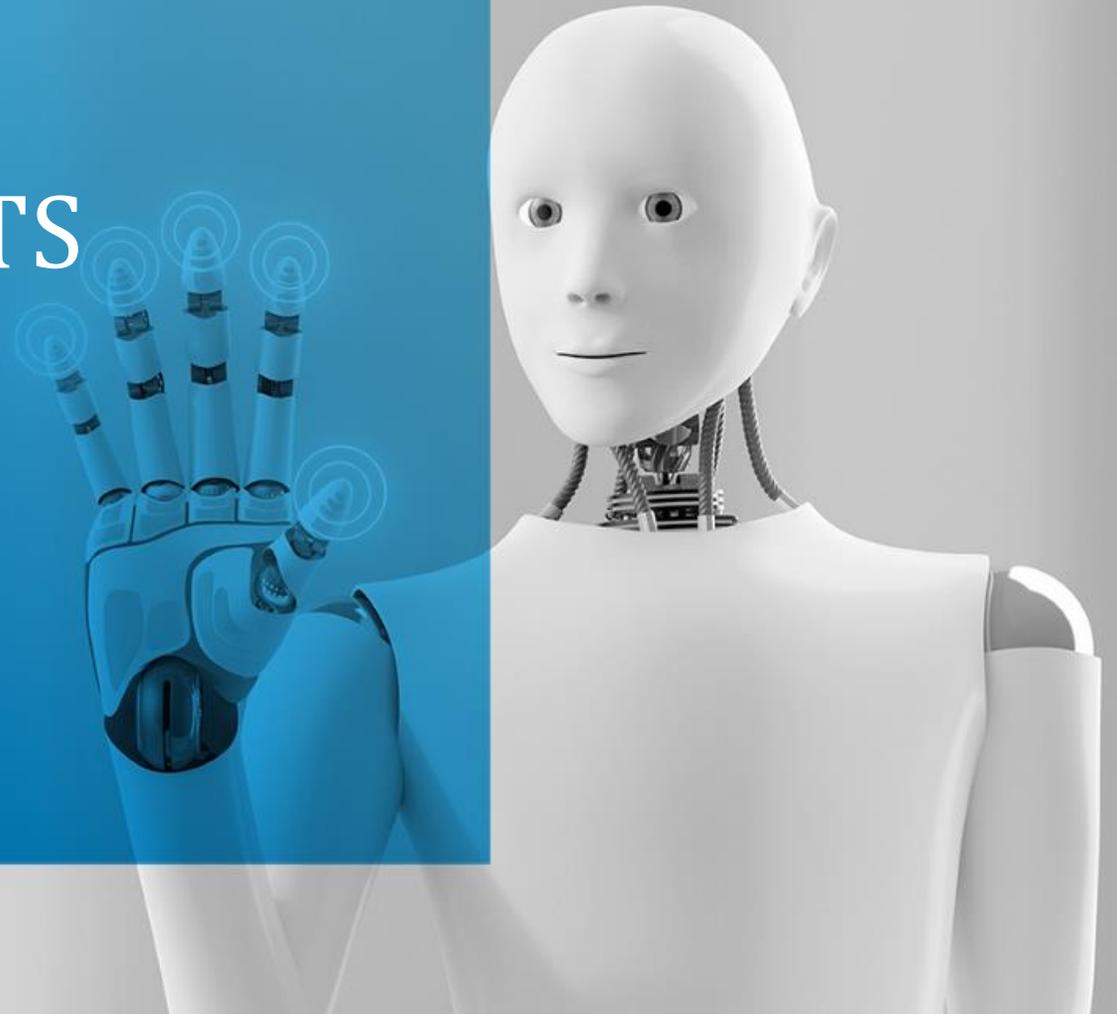


1st December 2021

# RISE OF THE ROBOTS

Market Opportunities in the  
German Robotics Industry

Peggy Görlitz  
Senior Manager Automation Technology & Robotics  
[www.gtai.de](http://www.gtai.de)



