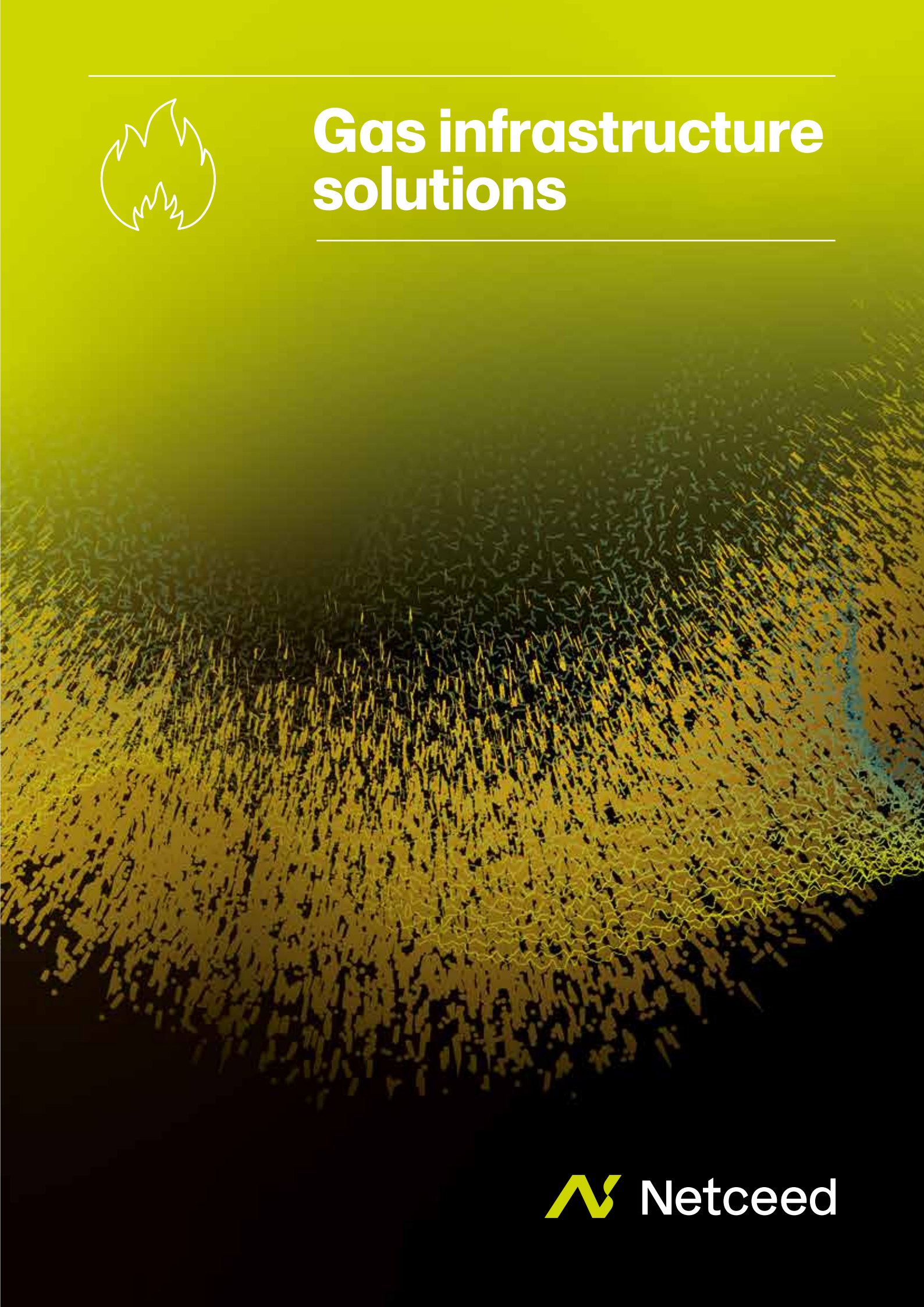
Gas infrastructure solutions

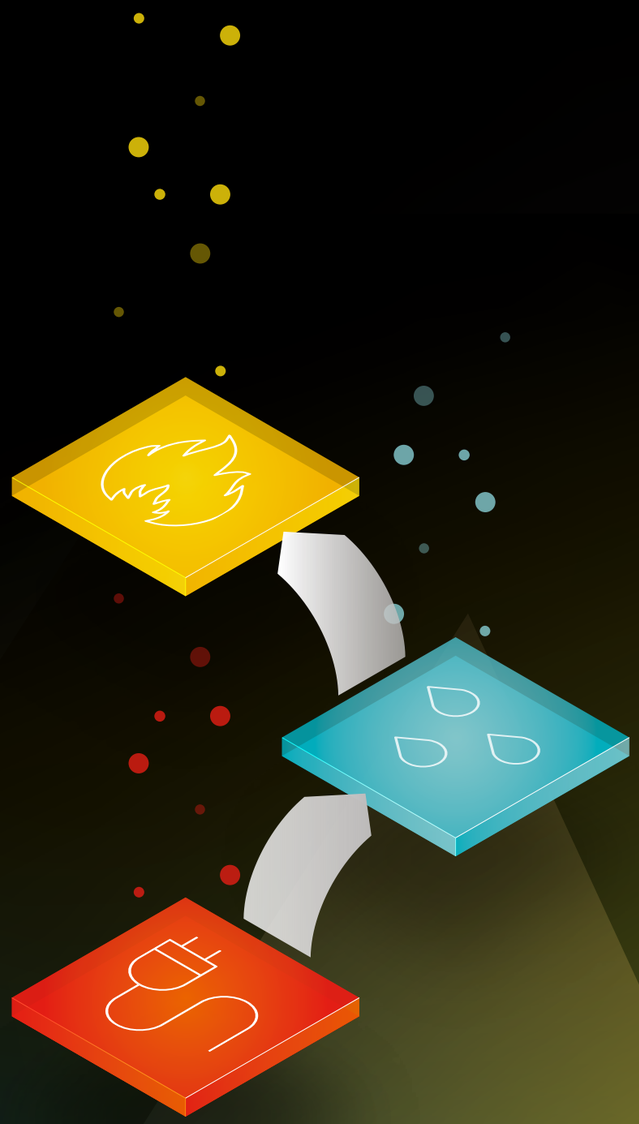


Netceed

About us

Netceed offers solutions to address the energy needs of a growing population. Our systems for gas distribution networks and storage are rigorously tested to meet the highest safety standards and ensure consistent performance.

Our solutions are suitable for various distribution networks and storage needs, including natural gas, LPG, hydrogen, biogas, and industrial gases. They have been engineered to create a fully homogeneous system that both utilities and end-users can depend on.



Netceed is your premier partner and one-stop shop for all active and passive materials, technical expertise, and logistics solutions. With over 30 years of industry experience, Netceed provides end-to-end connectivity solutions at more than 80 locations across 19 countries. While primarily focused on the telecom sector, Netceed is also active in the energy industry. With a strong local presence in Belgium, the Netherlands, and Germany, Netceed offers extensive, combined know-how in this field.

Our solutions

Pressure regulation

Low-pressure gas regulators and governors

Low-pressure gas regulators and governors play a vital role in controlling the flow of gas in various applications. They ensure a safe and consistent supply of gas to appliances like boilers, stoves, heaters, and industrial equipment. Low-pressure regulators maintain a steady outlet pressure from high and medium sources, preventing damage or malfunction. Governors, on the other hand, manage gas distribution from low-pressure sources. Their precision and reliability contribute to overall safety and performance.

Medium and high-pressure regulators

Medium and high-pressure gas regulators are key components in gas distribution systems. They reduce the pressure of gas from the high-pressure network to suitable levels for industrial, commercial, and residential use. They allow for gas to be delivered consistently and safely and promote optimal energy efficiency. We offer a wide range of medium and high pressure regulators in different sizes and configurations. No matter the requirements of your system, we have a suitable solution made from high-quality materials to offer excellent performance and long-lasting durability. We also offer models with advanced features that enhance safety and efficiency, such as integrated safety devices and emergency shut-off valves.

