partners in high pressure.
Serving our partners along the entire plant life cycle.

Uhde High Pressure Technologies is a high technology company of thyssenkrupp with approx. 250 employees. With our wide-ranging expertise and more than 80 years of experience we are one of the world’s leading companies for industrial high-pressure plants and equipment with an international customer base in several markets. We support our customers along the entire plant life cycle – starting with planning high pressure solutions and in-house engineering through manufacturing of tailor-made equipment up to the operation phase with service and spare parts supply. The combination of local in-house-manufacturing “made in Germany” and a global supplier network enables us to ensure high quality at optimized costs. Our profile is supplemented by qualified supervisors to support installation and commissioning worldwide.

“We are strongly committed to our clients’ success. With passion and technological expertise, we offer optimum and efficient solutions for high-pressure applications.”

Dennis Grimm, CEO
As a specialist in the development of high-pressure process technology, we provide comprehensive in-house capabilities for the optimal design of components, processes and plants. From highly standardized products to tailor-made solutions – we accompany you in process engineering during the early project phase and contribute to the optimization of the entire plant design. With our experienced designers we are able to adopt the design and calculation of key equipment such as tanks, pumps or valves, through to complete plants or systems. In addition, we conduct research and development of high-pressure process technology. Thanks to thoroughly tested high quality, certified for international standards, codes and regulations, our material definition fulfills even the highest specifications. Therefore, we offer customized software solutions allowing the implementation of individual interfaces, well reflected control programming and process visualization as well as the installation of remote maintenance systems.

Comprehensive expertise and extensive experience over 80 years have made us experts for high pressure plants and solutions. Nowadays our range of different market solutions includes LPDE and urea plants, supercritical fluids, high pressure processing and waterjet cutting.
Tailor-made high-pressure systems, solutions & services
thyssenkrupp Industrial Solutions

1980s
Supercritical fluid extraction: from first idea to final product.

1990s
Becoming part of a globally leading multinational company ThyssenKrupp

1997
Pioneering high-pressure processing (HPP) applications based on solid experience
Best performance with continuous quality “Made in Germany”.

From off-the-shelf-products to tailor-made solutions, our clients can expect consistently tested top quality. Uhde High Pressure Technologies possess experience and a wealth of expertise in the manufacture of high-pressure solutions. Our quality “Made in Germany” is based on three pillars: continuity, safety and economic efficiency.

Best performance with continuous quality assurance makes us one of the worldwide pioneers in the production of high-pressure components and complete systems. Well-founded material and manufacturing competence in bending, drilling, fastening and final precision machining, gained in decades of experience, has made us experts in the manufacture of high-pressure reactors, pipes, tanks, vessels, valves and pumps. Thanks to non-destructive, destructive and corrosion tests in independent test labs, our manufactured components meet all requirements for hardness, pressure, tightness, flexibility and precision.
Continuity
Based on state-of-the-art technology, we offer a long-term perspective thanks to permanent further development, flexible tailor-made concepts according to customer wishes and personal customer support to be successful in competition.

Safety
Customers can rely on our implemented high-pressure applications and processes in plant construction, focusing on maximum safety due to reliable and durable performance. Our successful security measures and the reliability of our systems are demonstrated by plants that have been in operation for more than 30 years.
Conveying, storing and handling different types of chemicals require tailored equipment such as reactors, pumps, valves or pipes.

Uhde High Pressure Technologies designs and manufactures specialized equipment for high-pressure plants.
What our partners can expect:

– Solutions tailored to specific customer wishes
– Reliable and durable plants remaining in operation for decades
– Highest safety and quality standards

Low-density polyethylene plants

Specialized equipment for LDPE plants since 1952
As a specialist in design, development and fabrication of high-pressure components in LDPE and EVA plants from 300 up to 3,600 bar Uhde High Pressure Technologies is one of the market leaders. Our long-term experience is consistently used to the benefit of our clients and makes us an approved supplier for all licensors: on the one hand, plants remaining in operation for decades show the reliability and durability of our work. On the other hand, we use the experience from long-term operation data for optimizing our products. We provide reactors, pumps, valves, piping, vessels, heat exchangers and hydraulic oil systems in LDPE plants with our high-pressure technologies.

Urea plants

Tailor-made equipment for the world’s biggest fertilizer plants
With our comprehensive competence, we have always advanced technological developments for the design of plants, especially in the area of urea. While specific conditions for high-pressure valves in urea services require individual solutions, our design and flexible construction enable us to meet many customer wishes such as closing times, types of actuators and attachments as well as extremely reliable and robust equipment up to 16”. Moreover, we provide safety for the design and ensure the quality of the entire plant equipment.

