



# Process & Pressure Vessels

Innovative Environmental Process,  
Emission & Air Pollution Control Equipment  
Manufacturing and Engineering Company



# Äager

## Who are we?

Äager, an innovative company in environmental process, emission, and air pollution control equipment manufacturing and engineering, started its journey in Munich, Germany. With four international branch offices, Äager extends its reach to over 150 countries.

Boasting 40 years of experience, Äager holds a leadership role in creating superior, safer, and more cost-effective solutions for storage tank equipment, pressure vessels, and process solutions.



### Process & Pressure Vessels

As a single source for plug-and-play systems, ERGIL can reduce your project cost and time drastically.

We can reduce your site activities and reduce your risk by supplying single or multiple units from our world-class manufacturing facility.



### Emission Control & Safety Solutions

Storagetech™ manufactures storage tank equipment, such as flame arresters, breather valves, gauge hatches, floating roofs, and floating suction pipes.

Storagetech™ also provides many other products for the industrial solutions as turnkey packages including fire fighting systems.





Engineering  
Know-How of

40  
years



# Sustainable

## Production Technologies

Ergil, committed to the core principles of Lean Manufacturing and 5S, places the protection of life, food sources, and environmental integrity at the forefront of its operations.

This dedication to social responsibility is reflected not only in our efforts to lower carbon emissions and preserve ecological integrity but also in our adoption of lean production methods across all facilities.

By implementing these strategies, we significantly reduce errors, costs, inventory, labor requirements, and waste, streamlining our development processes and minimizing our environmental footprint.





## Leading the Way in Sustainable Manufacturing

In a landmark move towards sustainable operations, Ergil has deployed an extensive array of solar panels across its manufacturing facilities. This forward-thinking initiative is projected to produce an impressive 1,144,360 kWh of electricity per year, effectively fulfilling 110% of our annual energy requirements.

This initiative underscores Ergil's unwavering dedication to reducing environmental impact through the adoption of renewable energy sources. Moreover, it enhances our operational efficiency, reducing reliance on non-renewable energy and contributing to a more sustainable future. Ergil's venture into solar energy highlights our role as an

industry leader in eco-friendly manufacturing, setting benchmarks for others in the sector.

By prioritizing sustainability and efficiency, Ergil is not just responding to the global call for environmental responsibility but is also ensuring a resilient, self-sufficient, and green energy supply for our operations. This strategic move aligns with our goals of innovation, sustainability, and leadership in the manufacturing industry.



# Experience

<b>Client Name:</b>	BP	Engineering, procurement, and construction of 8000 m3 concreted covered, steel storage tank to drain the oil from BTC pipeline in case of emergency and supporting facilities.
<b>End User:</b>	BTC Pipeline Company	
<b>Project Name:</b>	Emergency Drain Down Facility	
<b>Location:</b>	Georgia	
<b>Client Name:</b>	KBR/Halliburton	Engineering, design and fabrication of 1 no 5000m3 aluminum dome roof and 1 no 5000m3 external floating roof storage tank along with all consumables fittings, accessories and erection equipment.
<b>End User:</b>	Ministry of Oil, Iraq	
<b>Project Name:</b>	Basra Airport Storage Facility	
<b>Location:</b>	Basra, Iraq	
<b>Client Name:</b>	Azerbaijan Methanol Company	Engineering, design and installation of complete semi automatic fire fighting system, 56m dia storage tank internal floating and complete storage tank equipment.
<b>End User:</b>	Azerbaijan Methanol Company	
<b>Project Name:</b>	Karabag Methanol Plant	
<b>Location:</b>	Baku, Azerbaijan	
<b>Client Name:</b>	Shell	Engineering, design and fabrication of GOST certified 52" Pipeline test heads, pig traps and handling system.
<b>End User:</b>	Shell Russia	
<b>Project Name:</b>	Sakhalin	
<b>Location:</b>	Sakhalin, Russia	
<b>Client Name:</b>	Total E&P	Engineering, design and fabrication of complete skid mounted 360 bar 6 nos pig launcher and receiver system.
<b>End User:</b>	Total E&P	
<b>Project Name:</b>	KHARIR Well Development	
<b>Location:</b>	Yemen	
<b>Client Name:</b>	Shell	Engineering, design and fabrication of complete skid mounted 360 bar 12 nos pig launcher and receiver system. Including valves, transmittals, interlocks.
<b>End User:</b>	Shell	
<b>Project Name:</b>	Majnoon Oil Field	
<b>Location:</b>	Majnoon, Iraq	
<b>Client Name:</b>	Petronas	Engineering, design and fabrication of complete skid mounted 8 nos pig launcher and receiver system. Including valves, transmittals, interlocks and pig handling systems.
<b>End User:</b>	Petronas	
<b>Project Name:</b>	Garraf Oil Field	
<b>Location:</b>	Garraf, Iraq	
<b>Client Name:</b>	Schlumberger	Engineering, design and fabrication of complete fuel tanks with dike.
<b>End User:</b>	Schlumberger, Iraq	
<b>Project Name:</b>	North, Iraq	
<b>Location:</b>		
<b>Client Name:</b>	GAZPROM	Engineering, Design and Fabrication of Gasboot, Knock Out Drums, Oil, Gas & Water Separators With High Pressure and ASME U certifications.
<b>End User:</b>	GAZPROM	
<b>Project Name:</b>	Gazprom Sarqala Project	
<b>Location:</b>	Northern Iraq	
<b>Client Name:</b>	Cargill	Special design to reduce 99% of the high concentration of odor (100.000OU) and SO <sub>x</sub> (500 ppm) emission at the corn starch production
<b>End User:</b>	Cargill	
<b>Project Name:</b>	Project	
<b>Location:</b>	Türkiye	
<b>Client Name:</b>	ENI	Engineering & Fabrication of ASME design FLOW TANK DE-GASSER, API 650 Storage Tanks, TANK EQUIPMENT, Cathodic Protection System.
<b>End User:</b>	ENI & SOC	
<b>Project Name:</b>	Zubair Oil Field Development	
<b>Location:</b>	Project Türkiye	





Schlumberger



SOCAR



SIEMENS



NESTE OIL



35.000



Square Meter  
Manufacturing

300+



Employees

5+



Main  
Office

QUALITY



Certificates

40 YEARS



Years  
Of Experience

200+



Diverse Range  
Products

4+



Regions

30+



International  
Representatives

# In-House Engineering

## Multidisciplinary Engineering

The offices of ERGIL in Dubai and Istanbul provide support for its employees everywhere.

Adhering to API, ASME, EN, DIN, and GOST standards, ERGIL is skilled in designing both small and large atmospheric or pressurized storage tanks and pressure vessels. This is achieved using advanced 2D and 3D design tools, including AME-Tank, PV Elite, Compress, PDMS, Solidworks, ANSYS, Inventor, Bentley, and many more. Our use of certified modern computer-aided engineering (CAE) and computer-aided design (CAD) software supports businesses across various

sectors. A wide range of products, such as storage tanks and equipment, pressure vessels, pipeline and pigging systems, process vessels, heat exchangers, filter and scrubber systems, and blow-off silencers, are developed entirely in-house through multidisciplinary engineering. Thanks to our trained welding engineers, certified by reputable third-party inspection companies like TUV, BV, and SGS, we are equipped to prepare PQR, WPS, and train Ergil welders to meet ASME IX regulations.

AD 2000-Merkblatt





# Industry Standards in Ergil

Storage Tanks  
Pressurised Equipments  
Storage Tank Equipments  
Filters  
Exchangers  
Pigging Systems  
Quick Opening Closures  
Surge Vessels  
Fire Fighting System  
Silencers

API 650, API620, EN 14015, AWWA D100, UL 142  
ASME Section VIII Div. 1/2, EN 13445, AD2000 Merkblätter, PD5500, CODAP / 95  
External & Internal floating Roofs, Breathing Valves, Flame Arresters, Level Indicator  
Absorber, Degasser, Gas Boot, Knockout drum, Scrubber, Coalescer Separators  
TEMA, ASME Section VIII Div. 1/2, EN 13445  
ASME B31.3, B31.4/8  
ASME Section VIII Div. 2 Design by Analysis Module, FEA Analyses  
Transition, Surge ve Hammer effect analysis  
NFPA, UL  
FEA, CFD, Noise Insulation Applications

# Manufacturing & Fabrication

## Modern Manufacturing with Industry 4.0 Technologies

### Advanced Manufacturing Solutions

Ergil's 35,000 square meter facility epitomizes the fusion of traditional manufacturing excellence with Industry 4.0 innovation. Here, custom production meets cutting-edge technology in the design, fabrication, and installation of a wide range of materials, from carbon steel to exotic alloys.

### Precision and Efficiency

Leveraging fully automated systems for everything from welding and CNC plasma cutting to painting, our facility represents the pinnacle of modern manufacturing. This automation ensures precision, efficiency, and the highest quality standards across all our processes.