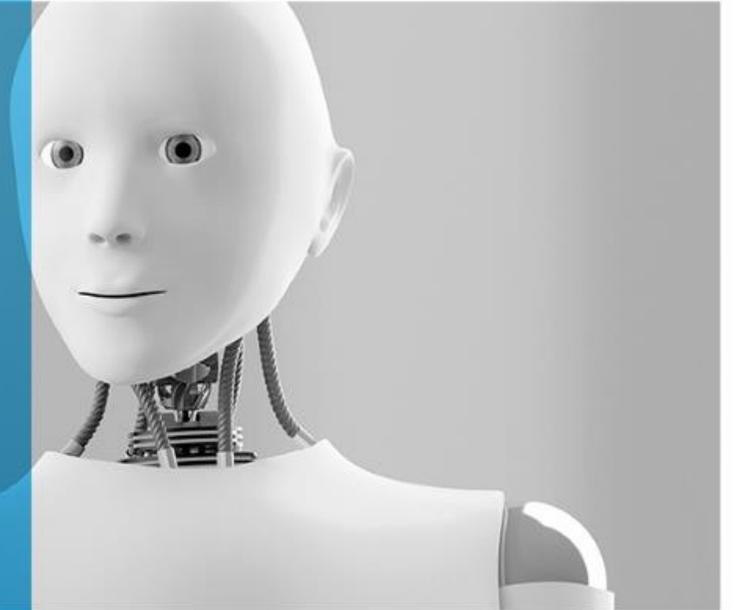
GERMANY IS THE  
5TH LARGEST ROBOTICS MARKET  
WORLDWIDE WITH

**22,302**

NEW ROBOT INSTALLATIONS IN  
2020

Source: IFR World Robotics Report 2021

Picture: © Gettyimages



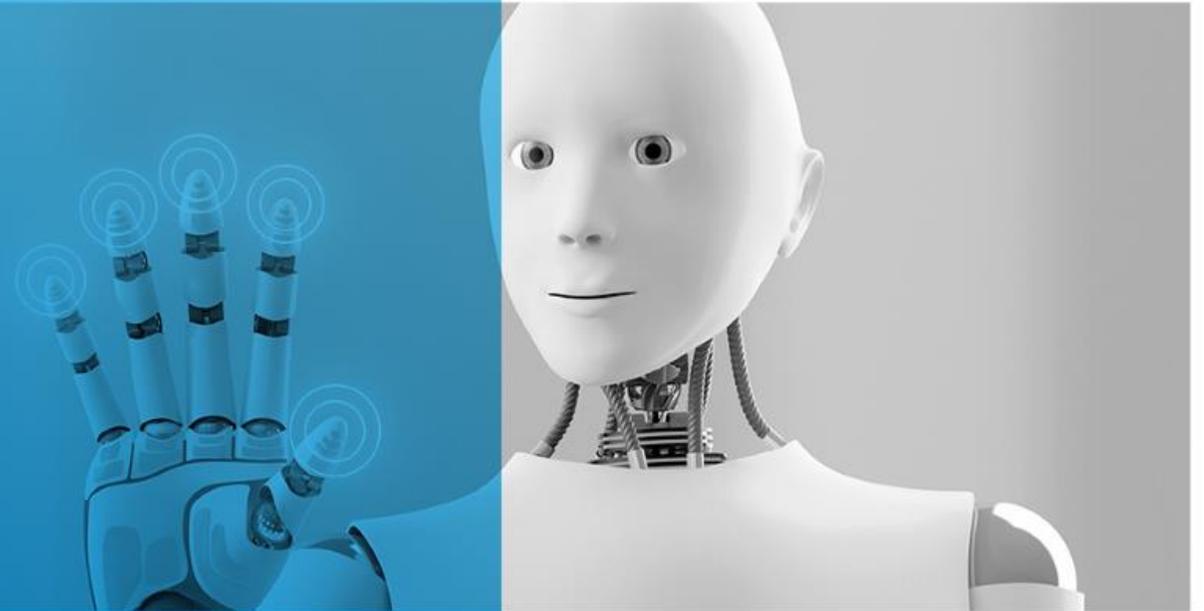
WITH THE HIGHEST  
ROBOT DENSITY,  
GERMANY IS EUROPE'S  
ROBOTICS & AUTOMATION HUB:

