LEFFER

**Leading Solutions.** Since 1946.



# Competence builds Excellence

Sustainable. Innovative. Global.

EX
CEL
LENCE

Perfection and the highest quality
is our commitment.

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# PREFACE

**LEFFER – Leading Solutions, Made in Germany**
**Proud of Yesterday. Focused on Today.**
**Ready for Tomorrow.**

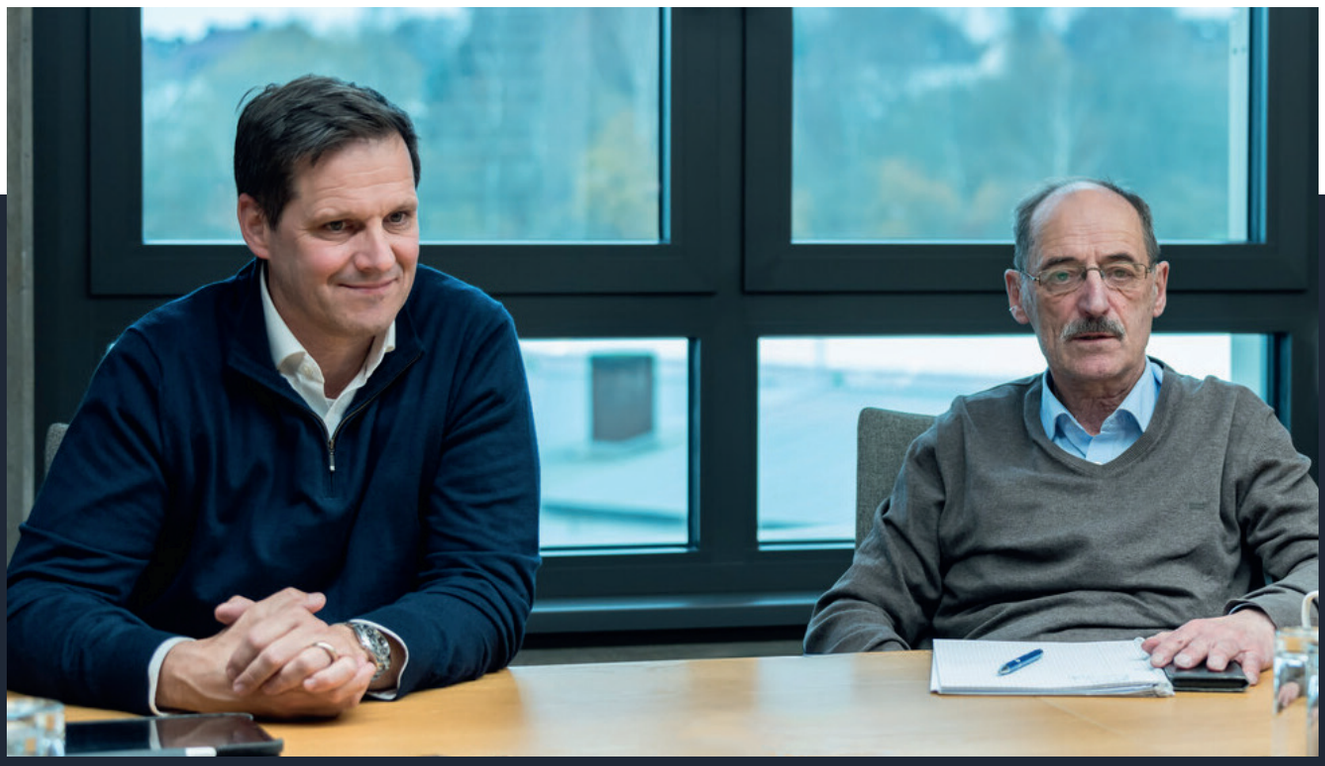
For almost 80 years, LEFFER has stood for technical excellence, reliability, and uncompromising quality. Founded in 1946 by mechanical engineer Hans Leffer, the company remains 100% family-owned and is now managed by Hans Georg Leffer and Dr. Andreas Leffer.