Gas cabinets

A gas cabinet is a secure enclosure designed to house equipment that regulates the distribution of various gases. It typically contains valves, regulators, filters, and safety devices that control the flow and pressure of gas. These cabinets are crucial for ensuring the safe and efficient operation of gas installations in buildings, grids, and industrial settings. Constructed with durable materials and equipped with safety features, a well-designed gas cabinet provides a reliable solution for managing this vital energy source.

High-pressure regulators for compressed technical gases

High-pressure regulators for compressed technical gases are designed to control and reduce the high pressure of gases stored in cylinders or pipelines to safe and usable levels for various industrial applications. These devices ensure a consistent and controlled flow of gas, protecting equipment from damage and ensuring safety in handling and using compressed industrial gases such as Acetylene-Nitrogen-Argon or CO2-Hydrogen-Oxygen.

Regulators for refrigerant gases

These types of regulators are used in the refrigerant flush system. The nitrogen regulator is specifically designed to meet the requirements of HVAC/R and automotive A/C systems.

Piping

Steel

Our steel pipes serve as the lifelines of modern society, functioning as line pipes for energy carriers such as oil and gas (e.g., CH4, H2, CO2, NH3). Our production and product technologies ensure that our steel tubes and pipes meet the most stringent quality and safety requirements and specifications. Through longitudinal HFI and spiral welding, we offer a full range of diameters and lengths. We can provide approximately 150 steel grades and several coatings and linings on demand.

CSST

CSST (Corrugated Stainless Steel Tubing) is a flexible, corrugated stainless steel tubing used for the distribution of natural gas or propane in buildings. It's commonly used as an alternative to traditional rigid piping systems. It offers several advantages:

- Flexibility: easier to install around obstacles and through walls, reducing the need for joints and fittings.
- Corrosion resistance: greater durability and longevity.
- Cost-effective: faster installation and reduced labour costs compared to rigid piping systems.
- Minimal risk of gas leaks: fewer joints and fittings reduce potential points of failure.
- Lightweight: easier to handle and transport.

HDPE

HDPE pipes for gas installations are made from high-density polyethylene, a material known for its durability, flexibility, and resistance to corrosion. These pipes are lightweight, making them easy to handle and install. Their smooth inner surface reduces friction, allowing for efficient gas flow.

Key features include:

- Corrosion resistance: longer service life and minimal maintenance.
- Flexibility: easy installation, bends around obstacles without additional joints, absorbs ground movements to minimise the risk of pipe damage.
- Leak-free joints: joining with heat-fusion techniques creates seamless joints that eliminate the risk of gas leakage and ensure the safety of the installation.
- Environmentally friendly: HDPE is a recyclable material, making it an eco-friendly choice.

HDPE pipes are commonly used in gas installations for distribution lines, service lines, and other applications requiring a reliable and durable piping system.

Flexible hoses

Flexible hoses in gas installations are designed to convey gases within a system. They are commonly used in residential, commercial, and industrial settings to connect gas appliances or gas meters to the gas supply. Typically made of stainless steel or other corrosion-resistant alloys, these hoses offer durability and strength.

The key advantage of flexible hoses in gas installations is their ability to bend and flex. This allows for easier installation in tight spaces and accommodates movements or vibrations without compromising the integrity of the gas line. The flexibility helps prevent stress on the connections and reduces the risk of leaks.

Flexible hoses are often equipped with end fittings made from materials such as brass, HDPE, steel, or other suitable options. These fittings facilitate secure connections to both the gas source and the building installation or appliance.

Valves

Ball valves

A ball valve is a type of shut-off valve commonly used in gas installations. It consists of a spherical disc (the ‘ball’) with a hole through its center. When the valve is open, the hole aligns with the flow path, allowing gas to pass through. Rotating the handle 90 degrees turns the ball, blocking the flow and closing the valve. Ball valves are preferred in gas installations due to their quick and reliable operation. They provide a tight seal to prevent gas leaks when closed, are durable, and easy to operate. Suitable for a wide range of applications, they are a popular choice for controlling gas flow in various settings. Ball valves are available in common materials including brass, steel (carbon or stainless), and PE. The maintenance-free, fully welded shut-off valves are ideal for high-pressure pipelines carrying liquids and gases

Butterfly valves

We offer an extensive range of highly durable butterfly valves, available in various styles, materials and sizes to suit light, general and heavy-duty applications.

