Sensors & Electronics – short, as of 07.2025

# Bosch Manufacturing Solutions | BMG

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# BMG | **who we are**

Bosch Manufacturing Solutions | BMG –

## Global industrialization partner & turnkey special machinery provider for production equipment & automation

- > 30 years of experience as special machinery supplier
- > 4.000 assembly & testing systems
  > 10.000 small & services projects
- Automation level adjustable, semi- to fully automated solutions
- Digital planning & process to digital engineering & i4.0 applications

**>17**
Locations

**Full-liner**
**portfolio**

**Several industries & product areas**

**1.900**
Employees

**~680**
TNS m€



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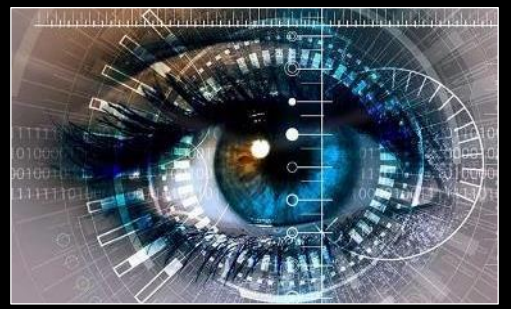
# BMG | **our portfolio**
## Customized assembly & testing systems

Global industrialization partner & turnkey special machinery provider for production equipment & automation, offering

# Customized assembly & testing systems

empowered by ...



**Engineering Consulting & Digital Engineering**

**Advanced Manufacturing Processes & Technologies**

**Digital & Intelligent Solutions**

**Services along the entire product lifecycle**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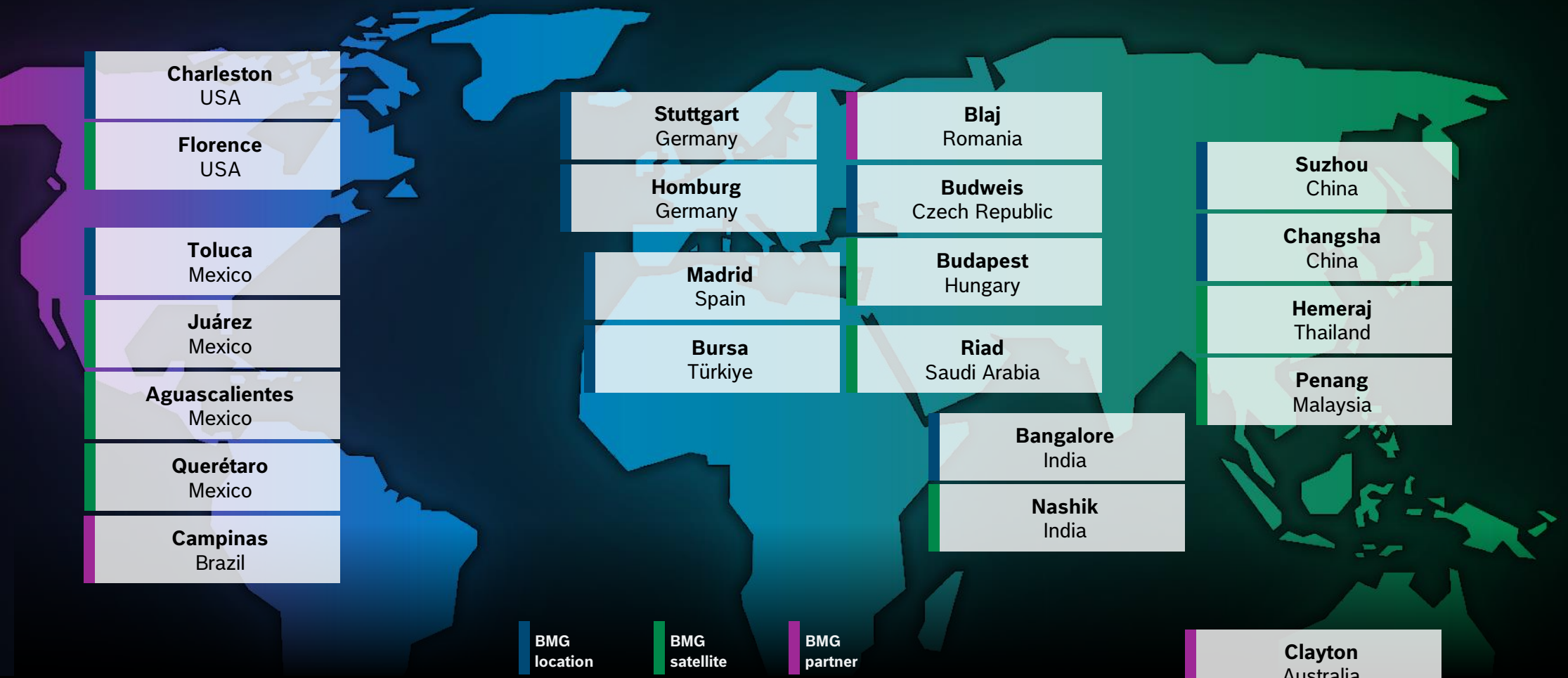
# BMG | **global strength in network & partners**