**371**

ROBOTS / 10,000 EMPLOYEES

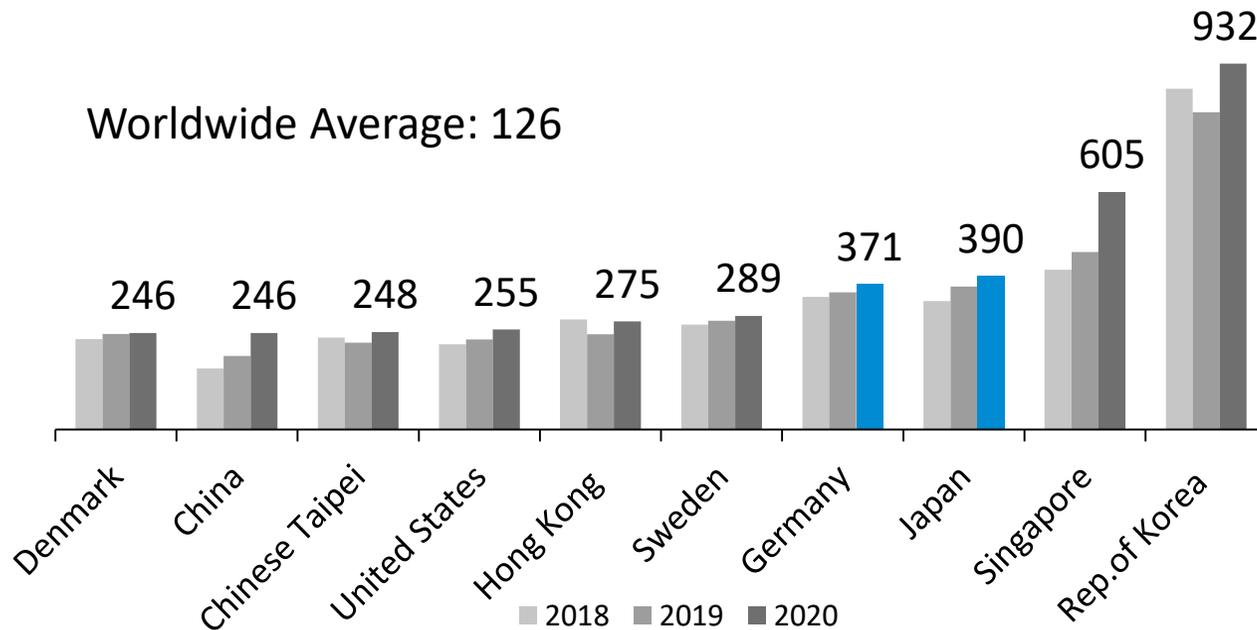
*Source: IFR World Robotics Report 2021*