Our selection includes:
- Double flanged body
- Flangeless wafer body
- Lugged wafer body

We provide the ideal solution for any valve actuation use case, with options tailored to the needs of a wide range of market segments and customers, including:
- (Electro)hydraulic actuation
- Electric actuation
- Manual gearbox
- Manual lever
- Pneumatic actuation

Gate valves

Netceed offers a selection of resilient seated gate valves for gas applications. Our full-bore gate valves are made of ductile cast iron and feature an NBR fully vulcanised wedge, making them the perfect choice for medium-pressure gas pipelines. These valves can be coated with different materials, such as epoxy or PUR, and are available with flanges or pipe connectors made of weldable carbon steel or PE pipes. For higher pressure applications, we also offer valves with carbon steel bodies upon request.

Industrial valves

Industrial valves are essential for controlling the flow of gases in various industrial processes. They regulate, isolate, or direct the flow of fluids, while actuators convert energy into mechanical motion in order to operate valves. In gas applications, both components are crucial to ensure process efficiency, safety, and reliability.

Cylinder valves

A cylinder valve is a mechanical device designed to control the flow of gases into and out of a cylinder. Typically used in various industrial and domestic applications, such as in compressed gas cylinders for welding, medical gases, or fire extinguishers, the cylinder valve serves as a crucial component for the safe and efficient handling of compressed gases. It allows for the regulation of gas pressure, on/off control, and connection to external equipment or distribution systems. Cylinder valves are designed with safety features to prevent accidental releases. They come in different types depending on the specific application and gas involved.

Spindle extensions or actuators for all valves

Spindle extensions enable manually opening and closing underground valves. Different cover depths are available depending on the depth at which the valve is buried. The height of the models can be either fixed or adjustable (telescopic). Other features include various manipulation squares and protection sleeves tailored to the application.

Actuators are suitable for precise control and automation. They are often used in gas applications due to their reliability, simplicity, and ability to generate high and precise forces. These devices are available in manually operated, electric, pneumatic, and solenoid-powered options.

Fittings

Thermoplastic fittings

Electrofusion

Electrofusion couplings are specialised fittings designed to connect polyethylene gas pipes. Made from high-density PE 100, these couplings ensure a strong bond between the fitting's internal layer and the pipe's external layer when welded together. The couplings include a label with a barcode that can be read by welding machines to provide information on the welding process, such as temperature and installation time.

Push fit

Push-fit fittings for PE-pipes according to EN-1555-2 SDR 11 and SDR 17 provide a tight and end-load resistant connection. The couplings are easy to use and provide a reliable long-term connection without the need for special tools.

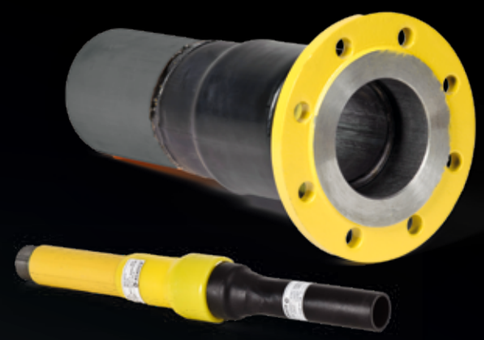
Steel fittings

Netceed offers T-spools, curves, and reducers with weldable ends or flange connections. These fittings can be customised for your specific projects, but we also provide a standard range. Various coatings are available to suit your needs.

The sleeve type steel fitting simplifies connecting, repairing, splitting, or decommissioning a steel gas pipeline under pressure. The robust sealing elements can withstand professional welding, including autogenous welding, allowing the pipeline to be welded and connected while still under pressure.

Cast iron fittings

Mouldable cast iron fittings are the most commonly used pipe fittings thanks to their durability and mechanical strength. The robust material can withstand high mechanical stress. With the standardised joining method, these fittings are suitable for numerous applications. Our selection includes threaded and compression fittings. We also offer specially designed wide-range compression fittings that seamlessly connect pipes of different sizes and materials



Transition fittings

Our offering also includes transition pieces to connect pipe types of different materials. In gas distribution networks, this mainly concerns PE-steel transition pieces, but any combination of materials is possible. From flange, PE, or steel weld ends to electrofusion connections and many more variations.

