

# Diehl Controls

Company Presentation 2024

**FEEL THE DNA  
OF ELECTRONICS**

Corporate Marketing  
Wangen i. A., September 2024

# Diehl Controls Company Presentation

## Agenda

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01 | Diehl Group at a Glance

02 | Diehl Controls



# 01 | Diehl Group



# Diehl - Global Player with Tradition

Facts and figures Diehl Group 2023 (rounded)

**DIEHL**

## EMPLOYEES



17,700

## FAMILY-OWNED



Since 1902

## REVENUE



3,900 Mio. €

## R&D EXPENSES



340 Mio. €

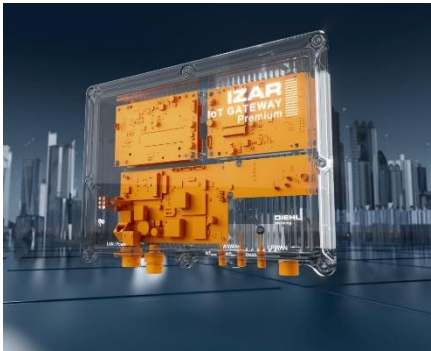
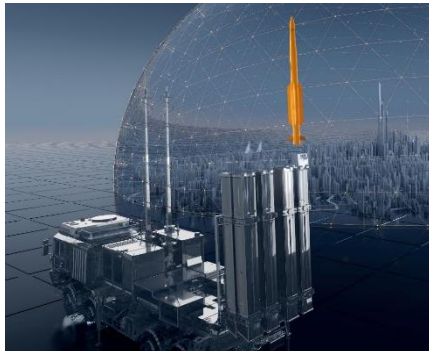
## CAPEX



230 Mio. €

# Diehl Group Corporate Divisions

Many solutions – one group.



