

IBG

IBG – IBG, Inspire, Initiative, Innovative and Integrative

Company presentation

IBG

| The company





Company profile

- Owner-managed, international group of companies with headquarters in Neuenrade, Germany
- A leading development partner in the field of automation as well as plant engineering and construction for more than 35 years
- More than 280 employees
- A pioneering company that integrates innovative technologies within its customers' production processes and plants
- Leitmotif “I5 {ai faiv} – IBG, Inspire, Initiative, Innovative and Integrative”





The company

The owner-managed, international IBG / Goeke Technology Group conceptualises and implements customer-specific production systems at its company headquarters in Neuenrade, North Rhine-Westphalia's take on Silicon Valley.

280 employees worldwide are passionate about implementation of perfect technical solutions in all areas of the industry and ensure a consistently high quality of products and short delivery times.

True to our motto, "Treat the impossible as if it were possible", IBG is a pioneer in its field. It takes the initiative to keep on developing innovative technologies within the field of automation as well as for plant engineering and construction.



Location in Neuenrade, Germany



Location in Lübeck, Germany



Location in Columbia, USA



Location in Malta

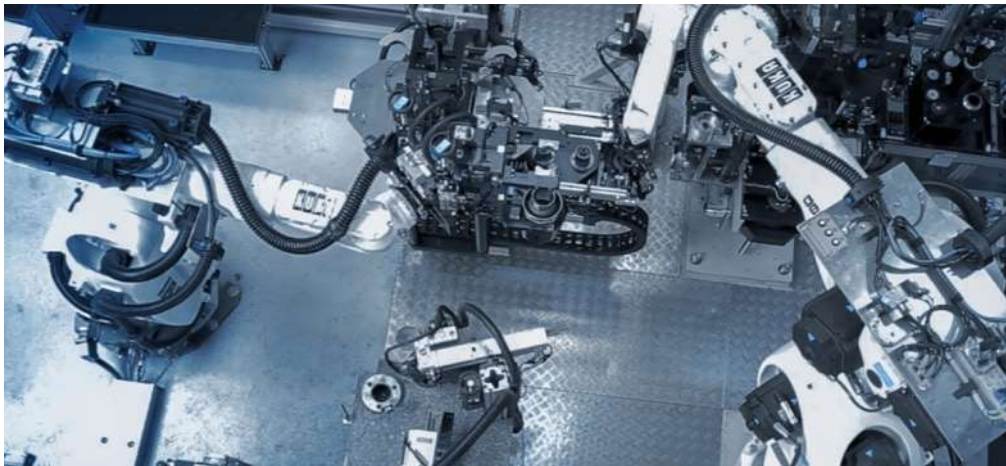


IBG

The company

The IBG / Goeke Group is a global provider of solutions for automation, plant engineering and construction, robot technology, image processing, software engineering, electro mobility and for the automation of medical devices.

Under the leitmotif “I5 {ai faiv} – IBG, Inspire, Initiative, Innovative and Integrative”, IBG has been a leading development partner in the field of automation as well as plant engineering and construction for more than 35 years.