### Quality Assurance and Expertise

Our commitment to excellence is underscored by comprehensive in-house testing, including radiography and pressure testing, ensuring compliance with international standards. Supported by our team of certified welding engineers, Ergil maintains the highest levels of quality, preparing our workforce with the latest certifications from TUV, BV, and SGS, in line with ASME IX regulations.

In the heart of our operation lies a commitment to not just keeping pace with industry advancements but leading the charge. Ergil's integration of Industry 4.0 technologies into every aspect of our work sets a new standard for manufacturing, where efficiency, innovation, and quality converge.







# Quality Management System

Ergil's quality policy, since its founding, has been dedicated to delivering the highest quality products and services to both national and international markets.

To maintain our status as a globally recognized company committed to unmatched customer satisfaction, we adhere to the administrative regulations and standards set forth by our stakeholders.

Ergil continually enhances its processes through a commitment to continuous improvement, driving efficiency across all operations.

Innovation and creativity are at the core of Ergil's philosophy. We invest in training that develops the technical and behavioral skills of our team, fostering an environment of innovation.

Our commitment to research and development is evidenced by over 40 certifications, including ISO 9001, 14001, 1090, 45001, 3834-2, ASME U, 2, R Stamp, EN 3834, AD 2000 HP0, and CE/ATEX certificates, demonstrating our adherence to international standards.

These certifications have been validated by reputable third-party agencies such as TÜV Nord, TÜV Austria, and Bureau Veritas, ensuring our processes and products meet the highest quality standards.





# Manufacturing

## with advanced technologies



A cornerstone of ERGIL's success is its expansive manufacturing capability, powered by state-of-the-art technologies.

This includes precision CNC machining for components up to 5m in diameter, CNC plasma cutting for high-quality metal shaping, robotic welding for consistent and durable joins, as well as advanced drilling, rolling, and bending techniques.

Additionally, our facilities are equipped with automatic shot blasting and painting systems for superior finishing, complemented by efficient assembly and installation processes.



These capabilities are augmented by ERGIL's 40 years of accumulated expertise and knowledge, which enrich the production of sophisticated machinery and accessories tailored for industrial facilities, pipelines, refineries, and storage tank terminals.

With four decades of industry experience, ERGIL not only brings depth of knowledge but also a commitment to innovation and quality in manufacturing.



This blend of advanced technological capabilities and extensive expertise positions ERGIL uniquely in the market, enabling us to meet the diverse needs of our clients across various sectors.





# Capabilities

## Modular Process Skid Equipment

### Understanding Modular Process Skids (MPS)

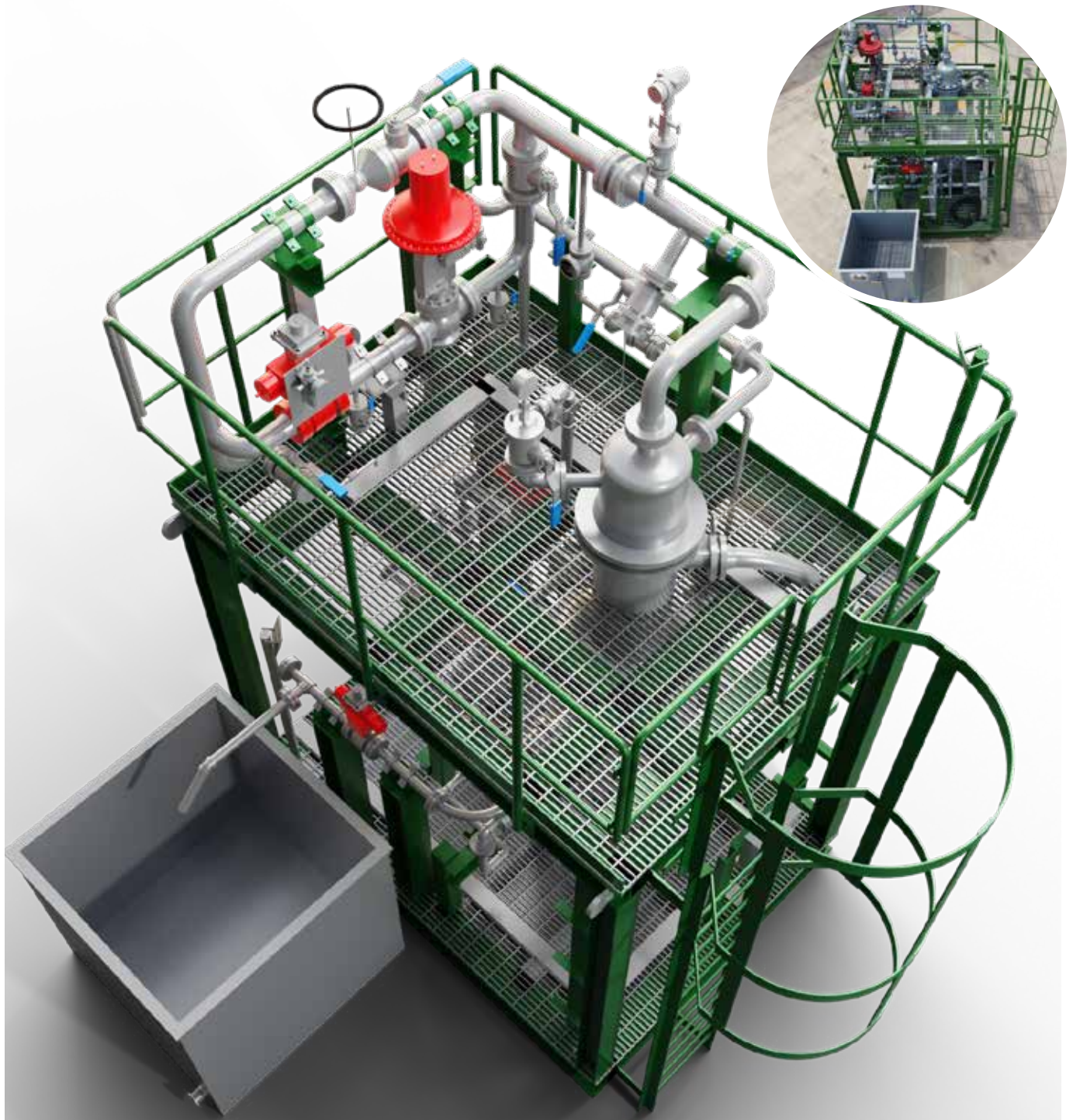
Modular Process Skids (MPS) offer an innovative engineering approach, integrating diverse equipment into a unified frame.

From basic units with pumps to more elaborate setups including pressure vessels, heat exchangers, and storage tanks, these skids adapt to various industrial needs with unparalleled efficiency.

### Advantages of Modular Process Skid Equipment

These skids reduce on-site labor, lower construction risks, and shorten project durations, making them attractive for industrial facility construction. Their controlled fabrication ensures quality, meeting the highest industry standards.

This efficiency, combined with their ability to streamline operations and enhance safety, positions MPS as a preferred solution for operational excellence in numerous industrial settings.





# Skid Equipment

**Ergil's Modular Process Skids:** Ergil's mastery of MPS technology not only delivers superior operational efficiency but also ensures each skid is tailored to meet the specific requirements of our clients, demonstrating our leadership in innovative industrial solutions.

**Cost Efficiency:** Ergil's approach to prefabrication in a controlled environment significantly cuts down on overall project expenses by reducing the need for extensive on-site labor and assembly durations.

**Enhanced Safety:** Our commitment to safety is evident in every skid we fabricate. By operating in secure facilities, we substantially lower the risk of workplace accidents, from the manufacturing floor to final operation, safeguarding both our workforce and clients.



# Capabilities

## Heat Exchangers

### Innovative Design and Fabrication

Our engineering team specializes in the design and fabrication of heat exchangers for a variety of applications, including traditional liquid-to-gas, gas-to-liquid, and the more complex gas-to-gas configurations. This versatility is supported by our extensive inventory of high-quality materials, ensuring that each heat exchanger we produce meets the exact specifications and standards required by our clients.

### Advanced Surface Treatment

ERGIL's in-house shot-blasting and painting services complement our manufacturing capabilities, providing high-quality surface finishes that enhance the longevity and aesthetics of our heat exchangers. Our painting shop is equipped with the latest in spraying technology, capable of applying a range of coatings that protect against corrosion, wear, and environmental impacts. This ensures that our heat exchangers not only perform well but also maintain their integrity over time.

### Certified Excellence

With the option for NACE inspector coating and painting quality approvals, ERGIL underscores its dedication to adhering to the highest industry standards. Our heat exchangers are designed to meet and exceed expectations, providing reliable, efficient, and sustainable solutions for any application.