## DIEHL Metall

Rods and tubes,  
Cell contact systems,  
Plated & stamped parts

800 Mio. €

3,050

## DIEHL Controls

Inverter solutions,  
High end displays,  
Industrial electronics

440 Mio. €

3,430

## DIEHL Defence

Ground-based air  
defence,  
ammunition,  
surveillance systems

1,140 Mio. €

3,770

## DIEHL Aviation

Cabin interiors,  
aircraft systems,  
supply systems

1,050 Mio. €

4,950

## DIEHL Metering

Water and energy  
metering,  
submetering solutions,  
Connectivity

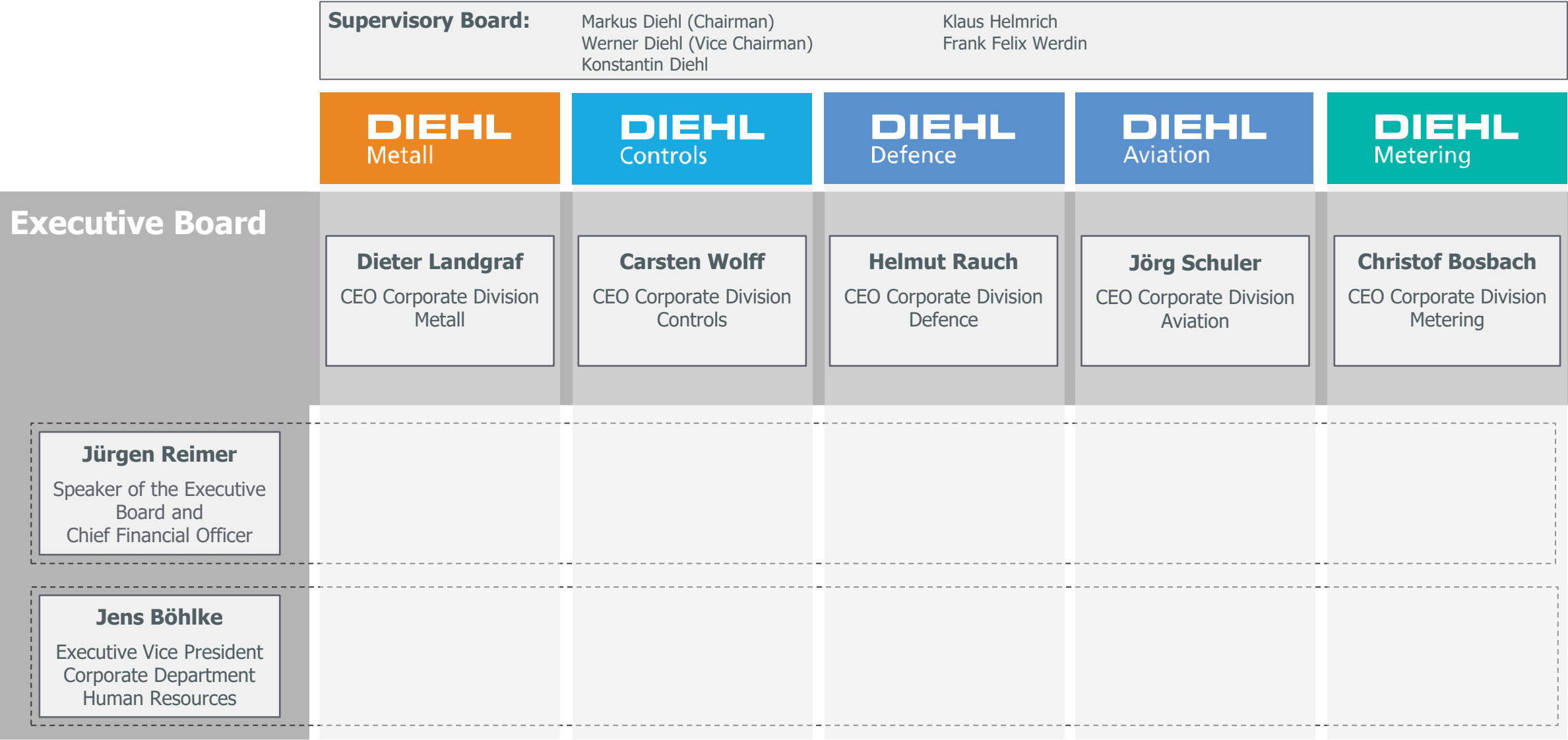
430 Mio. €

1,830



# Diehl Group Corporate Organisation

Organizational chart



# 02 | Diehl Controls



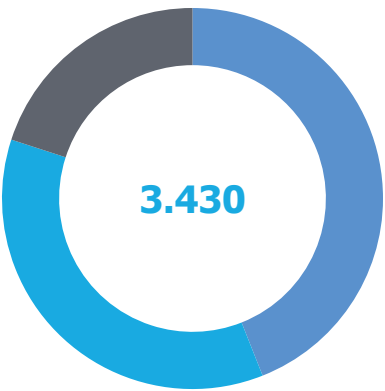
# Diehl Controls at a Glance

Globally positioned hidden champion, headquartered in Germany

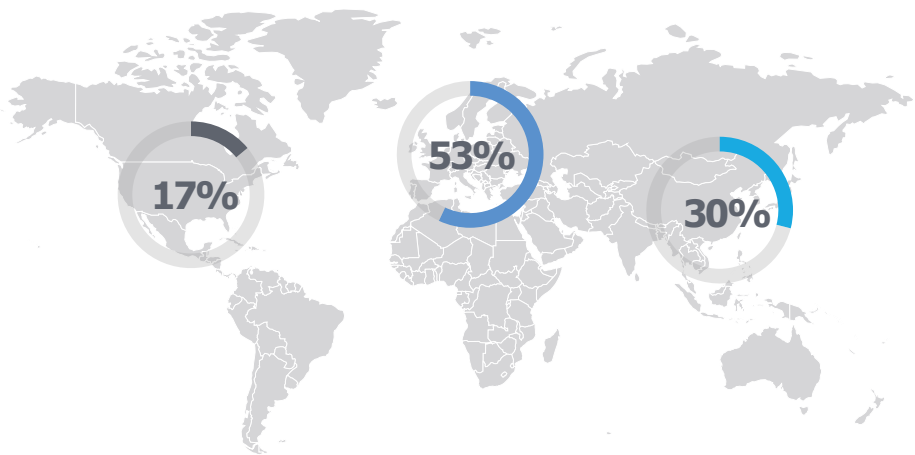
## Revenue 2023 (Mio. € )