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# BMG | **focus industries & product areas**

## Focus industries

eMobility

Automotive (ICE)

Energy

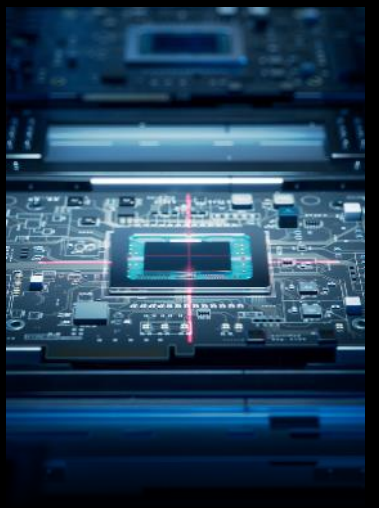
Consumer Goods

## Focus product areas

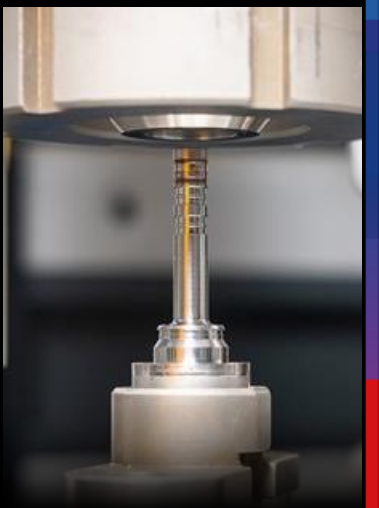
Battery