*Picture: © Gettyimages*



# Robot density in the manufacturing industry - TOP 10 worldwide

Robots installed per 10,000 employees, 2020



**Japan # 3 , Germany # 4**

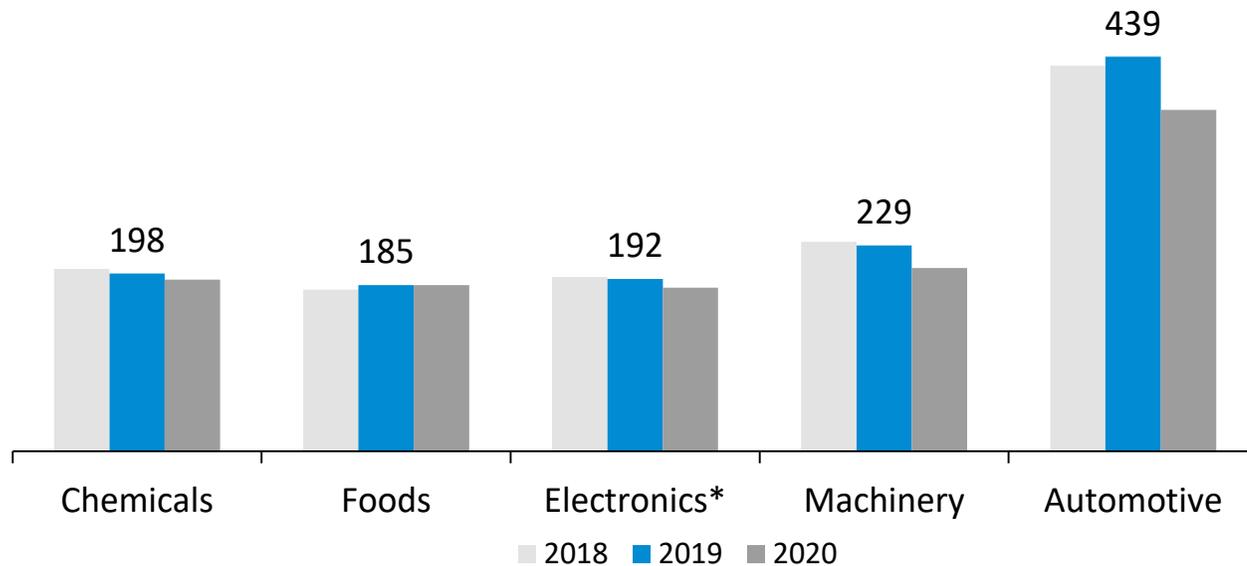
**Application in the  
Automotive industry –  
higher density**

**Japan: 1,269**

**Germany: 1,395**

# All major robotics application industries are in Germany.

Annual turnover of industry sector in Germany (in € bn.)



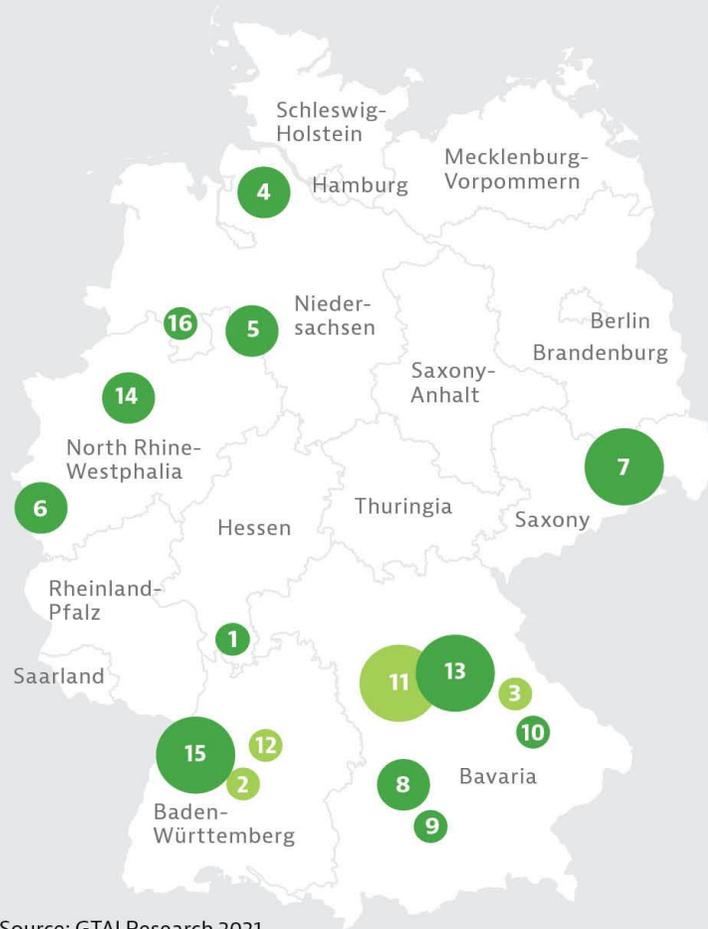
**Automotive industry:  
largest manufacturing  
sector and robotics  
customer in Germany.  
Robot density 1,395  
robots/10,000employees**