With around **500 employees** and decades of experience, LEFFER is a trusted partner for international clients across Pressure Vessels & Heat Exchangers, Machinery, Gasholders & Structural Steelwork, Industrial Services, Welded Products for Defense Technology, and Hydrogen Production, Storage & Transport.

As a true **one-stop-shop**, we design, fabricate, and test all our equipment in-house. Every process – from engineering and machining to assembly and inspection – is performed by our skilled teams in Germany, ensuring precision, safety, and consistent quality.

Our products support critical infrastructure around the world – from vibration-free foundation equipment for skyscrapers and bridges to process equipment needed to secure energy supplies for entire nations. Guided by sustainability, innovation, and adaptability, LEFFER continues to shape the technologies of tomorrow.

As a family business, we take pride in our heritage, our people, and the trust our customers place in us. We don't just deliver equipment – **we deliver confidence, reliability, and long-term partnership**.



Dr. Andreas Leffer

Dipl. Ing. Hans Georg Leffer

# OUR CORE COMPETENCIES

- **Pressure Vessels and heat exchangers**
- **Machinery**
- **Industrial Services**
- **Gasholders**










**Precision. Reliability. Innovation.**
From our headquarters in Germany, we serve international customers in the energy, petrochemical, civil construction, steel producing, defence and hydrogen sectors. LEFFER provides the complete technical infrastructure to design, fabricate, and test complex equipment and assemblies. Our facilities are equipped for heavy-duty machining, precision welding, hydraulic systems, and the construction of large-scale steel structures.

- **Pressure Vessels & Heat Exchangers**
  LEFFER designs and manufactures high-performance pressure vessels and heat exchangers for demanding industrial applications. Units of up to 600 tons, 100 meters in length, and 7 meters in diameter can be completely fabricated, assembled, and tested in-house at our facilities.

- **Machinery**
  For more than 50 years, LEFFER machinery has been used worldwide in civil and foundation engineering, delivering reliable performance under the most challenging conditions. Our heavy-duty equipment is engineered for precision, safety, and durability in every application.

- **Industrial Services**
  Our experienced field teams specialize in structural steelwork, piping, maintenance, and the installation and commissioning of complete process plants. With a team of professionals permanently deployed on-site, LEFFER ensures efficient and safe project execution worldwide.

- **Gas Holders**
  LEFFER engineers, fabricates, and erects waterless and traditional gasholders (Type MAN and others) around the globe. We provide complete solutions for new installations, repairs, and modernization projects, ensuring long-term operational reliability.

# FACTS AND NUMBERS

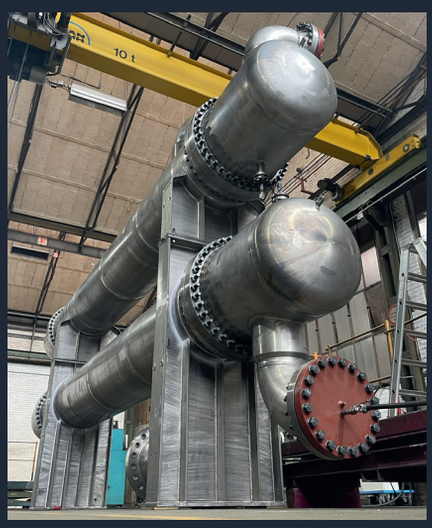
| | |
|---|---|
| **Company established** | 1st of February 1946 |
| **Type of company** | Private limited, all shares family owned (LTD) |
| **Location** | Saarbrücken, South-West, Germany<br>near French border |
| **Facilities Area** | 114,000 sqm total, 35,000 sqm Workshop |
| **Number of employees** | ± 500 |
| **Yearly turnover** | ± 100 Mio. Euro |
| **Scope of work** | Pressure Vessels & Heat Exchangers · Structural Steelwork<br>Waterless Gasholders · Machinery · Field Site Work & Piping<br>Welded Products for Defense Technology · Hydrogen Production<br>Storage & Transport |
| **Managing directors** | Dipl. Ing. Hans Georg Leffer<br>Dr.-Ing. Andreas Leffer |



