

December 2021

# Investors Presentation

Andreas Müller (CEO), Mads Joergensen (CFO) and Daniel Bösiger (IR)

# Pioneering industrial technology

for more than 200 years

**+GF+**

1802

## GF Corporate

GF founded in Schaffhausen



1864

## GF Piping Systems

First piping systems product



1897

## GF Casting Solutions

First automotive part



1921

## GF Machining Solutions

First machinery



1802: Johann Conrad Fischer | 1864: Malleable iron fitting | 1897: As of 1900 GF develops wheels made of cast steel for trucks and cars | 1921: GF acquires the Machine Factory Rauschenbach for agricultural machinery

# Today GF stays at the forefront

of new technologies

+GF+

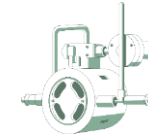


23%

GF Casting  
Solutions

54%

GF Piping  
Systems



23%

GF Machining  
Solutions



- Sales 2020 CHF 3.184 billion, EBIT before one-offs CHF 185 million and 14'118 employees
- Our core strength lies in applying **state-of-the-art industrial technologies**
- We specialize in developing tailored solutions to meet the **needs of our customers**
- We operate in markets with high technology, complex processes and certification requirements

# A global footprint with local services

**+GF+**

Present in 40 countries



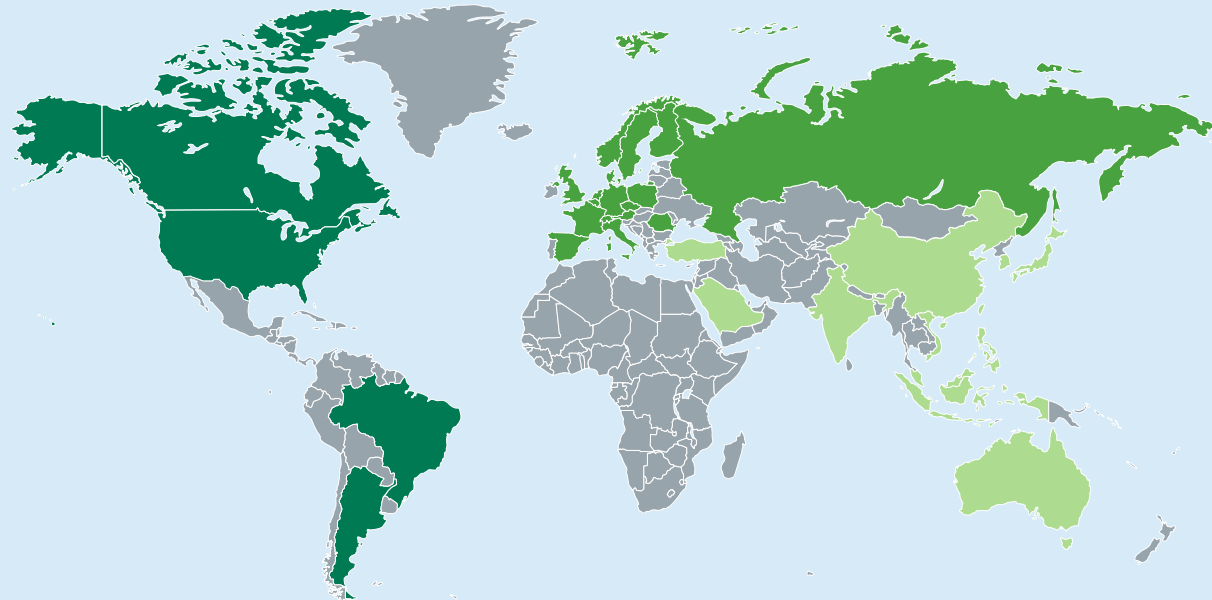
83 production sites



113 sales sites



11 R&D centers



## Americas



12



13



2

## Europe



32



43



7

## Asia Pacific



39



57



2



# We have an impact on every day life

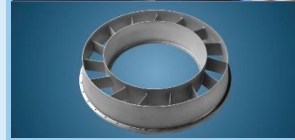
**+GF+**



6 am



7 am



9 am



2 pm

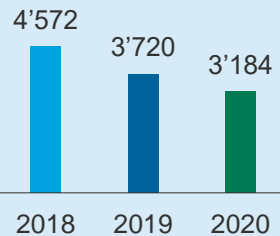


8 pm

# FY 2020 key financial figures – three years overview

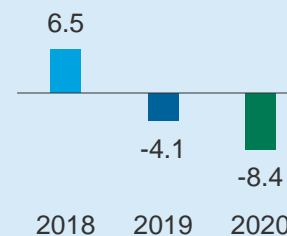
3'184

**Sales**  
in CHF million



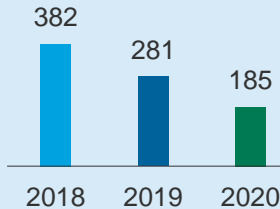
-8.4

**Organic growth**  
in %



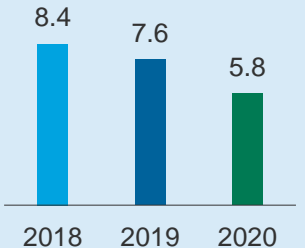