Brass fittings

Brass fittings are used to connect or terminate pipes in gas installations and are known for their durability and corrosion resistance. Commonly used types include solder fittings, press fittings, compression fittings, and standard threaded fittings.

Insulation fittings

Insulating joints are designed for use with gas, oil, flammable liquids, water, technical gases (such as oxygen and hydrogen), and in district heating systems. These joints are suitable for both underground and above-ground installations. They come ready to install with a fully welded construction and a homogeneous, seamless exterior. Rigid insulation versions are available with either welding ends or flanges. For smaller diameters up to 2 inches, we offer flanged versions or threaded versions, which are particularly suited for house installations.

Stainless steel repair fittings and saddle

A stainless steel pipe repair clamp make it easy to repair damaged pipes located both above and below ground. The clamps feature a rubber lining that protects the inside edge of the band, enabling the repair of small holes caused by corrosion or frost. It is suitable for various types of pipes, including cast iron, AC, steel, PVC, and GRP. Additionally, tapping clamps are available for creating taps on both existing and new pipelines.

Meters

Mechanical

A mechanical gas meter measures the volume of natural gas or other gases consumed by residential or commercial properties. It typically consists of a sealed metal casing that houses a series of rotating gears or chambers. As gas flows through the meter, these internal components are set in motion, causing a counter to increment and record the amount of gas consumed. Gas utility companies then use this recorded data for billing purposes. While mechanical gas meters are reliable and widely used, they are gradually being replaced by newer technologies like digital and smart meters, which offer enhanced accuracy and remote monitoring capabilities. These meters are available with mono-tube or bi-tube connections.

Rotary and turbine gas meters

Rotary and turbine gas meters are flow meters that measure the flow rate of gas in various industrial and commercial applications.

Rotary gas meter

- Principle of Operation: Rotary gas meters operate based on the positive displacement principle. They consist of a chamber with rotating blades or lobes that trap and transport a known volume of gas through the meter with each revolution.
- Measurement: The rotational movement is directly proportional to the volume of gas passing through the meter. The totalised volume is recorded for billing or monitoring purposes.
- Applications: These meters are commonly used to measure natural gas consumption in residential, commercial, and industrial settings.

Turbine gas meter

- Principle of Operation: Turbine gas meters utilise the flow of gas to drive a turbine rotor. As the gas flows through the meter, it hits the turbine blades, causing them to rotate.
- Measurement: The rotational speed of the turbine is directly proportional to the gas flow rate. Sensors or transducers convert the turbine's speed into a flow measurement.
- Applications: These meters are widely used to measure gas flow in large pipelines and industrial processes. They are suitable for both clean and dry gas applications.

Ultrasonic gas meter

Ultrasonic gas meters measure the flow of gas in pipelines using ultrasonic technology. Unlike traditional gas meters that rely on mechanical components, ultrasonic gas meters use ultrasonic transducers to send and receive sound waves through the flowing gas. By analysing the time it takes for these sound waves to travel upstream and downstream, the meter calculates the velocity and volume of the gas flow. This non-intrusive and highly accurate method offers advantages such as minimal pressure drop, reduced maintenance needs, and the ability to measure a wide range of gas types. Ultrasonic gas meters are used in utilities, manufacturing, and residential settings, providing precise and reliable gas consumption data.

Gas volume convertor

Compliant with the MID directive, our gas volume corrector provides high-performance functions ideal for commercial and industrial use. Its intuitive configuration software is extremely easy to use and allows for personalised configuration. With our electronic volume converter, you can guarantee financial transactions, continuously monitor gas consumption, and implement energy-saving actions. These volume correctors can connect to pressure sensors, temperature sensors, and flowmeters, transmitting real-time data about gas consumption, flow rates, and other relevant information to a central monitoring system.

Telemetry

Telemetry measures and monitors gas consumption in residential or industrial settings. When integrated as an add-on or built-in technology, it enables more efficient management of gas distribution networks and helps identify and address potential leaks or anomalies. Telemetry gas meters also improve billing accuracy, enhance safety through early detection of irregularities, and promote overall energy conservation.