## Employees 2023\*



## Revenue in percent by geography in 2023



\* by geography as of 12/2023



# Creating Value for our Global Customer Base

Diehl Controls aims to raise the value of our customers' products

- We create **ambitious electronic solutions** and **value chains** for the individual challenges of our **global industrial customers**
- We are global technology and production experts – enhancing the **sustainability, reliability and user experience** of our customers' products
- We are running **dedicated operating models, custom-tailored** to the **needs** of the **industries** we serve
- As a technology leading partner, we provide innovative **electronic solutions and supply chains** to our global customer base in our focus markets
- We combine excellent expertise at optimized costs in **Power & Control Electronics, Drive Electronics, Connectivity & Gateways** and **Human Machine Interfaces**



## Broad Customer Base (exemplary)

Trusted by blue chip companies of our focused markets

**Alliance**<sup>TM</sup>  
Laundry Systems

B/S/H/

*Danfoss*

 **Electrolux**

 **FPT**  
POWERTRAIN TECHNOLOGIES

 **General  
Electric**

**Haier**

**Hisense**

**mabe**

**MELING**

**Miele**

**Panasonic**

**PHNXX**

**RATIONAL**

**RITTAL**  


 **SCHULTHESS**

**STIEBEL ELTRON**

 **Vaillant**

 **Whirlpool**

**winterhalter**  


# Diehl Controls History

Electronics: within our DNA since the beginning



Patenting of an electric fence by Paul Kolb (1942);  
**Foundation of „Apparatebau Kolb (AKO)“**

1945



Erection of the new **factory in Wangen**. In 1967 it became headquarters of AKO

1962



**AKO becomes part of** the Nuremberg based **Diehl Group**. Beginning of dedicated Inverter development

1995



**Factory of the Year 2015**  
In recognition of the continuous improvement of all processes Diehl Controls receives the Factory of the Year award

2015



1950s

New building in Kisslegg and Paul Kolb's return to the Allgäu.  
  
Time of growth. Manufacturing heaters and infrared radiators as well as the **electronic control for** the first automatic AEG-LAVAMAT **washing machine**

1970s/80s

**Establishment of an electronics department** and entry of Peter Kolb as future successor for his father

2000s

**Diehl Controls goes global.** Establishment of the foreign locations in Poland, China, USA and Mexico

2024




Dedicated **Strategy "DC30"** is being implemented to expand into the global **HVAC/R and Industrial Electronics** markets



# Dedicated Market Focus

With our excessive electronics competence we serve several high demanding markets



 <b>Markets</b>	<b>HOME APPLIANCE</b>	<b>PROFESSIONAL APPLIANCE</b>	<b>HVAC/R</b>	<b>INDUSTRIAL ELECTRONICS</b>	<b>AEROSPACE &amp; DEFENSE</b>
 <b>Applications</b>	Laundry care, cooking, refrigeration, dish care, SDA	Laundry care, cooking, dish care	Heating, ventilation, air conditioning, prof. refrigeration	Various industrial applications	Guided missiles, air defense, lavatories, smoke detector
 <b>Solutions</b>	HMI, main control, inverter, connectivity	HMI, main control, inverter, connectivity	Inverter, main control, HMI, connectivity	Industrial controller, battery management systems	Controller, boards, complex electronics