185

**EBIT**  
before one-offs in  
CHF million



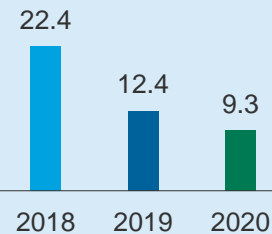
5.8

**EBIT margin**  
before one-offs in %



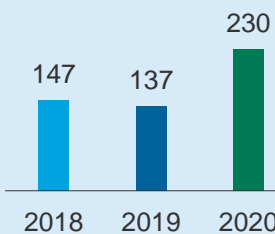
9.3

**ROIC**  
in %



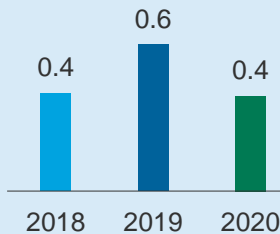
230

**FCF bef. acq./divest.**  
in CHF million



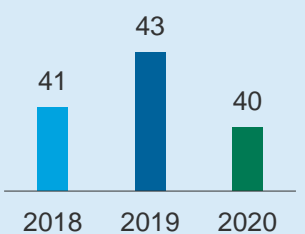
0.4

**Net debt / EBITDA**  
(multiple)



40

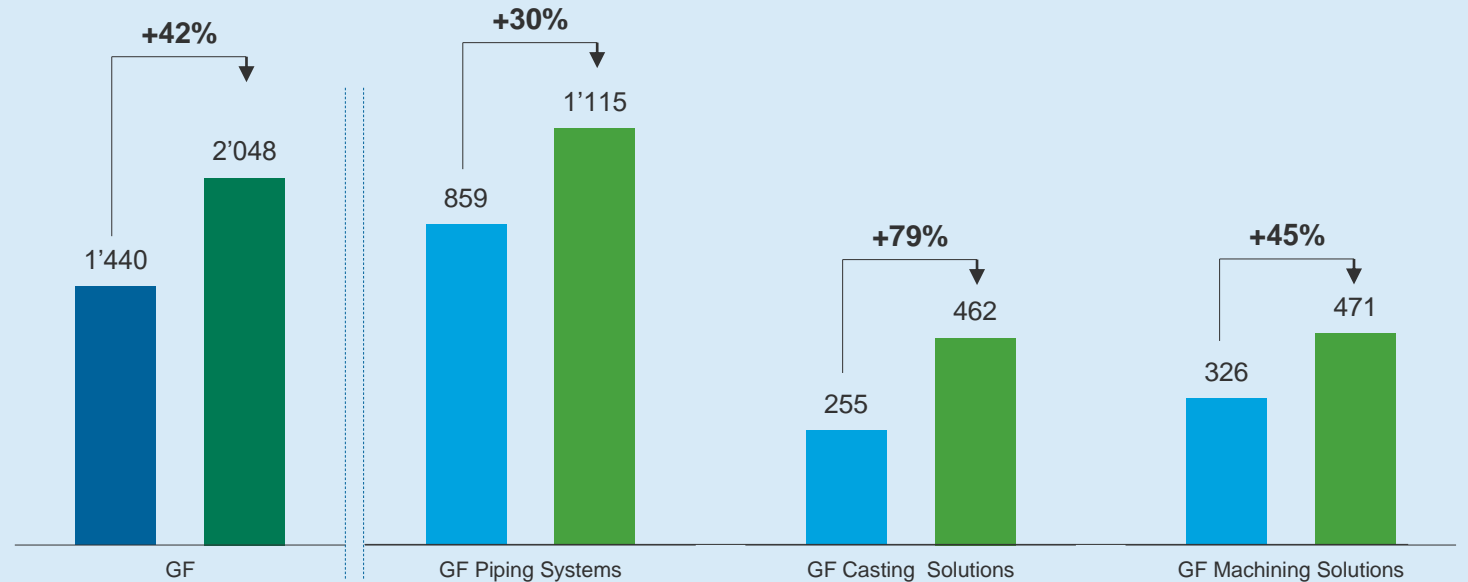
**Equity ratio**  
in %



# Strong order intake in all divisions per H1 2021



## Order intake in CHF million



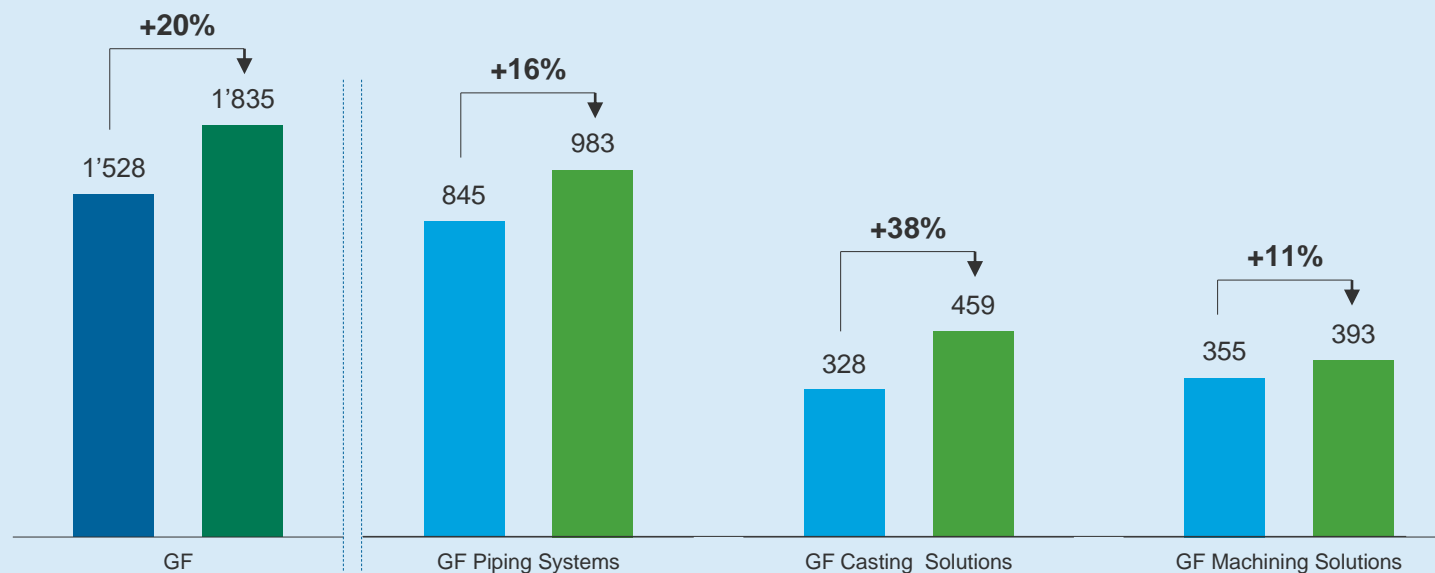
■ H1 2020 ■ H1 2021 — Organic growth

# Strong recovery in all divisions per H1 2021



## Sales

in CHF million

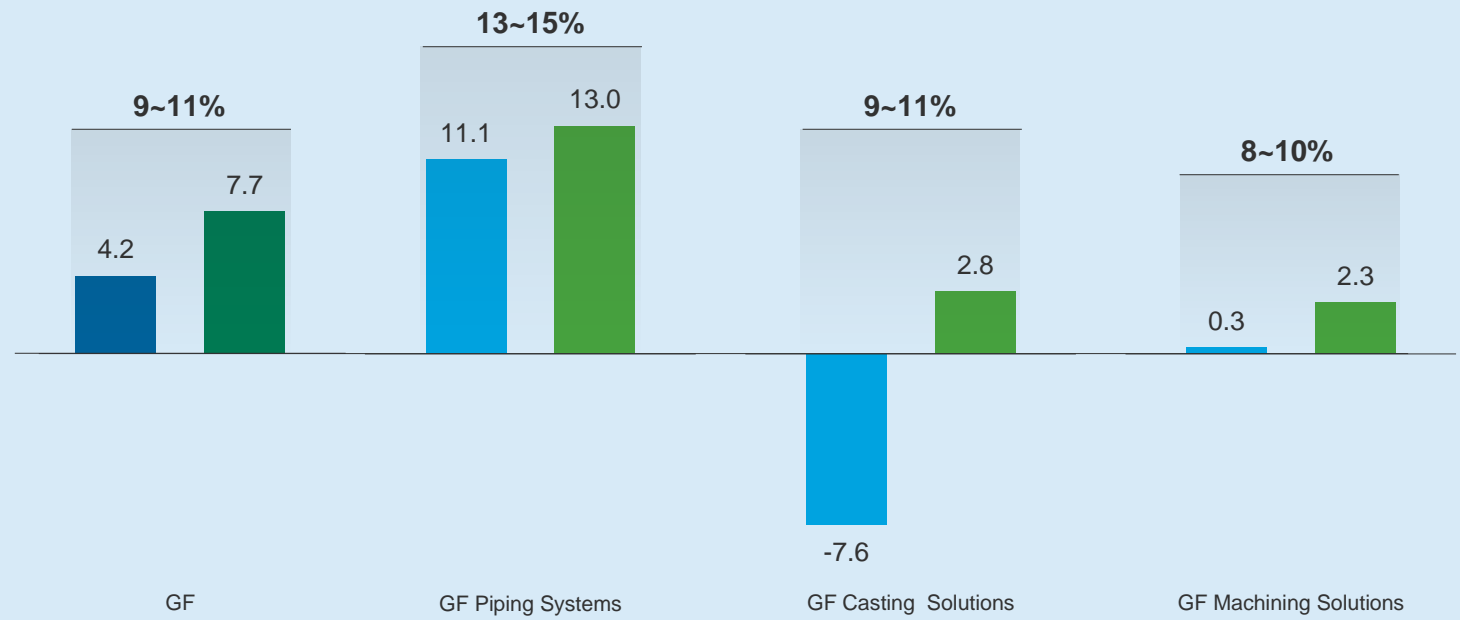


■ H1 2020 ■ H1 2021 — Organic growth

# Significant increase in profitability per H1 2021



## EBIT margin in %



■ H1 2020   
 ■ H1 2021   
 — Strategic objectives in 2025   
 \* before one-offs in H1 2020



# Our Vision



# #1



**GF is a sustainability and innovation leader**  
providing superior customer value



**Our strategy is about  
profitable growth**  
with emphasis on resilience and learning

## Piping Systems

Sales  
**CHF 2.2 bn**

Return on sales  
**13 – 15%**

Return on invested capital  
**20 – 24%**

## Casting Solutions

Sales  
**CHF 1.1 bn**

Return on sales  
**9 – 11%**

Return on invested capital  
**18 – 22%**

## Machining Solutions

Sales  
**CHF 1.1 bn**

Return on sales  
**8 – 10%**

Return on invested capital  
**20 – 24%**

## Corporation

Sales  
**CHF 4.4 – 5.0\* bn**

Return on sales  
**9 – 11%**

Return on invested capital  
**20 – 22%**



- 1 **Drive profitable growth** through intelligent and sustainable solutions
- 2 **Increase robustness** through resilient portfolio and operational excellence
- 3 **Evolve culture** towards more performance and learning