# PRESSURE VESSELS

**Built for Performance. Trusted Worldwide.**

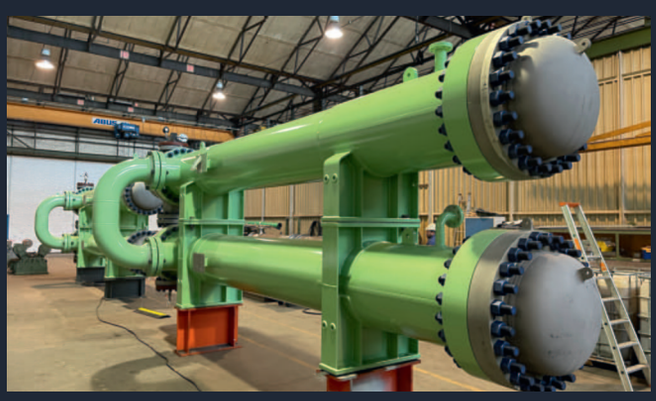
From oil and gas to hydrogen to power generation – **LEFFER delivers innovation that lasts.**











LEFFER is a leading high-tech manufacturer of custom-engineered process equipment.

- **Reactors**
  e.g. DHT and Polypropylene Reactors for critical chemical and refining processes
- **Power Plant Equipment**
  e.g. High- and Low-Pressure Feedwater Heaters, Condensers, and Deaerator Storage Tanks
- **Process Columns**
  Tailor-made designs for refining, gas treatment, and chemical applications
- **Heat Exchangers**
  Shell-and-tube type, e.g. Combined Feed Exchangers, Texas Towers, and Seawater-Cooled Exchangers
- **Separators**
  e.g. Two- and Three-Phase Separators, and General Process Separators for diverse process conditions
- **Hydrogen Applications**
  Medium- and high-pressure storage systems, integrated heat transfer and exchange units for hydrogen production, storage, and transport
- **Pressure Vessels for Coal Drying and Gasification**
  Designed and manufactured to meet the highest standards of safety and efficiency

We provide complete turnkey services – from process and mechanical engineering to fabrication, assembly, testing, and on-site installation.






**Process Equipment – Made for the Most Demanding Industries**

For over 50 years, LEFFER has delivered process equipment to the **oil & gas, offshore, subsea, hydrogen, gasification, and chemical process industries**. We combine technical mastery, precision fabrication, and fully in-house capabilities to meet the strictest international designcodes and standards.

Our proven efficiency ensures rapid fabrication and delivery – even for urgent or "emergency" orders – without compromising safety or quality.
We specialize in equipment made from various material grades ranging from **C-Mn steels to Duplex, Super Duplex or Titanium**. LEFFER is a recognized specialist in weld overlay, including small-diameter nozzles or complex pipe bends.

All production stages are supported by our in-house NDT and materials testing laboratory, with Level II and III qualified personnel. In addition, we provide professional coating and surface treatment to ensure maximum durability and corrosion resistance.



# MACHINERY

**Global Expertise. Proven Performance.**
**Niche Leadership.**

- **Casing oscillators**
- **Casing rotators**
- **Tube extracting equipment**
- **Diaphragm Wall Grabs**
- **Bore Pile Grabs**
- **Spherical Grab**
- **Chisels**









Wherever **deep or large-diameter foundations** are required, **LEFFER machines** deliver unmatched **power, precision, and reliability**.