*\*without information technology*

*Source: Statista 2021*

# German Robotics Hubs

## Selected Robotics and Automation Clusters and Networks



Source: GTAI Research 2021

## Selected Clusters and Networks

- 1 Automatisierungsregion Rhein Main Neckar e.V.
- 2 Intralogistik Netzwerk in Baden Württemberg e.V.
- 3 Kompetenz Netzwerk Mechatronik in Ostbayern
- 4 Composites United e.V. (CU)
- 5 it's owl
- 6 REGINA e.V. – Regionaler Industrieclub Informatik Aachen
- 7 Silicon Saxony e.V.
- 8 Cluster Mechatronik & Automation e.V.
- 9 Robotics and Mechatronics Center at the DLR
- 10 Strategische Partnerschaft Sensorik e.V.
- 11 Automation Valley Nordbayern
- 12 Allianz Industrie 4.0 Baden-Württemberg
- 13 Forum MedTech Pharma
- 14 Digital Hub Logistics
- 15 BIOPRO Baden Württemberg
- 16 Agrotech Valley

## Clusters

- Small cluster (<85 member companies)
- Medium-sized cluster (85-200 member companies)
- Large cluster (>200 member companies)

## Networks

- Small network (<85 member companies)
- Medium-sized network (85-200 member companies)
- Large network (>200 member companies)

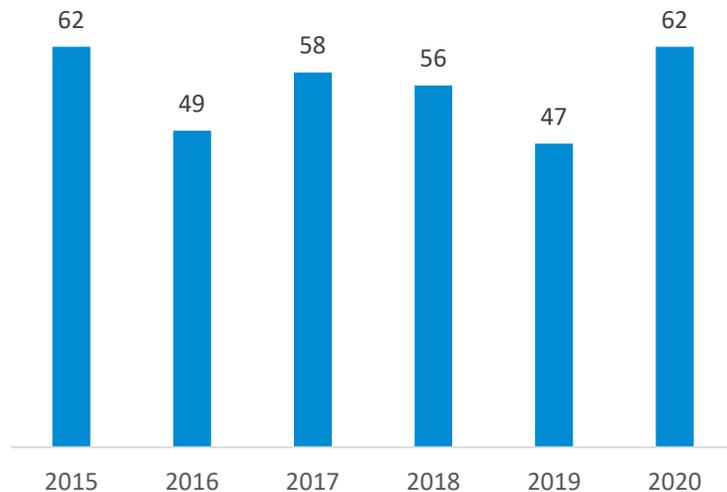
Source: webpages of the clusters

**Robotics clusters & networks are mainly located in manufacturing regions with a higher density of related industry & research**

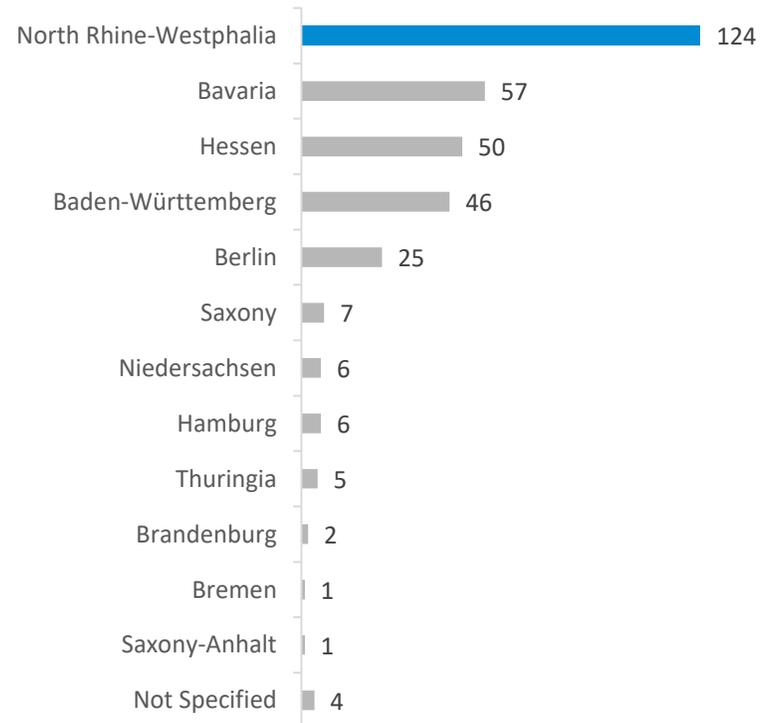
# Japanese FDI Projects

North Rhine-Westphalia ranks first in terms of Japanese FDI projects, followed by Bavaria and Hessen.