I5 IBG
Inspire
Initiative
Innovative
{ai faiv} Integrative

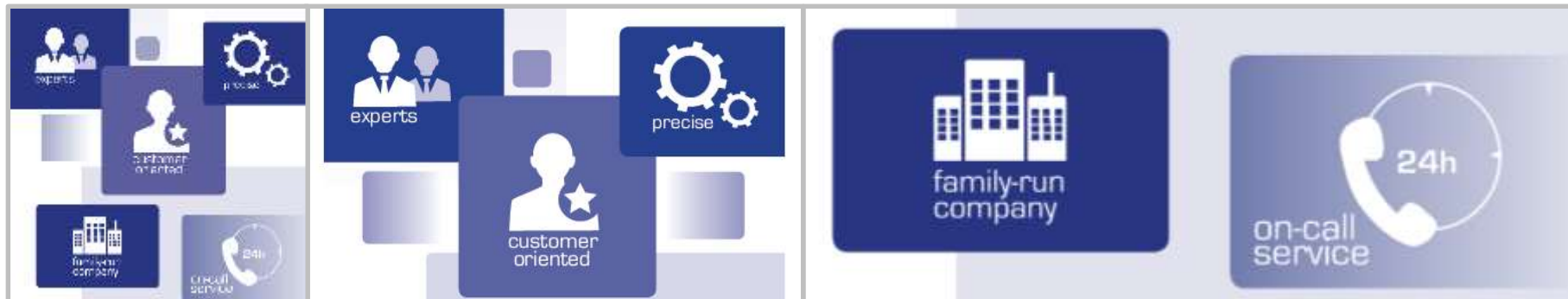


The company

As a generalist, IBG / Goeke Technology Group offers a comprehensive range of services in the field of process automation, robotic systems, systems logistics and services.

With its many decades of experience in robotics, mechanical engineering and construction as well as proficiency in research and development throughout all industrial sectors, Goeke Technology Group successfully implements innovative, sustainable and cost-efficient solutions.

Within a very short period of time, Goeke Technology Group has become a pioneer for beacon projects, concepts and processes.





Locations in Germany

**IBG Technology Hansestadt
Lübeck GmbH**
23569 Lübeck

IBG Automation GmbH
58809 Neuenrade
44227 Dortmund

IBG Robotronic GmbH
58809 Neuenrade

IBG Automation GmbH
86156 Augsburg



Locations worldwide

IBG Kanada

Representative: Ramp Inc. 50
Ontario N2V 1Z7, Canada

IBG Automation GmbH

58809 Neuenrade, Germany
44227 Dortmund, Germany

IBG Kalifornien i.G.

Palo Alto, Silicon Valley, USA

IBG Japan

Representation: FLO-TEC, LTD
Yokohama, 230-0071, Japan

IBG North America LLC

Columbia, SC 29201, USA

IBG Automation Malta Ltd.

BBG3000 Birzebbuga, Malta



Company history

1982

Matthias Goeke founded the engineering company and specialised in the development and production of automation plants and devices.

1989

IBG Industrieautomatisierung GmbH was founded.

1999

IBG Technology Hansestadt Lübeck GmbH was founded and concentrated on the development, production and distribution of automation plants and devices for the Scandinavian market.

2002

Goeke Technology Group GmbH was founded.

2009

Subsidiary in South Carolina, USA was established.

2014

XPION GmbH (brand experience agency) became part of Goeke Technology Group and Maltese subsidiary was established.

2016

Subsidiary in Augsburg, Germany was established.

2017

Subsidiary in Silicon Valley, USA is planned.

1982

35 years of innovation

2017



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Awards





Services

IBG is a full-service company offering a wide range of products and services:

- Development and design
- Programming
- Manufacturing
- Services
- Construction
- Prototyping
- Commissioning
- Maintenance