**Our Machinery Portfolio:**

- **Casing Oscillators** – For diameters up to 3,800 mm, providing vibration-free, high-torque operation.
- **Casing Rotators** – With or without chassis, diameters up to 3,000 mm.
- **Tube Extracting Equipment** – Handles uncased or partially cased drills; attachments allow extraction of wide flange beams and sheet piling sections.
- **Diaphragm Wall Grabs** – Optional computer-aided measurement for precision excavation.
- **Bore Pile Grabs** – Hydraulic or mechanical, for diameters up to 3,500 mm, depths up to 100 m.
- **Spherical Grabs** – For bored piles 880–3,500 mm, double rope design, ideal for vibration-free operation in semi-hard to hard soils.

**Why LEFFER?**

- Machines engineered for extreme depth and diameter
- Vibration-free and high-precision operation
- Supported by a global network of agents and service experts






**LEFFER Machinery – The Global Benchmark for Deep Foundation Engineering**

LEFFER machinery has set the standard for deep foundation and heavy-duty civil engineering projects worldwide. Renowned for power, precision, and reliability, our machines are trusted for some of the most demanding construction sites - from landmark skyscrapers to bridges and industrial facilities.

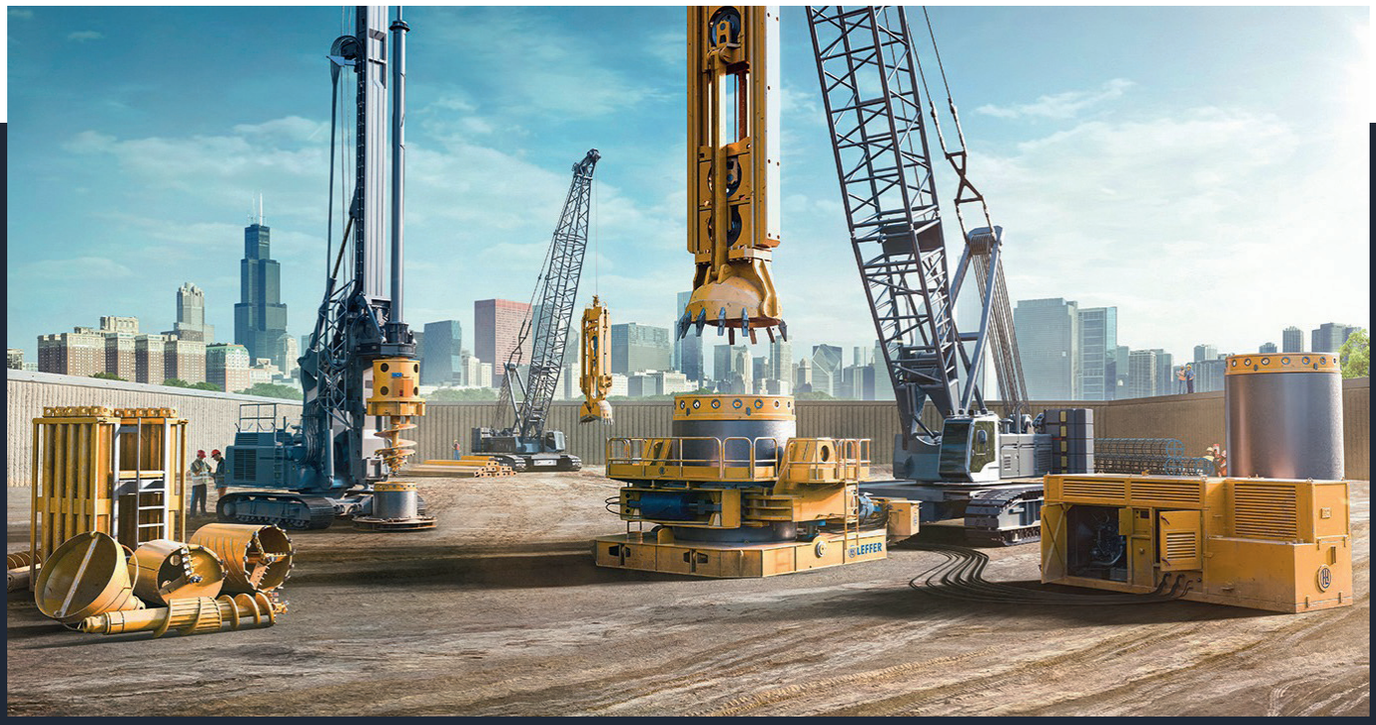
LEFFER follows a two-pronged strategy to meet the needs of the deep foundation market:

**1. Grab Drilling Solutions**
For the grab-drilling method, we provide a complete range of machines, hydraulic and mechanical grabs, power packs, piles, and specialized tools such as chisels, all designed and fabricated in-house. This fully integrated approach ensures perfect compatibility, efficiency, and vibration-free operation under the toughest conditions.

Today, we proudly supply one of the world's strongest pile driving machines, capable of handling piles up to 3.8 meters in diameter – a showcase of our engineering leadership, precision, and reliability.

**2. Drilling Tools & Accessories**
For the Kelly drilling method, Continuous flight auger drilling, down-the-whole drilling, full displacement drilling, etc. LEFFER designs and manufactures drilling augers, buckets, casing drives, kelly bars, displacers, casings, cutting shoes and more, complementing the portfolios of specialist Kelly drill rig manufacturers.

Every machine benefits from in-house design, fabrication, and testing, ensuring peak performance and safety. Supported by our global service network, clients receive prompt maintenance, guidance, and operational support wherever their projects take them.



# MACHINERY ACCESSORIES

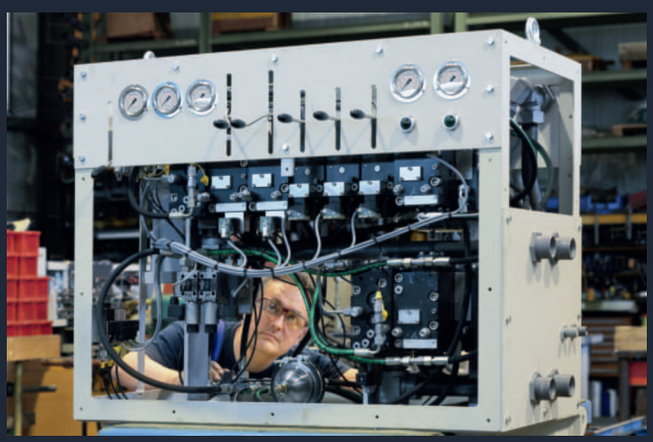
**Complete Solutions for Deep Foundation Applications**

- **Casings and Accessories**
- **Power Packs**
- **Drilling Tools**









LEFFER offers a comprehensive range of tools, casings, and accessories for all major ground engineering and drilling methods. Each product is designed and manufactured in-house to ensure perfect fit, long life, and maximum performance under the toughest site conditions.

**Casings & Casing Accessories**
LEFFER casings are available in standard design for depths up to 35 m and heavy-duty (HD) design for depths beyond 100 m.

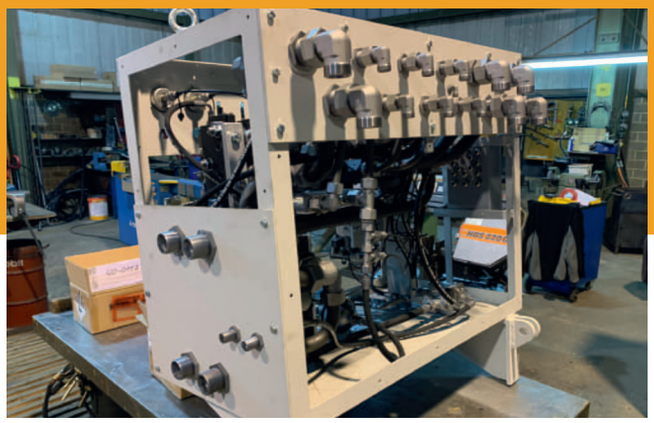
Our patented casing joints guarantee fast assembly, secure bolting, and optimum force transmission, even under high torque loads.