Number of Japanese Projects in Germany  
(2015-2020)



Number of Japanese Projects in Germany by Federal State  
(2015-2020)

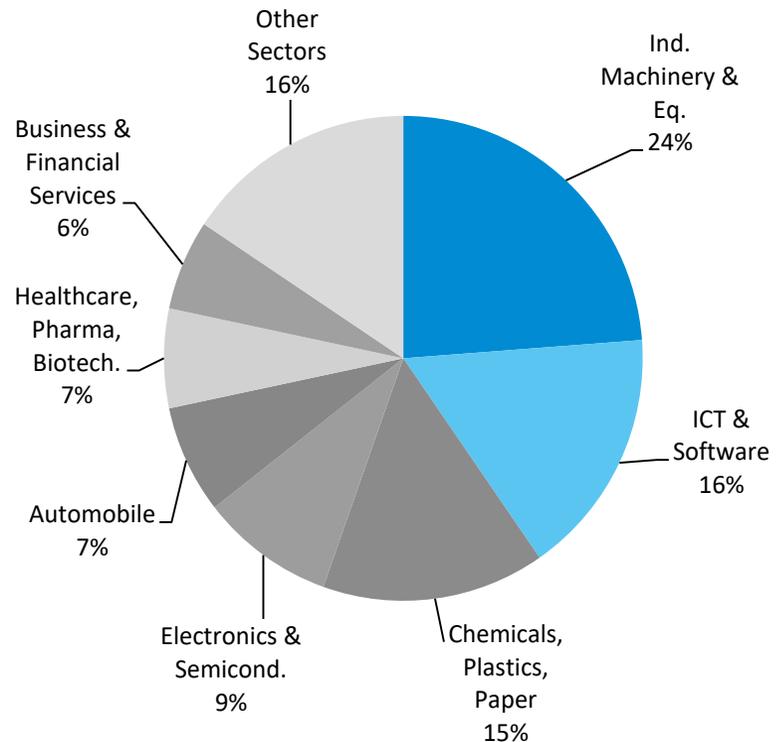


# Japanese FDI Projects

Industrial Machinery & Equipment was the main investment sector between 2015 and 2020.

## Japanese Projects in Germany (2015-2020)

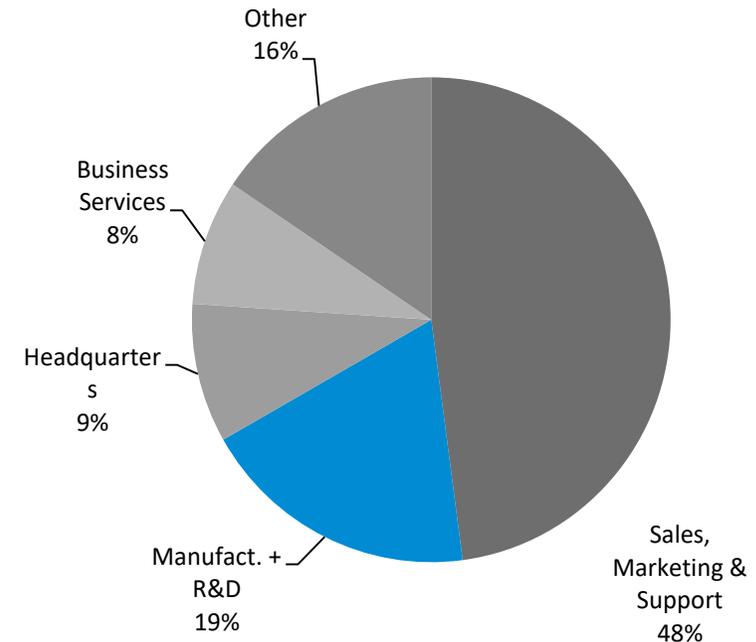
By Sector



Source: fDi Markets 2021

## Japanese Projects in Germany (2015-2020)

By Business Activity



Source: fDi Markets 2021

# Japanese FDI projects in Germany in the Robotics & Automation (R&A) industry

#1

Germany #1 Location in Europe  
for Japanese Machinery FDI

#2

Germany #2 Location in the World for  
Japanese Machinery FDI (USA #1, India #3)