# Global trends offer great opportunities



Urbanization



Renewable energy



Data centers



Water treatment



E-Mobility



Digitalization



Global trends driven by sustainability needs



# Sustainability is an integral part of our strategy



## Product Portfolio



70% of sales with social or environmental benefits



## Climate & Resources



21% absolute CO<sub>2</sub> emissions footprint reduction



## People & Well-being



30% accident rate reduction





# Sustainability is fully integrated and part of our culture

We support our customers' success with **innovative, energy-saving solutions** to make the **collective global footprint** more **sustainable**

In our 219 years of history, we have continuously pioneered quality and standards. Our innovations, not limited to technology, apply also to the way we **conduct our business** and **care for society**



## GF Piping Systems

Safe & hygienic transport of water



## GF Casting Solutions

Reduction of CO<sub>2</sub>-emission through lightweight design & materials



## GF Machining Solutions

Highest machining precision leads to more energy-efficient and safer components



# Sustainability investments in production facilities world-wide...



Focus on **energy efficient capex** – electric injection molding machine at GF Piping Systems in Schaffhausen (Switzerland)



New **energy efficient LED lights** installed throughout the production facility at GF Harvel, Little Rock (USA)



Employees and product affected by high and low temperatures > Roof upgrade to include weather coating to **reduce cold/heat fluctuations** at GF LLC, Irvine (USA)



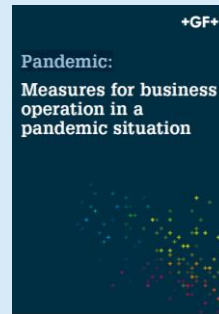
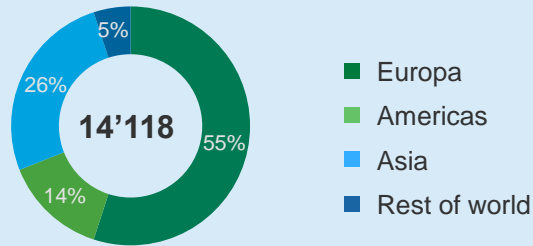
**Silver certification** under the **LEED** rating system to be applied for by GF Casting Solutions site in Shenyang North China (China)

# ... and social responsibility is at the heart of GF



## Safety first!

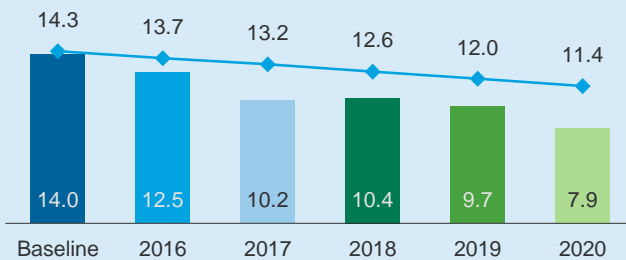
### Employees per region



### Accident rate

(per 1'000'000 working hours)

◆ Target line

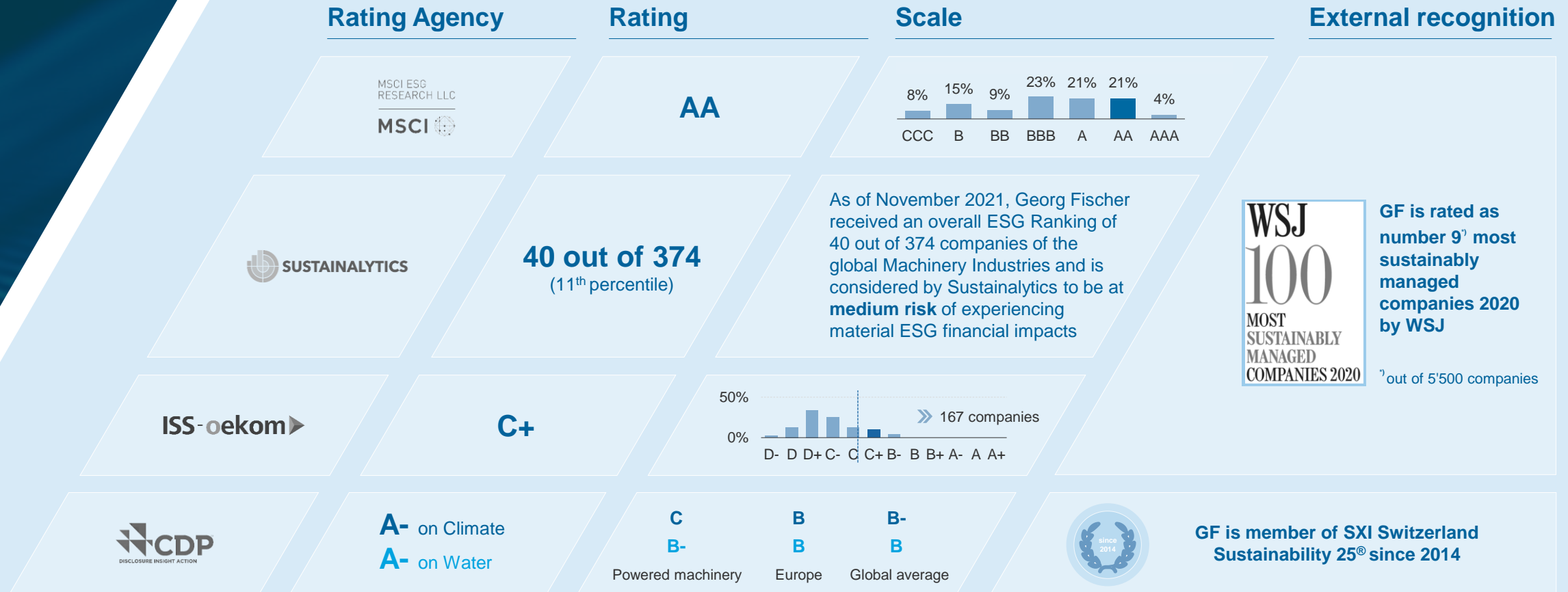


## Employer attractiveness

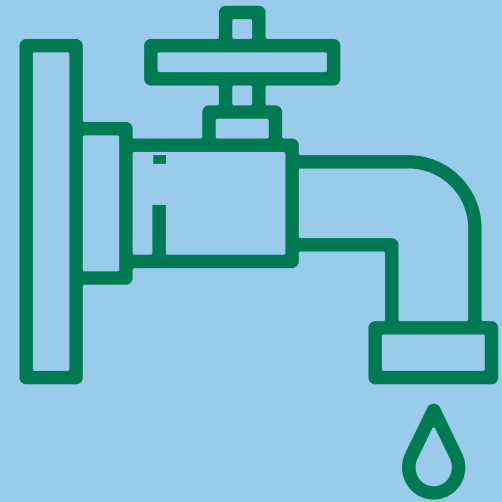
Efforts to enable flexible working models and support employees in balancing family & work

Continuous work on modernizing the production and working facilities to create ergonomic and collaborative spaces

# Our ESG efforts are clearly recognized by leading agencies



# GF Piping Systems

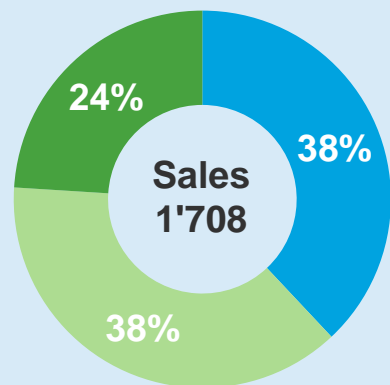




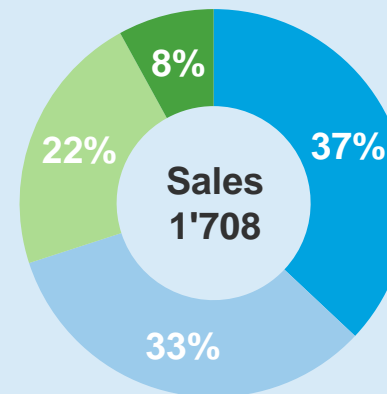


# Business Overview

(Sales 2020 in CHF million)



- Utility
- Industry
- Building Technology



- Europe
- Asia
- Americas
- Rest of world

## Utility

Market Trend:



**Position:** World #1 for PE electrofusion fittings

**Major competitors:** Aliaxis, Mexichem (Wavin), Agru

## Industry

Market Trend:



**Position:** International market leader

**Major competitors:** Simona, Aliaxis, Spears, Watts Water, Sekisui, Asahi, Yukizai, Agru

## Building Technology

Market Trend:



**Position:** Switzerland #1, Leading in selected markets

**Major competitors:** Simona, Aliaxis, Spears, Watts Water, Sekisui, Asahi, Yukizai, Viega

# Sustainability drives business



GF Piping Systems



NeoFlow Pressure  
Regulating Valve



Global **drinking water loss** per year:  
126 billion litres



Neoflow – The Solution of GFPS  
for **pressure management**



- 75% reduction in **pipe bursts** by decreasing excess pressure by 25%
- 5% reduction of **water leakage** can save up to 225k mt of CO<sub>2</sub> annually
- Savings on **installation time** by up to 40%



# Groundbreaking customer solutions

1

We are a **leading supplier** of piping systems made of plastics and metal

2

We focus on system solutions and **high-quality components** for the **safe transport** of water, chemicals and gases

3

Our product portfolio of fittings, valves, pipes, automation and jointing technologies covers all **applications** of the water cycle





# Our customers

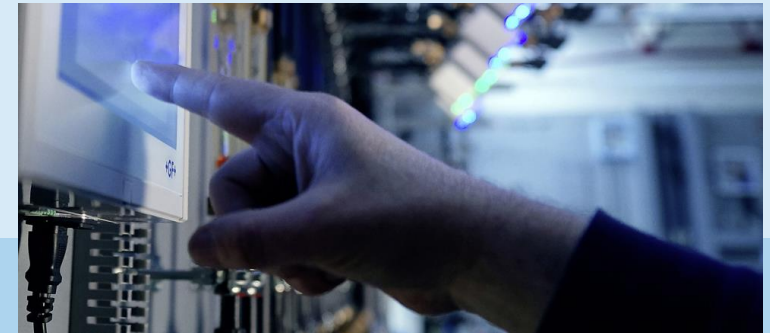
## Industry



## Utility



## Building Technology

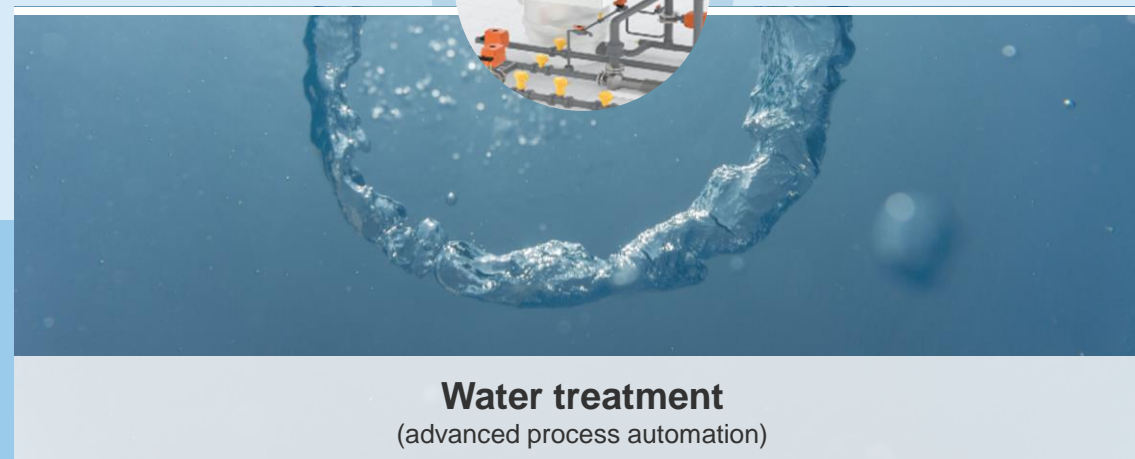




# Providing quality to our customers through safe and secure piping systems



**WBI Weld Bead Inspection**  
(WBI) Tool

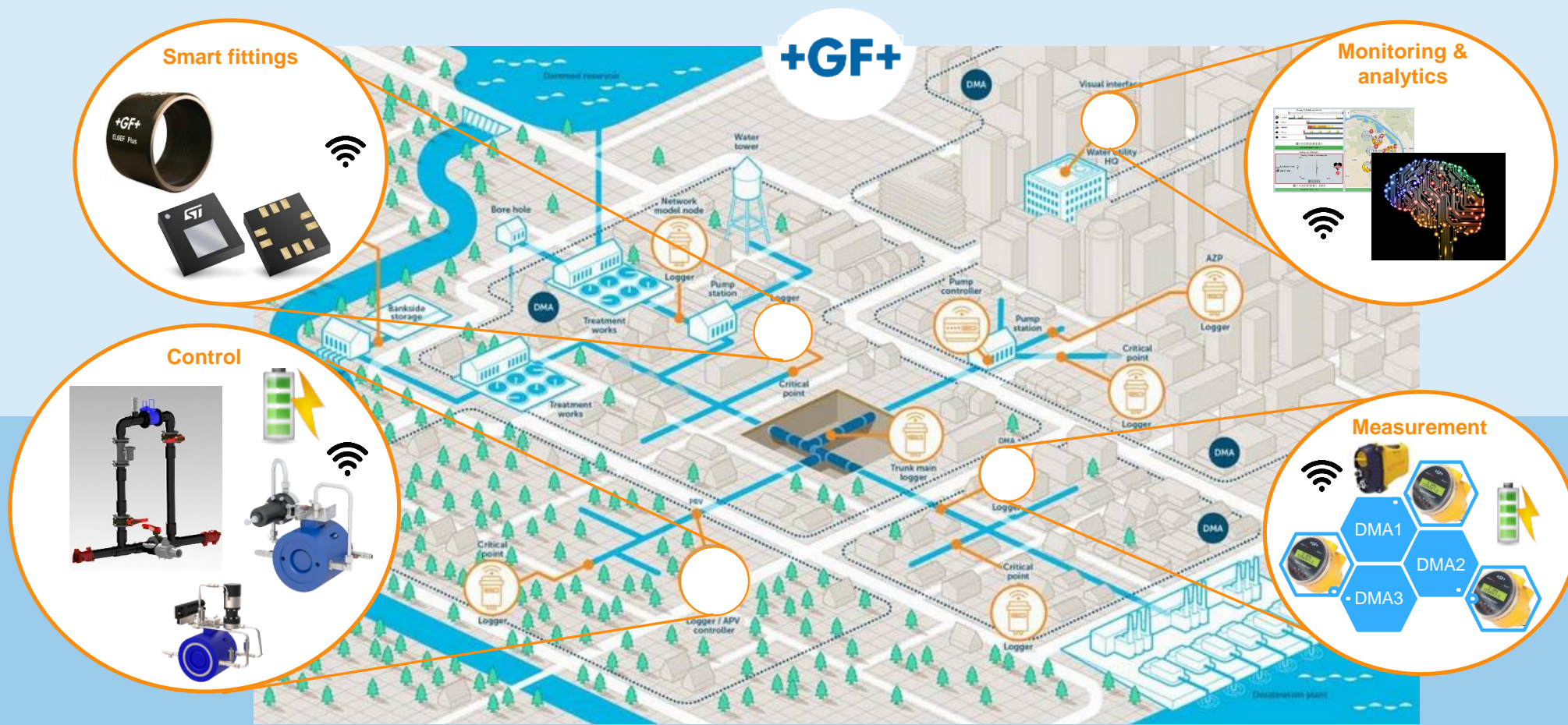


**Water treatment**  
(advanced process automation)





# Plant and network monitoring processes will become more connected





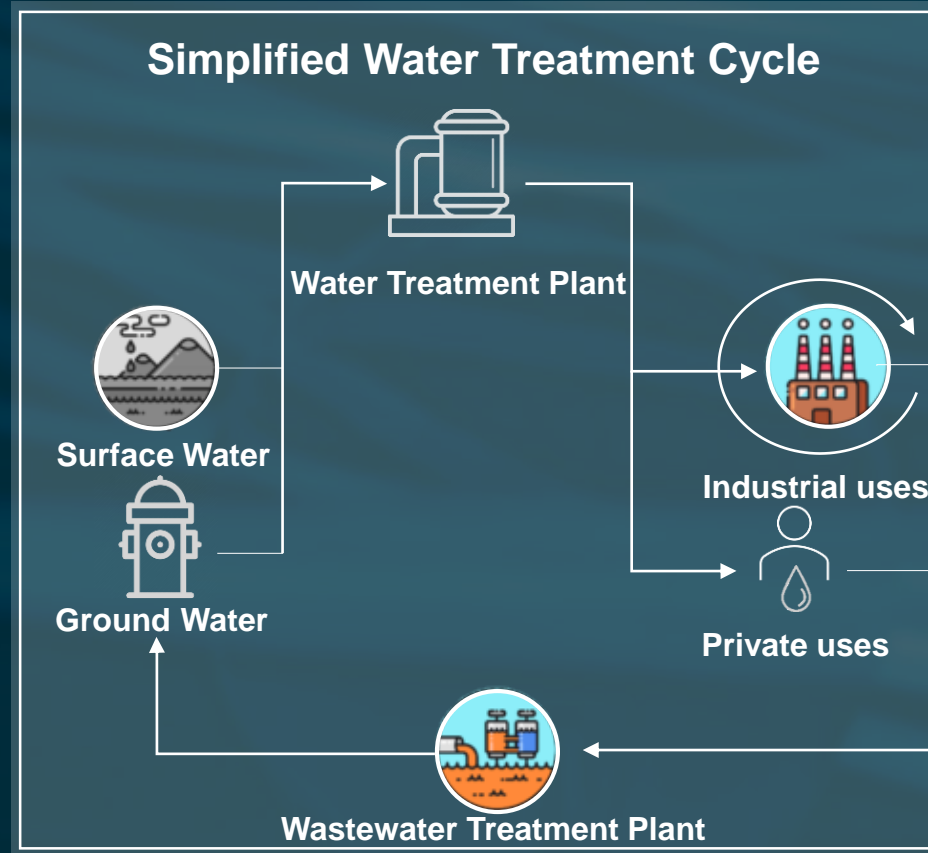


# Water treatment offers enormous potential

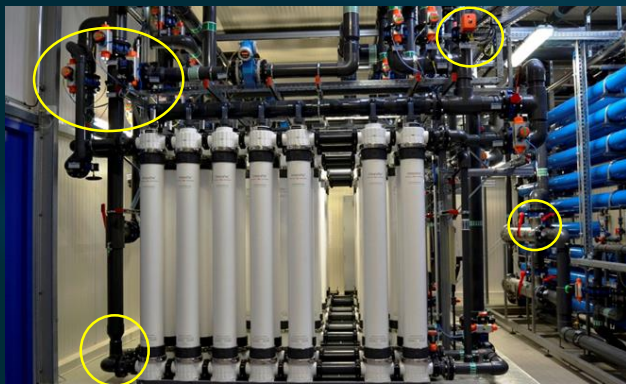