Gas-to-gas Heat Exchanger





# Pressure Vessels



## Material Stock for Diverse Applications

ERGIL keeps stock and uses a wide range of pressure vessel steel plates to fabricate pressure vessels, boilers and other high pressure applications. Our vast experience with various steel fabrication and design method gives us a unique position in the market.

## Testing Facilities for Optimal Safety

ERGIL is capable of testing pressure vessel and storage tanks for strength and leaks in-house. ERGIL's specially dedicated place for hydro-testing pressure vessels provide sufficient safety measures to test and inspect vessels with up to 300 bar test pressure.

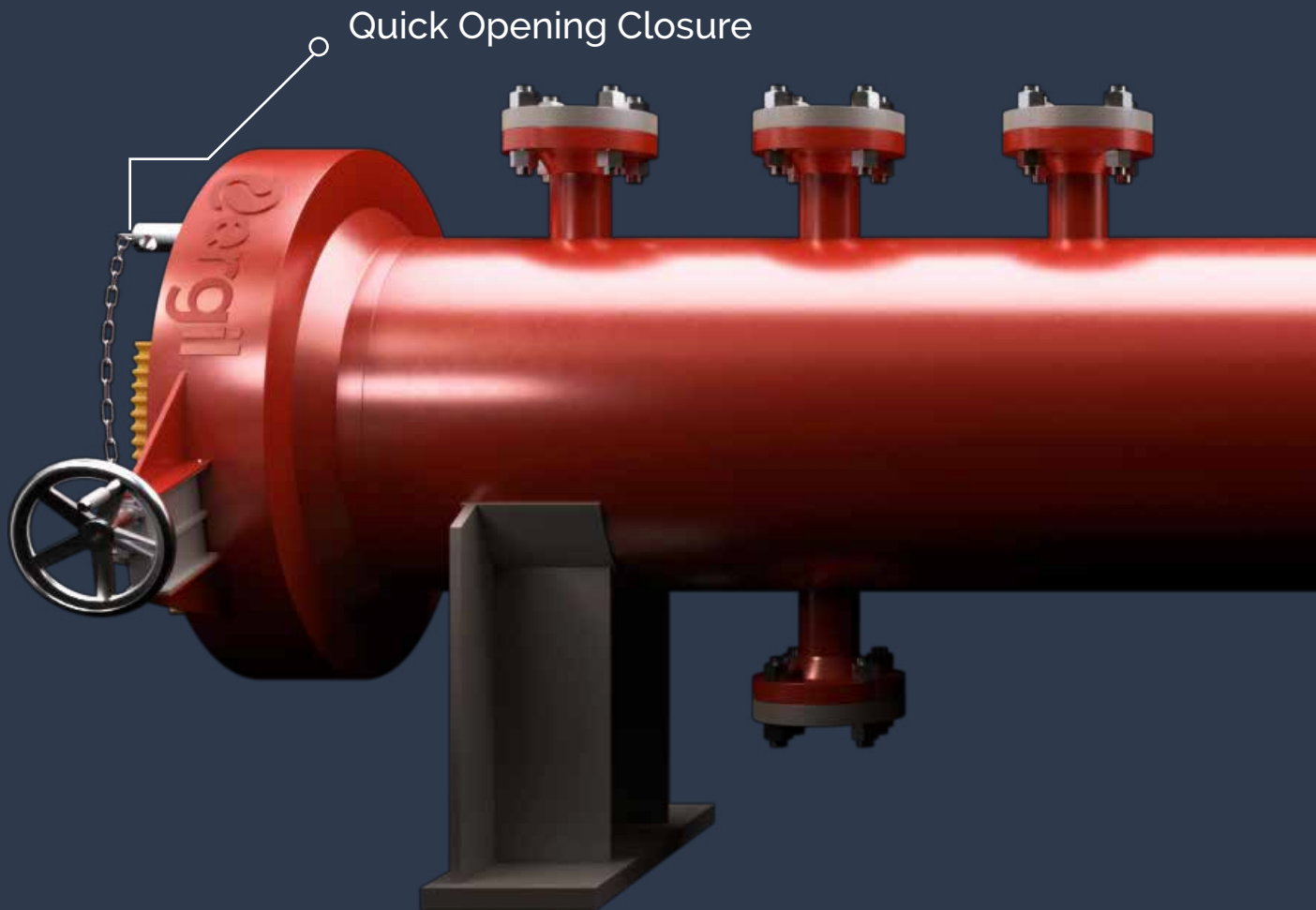
ERGIL is also capable of inspection and testing of static vacuum insulated cryogenic pressure vessels used in the storage of refrigerated liquefied gases.

## Surface Treatment and Coating Solutions

ERGIL's in-house shot-blasting and painting capabilities provide unique solutions for both onshore and offshore applications. Painting shop has a heating room that provides desirable results in much faster time. It is equipped with conventional, HVLP, airless, air-assisted airless and electrostatic spray equipment. This equipment is used to apply conventional coatings such as alkyds, epoxies, zinc riches, polyurethanes and water borne products. Ergil can provide NACE inspector coating and painting quality approvals upon request.



# PIPELINE **PIGGING** SYSTEM

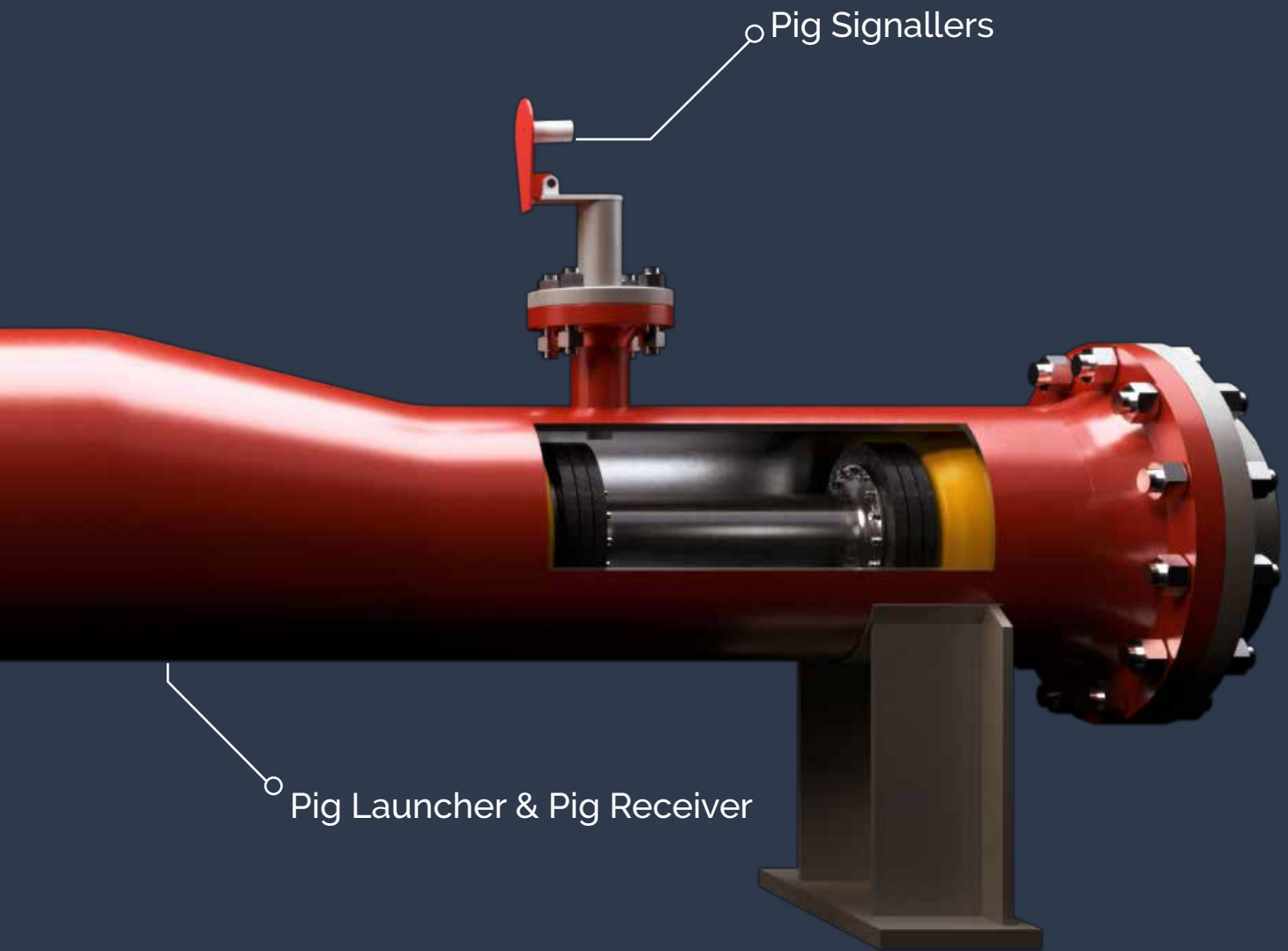


## Crucial Part of Pipeline Operation Integrity

The lifeblood of any pipeline is its pigging mechanism, a crucial part of the operation. Pig stations are employed for pipeline maintenance, cleaning, and inspection. Designing and manufacturing high-pressure pig launchers and pig receivers requires a particular specialty approved by industry authorities. ERGIL's fabrication facility is accredited by ASME U, S, R, NBR, GOST, AD 2000, EN 1090-1, EN ISO 3834-2, and the DNV GL + ABS Marine Welding Class Program. ERGIL is also qualified to design and manufacture products that meet ASME, EN, GOST, and end-user specifications, such as Shell DEP.