H2 Solutions / Fuel Cell

eDrive


Sensors & Electronics

Chassis & Steering


Combustion Engine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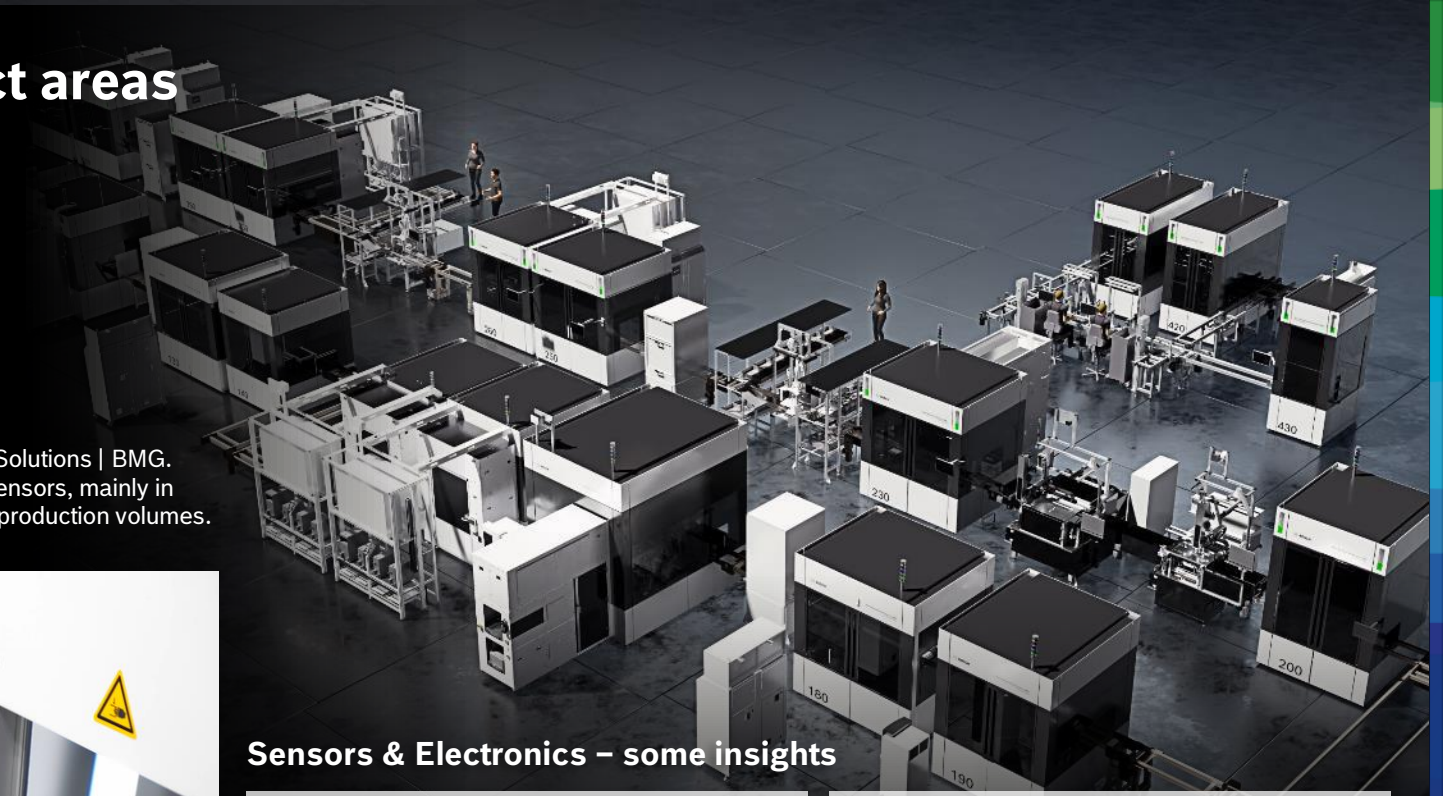
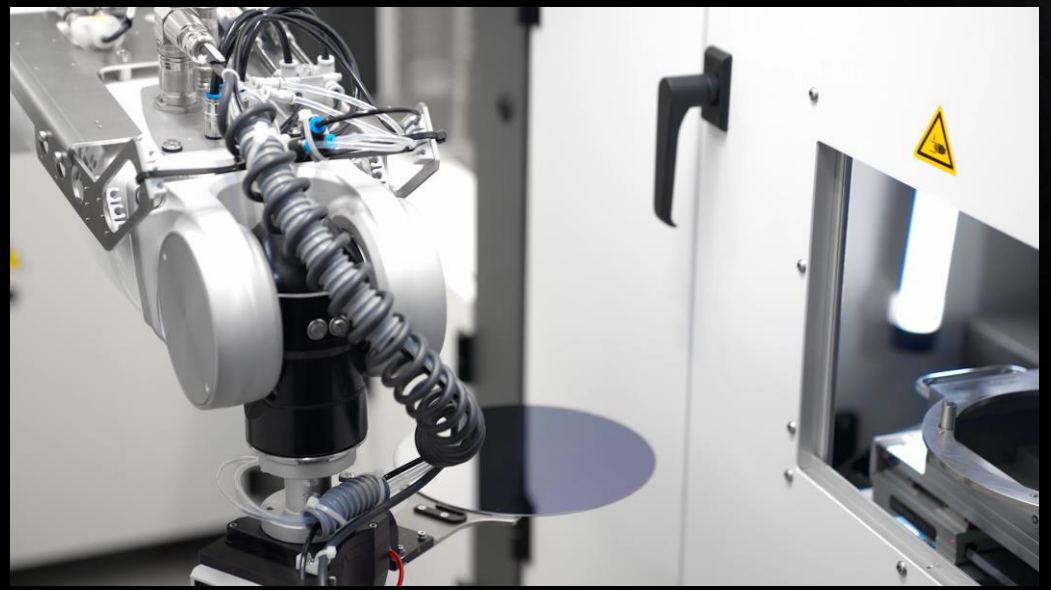
# BMG | **focus industries & product areas**
## Sensors & Electronics