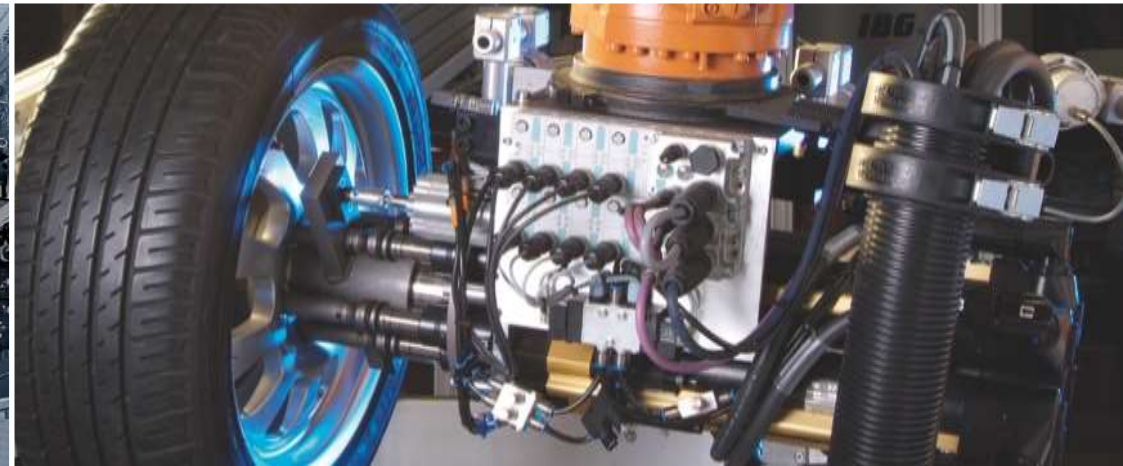
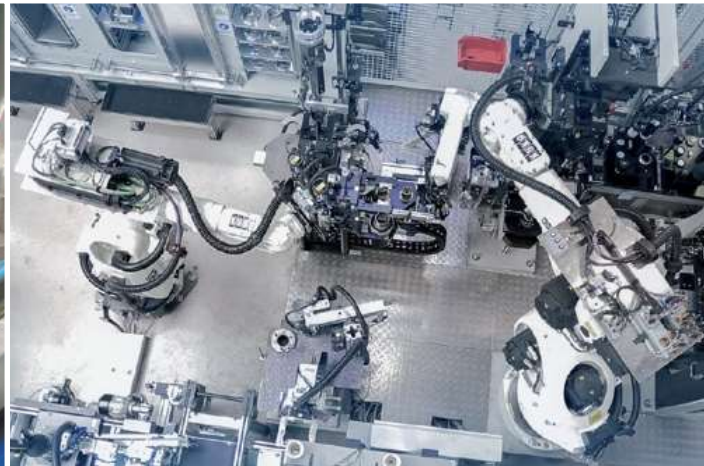
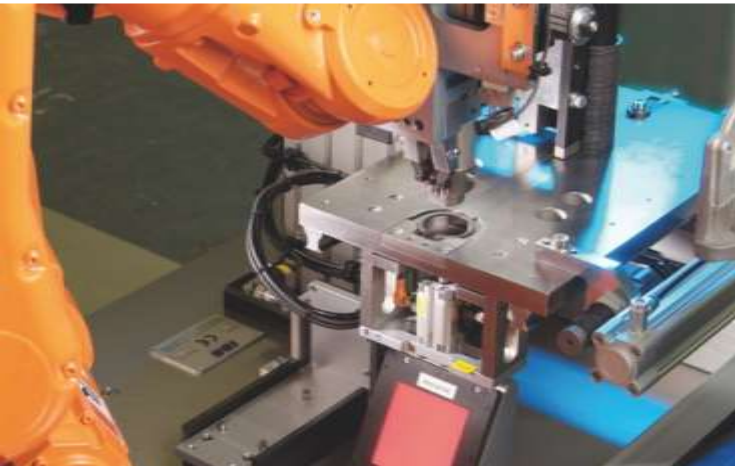




Competences

Core expertise at our innovative plants:

- Robot and automation systems for assembly and inspection tasks
- Handling of highly flexible parts
- Proprietary construction of control cabinets
- Turnkey systems
- Automatic wheel assembly
- Individual gripping systems
- Software development
- Vision technology





Expert services

Thanks to its unique service, IBG puts its customers in the very centre of their joint projects:

- Family-owned and managed company
- 24/7 on call
- Own manufacturing service
- Strong partnerships
- Customer-focused service
- EPC contractor (general contractor)
- Innovative research projects





Predictive Maintenance

Predictive Maintenance - Gelebte Industrie 4.0 in den Projekten der IBG:

- App-based documentation
- Remote maintenance / service
- Digitised maintenance notifications
- Error analysis
- Plant and machine monitoring
- Inspection / on-site maintenance
- Software Updates
- 24/7 service hotline
- Training





Industry 4.0

Industry 4.0 is an interdisciplinary process that will have a long-term effect on the entire economy and change the economic landscape as a whole. In this process, the outright infrastructure and value creation chain of the involved partners is taken into account and influenced.

Everything is interlinked, thus becoming more transparent and controllable. The synchronisation of the involved companies will determine the success in their respective market.

Already today, IBG is practising applied Industry 4.0 for its customers.