ERGIL's design personnel and welding supervisors are qualified and designated as per ASME BPVC requirements.





## Safe, Reliable and Sustainable

On a single skid, ERGIL's modular pigging stations fulfill all client requirements with precision.

ERGIL engineers both portable and permanent frames featuring height-adjustable mechanisms, facilitating easy relocation and compatibility with various pipelines. This design ensures effortless mobility between sites.

Additionally, modules are tailored according to the mode of shipment—whether by sea, road, or air—allowing for optimal transport efficiency. The systems are also customizable to withstand harsh weather conditions and corrosive environments, ensuring durability and reliability under diverse operational conditions.

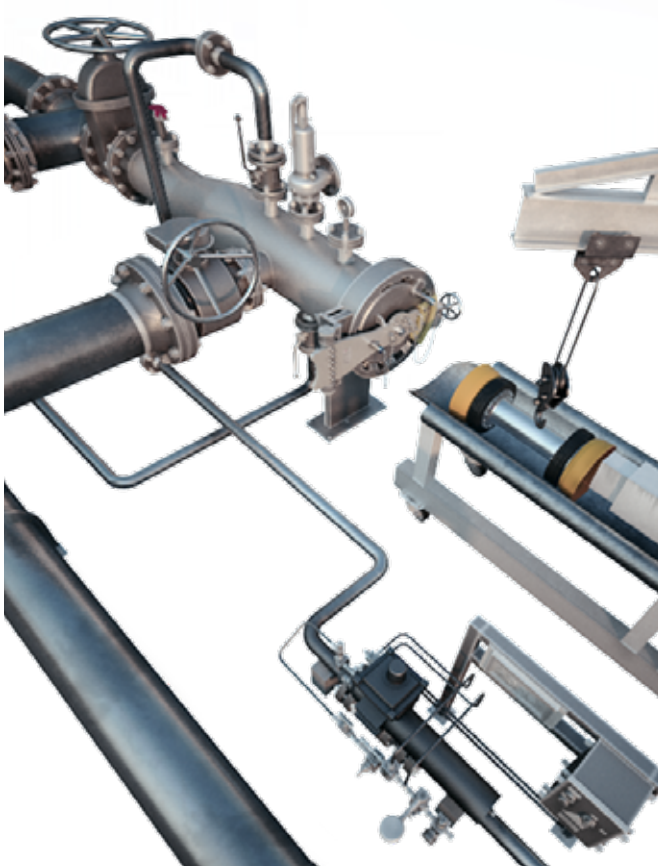
# Pig Launcher & Pig Receivers



## Product Description

Ergil® Pipeline Equipment provides Pig Receiver & Launchers to oil, gas and liquid service and operator companies. Ergil® is capable of providing pig receives and launchers for pipelines of any size and pressure ratings. Ergil® provides complete solutions for your pipeline related jobs, such as cleaning, drying, testing and displacement. Easy to use Ergil® launchers and receivers can be used almost all kind of applications. Ergil® PRL can be designed to accommodate scraper pigs, sphere pigs or "smart" pigs, or any combination of the three.

STANDARD Ergil® PIG LAUNCHER & PIG RECEIVERS comes with the standard type pig signal /indicator, closure, and nozzles.



## Key Features

- Designed to ASME B31.4 , ASME B31.8 and ASME Section VIII Div. 1 Codes.
- All pig receiver and launcher comes with the appropriate Ergil® pig indicator.
- All pig receiver and launcher comes with the appropriate Ergil® closures.
- All pig receiver and launcher comes with the sand blasted and primer coated and color of your choice.
- All welds are 100% inspected and tested.
- All pig receiver and launcher are hydrostatically tested.



# Quick Opening Closure

Rx1™



## Product Description

Oil, gas, and liquid service and operator organizations can rely on Ergil Process Equipment's RX1™ Byonet Type Quick Closures.

Ergil can provide quick closures in a variety of sizes and pressure ratings. The Standard Ergil™ Rx1 Quick Closure is included with the Standard Ergil™ Pig Launcher & Pig Receivers



## Vertical Type



Size Range	6" to 52" Nominal
Class Rating	ANSI 150, 300, 600, 900, 1500
Design Specification	ASME VIII Division 1 ASME VIII Division 2 ANSI B31.3, B31.4, B31.8 Other international standards are available on request.
Closure Configurations	Class 150, PN16, and Special
Material of Construction	ASTM A 350 LF2 ASTM A 105 304L or 306L Stainless Steel and Duplex Stainless Steel
Sealing	Elastomeric Lip Seal, Nitrile, Viton, AED((Anti-Explosive Decompression) Others on request
Accessories	Key Interlock System Pig indicator

## Accessorize; Key Interlock

The Quick Opening Key Interlock Type is intended for higher safety and higher pressure applications



# Quick Opening Closure

Rx2™



## Product Description

Ergil Process Equipment provides RX2™ Type Quick Closures to oil, gas and liquid service and operator companies. Ergil is capable of providing quick closures for any size and pressure ratings.

Standard Ergil™ Pig Launcher & Pig Receivers Comes With The Standard Ergil™ Rx2 Quick Closure.



## Vertical Type



Size Range	6" to 52" Nominal
Class Rating	ANSI 150, 300, 600, 900, 1500
Design Specification	ASME VIII Division 1 ASME VIII Division 2 ANSI B31.3, B31.4, B31.8 Other international standards are available on request.
Closure Configurations	Class 150, PN16, and Special
Material of Construction	ASTM A 350 LF2 / ASME II SA350 Lf2 ASTM A 105/ ASME II SA 105 304L or 306L Stainless Steel and Duplex Stainless Steel
Sealing	Elastomeric Lip Seal, Nitrile, Viton. Others on request
Accessories	Key Interlock System-Pig indicator

## Key Features

- Designed to ASME B31.4 , ASME B31.8 and ASME Section VIII Div. 1 Codes.
- All RX™ Quick Closures comes with the sand blasted and primer coated and color of your choice.
- RX™ Quick Closures can be hydrostatically tested.
- Ergil™ offers spare parts for all of its products during maintenance.
- Inspection and test certificates will be provided for each item.
- Third party inspection can be provided TUV, Veritas, or Lloyd if it is requested.





# Pig Signals

## Product Description

Ergil® provides pig signals / indicators for pipeline industry for the extreme conditions.

Ergil® pig indicator is a device that is used on a pipeline to show an indication to operator during the pipeline pigging.

Ergil® Pig Indicator is a economical solution that can be applied all kind of pigging systems.



# Pig Handling System

## Product Description

Ergil® provides custom made pig handling cranes and trolley systems for your pigging station.

These systems can help you to handle, load, and unload the pigs without using man power and minimize the work accidents.

Each pig handling and trolley system is designed and manufactured to meet the requirements of each client.

Pig handling systems consist of a trolley and a crane. Pig trolleys can be either mechanical (man-power), or automatic, which is powered by a motor.

Systems can be also applied separately. Spark proof certificated handling system can be also supplied on request.

Handling system specially designed for easy use, and easy to maintenance; no need for spare parts.









# PRESSURE VESSELS



ERGIL excels in the engineering, design, and fabrication of pressure vessels tailored for the oil and gas industry, offering a wide range of customization options.

Utilizing materials such as carbon steel, stainless steel, and other alloys upon request, our products are manufactured in accordance with Section VIII, Division 1 of the ASME Code, bearing the "U" stamp certification. This underscores our commitment to quality and safety in every component we produce.

Additionally, ERGIL is authorized to conduct repairs and make alterations to pressure vessels, holding the National Board Boiler and Pressure Vessel Inspectors (R stamp).

This authorization reflects our extensive expertise and capability to meet stringent industry standards, ensuring that all modifications and repairs are executed with the highest level of precision and compliance.