Supercritical fluids

From first idea to process design and complete plant
With comprehensive knowledge in the development of CO₂ plants, we are able to handle maximum requirements regarding process engineering, design, materials and components. Combining an eye for the bigger picture with the know-how for every detail of CO₂ plants we recommend ourselves as a highly specialized supplier for vessels, heat exchangers, valves, pipes through to completely pre-installed plants in fields of application such as extraction, cleaning, impregnation, coating or drying processes.
Food & beverages – Fresher and better products.

High pressure for 100% pure extracts & freshness
Is it possible to improve the shelf life of food and beverages while respecting the environment and increasing sustainability? High purity and extracts from plants are the keys for high-quality food to be transported and stored longer as well as more ecologically.

Supercritical fluids

**Extract, upgrade, purify using supercritical fluids**
Supercritical CO₂ is easily available, inexpensive, non-toxic and non-explosive and plays a key role in manufacturing high-quality products from raw materials such as herbs or spices. Extraction with supercritical fluids has a wide range of practical applications for the food, cosmetics and the pharmaceutical industries. Using the technology upgrades raw materials – e.g. the decaffeination of coffee or tea – and enables high-purity extracts as well as cleaning processes such as removing binder residues from structural components.

High-pressure processing

**High-pressure processing: food preservation 2.0**
High-pressure processing pasteurizes fruit, vegetables and meats gently at 6,000 bar – and with no need for chemicals. Uhde HPP enables maximum safety for products processed in their final packaging without subsequent contamination, longer shelf life without heating or additives and ecological and sustainable preservation without waste. The consistent product quality implies higher efficiency, quality and safety as well as increased yield.

What our partners can expect:

- High product safety without subsequent contamination
- Longer shelf life with gentle, heat-free preservation
- Inexpensive, non-toxic extraction or purification
Innovative applications in waterjet cutting.

Maximum cutting precision with 6,000 bar
We experience the power of water daily. It has been creating new shapes by erosion for millions of years. Uhde High Pressure Technologies reduces this time to mere seconds by increasing the pressure of the water – for cutting-edge results.

**Waterjet cutting pumps**

**24/7 reliable with maximum precision**

Uhde High Pressure Technologies has been designs and manufactures ultrahigh-pressure pumps for industrial use. The reliable high-pressure pumps work steplessly up to 6,000 bar cutting almost any kind of material without thermal effects and are implemented in all relevant industrial sectors, from the food industry to glass and stone to aerospace. Regardless of the material composition, water cuts with maximum precision and flexibility while being environmental and user friendly.

Uhde 4037 is the newest generation of waterjet cutting pumps. We have made the pump more robust in core components, assembly and operation have become simpler and our customers can rely on our qualified 24/7 service for quick support.

**What our customers can expect:**

- Cutting almost any kind of material without thermal effects
- Maximum precision regardless of the material
- Environmental and user friendly solution
Global services – your lifecycle partner.

The complexity of high-pressure plants and tailor-made equipment calls for professional service including trouble shooting, maintenance, repair and reconditioning. For this reason, Uhde High Pressure Technologies provides a 360° service wherever in the world your plant may be located. Thanks to decades of experience and more than 500 installed facilities we are a reliable, world-leading partner in high pressure technologies. Our goal is to establish a long-term customer relationship – as your lifecycle partner.

Comprehensive service – high efficiency, minimizing downtimes

The challenge of plant maintenance is to reduce downtime to a minimum. We achieve this, thanks to our experience, know-how and our highly qualified service technicians, offering tailored service packages for your needs. This is how we ensure high service quality.
As your partner, we support you during the whole lifecycle of your high-pressure plant and offer a 24/7 worldwide service. From detailed project planning to maintenance and repair service onsite or in our workshop, you can rely on our expertise and decades of experience to ensure the successful erection of the most complex plants and efficient support.

Global network
Thanks to our global network infrastructure, we ensure fastest possible delivery of spare parts and efficient, worldwide maintenance and repair service. Our partners can trust our well-trained personnel at local service centers offering immediate assistance in all cases. Furthermore, we work closely with our customers to adapt automation technology to their specific requirements. That’s how we understand service to be the right partner for your high pressure plant.

360° service
As your partner, we support you during the whole lifecycle of your high-pressure plant and offer a 24/7 worldwide service. From detailed project planning to maintenance and repair service onsite or in our workshop, you can rely on our expertise and decades of experience to ensure the successful erection of the most complex plants and efficient support.