Industrial sectors

Telecommunication Furniture
Automotive **Plastics industry** Pharmacy/chemistry
Electronics **Mechanical engineering**
Consumer goods Energy Aeronautics
Renewable energy Food





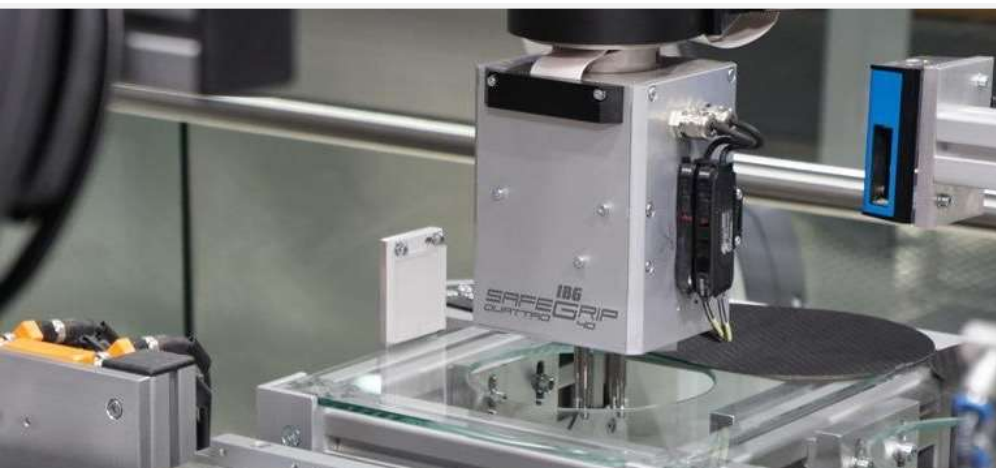
Abstract of realised systems

- safeGrip – gripper system
- System for automated assembly of retaining rings
- Vision gripper technology
- Automated bulk material extraction
- CFRP automation and CFRP gripper (CFRP: Carbon fibre reinforced polymer)
- Panoramic / sunroof fitting and adjustment
- Installation and adjustment plants
- Application of seals
- Automated balancing of cardan shafts
- Automatic fitting of wheels on conveyor systems
- Automated gearbox assembly
- Specialised system robots
- iPROCELL



safeGrip – sensor gripper system

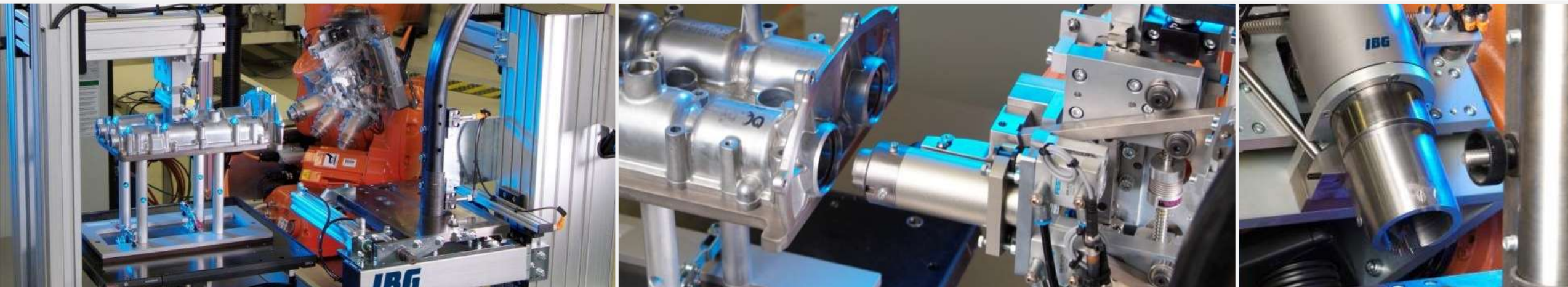
- Sensor gripper system for safe handling of objects
- Use of carbon fibre reinforced polymer (CFRP) reduces the weight of the gripper system
- Enables higher loading capacity and reach





System for automated assembly of retaining rings

- Combination of robot and camera technology together with servo technology and servo grippers to help to ensure safe placement
- Includes checking of correct positioning
- Scoring and scratching excluded





Vision gripper technology

- Use of 2D and 3D camera technology
- The robot is safely guided to a grippable workpiece





Automated bulk material extraction (Bin Picking)