Measuring and monitoring

Pressure logger

Digital measurement equipment for pressure tests on gas pipes or measuring pressures in gas installations has become essential for technicians installing or checking pipelines. These devices measure pressures, differential pressures, and temperatures in supply networks. Our comprehensive offering includes both ATEX and non-ATEX options, with various pressure and accuracy ranges. These devices can function as digital manometers and data loggers with internal memory. Recorded data can be collected via USB or an optional LTE GPS module, allowing test reports to be sent directly from the construction site, including the GPS position. In addition to our complete range of pressure test equipment for gas pipes on construction sites, we offer handheld solutions for fast and accurate pressure measurements, ensuring ease of use and suitability for a wide range of applications.

Gas leak detection

Our portfolio includes explosion-proof measurement instruments, gas warning devices, gas leak detectors, and gas concentration measuring devices. We also offer various gas measuring devices optimised for biogas, natural gas, landfill gas, hydrogen, and hydrogen sulfide. Our analysers are equipped with integrated ethane detectors, making it easy to differentiate between natural gas and biogas. Additionally, we provide vehicle-based solutions for inspecting underground gas pipes and software for the digital documentation of pipe network inspections. Our products cover a wide range of measurements, including PPM, LEL, and Vol%, with options for different types of internal or external sensors.

Pipe locators and metal detection

Buried pipelines are essential for the transportation and distribution of energy products like crude oil and natural gas. Netceed offers a range of solutions to locate and map these pipes. We offer a wide selection of locating equipment, including electromagnetic, acoustic, magnetic, and ground penetrating radar tools. They can be used to find leaks, identify different pipeline materials, and assess the condition of metallic pipeline coatings. Our mobile apps allow for the creation of detailed maps of the buried infrastructure.

Finding manholes or other metallic covers can be challenging due to changing environmental conditions like ground, concrete, vegetation, and gravel. When these access points are not visible, our extensive range of metal detectors can help locate them.

Cathodic protection

Netceed provides materials and expertise to help customers protect their structures from corrosion. Our offering includes rectifiers and drainage solutions for all situations. Our product portfolio features electrodes, anodes, and coupons, along with various connectivity materials for cathodic protection (CP). We offer state-of-the-art CP dataloggers and remote monitoring systems specifically developed for this purpose. Additionally, we supply above-ground and underground measuring poles for installing CP cables and measuring tools, available upon request.

Installation equipment

Signposts and measuring posts

Signposts are used for marking routes. Our PVC posts have a co-extruded PMMA surface and are easy to install. These posts mark pipeline routes and can be matched to the official colour of the media inside the pipe or visually adapted to urban planning and landscape requirements. We also offer flight marking bonnets in various sizes, colours, and shapes. Additionally, we provide injection-moulded or aluminium identification plates for gas lines.

Surface boxes

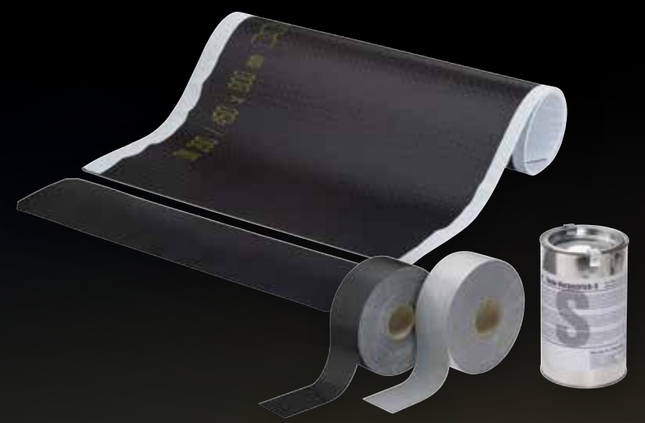
A surface box is a protective enclosure or cover installed on the ground, pavement, or floor, commonly used in infrastructure and utilities management. It provides access to underground utility lines, valves, meters, and other equipment for maintenance, inspection, or repair, while protecting them from external elements and damage. Surface boxes come in standard DIN sizes or custom dimensions. We offer both fixed and telescopic designs, made from glass-fibre reinforced plastic, cast iron, or steel. Our covers are primarily made of cast iron and are available in various resistance classes.