## Membrane Bioreactor



## Chemical dosing



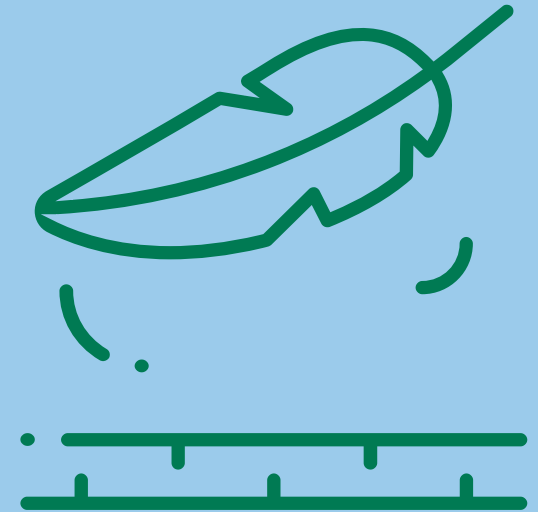
## Membrane systems



## Filtration



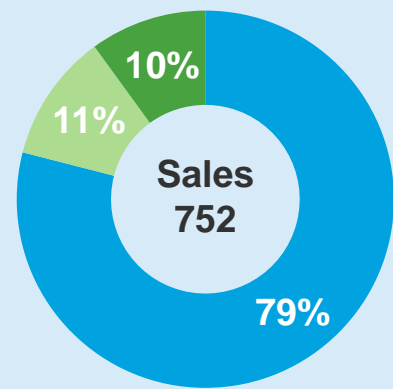
# GF Casting Solutions



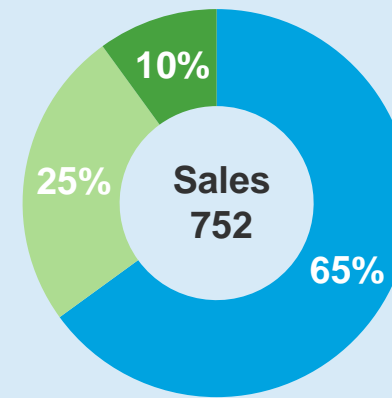


# Business Overview

(Sales 2020 in CHF million)



- Automotive
- Industrial Applications
- Aerospace / Energy



- Europe
- Asia
- Americas

## Automotive

Market Trend:



Position: Europe Top 3

**Major competitors:** Nematik, Handtmann, DGS, KSM Castings, Shiloh (Aludyne), Bocar, Ryobi, Meridian

## Industrial Applications

Market Trend:



Position: Europe Top 3

**Major competitors:** Leipzig: Eisenwerk Martinlamitz, Luitpoldhütte, Arrowcast, Kunshan: Fujiwa Machinery Industry, Infun (acquired by GIS)

## Aerospace / Energy

Market Trend:



Position: Europe Top 3

**Major competitors:** EU: CPP, Howmet,, Doncaster, US: PCC

# Increased CO<sub>2</sub> regulations drive demand for lighter components

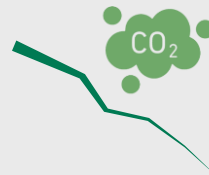


Lightweight Aluminium Battery Housing



Lightweight Magnesium Cross Car Beam

EU CO<sub>2</sub> regulations for passenger cars

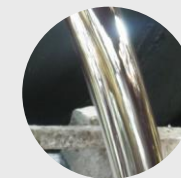


Approx. 50% CO<sub>2</sub> reduction between today and 2030 target

Sustainable logistics through local for local



100% recyclable material







# Driving future technologies

1

We are a **technologically pioneering development partner** and manufacturer of cast and additive components for the global **automotive** industry, aerospace and **energy** markets, off-highway vehicles and for industrial applications