Precision-machined to exact tolerances, LEFFER casings and joints ensure trouble-free performance in rotary bored pile construction worldwide.

**Drilling tools**
LEFFER supplies a complete range of drilling tools in various sizes and diameters:

- Augers, Conical augers, hollow augers, Continuous flight augers
- Drilling buckets
- Casing drivers (automatic (electric) / manual)
- Core barrels
- Hydraulic retaining clamps
- Tremie pipes and accessories
- Cutting shoes





**Modular Power for Maximum Performance**

LEFFER hydraulic power packs deliver the energy that drives our drilling systems. They are precisely matched to our machinery portfolio – from casing oscillators and rotators and grab drilling systems.

Our portfolio covers a wide performance range, from compact units with 200 kW output to heavy-duty systems exceeding 1,200 kW. This flexibility allows each power pack to be tailored to specific applications, whether for high-torque pile drilling or continuous operation in deep foundation work.

Every unit is built with premium components from globally recognized manufacturers, ensuring long-term reliability and worldwide spare parts availability.

Optimized cooling and hydraulic systems guarantee safe, continuous operation, even at extreme loads. Low-noise, emission-compliant designs make them ideal for use in urban or environmentally sensitive areas.

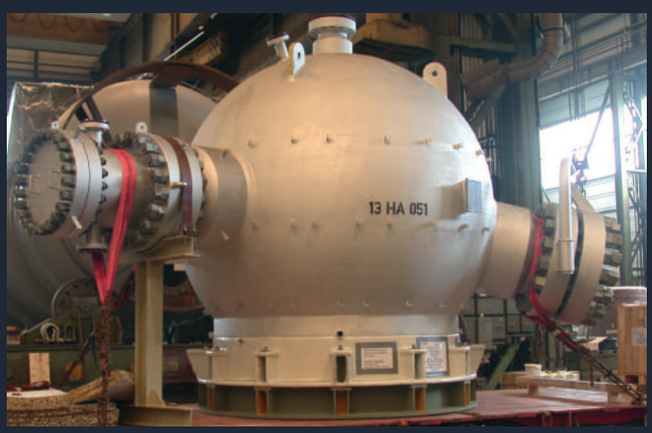
Maintenance and serviceability are at the core of every LEFFER design. Components are arranged for easy access, minimizing downtime and maximizing on-site performance.



# HYDROGEN APPLICATIONS

- **Complete installations, including commissioning**
- **Specialized in storage and distribution networks**
- **All trades included:**
  - Pressure vessel construction
  - Piping and steel construction
  - Plant assembly

For our customers within the energy and process industries, we develop and realize customized solutions – from planning through manufacturing all the way to turnkey installation.






**Pressure-free storage** (gaseous)

- **Large-volume constant-pressure gas containers** for buffering
- **All-in-one solutions** for steel and piping construction

**Pressurized storage** (gaseous & chemically bound)

- **Medium- and high-pressure reservoirs** as individual containers or storage solutions
- **Integrated heat transfer units and heat exchangers**
- **Planning, calculation, manufacturing, and assembly** in compliance with a wide range of regulations
- **Highest safety and testing standards** for maximum reliability

**Piping construction**

- **Planning, fabrication and installation of hydrogen pipelines**
- **Material-appropriate execution** – with the highest standards for safety and durability

**Steel construction for routes and transports**

- **Support structures for pipelines, containers and technical equipment**
- **Customized production** – both for existing facilities and new construction projects











**Gasholders – Engineered for Safety and Reliability**

With more than 100 gasholder projects worldwide, LEFFER ranks among the leading specialists for large volume gas storage and gas buffering (constant pressure) systems.

As a manufacturer of the renowned MAN waterless gasholders, LEFFER offers proven technology with superior efficiency and minimal maintenance. In addition, we design, build, and service other gasholder types, such as WIGGINS, water-sealed (“Glockengasbehälter”), and other customized gasholder types, tailored to each client’s operational needs.