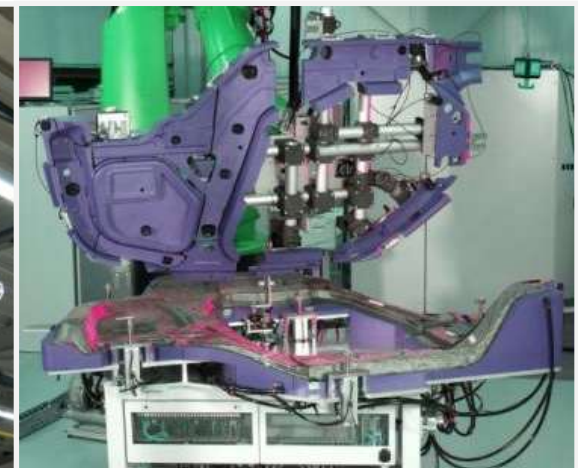
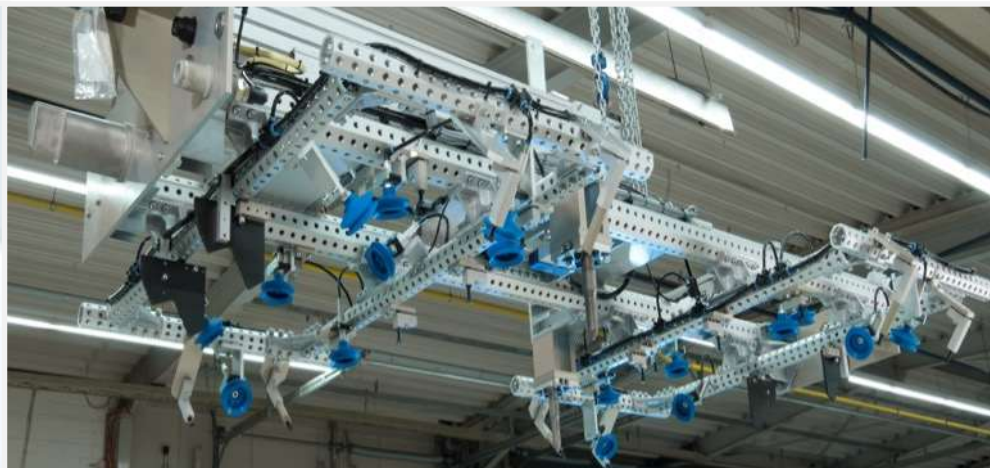
- Intelligent 3D vision technology
- Innovative gripper systems
- Taking different workpieces as bulk material from a bin – currently state-of-the-art technology





CFRP (Carbon Fibre Reinforced Polymer)

- Manufacturing and machining – proprietary developments in the fields of cutting and gripping
- Exact positioning of semi-finished plastic and CFRP components / products