2

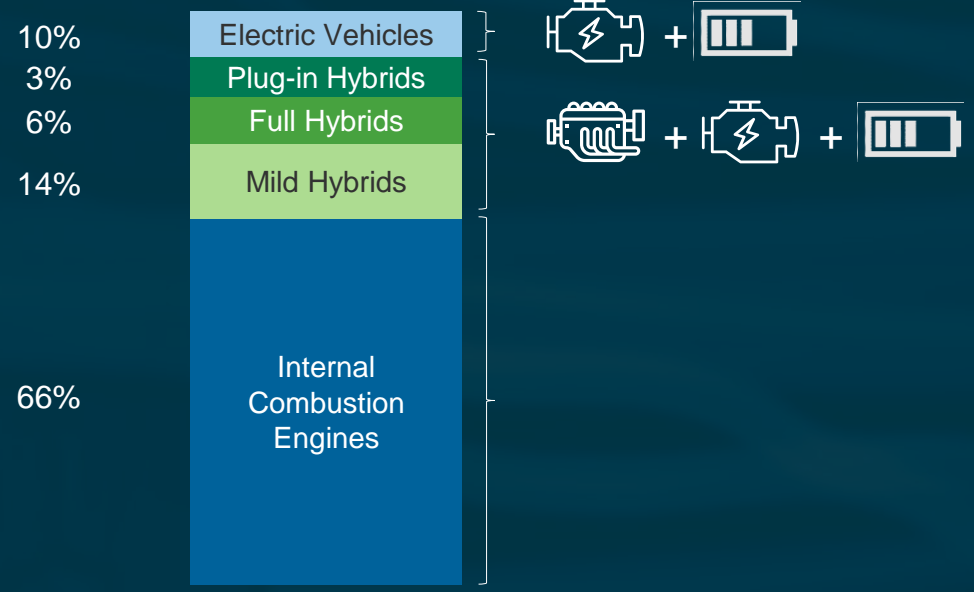
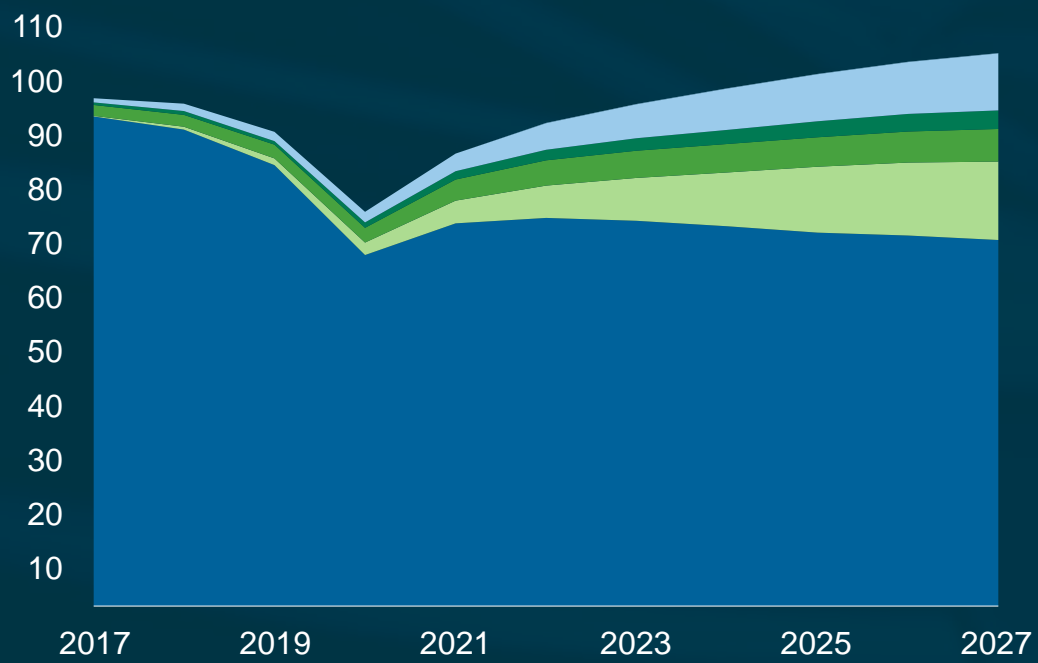
Our highly complex **lightweight components** are produced using state-of-the-art manufacturing technologies – from the development to the ready-to-mount solution





# Share of electrified vehicles will increase within the next years...

## Global Light vehicle production in million units

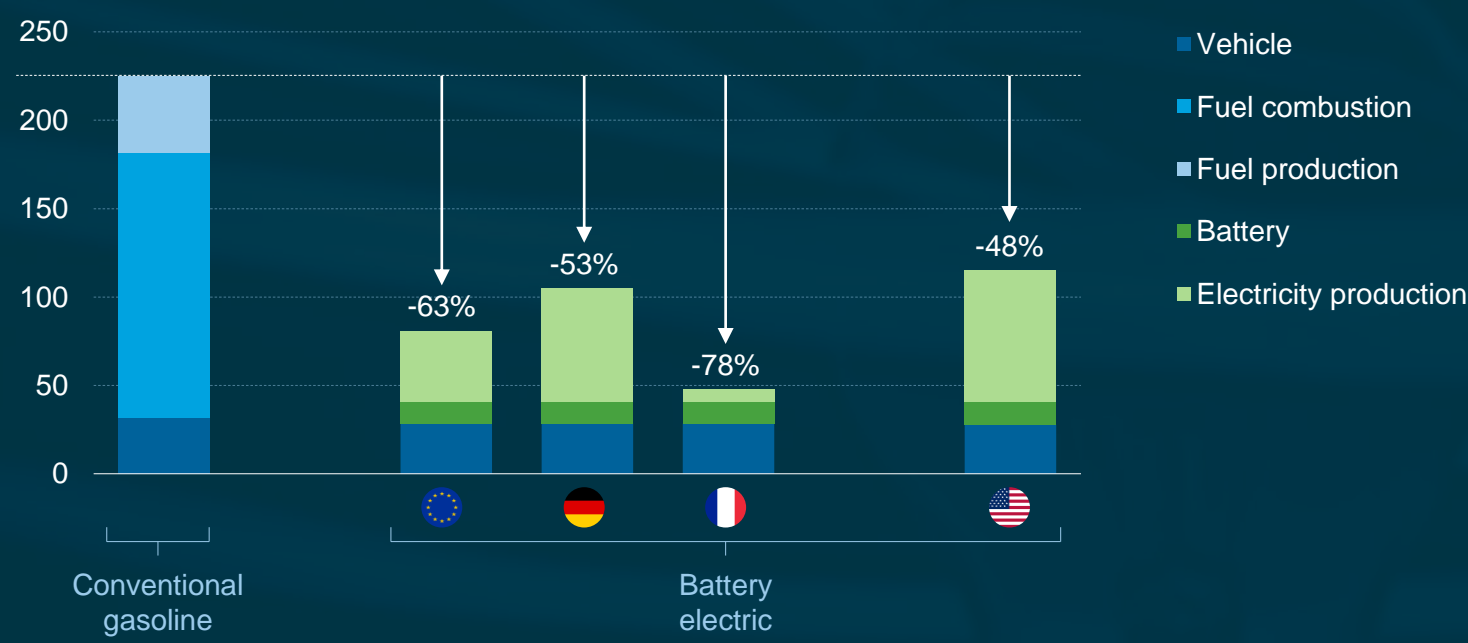


Source: LMCA Q3 2020



# ... and EV cars will significantly reduce CO<sub>2</sub> emissions over lifetime

Life-cycle greenhouse gas emissions of gasoline and battery-electric vehicles (gCO<sub>2</sub> eq./km)



Even in countries where the electricity used for charging still comes mostly from non-renewable sources

Source: ICCT 2020.12.02, <https://theicct.org/cards/stack/explaining-electric-vehicles>





# New plant in Shenyang almost completed



Plant from a birds eye – solar panels to be installed



First test run successfully completed in September 2021  
(Left: Cross Car Beam | Right: Shock tower)