Sealings and spacers

Durable resistant sealings
The supply and disposal systems of a building are typically managed through underground lines. Sealing systems, also known as lead-through systems, are used to create a gas- and watertight transition from the building seal to the pipe. These seals protect people, property, and the building itself from external influences, especially water and gas.

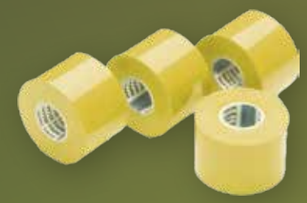
We offer a complete range of sealing inserts, pipe sleeves, link chains, cable entries, and special constructions. In addition to mechanical seals, we also provide a variety of two-component foams and resins. These systems can be used to create gas- and watertight seals around pipes passing through masonry or concrete.

Spacers and end seals
We offer plastic or steel spacers and insulators for service pipes placed inside protective tubes, along with casing end seals.



Anti-corrosion tape systems

The longevity of steel pipelines used in energy generation and supply relies heavily on the quality of their individual components. The connection points of steel pipelines are critical safety areas that require protection with advanced materials. We offer solution-oriented systems that have been approved and successfully used in both national and international markets for decades. Our passive corrosion protection systems include post-weld coatings for weld seams and fittings, as well as CP cable connections. We provide tailor-made solutions for re-coating steel pipes and fittings, including multi-layer plastic tape systems for various requirements. Shrink technology offers custom-fit corrosion protection for weld seam connections and moulded parts. Additionally, traditional and proven solutions such as bitumen/petrolatum tapes and high-quality PVC insulation tapes are available for reliable protection.



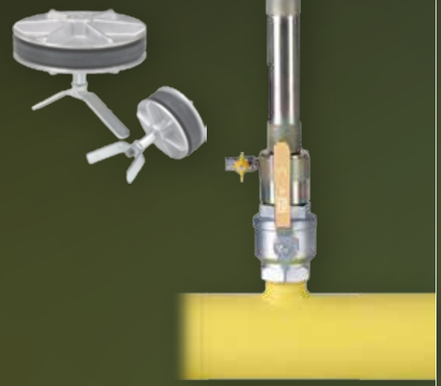
Tooling

Mobile gasflare

Reducing methane emissions in the gas grid has been a long-standing objective. Yet with the adoption of the EU Methane Regulation, it has become a larger priority than ever. Flaring is a common and effective method for reducing operational methane emissions, such as those released during pipeline flushing. Netceed offers a mobile and compact gasflare for the safe and environmentally friendly flaring of natural gas, hydrogen, or other combustible gases. It helps avoid methane emissions during the commissioning and decommissioning of pipelines, in line with German DVGW worksheet G 404. The gasflare is ideal for supply and distribution lines, with some limitations for house connections, and is also suitable for emptying gas tanks and storage facilities.

Drilling and stopping systems

Hot tapping and stopple devices allow for leak-free tapping and shut-off of active gas pipelines. We offer complete drilling systems for steel, cast iron, polyethylene, and cement/asbestos pipes. Additionally, we provide plugging systems for low and medium-pressure pipes, including gas bags and expanding stoppers.



Gas tools

Netceed delivers custom-made tools based on our customers' specific requirements. For instance, we provide tooling sets for testing and commissioning regulators, gas meters, and gas connections.

Acces control and locks

Netceed offers intelligent locking systems that provide a reliable and cost-effective solution for all types of properties and access-management challenges. With limitless access options, easy administration, and top-notch security, these systems enable streamlined operations. Our lock technology allows you to choose between several 'keys': a digital key, an NFC-enabled mobile phone (iOS or Android), a fob, a tag, or even a PIN code. Additionally, our systems are designed to operate without the need for batteries or extensive cabling, simplifying installation and maintenance.

Welding systems for plastic pipes

Netceed provides welding equipment and machines that allow our customers to reliably and precisely weld PE and PP pipes. Our product range includes a variety of electrofusion control units, automatic butt-welding machines, socket fusion machines, a comprehensive assortment of tools and accessories, and documentation software.

Welding tools

We offer a wide range of tools and accessories for PE pipeline construction. Among the many solutions we provide are manual, pneumatic, and hydraulic pipe cutters or squeeze tools, pipe clamps and supports, rounding and re-rounding tools, and peeling or scraping tools.