# Unleash power

with sensors & electronics production equipment from Bosch Manufacturing Solutions | BMG. We provide flexible assembly technology for ECUs, power electronics, and sensors, mainly in eMobility. Our scalable solutions optimize investments and adapt to variable production volumes.



**Sensors & Electronics – some insights**

| | |
|---|---|
| Flexfoil Handling | Screwing |
| Laser Welding of Electrical Connections | Pressfit & Single Pin Insertion |
| Laser Micro Structuring | Optical Inspection |
| Laser Cleaning | Magnetic Conveyor System |
| Dispensing | |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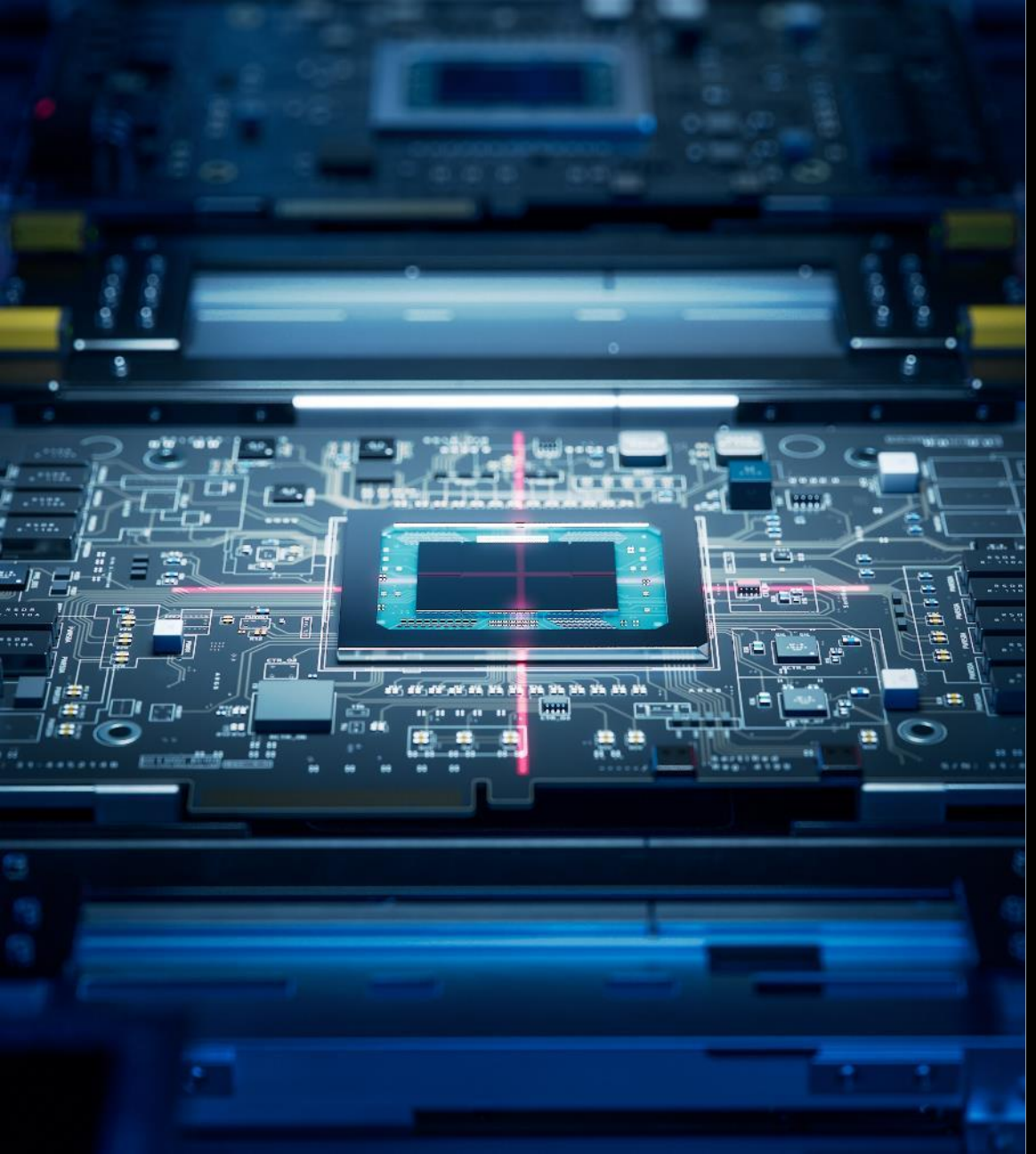