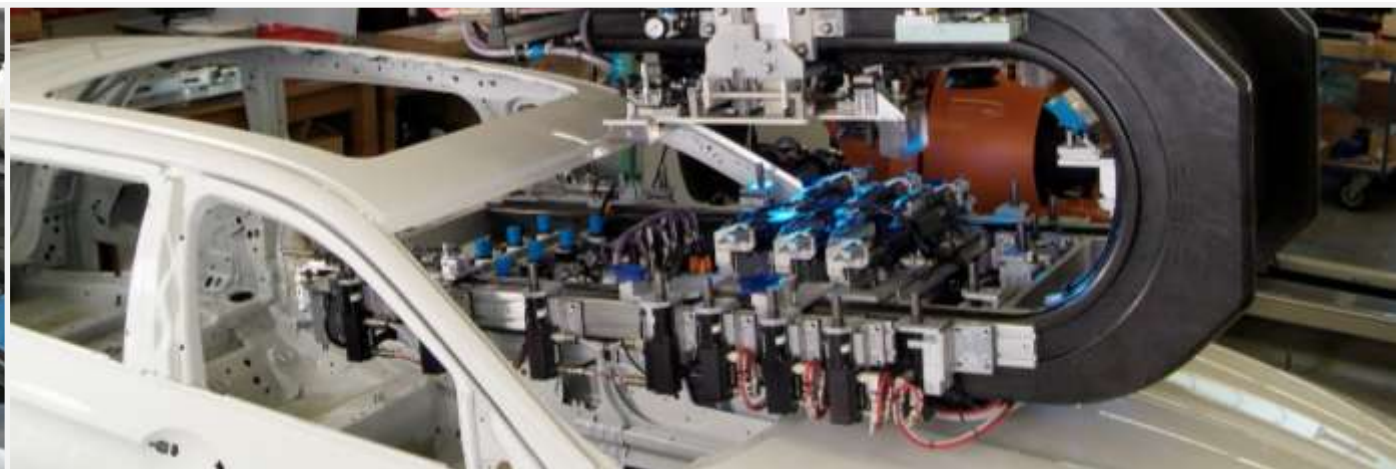




SHD & panoramic sunroof

Fitting and adjustment

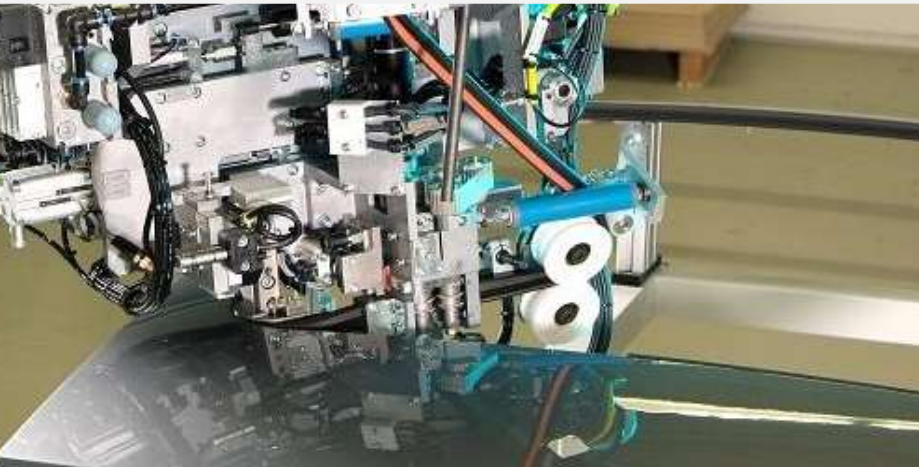
- Automated feeding of sliding roof and panoramic sunroof elements
- Fitting and fixing with EC screwdriving technology
- Adjustment of the glass roof level in relation to the roof edge





Sealing application

- Automated application of roof sealing
- Application of sealing, removal of liners, measuring of the inserted length
- Compressing of the sealing in the radii and formation of the seal joint





Automatic wheel assembly on conveyor systems

Overall system consisting of

- Feeding of wheels, wheel screws and nuts
- Synchronisation of robots with the vehicle hangers
- Measuring of hubs and break discs using 3D camera technology
- Screwing on of the wheels using EC screwdriving technology





Automated balancing of cardan shafts

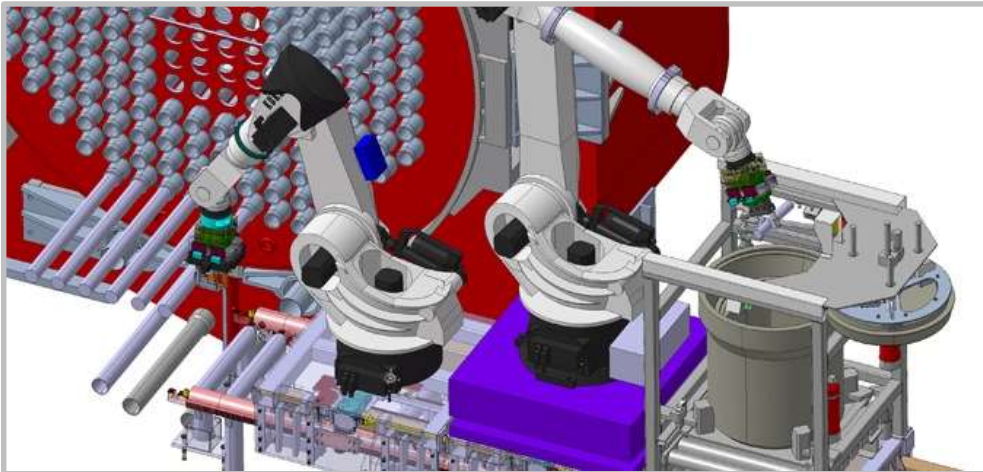
- Automated extraction of the cardan shafts from the conveyor system
- Measuring of the initial unbalance
- Production and welding of the balance weights
- Control run and placing of the completed cardan shaft on the conveyor system