LEFFER gasholders stand for quality, safety, and long-term performance – trusted worldwide for natural gas, industrial gas, and hydrogen applications.

**LEFFER – precision engineering for dependable gas storage and constant pressure systems.**



# INDUSTRIAL SERVICES

**Turnkey industrial solutions with precision, reliability and safety.**









With skilled specialists, LEFFER delivers industrial services, maintenance, and turnaround solutions for refineries, power stations, steel mills, the food industry and beyond.

We provide complete solutions for:

- **Piping systems** – including high- and low-temperature and hydrogen-resistant (HIC) lines
- **Building Services Engineering (BSE)** – heating, ventilation, and sanitary installations
- **Structural steelwork** – fabrication and erection of complex constructions
- **Complete plant assemblies, modules, and skids** – vessels, columns, pumps, and full process units

From planning, material take-off, and prefabrication to on-site erection, testing, and full documentation: **LEFFER delivers turnkey industrial solutions with precision, reliability and safety.**

# STRUCTURAL STEELWORK





**Structural Steelwork – Engineered, Fabricated, Erected**

LEFFER is certified according to **EN 1090 EXC 1 – EXC 4** and operates a full **in-house engineering department**, combining design expertise with fabrication capabilities to deliver steel structures for industrial, energy and civil projects worldwide:

- **Gasholders**
- **Structural steel for plants and power station equipment**
- **Supporting structures for vessels**
- **Pipe bridges and pipe supports**
- **Flare stacks, silos, cracking heaters and filters with ducts**
- **Waterway constructions**

LEFFER ensures turnkey solutions with highest safety and quality standards. Our teams bring decades of experience, technical know-how, and logistical expertise, making projects manageable, efficient, and fully compliant with international regulations.

**LEFFER – your trusted partner for versatile, reliable, and high-quality structural steelwork solutions.**



# ONE-STOP-SHOP

- **Product development**
- **Prefabrication**
- **Assembly**
- **Welding and Testing**
- **Industrial Coating**
- **Transport Management**







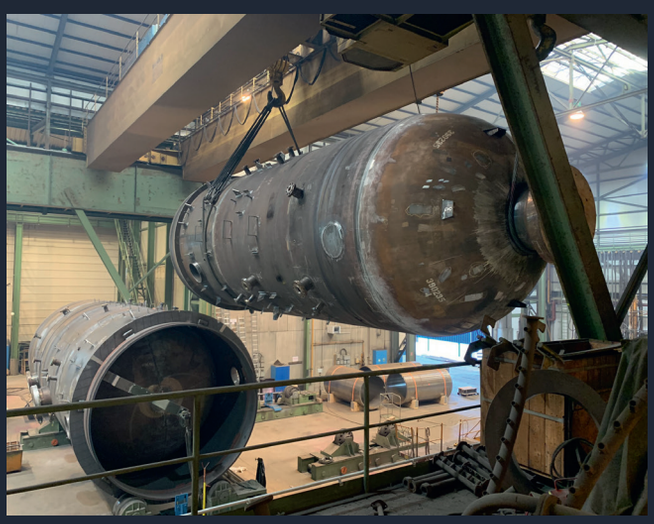


**LEFFER Fabrication – Precision, Power, and Expertise**
As a one-stop-shop, LEFFER covers the complete fabrication process chain - from product development, engineering, and prefabrication to assembly, welding, testing, coating, and transport management. Every step is executed in-house, ensuring precision, reliability, and the highest quality standards for critical industrial applications.

**Material Expertise** is a core strength, i.e. carbon and low-alloy steels, high-strength quenched & tempered steels, wear-resistant steels, corrosion-resistant and nickel-based alloys, duplex and superduplex steels, austenitic steels and titanium.

Our name stands for robustness and durability: whether it's a pressure vessel, heat exchanger, gasholder, machinery, or complete plant module, every product is engineered to perform flawlessly on site.