## Pressure Vessels Product List

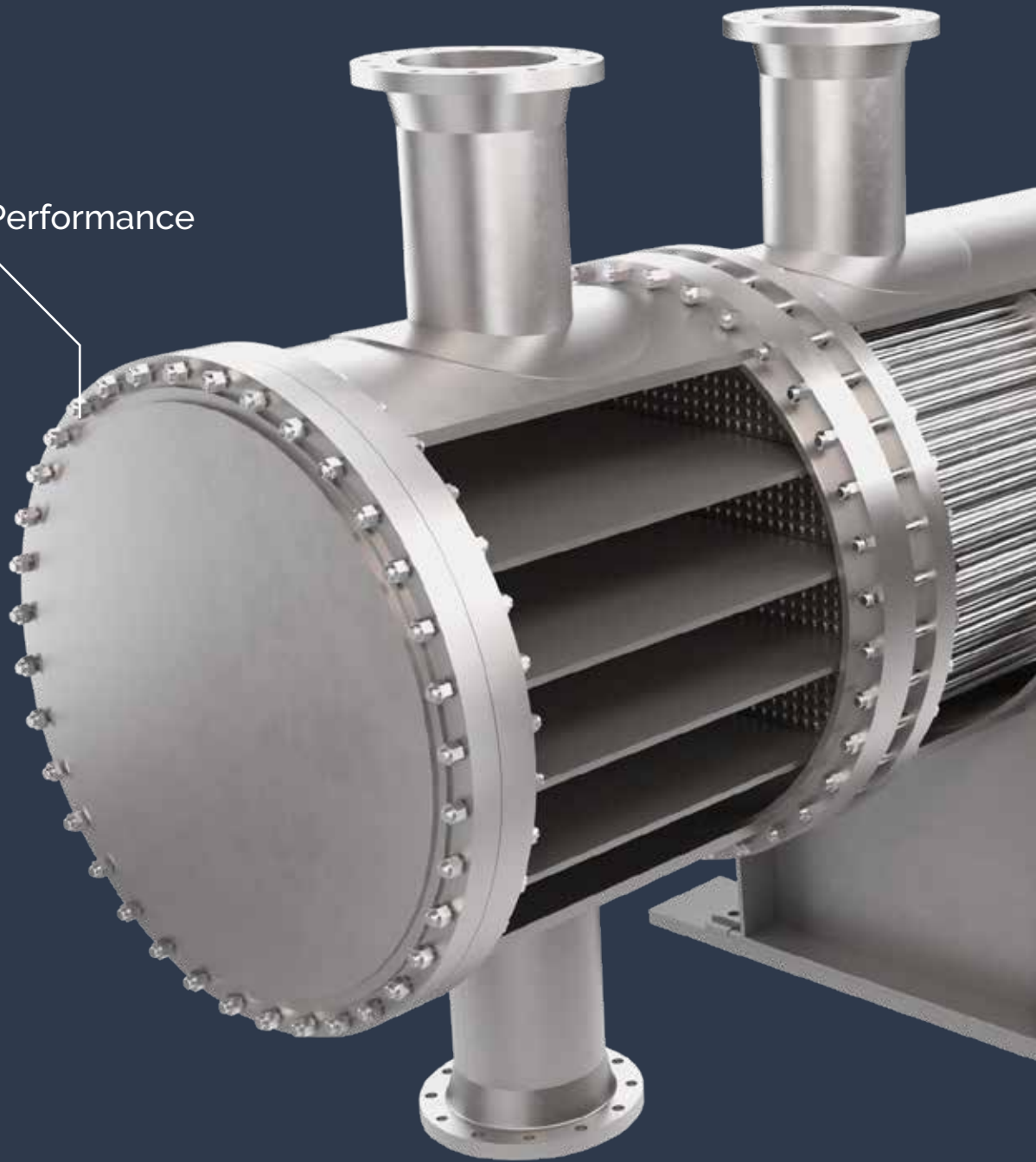
- Oil, Gas & Air Separators
- Pig Launcher & Pig Receivers
- Heat Exchanger
- Surge Vessels
- Boilers
- Reactors
- Cryogenic Vessels
- Filtration Vessels
- Drums & Colum
- Mixer Vessels
- Air Receivers
- Evaporators and Dryers
- Water Treatment Vessels





# HEAT EXCHANGER

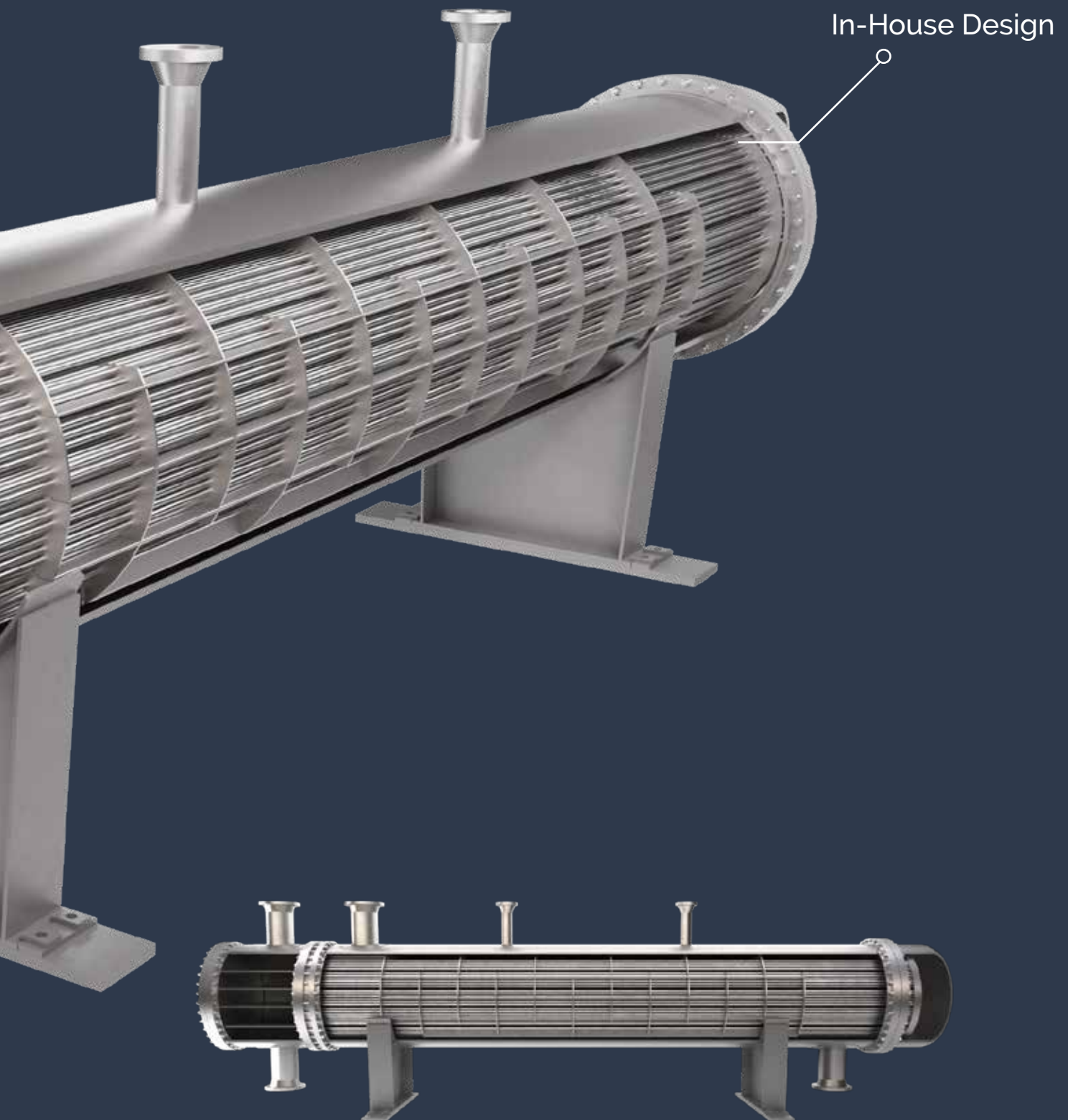
Best Thermal Performance



## Pioneered in Heat Exchanger Design

Shell and tube-type heat exchangers are highly complicated equipment and critical parts of any industrial plant to provide the best thermal performance. Experience and the right manufacturing methods play important roles in design and quality.





## Safe & Reliable

From the conceptual design to commissioning, ERGIL provides unique solutions for shell and tube-type heat exchangers. Keeping customers' requirements in mind, they follow the latest industry standards, regulations, and cost-effective solutions. In recent years,

# Heat Exchanger



ERGIL is capable of designing and manufacturing the following types of heat exchangers for the ideal solution of any industry. In this direction, all stations where heat exchangers are produced and all materials for it are chosen and processed according to certain certifications.

U-tube type heat exchangers  
One pass straight fix-tube heat exchangers  
Two or multiple pass straight fix-tube heat exchangers  
Floating head heat exchangers

ERGIL developed its unique manufacturing technology by cooperating with various machinery manufacturers to maximize welding, tube forming, and tube sheet quality efficiency.

ERGIL also continuously invests in the latest technical analysis design software in addition to the development of its in-house design software.