# Partnering with leading manufacturers worldwide ...

## Passenger Cars



## Industrial Applications



## Aerospace / Industrial Gas Turbines







# ... with **strong expertise** in e-drive solutions and lightweight structural parts



**Transmission Housing**  
VW MEB Platform

Source: VW



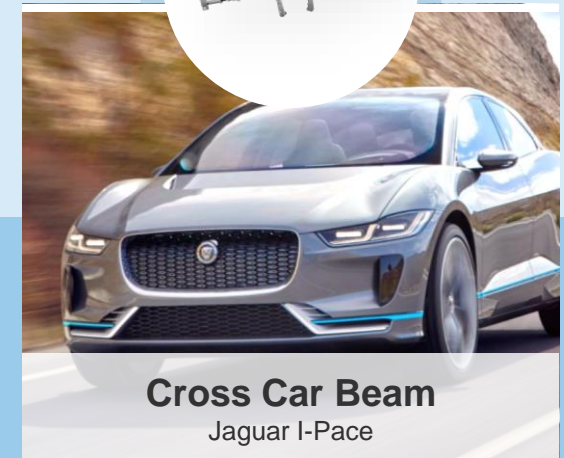
**E-Engine Housing**  
Audi E-Tron

Source: Audi



**Battery Housing**  
VW Golf GTE

Source: VW

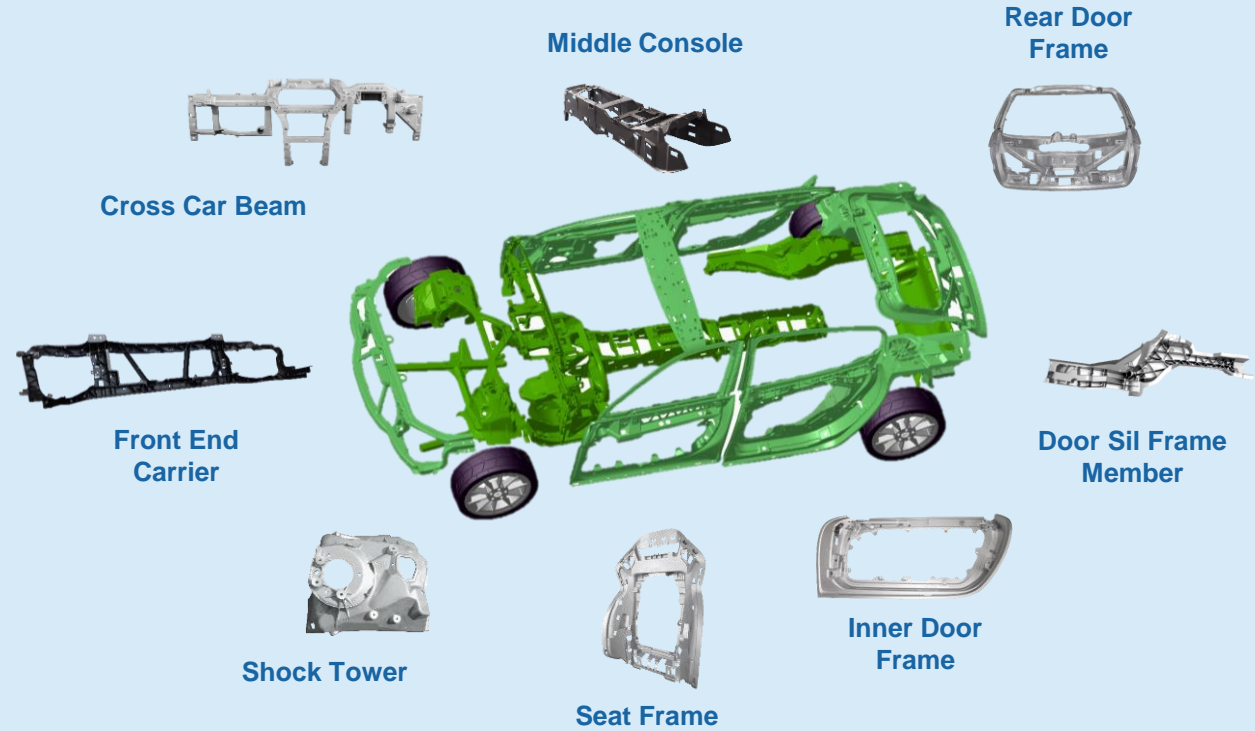


**Cross Car Beam**  
Jaguar I-Pace

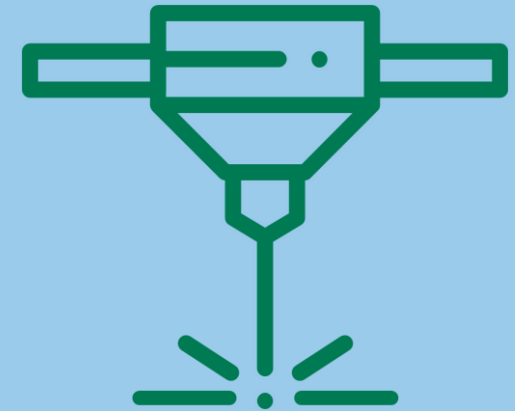
Source: Jaguar



# Nearly every car on the road drives with GF Casting Solutions parts



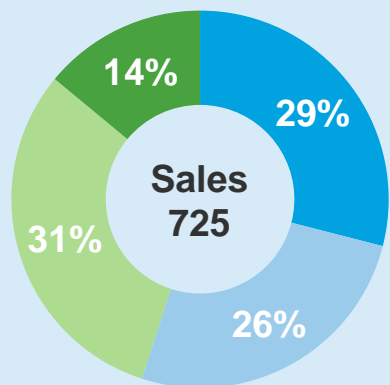
# GF Machining Solutions



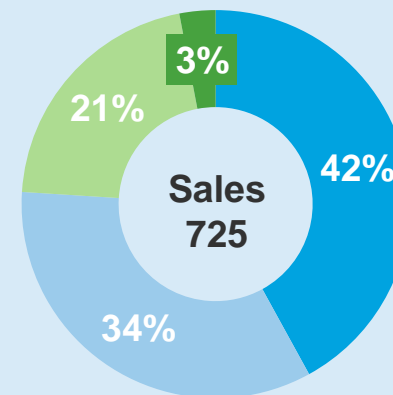


# Business Overview

(Sales 2020 in CHF million)



- Milling
- EDM
- Customer Service
- Adv. Manufacturing / Automation & Tooling



- Europe
- Asia
- Americas
- Rest of world

## Milling

Market Trend:



Position: HSM Top 5

Major competitors: Makino, Hermle, DMG Mori, Rödgers, Exeron

## EDM

Market Trend:



Position: Top 3

Major competitors: Sodick, Fanuc, Mitsubishi, Makino

## Customer Service

Market Trend:



Position: #1 Coated Wire Sales

## Adv. Manufacturing / Automation & Tooling

Market Trend:



Position: World #1

Major competitors: Erowa, Hirschmann, F-Tool, Zimmer & Kreim, Fastems



# Digitalization and miniaturization increase need for precision



GF Machining Solutions



ML-10 Nozzle ablation



CMC Ventilation micro-holes improve performance and efficiency



CMC is 2/3 lighter with 20% higher temperature resistance

The GENx is delivering up to **15%** better specific fuel consumption than the engine it replaces

The GENx's emissions are up to **95%** below current regulatory limits, ensuring clean compliance for years to come





# Focus on digitalization

1

We are one of the world's leading providers of complete solutions to the tool and mold making industry and to manufacturers of precision components

2

Our portfolio includes Milling, wire-cutting and die-sinking EDM machines

3

We offer spindles, Laser texturing, Additive Manufacturing, tooling and automation as well as digitalization solutions and customer services

4

Our key customer segments are the aerospace, ICT, medical and traditional mold and die industries