# Diehl Controls Competencies

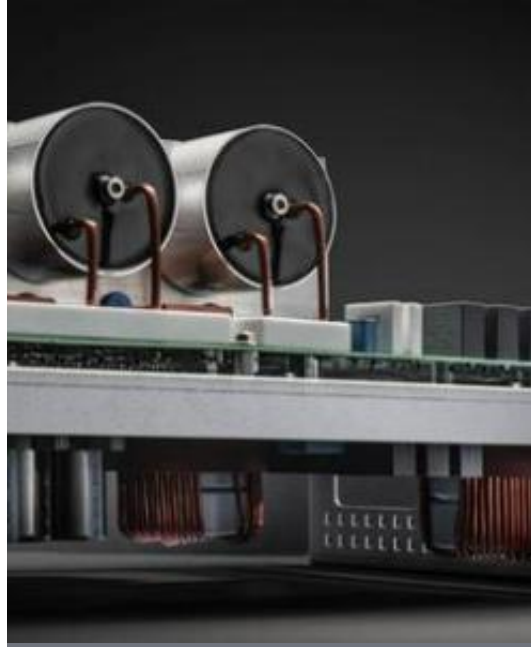
Main product competence areas



## Power & Control Electronics

25 million products  
per year

35 years expertise



## Drive Electronics

5 million products  
per year

30 years expertise



## Connectivity & Gateways

2 million products  
per year

15 years expertise



## Human Machine Interfaces

20 million products  
per year

25 years expertise

| Dry

Care



Smart

Temp. High

120<sup>min</sup>



Quick  
30<sup>min</sup>



Wool  
120<sup>min</sup>



Shirts  
68<sup>min</sup>



Silk  
25<sup>min</sup>







**Ultra Wide TFT**  
9.5 Inch TFT



**Smartphone Feeling**  
Touch Screen, Video



**Dead Front**  
Panel integration



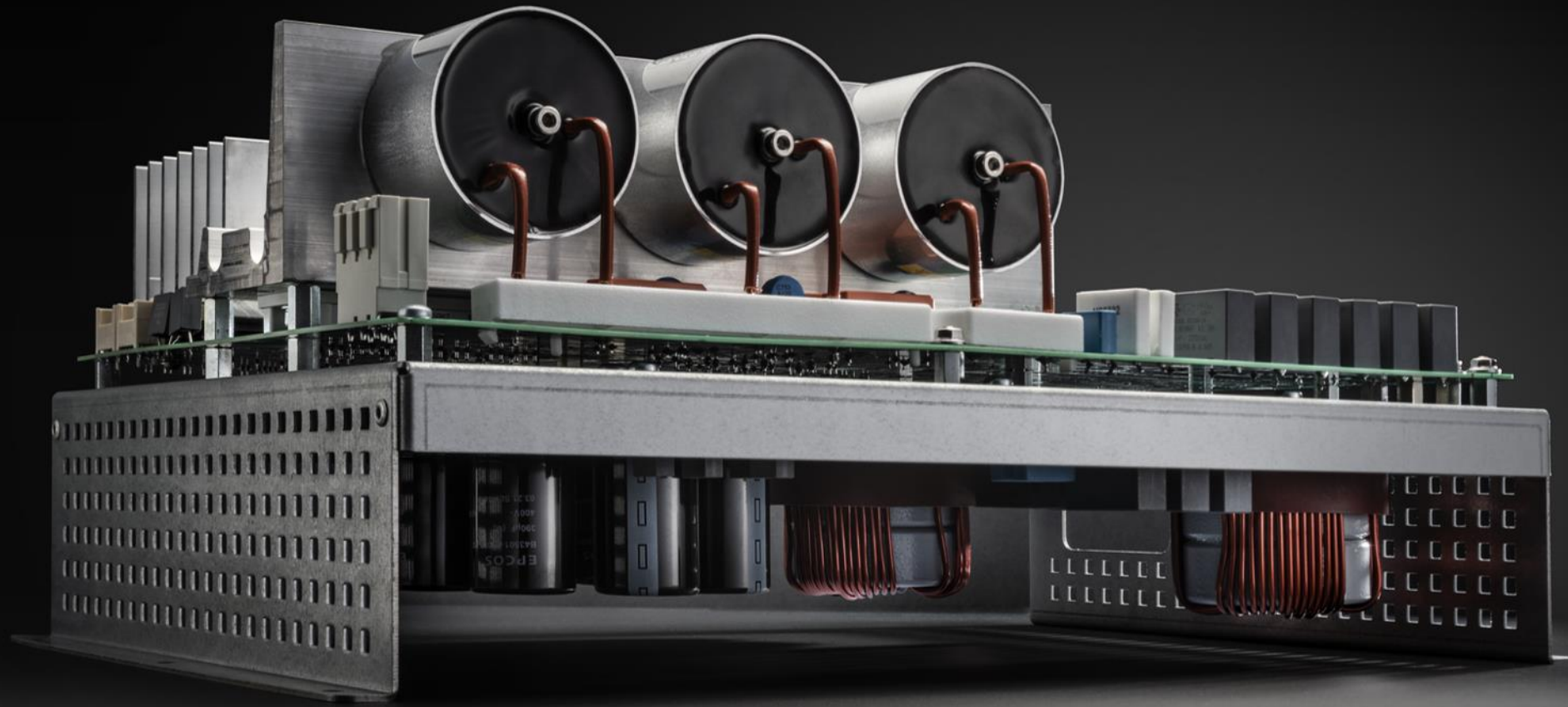
**Operating Systems**  
Linux OS, Android OS