Body / Flanges	1- Carbon steel 2- Stainless steel AISI 316 –L or 304-L 3- Aluminium 4- Customer Specification
Flange Drilling	Class 150, PN16, and Special
Flange Element	Stainless steel AISI 316 –L or 304-L
O-ring Seal	Nitrile, Special
Screen	Stainless steel
Weather Hood	Carbon steel, Stainless steel or Aluminium
Paint Finish	1- Powder Coating, Colour RAL 9006 2- Epoxy Paint, Colour RAL 9006 3- Customer Specification

## Key Features

- Robust design and minimized maintenance ensure maximum uptime.
- Superior thermal performance means maximum heat recovery using minimal heating and/ or cooling media, which cuts fuel consumption, energy costs and environmental impact.
- Small footprint and light weight minimize installation, operating and maintenance costs.
- Gasket-free construction means high security against leakage.
- Easy to install and maintain due to multipass design.
- Compact solution with a small footprint.



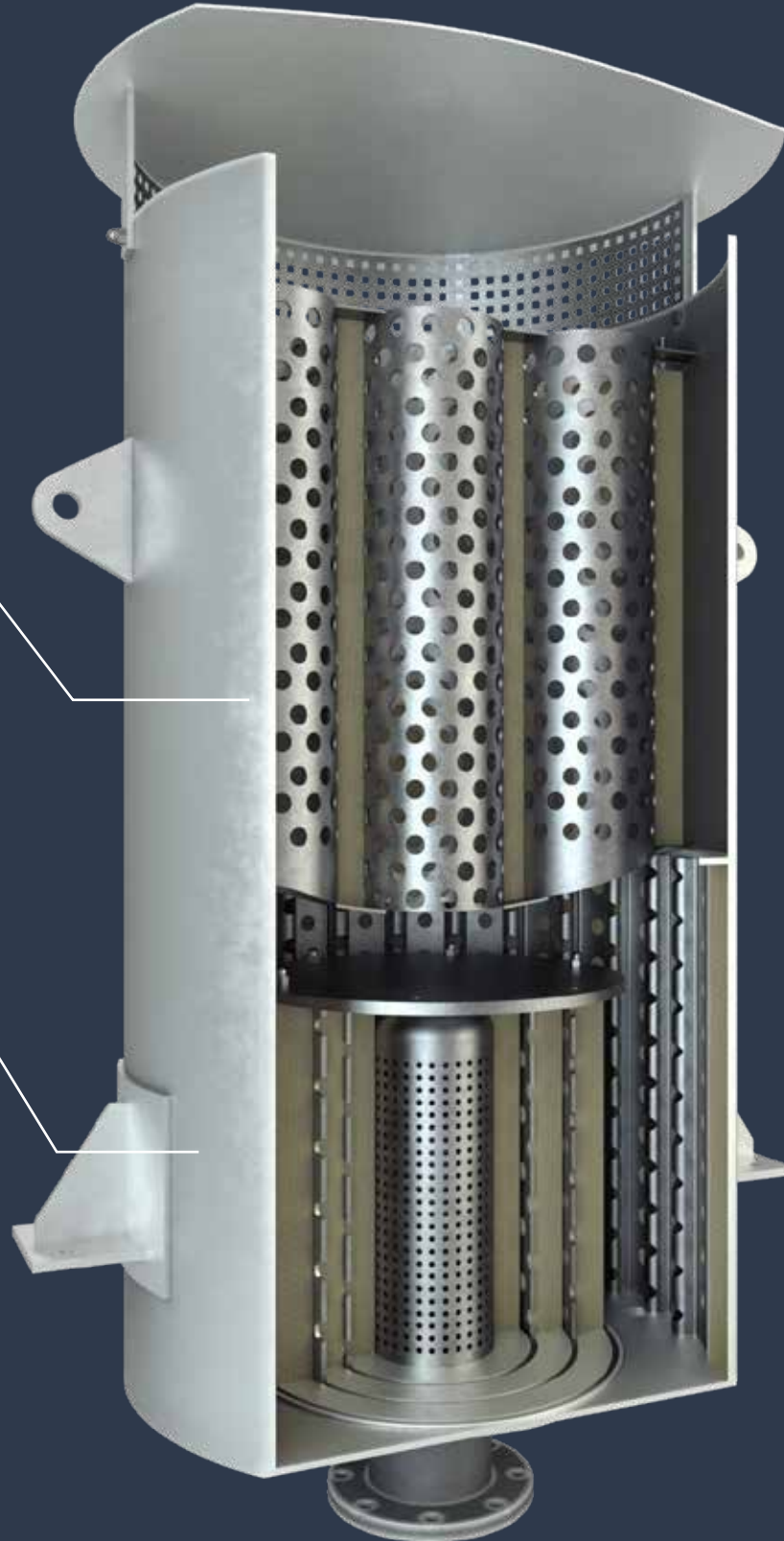


# VENT SILENCER



Maximum  
Noise  
Reduction  
Performance

Absorptive  
& Reactive







## Product Description

ERGIL is among the world's leading suppliers of Industrial Vent and Blow-off Silencers. Vent Silencers are designed to reduce noise generated when gas or steam expands from elevated pressures to atmospheric pressure. These absorptive silencers are utilized to mitigate noise produced by high-velocity gas streams, such as those from steam vents, safety relief valve outlets, system blowdowns, and purge outlets.

Noise generation occurs due to high-velocity flow through valves and turbulence created around obstacles that suddenly restrict or change the flow direction, like valves or orifices.

Our Vent Silencers are fully customizable, accommodating both vertical and horizontal orientations. We pride ourselves on offering acoustically optimized silencers of the highest quality at reasonable prices, serving various industries worldwide.



# SEPARATOR & FILTER **VESSELS**

ERGIL products provide the removal of suspended substances such as clay, silt, organic and inorganic substances, dissolved color organic compounds and micro-organisms that cause turbidity (measurement with nephelometer). It can be designed in different sizes and according to different filtering features.





Materials in the nature have their own language and we speak the same language with them! To eliminate the unwanted elements in the water, different layers are being used with different thickness levels, also different goods are chosen.

That requires critical calculations and engineering effort, so Ergil's expert engineers and technicians are here for that.

After a careful analysis about the content of the water, usage of different materials is decided and calculations are made.



# Medias

## Garnet

It is a high hardness and high density granular filter media. It is used as a substrate in a dual-media filter system with sand, gravel and anthracite.

## Quartz

It is used as a filtration medium or substrate depending on the suspended solid particle size and application.

## Antiricite

Anthracite is a natural mineral used as a top layer filtration mineral in multimedia sand filters.

## Dolomite

Dolomite is a granular calcium carbonate filtration media with a particle size of 1 to 2 mm.

## Activated Carbon

Activated carbon is used to remove chlorinated hydrocarbons and trihalomethanes, disinfection by-products, volatile organics, pesticides and micro-pollutants that cause taste and odor in drinking water.



# SCRUBBER **SYSTEMS**





%

99

With Efficiency Rates Of  
**Up To**

Scrubber Systems offers solutions  
for the following sectors;

- Asphalt Processing
- Pharmaceuticals
- Oil & Gas
- Landfills and Biogas
- Textile Processing
- Tar Removal
- Curing Ovens
- Vinyl Manufacturing
- Acid Mist Control
- Fertilizer Manufacturing
- Wastewater Treatment
- Steel Processing
- Electronics
- Food Processing
- Cocoa Processing
- Nuclear Waste Filtration
- Printing
- Precious Metal Recovery
- Wood Products

ERGIL's Scrubber Systems offer effective solutions for mitigating harmful gases and odors emitted by industrial activities, which pose significant threats to both human health and the environment. These systems are engineered to purify acidic gases from exhausts, thereby preventing the formation of acid rain and contributing to environmental protection.

Capable of handling high-temperature and highly moist gas streams, ERGIL's scrubbers are designed for efficiency, requiring less space for installation. They offer the flexibility to be retrofitted into existing equipment, enhancing their applicability across various industrial setups. Additionally, these systems are capable of cooling heated gases, further extending their utility.

Notably, ERGIL's scrubbers boast a superior desulfurization capacity when compared to other available equipment, while maintaining a low purchase cost. They effectively cool heated gases and neutralize highly corrosive gases and dust, making them a cost-effective and environmentally friendly solution for industrial emission control.

# Wet Scrubber

Scrubbers are the best way for preventing harmful gases and odor control.

ERGIL's Wet Scrubbers are able to remove highly corrosive gases and particulates in a single unit. Wet Scrubbers also use heat reduction options in their process.

These units handle highly flammable dust with little risk of explosion when they are properly designed. Wet scrubbers offer several customizable options, based on specific output and applications. These options often allow a reduction in cost.



# Bio Scrubber

ERGIL uses the power of chemistry and biology sciences for Bio Scrubbers. Bacteria are used to absorb harmful gasses & odors. These bacteria consume the harmful chemicals as a way of absorption.