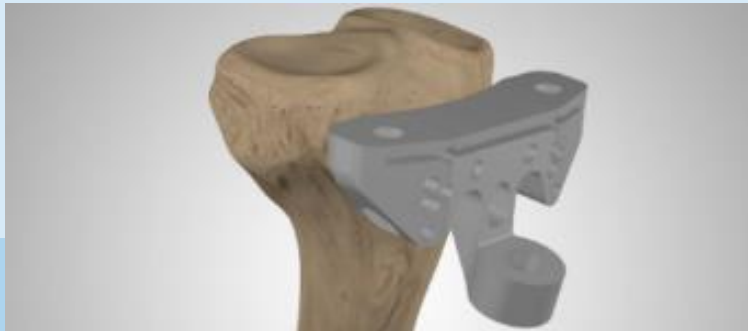


# We offer our customers ...

## ICT



## Medical



## Aerospace





# ... innovative and advanced technology solutions

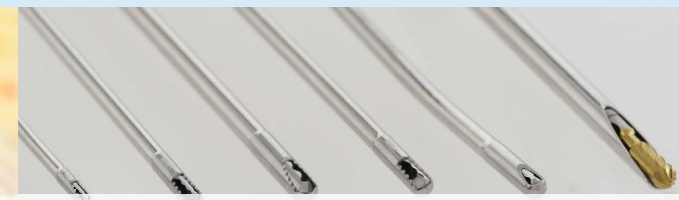


LASER P series

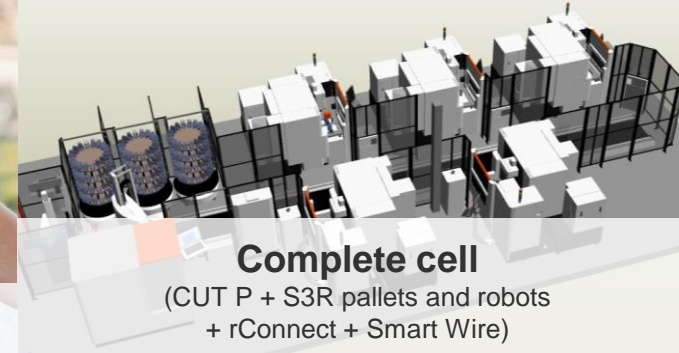
**Next generation Laser technologies**



**Medtech**



**Arthroscopic cutter blades**

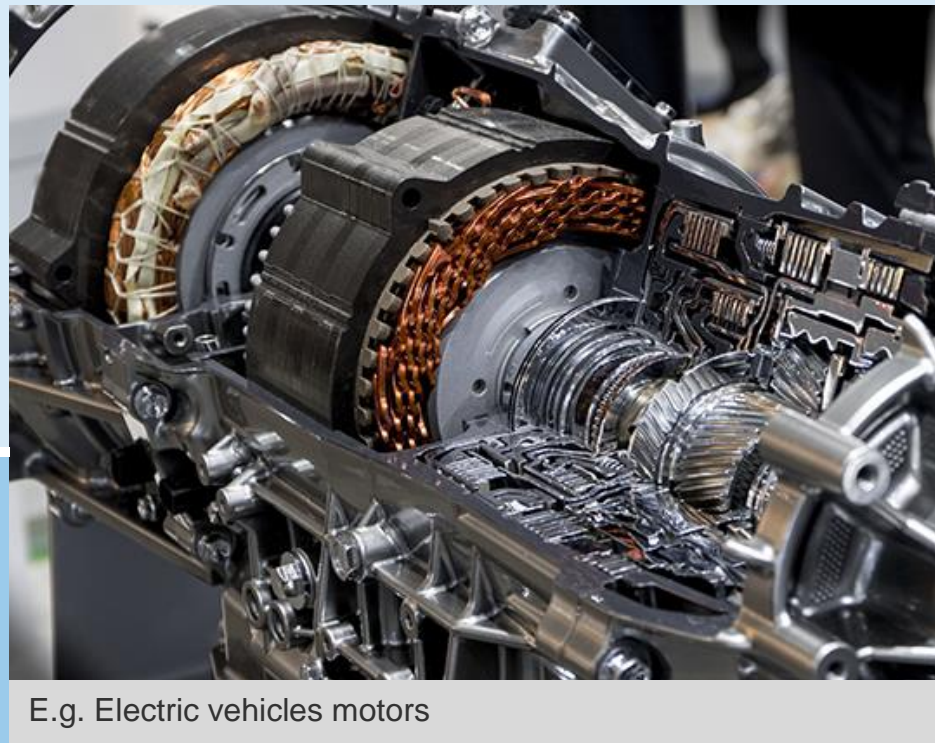


**Complete cell**  
(CUT P + S3R pallets and robots + rConnect + Smart Wire)

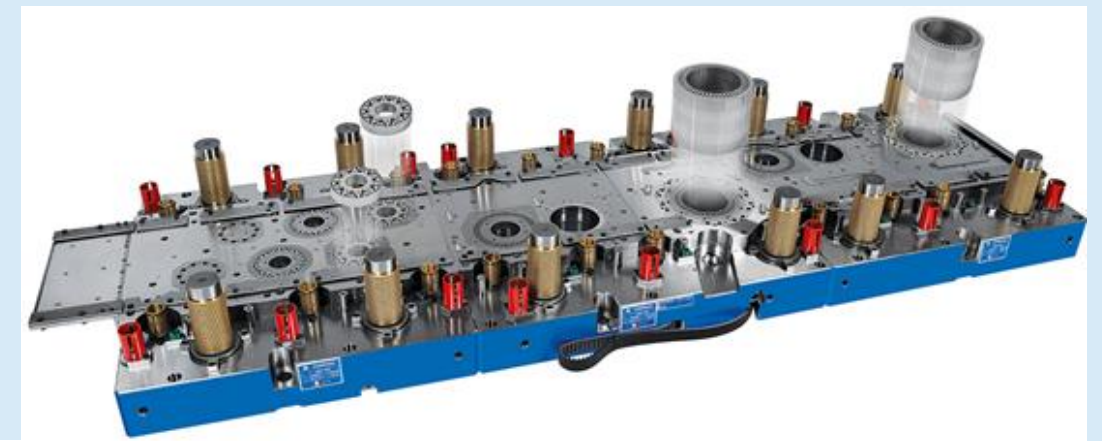




# New market opportunities in E-mobility



E.g. Electric vehicles motors



Progressive stamping tool – fine stamping for stacked lamination coils for increased motor efficiency



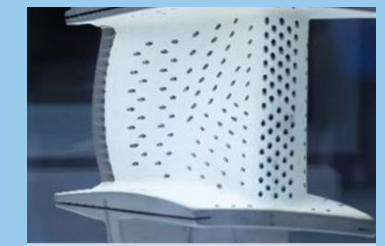


# Higher fuel efficiency through dedicated solutions for **Aerospace & Energy**

## Higher temperatures



Inconel blisks milling



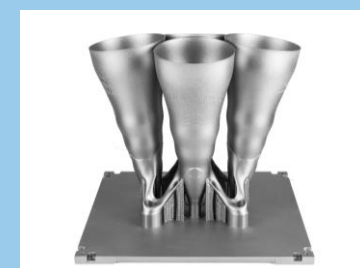
Micro drilling on CMC\*



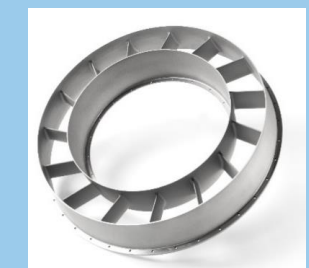
Seal slot\* + CUT 200 dedic.

\* Ceramic Matrix Composite

## Lightweight design



Antenna horns



Turbine rear vane



CUT AM

**GE9X** This Goliath engine is point-designed for the Boeing 777X. Scheduled to enter into service in 2020 with a backlog of about 700 engines. It will be the most fuel-efficient engine GE has ever produced on a per-pounds-of-thrust basis.

**4<sup>th</sup>** generation composite fan blades

**ONLY 16** fan blades

The largest fan diameter in commercial aviation

**8db** margin to Stage 5 noise regulations

**5% better** specific fuel consumption (SFC) than any other twin-aisle engine in service in 2020

**30% NOx** margin to CAEP 8 regulations

**10%** lower fuel burn than the GE90-115B

**27:1** compressor pressure ratio  
The highest ever in commercial aviation

E.g. Aero engine



# GF at a glance

**+GF+**

**Investment  
proposition**



**Strategy focus on profitable growth with emphasis on resilience and learning** through intelligent and sustainable solutions, a resilient portfolio, operational excellence and evolving culture towards more performance and learning



**Products and services addressing demand of global mega trends** global mega trends with direct business impact in all three divisions



**Industry-leading technology provider** with more than 200 years of industrial know-how well balanced geographical presence with a Swiss quality brand and technology with worldwide local production



**Focus on solutions for our customers for their sustainable business** creating value to society and contributing to a sustainable development

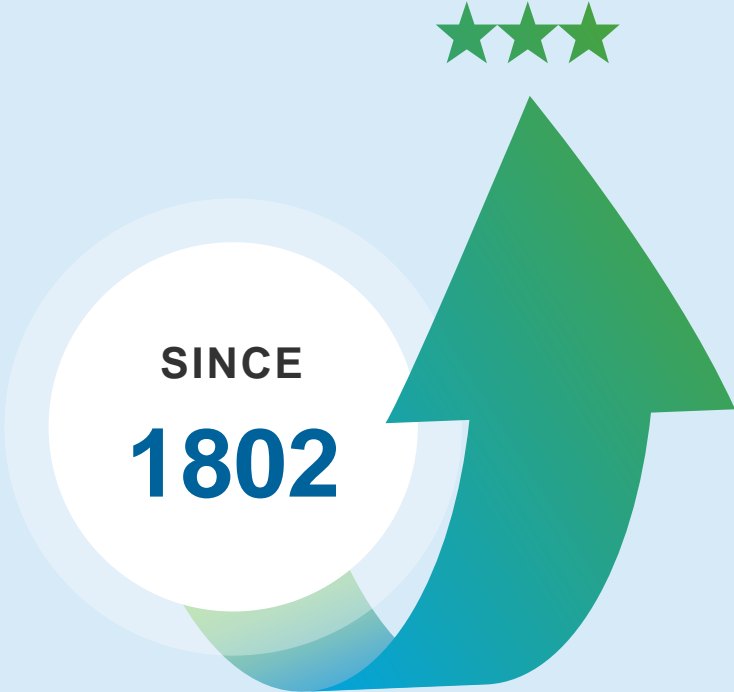


**Focus on long-term value creation and return on invested capital** value generation for our shareholders and other stakeholders

# Our Purpose



**Becoming  
better every day**



A world map in shades of blue, overlaid with a network of white lines and dots, suggesting global connectivity. The map is centered on the Atlantic Ocean.

**Thank you!**

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