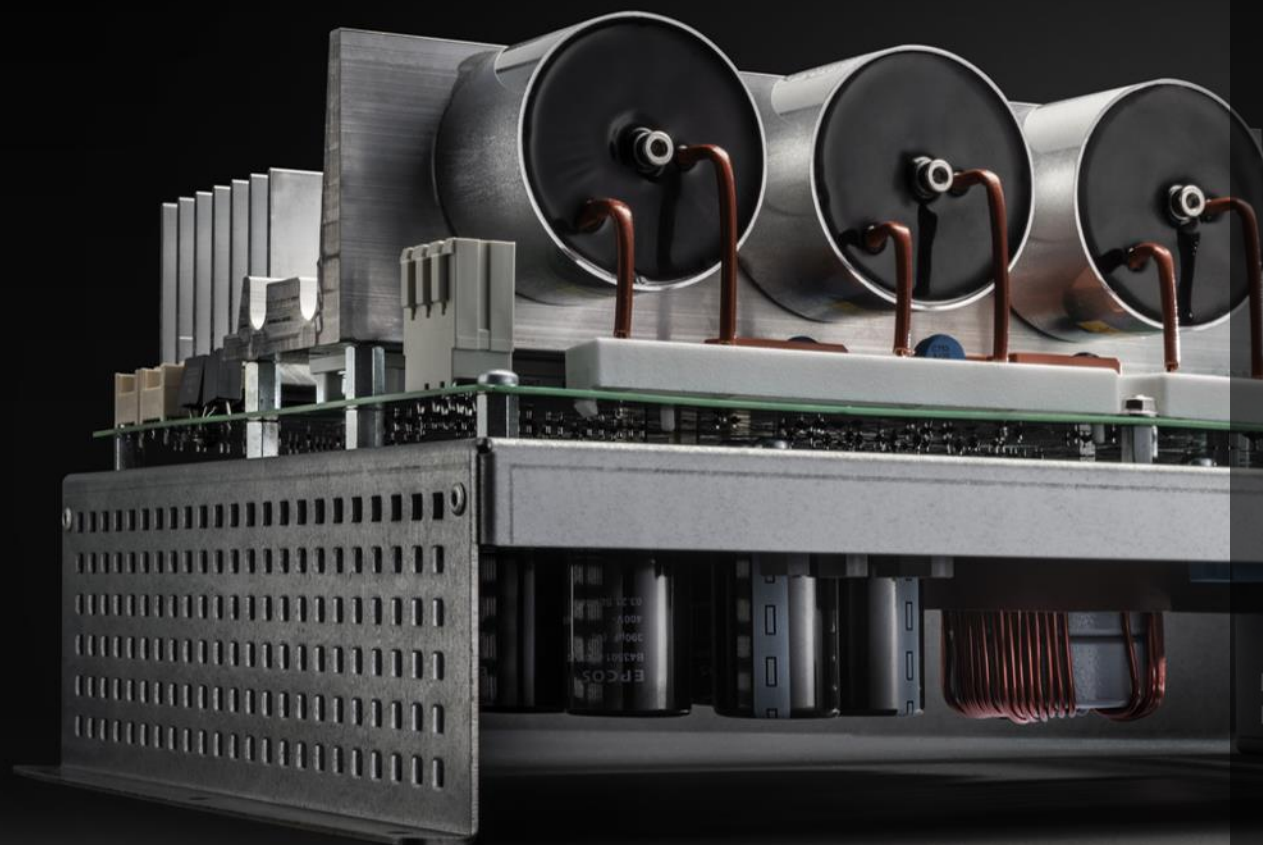


**Connectivity**  
Wifi & BT supported



**Product Branding**  
3rd party software





**Full Power Range**  
<1-11 KW, 230 V/400 V



**Active PFC**  
PF 1 for 3 phase grid



**SIP Topology**  
high energy efficiency



**Flammable Refrigerant**  
approved system



**Functional Safety**  
protecting the system



**Data Monitoring**  
predictive maintenance



# Global Industrial Footprint

Throughout a global network of existing sites and expansion projects we serve our customers local for local



## USA

7 employees  
sales hub



## GERMANY

440 employees  
1.2 Mio electronics p.a.



## POLAND

1.090 employees  
13 Mio electronics p.a.



## CHINA (QD)

Up to 330 employees  
Up to 4.6 Mio elect. p.a.



## MEXICO

710 employees  
9 Mio electronics p.a.



## ROMANIA (2025)

Up to 600 employees  
Up to 6.8 Mio elect. p.a.



## CHINA (NJ)

1.040 employees  
15.8 Mio electronics p.a.

# Global Production Locations

A global company, headquartered in Germany, serving customers with a local production footprint

						
	<b>GERMANY</b> Wangen (HQ)	<b>POLAND</b> Namysłów	<b>Romania</b> Brasov	<b>CHINA</b> Nanjing	<b>CHINA</b> Qingdao	<b>MEXICO</b> Querétaro
 Production lines	1 Speed- / 3 SMD line 4 Selective soldering / 2 Wave soldering lines	3 Speed- / 13 SMD lines 8 Wave soldering lines	6 SMD lines 3 Wave soldering lines	14 SMD lines 9 Wave soldering lines	4 SMD lines 2 Wave soldering lines	7 SMD lines 6 Wave soldering lines 5 Conformal coating lines
 Electronics p.a.	1.2 Mio	13 Mio.	up to 6.8 Mio.	15.8 Mio	4.6 Mio.	9 Mio.
 Production space	7,000 Sqm	9,700 Sqm	5,975 Sqm	15,200 Sqm	5,540 Sqm	4,500 Sqm
 Prod. Employees	300	680	up to 600	710	115	550