The chemical solution brings also biological solution, too, and ERGIL let them react with each other.

Beyond it is mechanical design, a chemical process takes place in the background and harmful gasses are filtered by the different chemicals and bacteria which have the power to absorb them. The used chemicals change from process to process due to gas and chemical content.



# Dry Scrubber

Dry scrubbers work with a system that lets the pass through the filters and harmful gases and odors are absorbed with this method.

The chemical filters should be chosen carefully and all calculations should be made properly to reach high performance and to obtain the desired outcome. The filters might change from process to process due to gas and chemical content.

In some cases, dry scrubbers can be retrofitted into current equipment.







# SURGE **VESSELS**







# Compressor Type Surge Vessel

## Product Description

Compressor-type surge vessels have been globally recognized for addressing surge issues effectively for many years. This system integrates a vessel filled with water and a predetermined volume of compressed air, which offers the necessary elasticity to propel water at the desired rate into the system. Achieving this precise balance necessitates a sophisticated control system encompassing compressors, an air receiver, solenoid valves, measuring instruments, and a control panel. As air naturally dissolves into the water, the control system is tasked with replenishing the compressed air to preserve the essential elasticity.

Furthermore, the implementation of several safety mechanisms is crucial to mitigate the risks associated with system malfunctions.

Ergil® Surge Vessels are the culmination of 40 years of refinement and expertise, embodying a cost-effective surge control solution. Our design boasts one of the industry's leading internally designed bladder pressure control systems, setting a new standard for reliability and efficiency in surge protection.



ERGIL's Surge Vessel is a powerful and user-friendly control system that protects your pipeline against water hammer & pressure transients for potable water, seawater, and wastewater applications. It protects not only humans' life, but also your pipeline, pump stations, hydrants, valves, and other related equipment.

- Surge Vessel Body (as per ASME, EN or GOST)
- Bladder (material is carefully chosen as per the requirements)
- Internals; such as vortex breakers, supports, anti-extrusion grid
- Compressors & Pumps
- Level Indicator
- Relief Valves
- Gauges
- Instrumentation
- Drain Valves
- Control Panel
- Skid Mobile or Fixed Frame & Components
- Piping
- Ladder & Platform
- Legs
- Lightning & Earthing

# Bladder Type Surge Vessel



## Product Description

Surge vessels are important assets in the water treatment process, though incorrect maintenance and management can lead to issues in pipelines costs and the water industry millions every year, causing burst pipes, structural damage, negative pressures and colossal water wastage.

Negative pressure directly contravenes Drinking Water Inspectorate (DWI) legislation due to the risk of contamination.

An Ager Brand, Ergil® is a global specialist in designing, engineering and manufacturing surge vessels with an extensive experience.



Ergil® manufactures two types of surge vessel which are categorized as Bladder type and Compressor type for the water pipeline, desalination plants, crude oil pipelines and other applications.

Ergil® provides surge vessels in horizontal and vertical types are available and orifice plates, butterfly valves, level instruments, pipeline etc. are provided as required.



## Key Features

- Reowned company understanding of surge system design
- Ensures compliance with Product Equipment Directive & ASME regulations.
- Reduces water leakage.
- Pipeline fatigue and bursts analyzes.
- Minimizes risk of contamination in potable water pipes caused by negative pressures.
- Accommodates variable pumping regimes without dumping compressed air.
- Improves your company's environmental social responsibility and public image dumping compressed air.



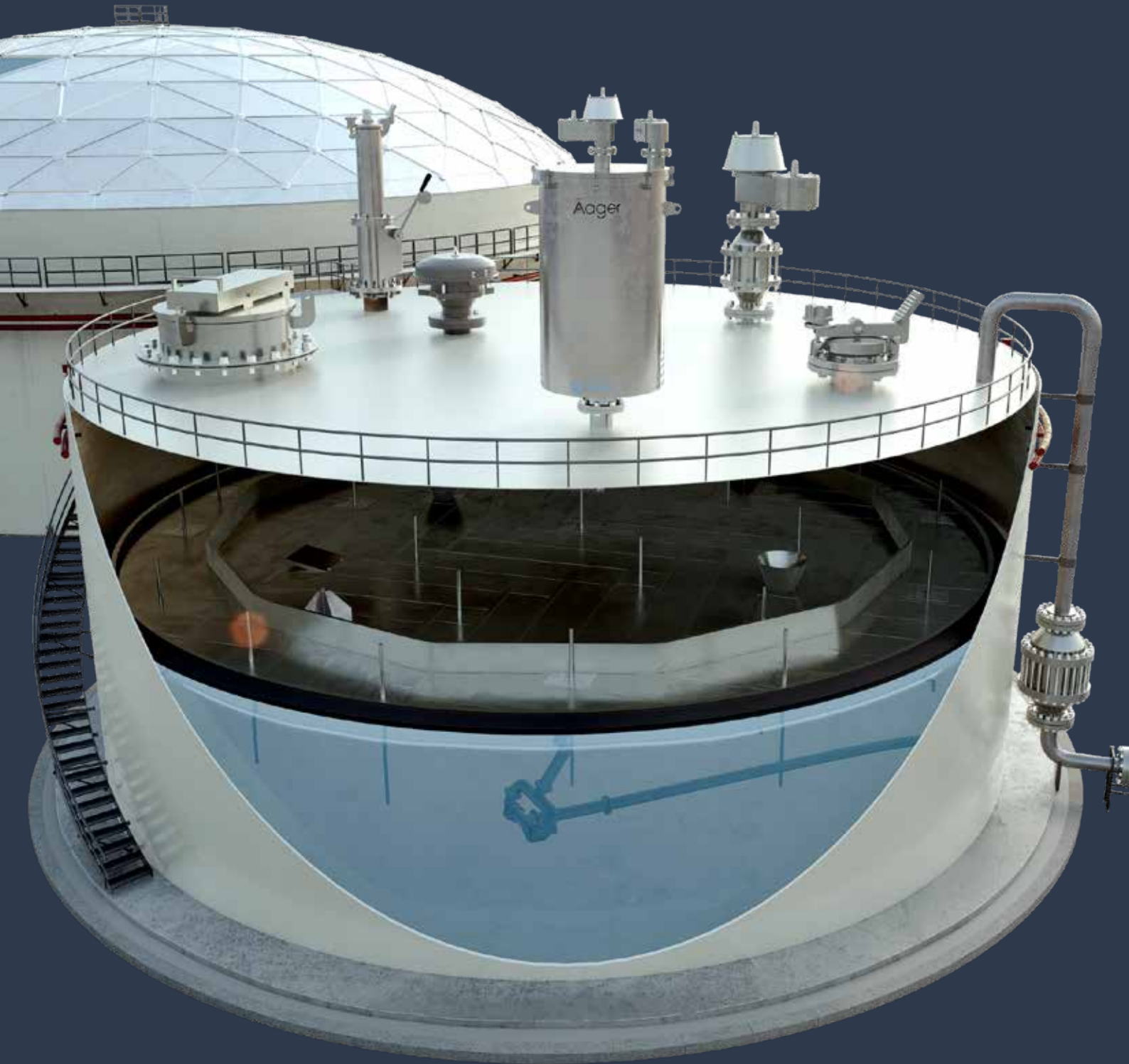








# STORAGE TANKS







## Product Description

As health, safety, and environmental concerns intensify, new regulations emerge that escalate the costs associated with designing, constructing, and operating storage facilities.

At ERGIL, we dedicate ourselves to delivering storage solutions that are not only cost-effective but also environmentally friendly and safe. Our services span from conceptual design through to commissioning, offering unparalleled solutions for storage tank terminals tailored to meet the evolving needs of our clients.

Mindful of our customers' requirements, ERGIL adheres to the latest industry standards and regulations, ensuring our solutions are both efficient and cost-effective.

With vast experience as a specialist designer and fabricator, ERGIL serves a wide range of sectors, including oil & gas, petrochemical, chemical, pharmaceutical, agro, water, wastewater treatment, and utilities. Our expertise encompasses both pressurized and atmospheric storage tanks, engineered-to-order, shop fabricated, and prefabricated, with capacities ranging from 1m<sup>3</sup> to 100,000 m<sup>3</sup>, reflecting our four decades of industry leadership.