#3

Japan #3 of worldwide Machinery  
FDI in Germany (Switzerland #1, USA #2)

79

Machinery FDI projects from  
Japan 2015-2020

25 %

Japanese R&A projects share  
(of all Japanese Machinery FDI)

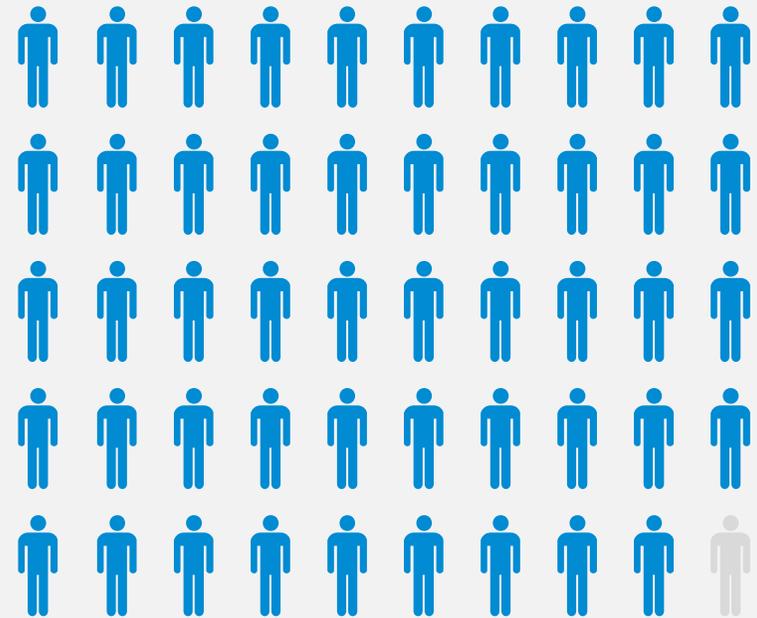
40 %

Of all Japanese FDI in Germany are  
in the Machinery and ICT sector

# Small and medium-sized companies are the backbone of Germany's economy

99%

of all German companies belong to the renowned Mittelstand



# Industrie 4.0 support for SMEs

Among the manifold support measures across Germany are:

- 26 Competence Center for SMEs advising companies with expert knowledge to make their way along the path to digitalization
- Demonstration Centers
- Test Centers
- Networks and events



