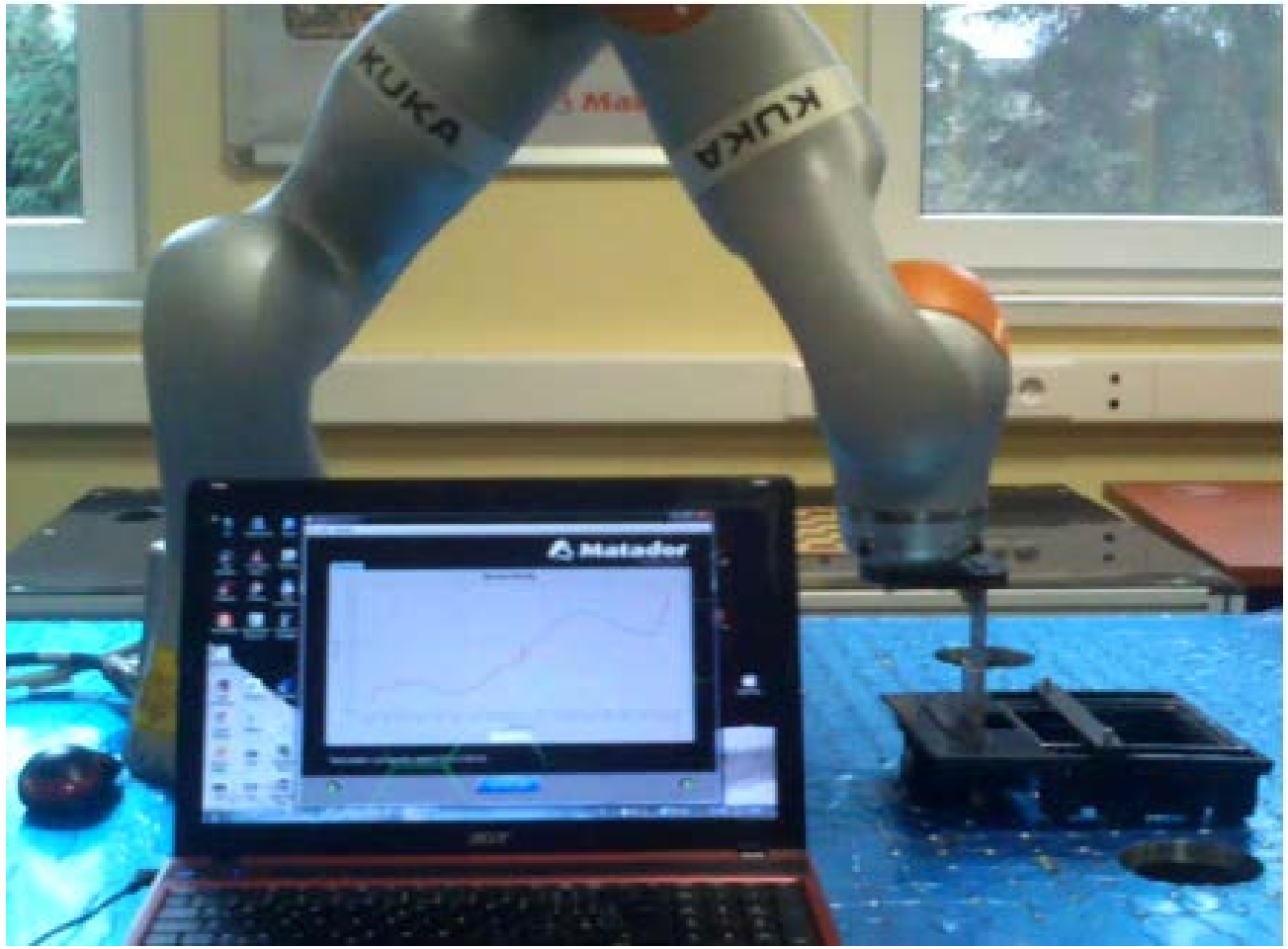
Vrchlabí, CZ

Part

Automatic gearbox DQ – 200

Project Highlight

Initial integration of collaborative robots within the VW Group. Reverse engineering of the cell, simulation and rapid prototyping secured the successful application.



Project

Collaborative quality testing application

Locality

Mladá Boleslav, CZ

Part

Parking break control switch

Project Highlight

In-house Software development for real-time evaluation of test data.

Seamless integration of KUKA, ABB or FANUC robots utilizing an in-house developed algorithm.

The 3D camera scans the “bin” before each pick up in order to determine the optimal path for the robot and to analyze the best positioned object from the upside down perspective.

In parallel the collision course of the robot, gripper and object are tracked and post processed.

FOF-11-2020: Quality control in smart manufacturing (IA)
We use the vision system to ensure quality control and monitor measurements to ensure optimal production quality.
Our interest is to engage in applied development, using and further expanding our knowledge in this field, showcase real-time data validation within an actual production line.

ICT-38-2020: Artificial intelligence for manufacturing

We prepare and work with data for prototype production, in which we use our know-how.

Our interest is in Innovative artificial Intelligence in manufacturing.

We can provide know-how in the field of simulation and human-robot interaction.

Our interest is in cognitive autonomous systems and human-robot interaction.

ICT-46-2020: Robotics in Application Areas and Coordination & Support

We focus on the secure interaction of robots – with humans, with their environments or with other robots. Dealing with the cooperative robot - human interaction, we deploy robotics in the areas of applications where we define tasks with usable configuration tools.

Our interest is to cooperate in the field of mechatronic, visual systems, quality control and optimization process.

ICT-47-2020: Research and Innovation boosting promising robotics applications

Our company deals with the speed and skill-handling of robots with objects.

We want to cooperate in the development of internally safe physically powerful robotic systems with the ability to capture distances for the tasks of human-scale cooperation and the development of variable autonomy systems that significantly expand and raise awareness of the working environment.

Our interest is also aimed at navigating robots using visual systems.


ŠKODA


Audi


SEAT


STUTTGART


SUZUKI


B M W


KUKA