# BMG | **Sensors & Electronics**

## Benefits at a glance

- Over 20 years of experience in production equipment & special processes for ECUs, sensors & semiconductors
- More than 100 assembly lines running worldwide e.g. for power electronics, motor ECUs, ultrasonic & radar sensors
- Highly flexible lines in terms of type variants, automation level & volume scalability
- Short cycle times down to 4 seconds
- Global services network with qualified experts in Europe, Asia & Americas

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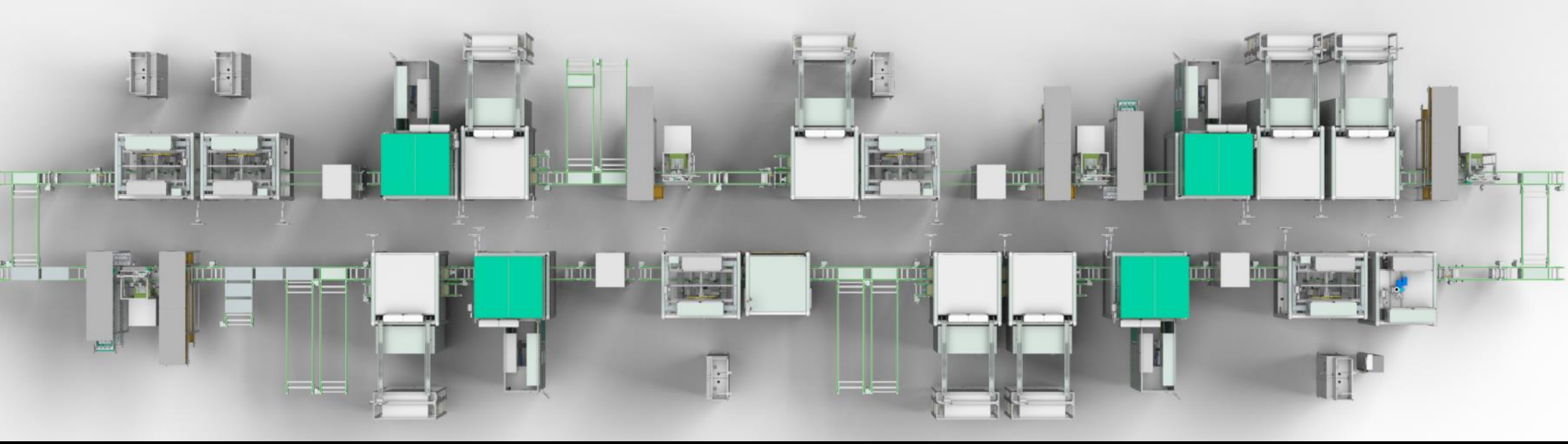

## BMG | Sensors & Electronics | reference projects | **inverter production line**

Scope:
Core assembly
Final assembly
Total of 38 stations

Key technologies:
Assembly, dispensing, AOI, tightening, flexfoil handling, laser & plasma treatment