Specialised system robots

- Robots for tight construction spaces with short forward and backward cycle time
- Application-specific extension of the robots' swing arms





Automated gearbox assembly

- System developed by IBG
- Use of 2D and 3D camera technology to measure:
 - Gearbox (bellhouse and gear teeth of the gearbox shaft)
 - Engine (sleeves at the engine flange and internal teeth of the driver plate)
- Zero-force merging of both parts with the help of a robot





CFRP automation and CFRP gripper

- Insertion of light construction gripper systems made of CFRP
- Reduction of the load on the robot



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Factory Cruiser FC80

IBG launches an innovative transportation system named **Factory Cruiser FC80**:

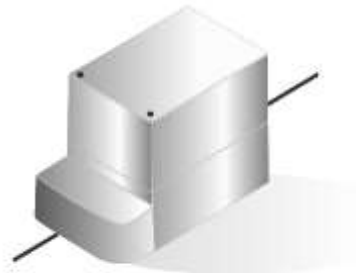
- Communication with robots and automation systems
- Autonomous movement and extremely flexible adaptation to the spatial conditions
- Vehicle load capacity of up to 800 kg





Factory Cruiser FC80

HAULING DEVICE



LIFT TRUCK



LIFT TABLE



ROLLER CONVEYOR



ROTATION DEVICE



FORK LIFT





Factory Cruiser FC80

Mobile Information and advertising surfaces:

- Top-quality appearance
- Mobile and, therefore, very flexible
- Decentralised steering / control
- Use for advertising and infotainment purposes
- Uniqueness at the POS



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iPROCELL

(using the example of the construction of an electric vehicle)

- A world novelty in small and very small batch production
- Fully automated final assembly cells with three autonomous robots
- The key innovation is the type of assembly with which the robots work symbiotically
- The modules are installed in finished products



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iPROCELL

(using the example of the construction of an electric vehicle)

- Integration of state-of-the-art gripper technology
- Assembly of small batches is available at a favourable price
- Modular format allows full manufacturing flexibility
- Decentralised assembly
- High economic efficiency
- Environmental sustainability



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iPROCELL

(using the example of the construction of an electric vehicle)

- Requires a completely different vehicle structure
- Ensures the complete process chain: from unloading of the container to the finished assembly
- Significant reduction of assembly time



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MOVING TECHNOLOGY



Moving Technology

... is Marketing 4.0:

I# Technology · II# Movement · III# Visualisation · IV# Individuality

... combines deliberate use of media with industrial robots creating inspiring brand experiences