### Types of atmospheric storage tanks provided:

#### Fixed-roof Tanks

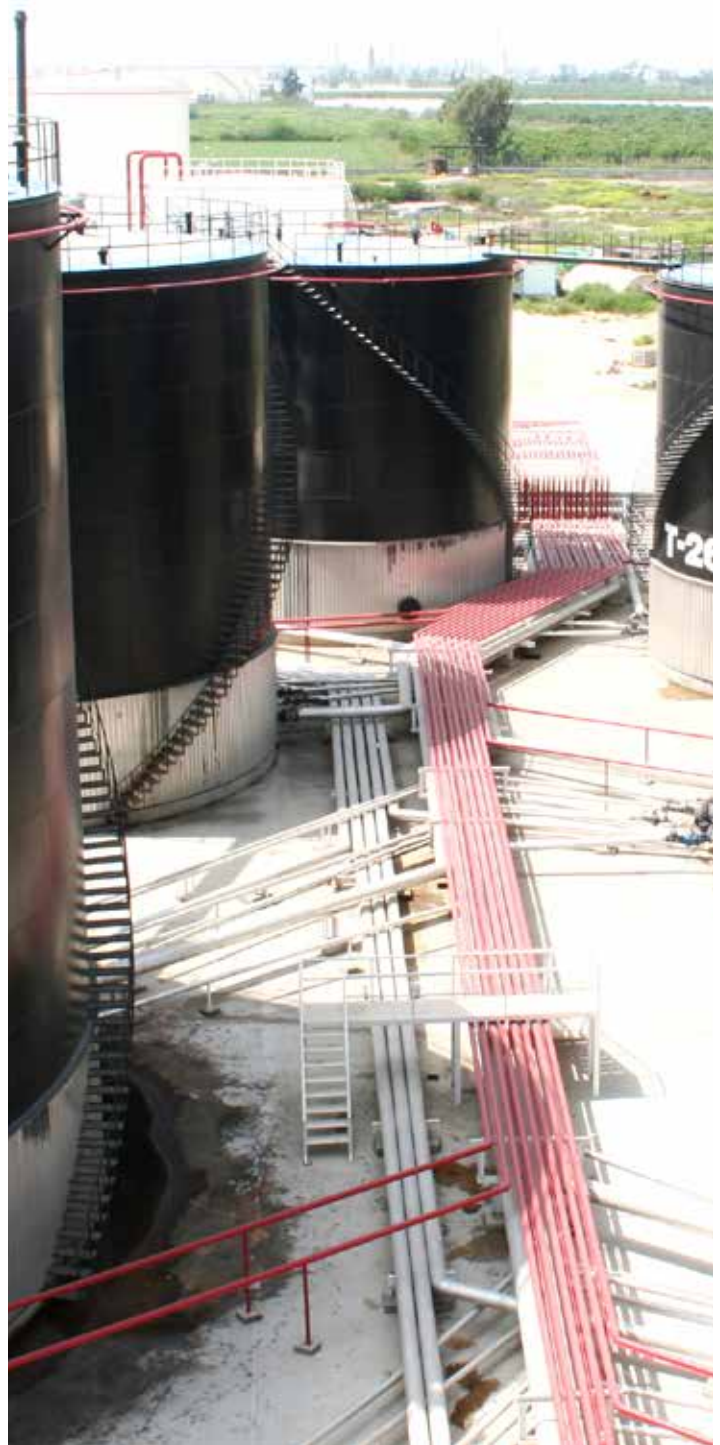
- Self-supporting/supported cone roofs
- Self-supporting dome roofs
- Stiffened umbrella roofs

#### Floating-roof Tanks

- Internal and external aluminum and steel welded steel pan, pontoon, or double deck designs
- Internal full contact aluminum honeycomb
- Stiffened umbrella roofs

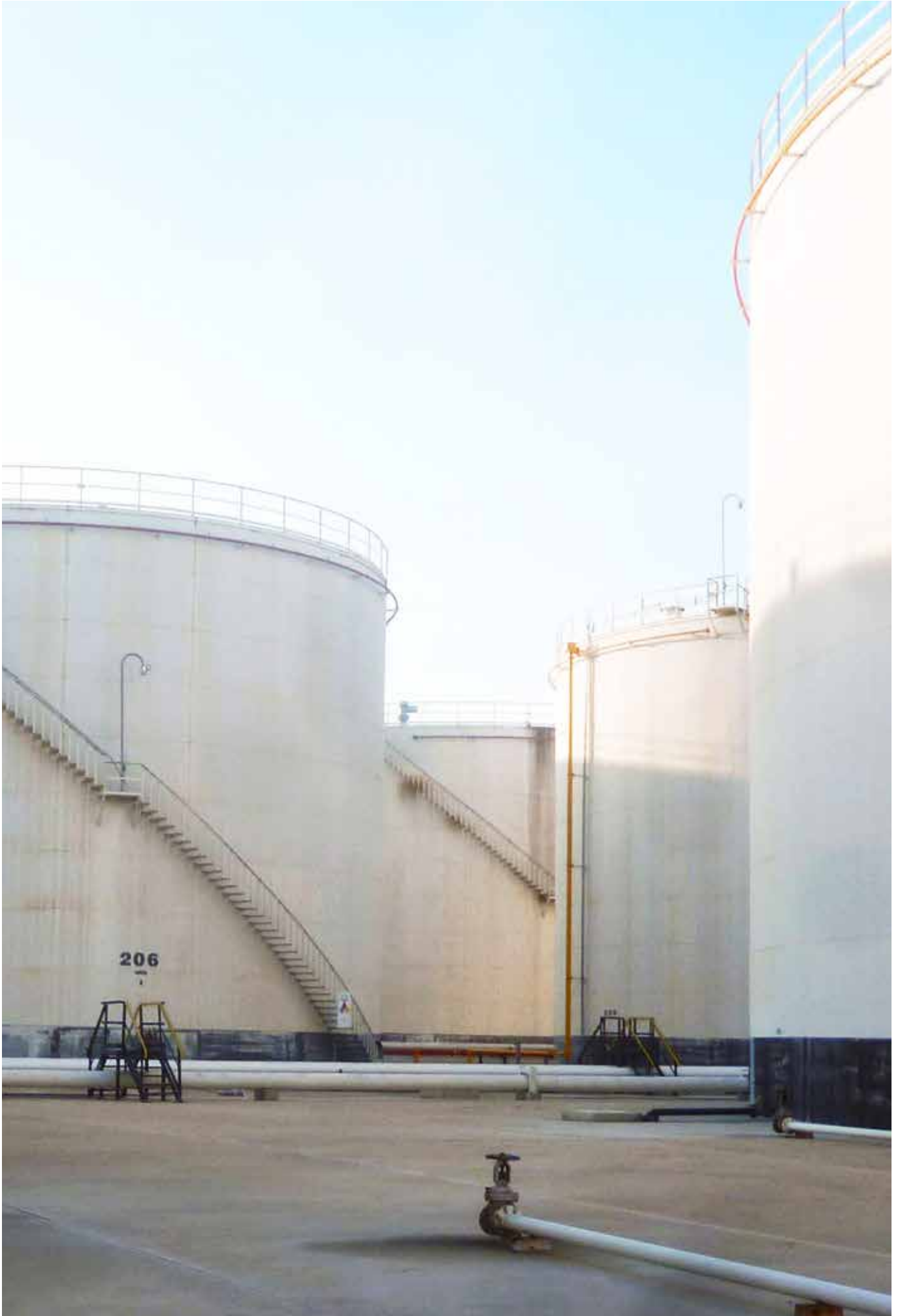
#### Special Atmospheric Tanks

- Open top tanks
- Elevated cone bottom tanks
- Bins
- Silo









# People Oriented

Ergil swiftly adapts to evolving technologies, providing solutions through its well-equipped infrastructure, commitment to quality, and dedicated team. Recognizing that successful outcomes are rooted in strong team spirit, Ergil values the satisfaction of its employees, fostering a positive work atmosphere.

By embracing the power of teamwork and collaboration, Ergil strives to create a comfortable and supportive work environment, positioning itself as a leader in the field.

The Ergil team maintains a disciplined work ethic, tirelessly pursuing improved and more efficient outcomes. Driven by the joy of production and development, Ergil continually sets its sights on advancement.





## Äger GmbH

Germany Head Office + R&D + Sales  
Herzogspitalstraße 24  
Munich 80331  
Germany  
+49 (0) 89 1250 15240  
www.aager.de  
sales@aager.de

Turkey Head Office + Sales  
Ağaoğlu My Office 212  
No: 3 B Blok /175  
P.K 34218 Güneşli – Bağcılar  
İstanbul / Turkey  
+90 212 485 40 07  
+90 212 485 40 42  
www.ergil.com  
sales@aager.de

Turkey Factory + Engineering + R&D + Sales  
Mersin Tarsus OSB.13.CD.NO:7  
P.K: 33540 Mersin, Turkey  
+90 324 676 44 04  
+90 324 676 44 03  
sales@aager.de

U.A.E. Sales + Warehouse  
Jumeirah Lake Towers, X2 Tower 1906  
P.O. Box: 123661 Dubai, U.A.E.  
+971 4 450 8051  
+971 4 450 8041  
sales@ergil.com

catalog series

Ergil®

Revision No: 02  
ER-Ctlg-02.24/V2  
ergil.com

February 2024

Ergil®  
Website QR Code



Äger