Involved BMG locations:
Germany, Spain & Turkey

Cycle time:
36 sec

Type variants:
2+

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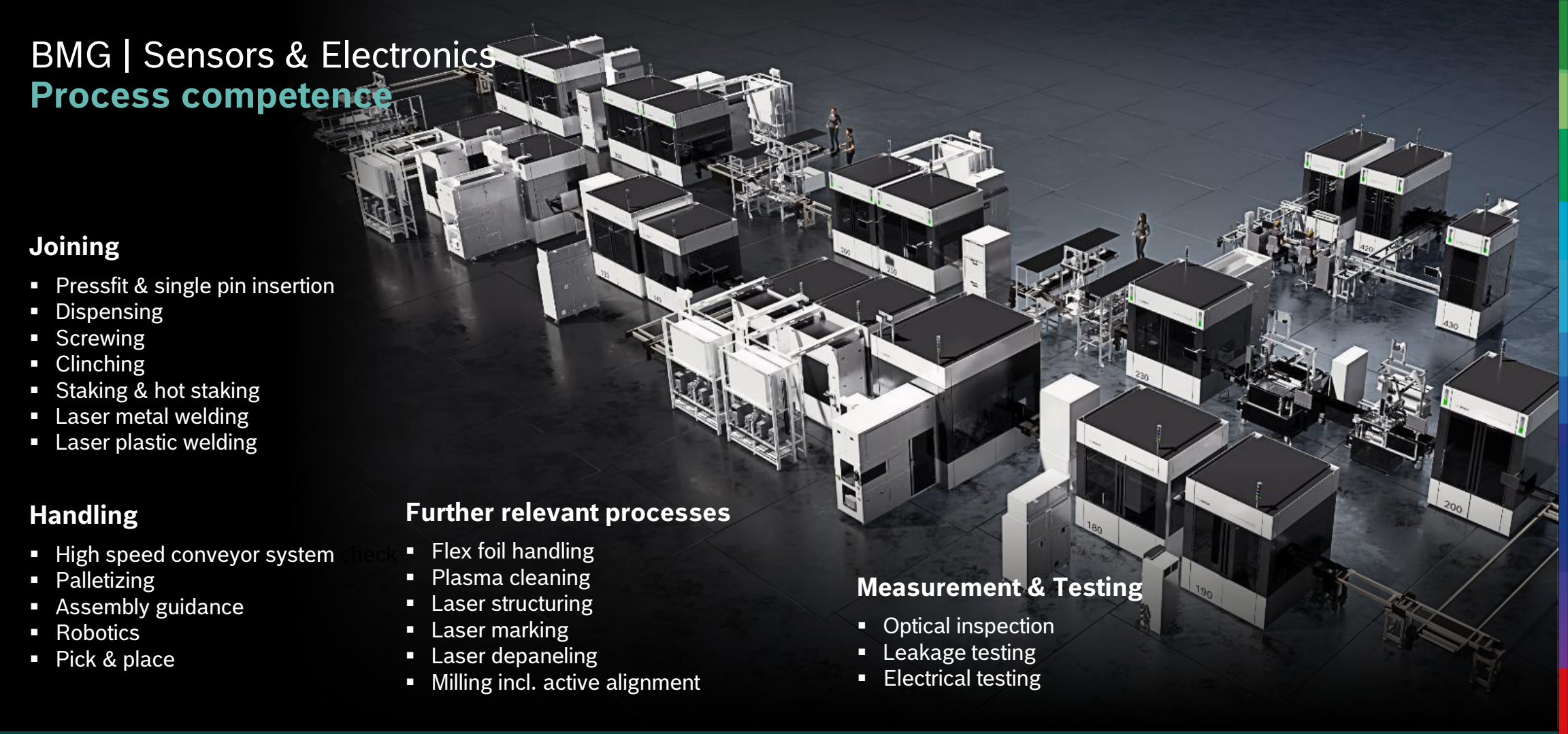
# BMG | Sensors & Electronics
## Process competence



### Joining
- Pressfit & single pin insertion
- Dispensing
- Screwing
- Clinching
- Staking & hot staking
- Laser metal welding
- Laser plastic welding

### Handling
- High speed conveyor system
- Palletizing
- Assembly guidance
- Robotics
- Pick & place

### Further relevant processes
- Flex foil handling
- Plasma cleaning
- Laser structuring
- Laser marking
- Laser depaneling
- Milling incl. active alignment

### Measurement & Testing
- Optical inspection
- Leakage testing
- Electrical testing

System integration & integrated processes from individual assembly and testing solutions to complete lines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