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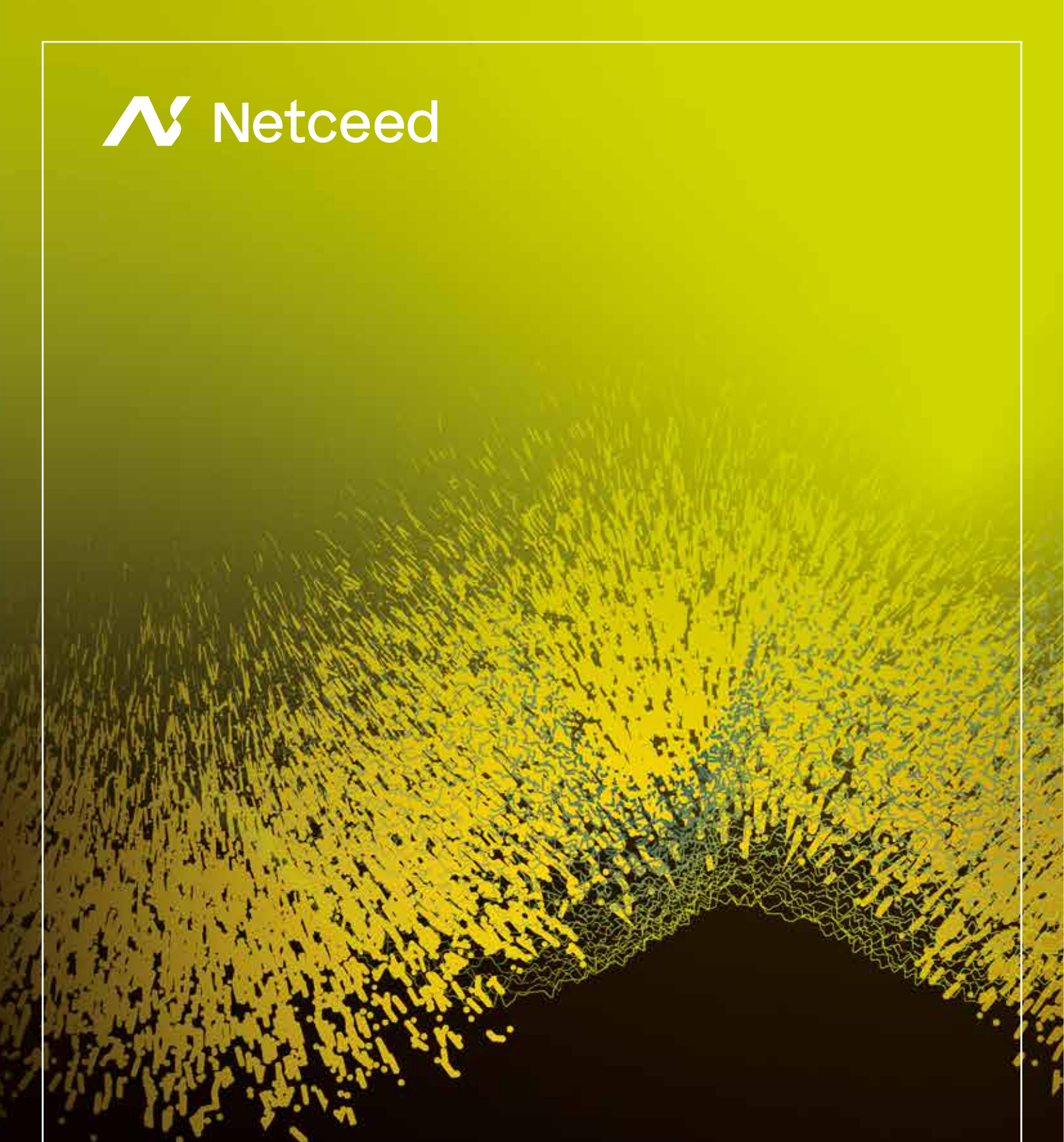

Get in touch

Our team of experts looks forward to helping you find the right solution for your project. Feel free to get in touch to discuss your project's requirements.

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