With decades of experience and skilled teams, we handle complex, large-scale, and cross-functional projects, including modules, skids, and complete plant assemblies.



# TECHNICAL EQUIPMENT AND CAPABILITIES





With one of the most capable production infrastructures in the industry, LEFFER turns complex engineering into proven performance.

- 20 different workshops with over 35,000 m² covered area
- Max. single-lift capacity of 250 tons
- Gantry cutting systems, beveling robot, pipe cutting machines, and automatic saw & drill lines
- Plate bending and rolling up to 100mm plate thickness
- Complete CNC machining centers, deep-hole drilling, milling, turning, boring and facing
- NDE, Metallurgical Laboratory
- PWHT furnaces and inductive local stress relieving for heavy components
- Sand- / Gritblasting and Coating (qualified coaters, Frosio LEVEL III Personnel)

From initial design to final delivery, LEFFER combines state-of-the-art equipment, technical know-how, and rigorous quality control to deliver heavy-duty, high-precision components.

Our fabrication capabilities ensure that your projects – from critical process equipment to structural steel modules – are executed with reliability, safety, and unmatched German engineering excellence.

**LEFFER – world-class fabrication, welding, and material expertise under one roof, delivering turnkey solutions you can trust.**





# QUALITY

**Built on Experience, Dedicated to Excellence.**










**Certified. Controlled. Consistent.**

Our **ISO 9001**-certified **Quality Management System** meets international standards, with precision and reliability embedded in every process. In addition, LEFFER holds the **Certificates of Authorization according to ASME U and U2**, fulfilling strict international key requirements.

The **QM & QS team drives operations**, ensuring every procedure, test, and optimization delivers consistent, long-lasting results.

All **non-destructive testing** is performed in-house by certified **Level II and III** personnel. Our laboratory is fully equipped for all types of **metallurgical and mechanical testing**, both stationary and mobile.

This commitment has earned LEFFER **repeated recognition from international customers** for excellence, reliability, and performance.

LEFFER holds a comprehensive range of certifications, including:

ISO 9001 • ISO 45001 & SCC • ISO 50001 • DIN 2303 Q2 BK1 EN 1090 EXC1 - EXC4 • ASME Code Stamp U & U2 2014/68/EU (PED) Module H/H1 • AD 2000 HP0 EN ISO 3834-2 • ISO 17025



# SUSTAINABILITY

**Committed to Generations.**

As a family-owned company, sustainability is a guiding principle that shapes our daily actions and long-term decisions. We are committed to aligning environmental protection, social responsibility and economic success in a balanced and lasting way.

Through targeted investments and continuous optimization, we have lowered our carbon footprint by more than 40% over the last 5 years while improving efficiency across all production areas.

LEFFER equipment is designed for decades of use. By offering professional refurbishment and repair, we extend product life cycles, conserve resources, and actively promote a circular use of materials.

Sustainability also means investing in people. Vocational training, dual study programs, and ongoing education equip the next generation with the skills to drive excellence. Every year, new apprentices start in our in-house training workshop, building a foundation for future expertise.

Regular team events strengthen collaboration and community. Many of these initiatives also support local social projects, combining team spirit with regional engagement.

Responsible corporate governance is an integral part of this commitment. Clear structures, transparent processes, and regular controls ensure that all our actions remain ethical, accountable, and future-oriented.

In 2025, LEFFER was honored with the **German Grand Prix for Medium-Sized Enterprises**, recognizing the company's achievements in corporate development, job creation and training, innovation and modernization, **environmental and regional engagement**, as well as customer service and partnership.












LEFFER

**Leading Solutions.** Since 1946.

# Get in Touch with us.

www.leffer.de/en

**STAHL- UND APPARATEBAU**
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# Or join our Team!

www.leffer.de/en/Karriere

**We are looking for:**

- Apprentices & dual students
- Skilled professionals

We welcome new, team-oriented, responsible and reliable talents

Are you interested?
Submit your application right now:

**bewerbung@leffer.de**