... creates visually emotional experiences thanks to its strong dynamics

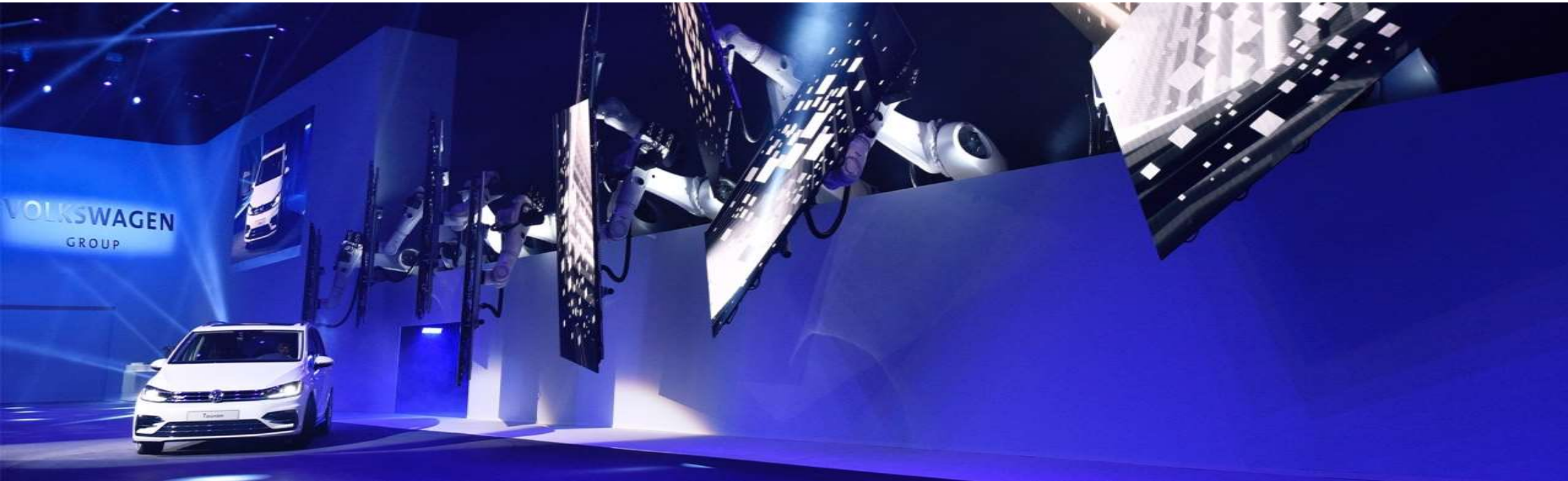
... is tailored:

intense shows | futuristic trade fair booths | compelling events – long-term installation

... is an exciting combination of innovation, technology and emotion



IBG | Volkswagen AG



IBG | Volkswagen AG



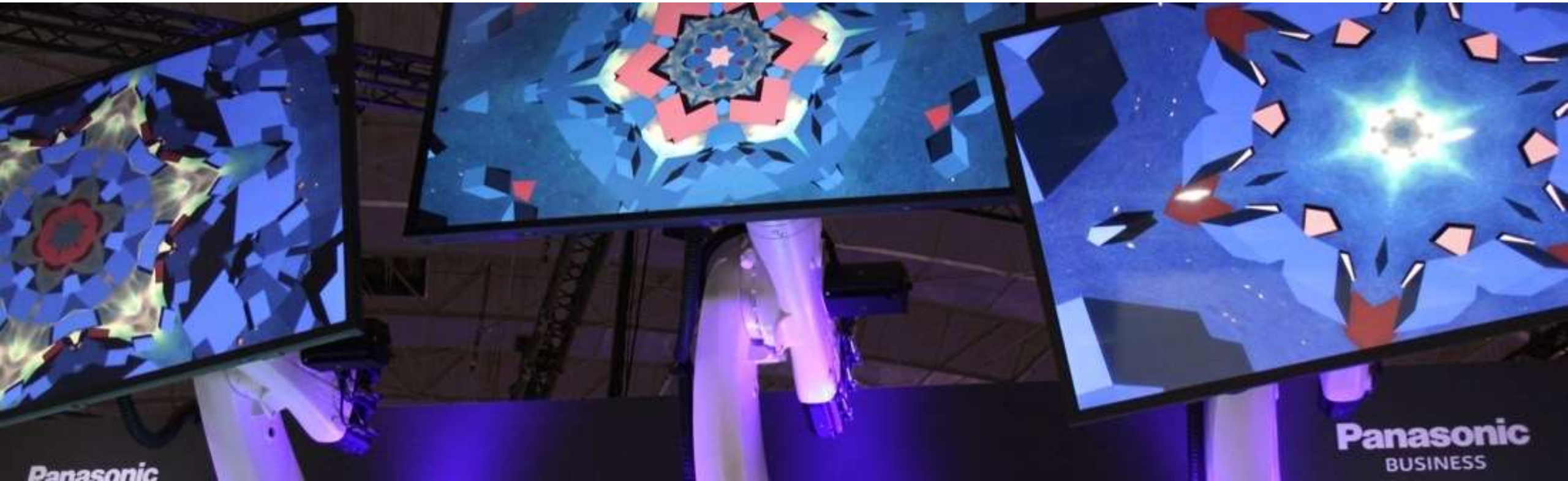
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Panasonic Business



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Hannover Messe





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