## Electronic Manufacturing Services

Sourcing according to customer product design and Bill of Material

Production setup according to customer manufacturing process requirements

C- and D-Samples

Production release

Series and Aftermarket production



## Product and/or manufacturing enhancement services

Rapid prototyping services

Strategic purchasing services

Design to cost services

Eco-design improvement services

Design verification services

Design to robustness services

Design to manufacturing services

Design to test services

Production systems services

Approbation management services



## Full product development and industrialization services

System Architecture

Electronic Design

Mechanic Design

Software Design

Industrialization

A-, B-, C- & D-Samples

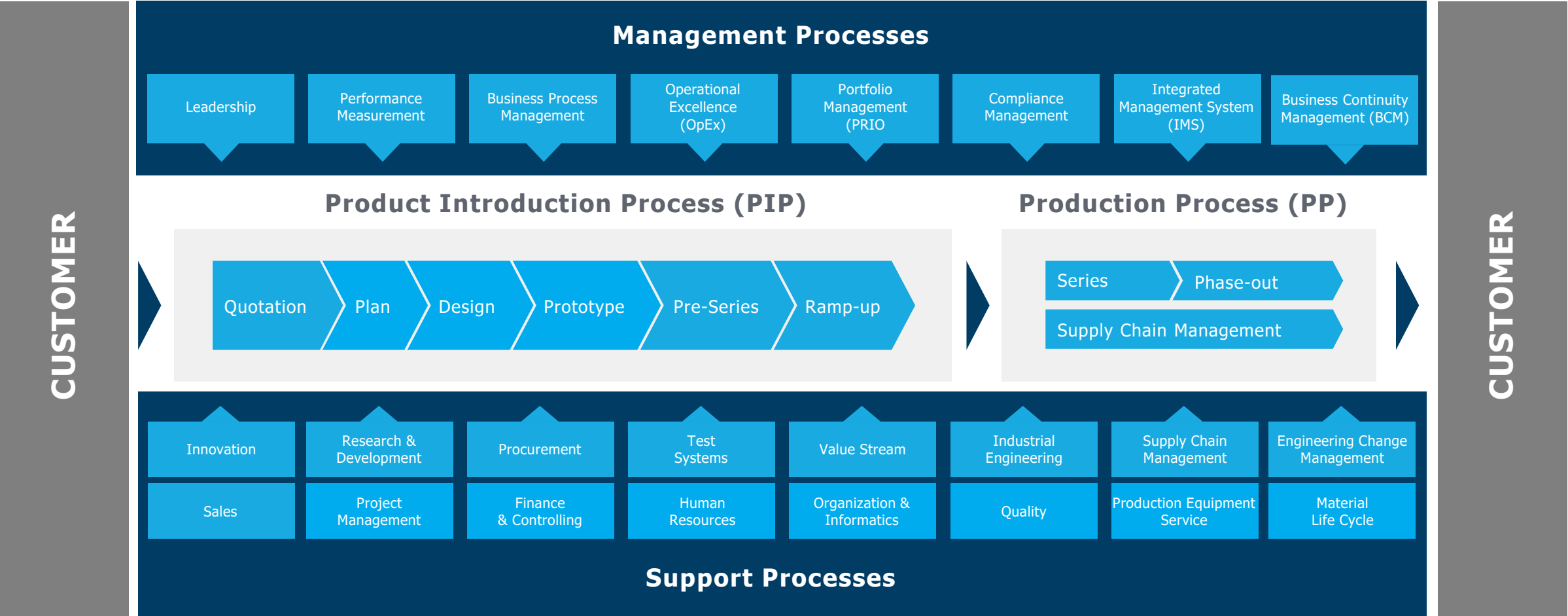
Qualifications and Certifications

Series and Aftermarket production



# Process Competence

Integrated processes landscape ensures highest quality standards of our products



## ENVIRONMENT

Environmental aspects play a **key role** in our daily doing. Focus areas are:

- **CO<sub>2</sub> footprint** (Scope 1-3) and SBT aligned **reduction targets of 38% until 2030\***
- **Products** and **ECO design of these** to reduce the environmental footprint
- **Energy efficiency** in our processes incl. ISO14001 certification of all sites

## GOVERNANCE

Sustainability is firmly embedded in our **governance** through

- Sustainability ratings (**e.g. CDP**)
- **Supplier assessments** with **EcoVadis**
- Diehl Group **Code of Conduct** and transparency guidelines



## SOCIAL

**Employees** and **society** are integral part of Diehl Controls

- **High global health standards**
- Employee **trainings**
- **Diverse recruiting process** throughout all hierarchy levels

# Feel the DNA of Electronics

With everything we do at Diehl Controls we contribute to our customers success

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At Diehl Controls, electronics is not just our business, but our passion and our heritage. We live the DNA of electronics in every aspect of our work - from development to production. In each of our innovative products, our customers feel the precision, quality, and pioneering spirit that define us.



# THANK YOU!

## **DIEHL CONTROLS**

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