**1,680**

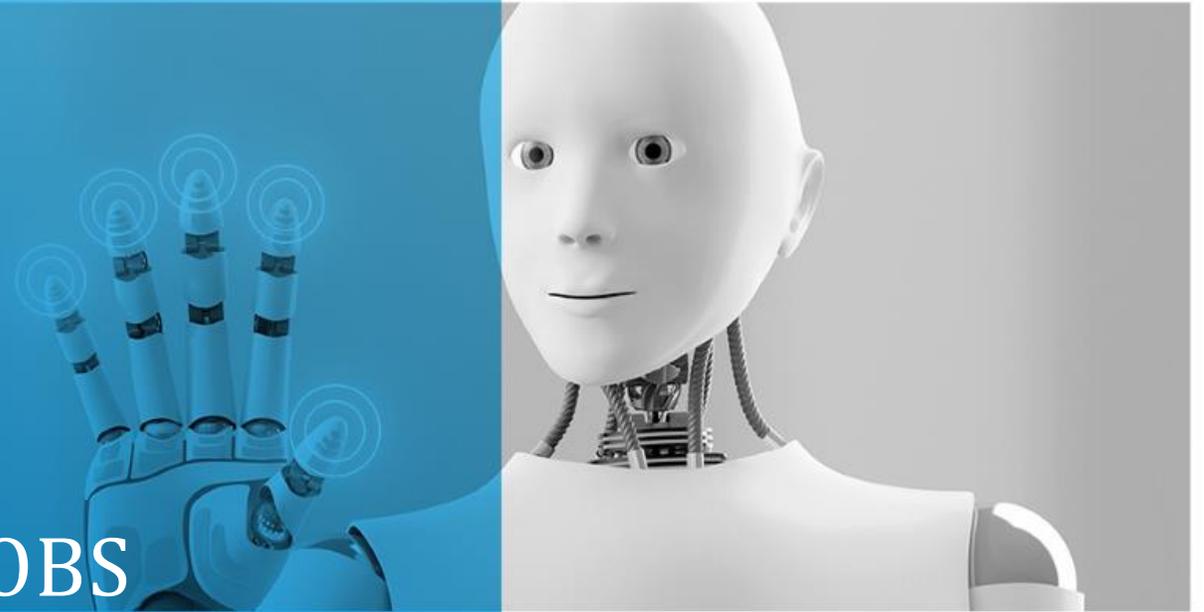
JAPANESE COMPANIES  
IN GERMANY

**165,700** JOBS

MORE THAN 12 %  
EMPLOYMENT IN THE  
MECHANICAL ENGINEERING

*Source: Markus Database 2021*

*Picture: © Gettyimages*



# Testimonial



Japanese companies have been investing in Germany for decades and have the longest history of Asian investment in Germany.

German company established in 1982. Continuous investment by the Japanese DAIHEN corporation at their 4 German locations.

Manufacturer of **welding robots**; supplies complete turnkey system solutions for industrial production to their German and European customers.

Developed and expanded their product and service range with the requirements of automation in production  
Industrie 4.0

# PROFESSIONAL SERVICE ROBOTS ENJOYED ROBUST GROWTH

# 41% GLOBALLY

TOP 5 APPLICATIONS:

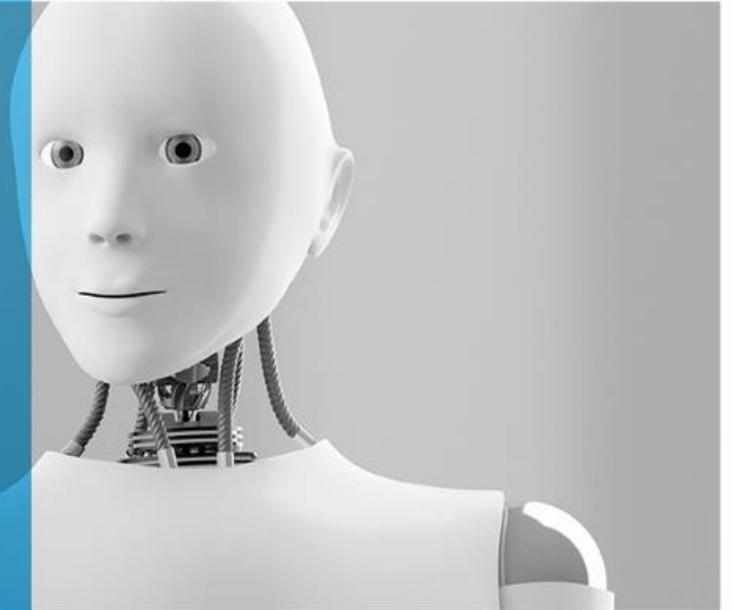
TRANSPORTATION & LOGISTICS,

PROFESSIONAL CLEANING, MEDICAL ROBOTICS,

HOSPITALITY, AND AGRICULTURE

Source: IFR World Robotics Report 2021

Picture: © Gettyimages



# Your contact to Germany Trade & Invest:

## GTAI Tokyo



**Hiroshi Iwamura**

Director Investor Consulting Tokyo  
Hiroshi.Iwamura@gtai.com

## GTAI Berlin



**Peggy Görlitz**

Senior Manager Investor Consulting  
Automation Technology & Robotics  
Peggy.Goerlitz@gtai.com

Thank you very much for your interest:

**[Peggy.Goerlitz@gtai.com](mailto:Peggy.Goerlitz@gtai.com)**

More information:

**[www.gtai.com](http://www.gtai.com)**