



INDUSTRIAL APPLICATION

*Your needs,
our ideas*

SPECIALIZED
IN SOLUTIONS

ENGLISH EDITION

ABOUT US

Over 60 years of experience in the industrial sector and constant technological research and innovation have propelled ODE to a leading position in the development of solenoid valves and other valves and solutions for the fluid control. Our product range has been designed and built according to the Company's founding principles: **quality, flexibility and reliability.**

These characteristics, combined with our natural focus on the future and unfailing ability to offer customers the best solutions, have allowed ODE to develop into a key player in this sector as well. Tradition, experience and innovation.

WE ARE READY FOR THE FUTURE.



YOUR NEEDS OUR IDEAS

The current product portfolio includes a **wide range of valves, solenoid valves and integrated control systems** resulting from the continuous refinement of technical innovations to reflect the needs and practical requirements of our customers.

More than 60 years of expertise in fluid control systems allow ODE to meet the needs of several industrial sectors such as **Iron & Steel, Chemical / Petrochemical, Pharmaceutical / Medical, Mechanical, Automotive, Food & Beverage** and **Agricultural.**



IRON & STEEL



AUTOMOTIVE



CHEMICAL
PETROCHEMICAL



FOOD
& BEVERAGE



PHARMACEUTICAL
MEDICAL



AGRICULTURAL



MECHANICAL



ENGINEERING



INDUSTRIAL SOLENOID VALVES & PUMPS

PILOT SOLENOID VALVES

A wide range of 2- and 3-way direct acting solenoid valves, N.O., N.C., with reliable and **proven design for high performance** and available in different body materials: brass, stainless steel and PPS.

CONNECTIONS
1/8" G, 1/4" G, 3/8" G, 1/2" G, 1/4" NPT, 1/2" NPT, flanged
PRESSURE
0-100 bar



PROPORTIONAL VALVES

A range of 2-way solenoid or motorised valves, N.C., capable of proportional fluid flow control, while also **ensuring precision and accuracy in modularity of response**. Controlled by integrated driver.



PROCESS SOLENOID VALVES

A wide range of 2-way **indirect and combined acting solenoid valves**, N.C., N.O., for high flow rates, ensuring proper fluid handling.

CONNECTIONS
3/8" G, 1/2" G, 3/4" G, 1 1/4" G, 1 1/2" G, 2" G, 2 1/2" G, 3" G, 3/8" NPT, 1/2" NPT, 3/4" NPT, 1" NPT, 1 1/4" NPT, 1 1/2" NPT, 2" NPT, 2 1/2" NPT, 3" NPT
PRESSURE
0.1-100 bar (indirect acting) / 0-20 bar (combined acting)



ATEX SOLENOID VALVES

Solenoid valves with ATEX certification, designed for use with **potentially explosive atmospheres** as per Directive 2014/34/UE. Available in different materials: brass, stainless steel and aluminium. Direct, indirect and combined acting. Available versions: Ex d, Ex m and Ex nA.



STEAM AND TEMPERATURE SOLENOID VALVES

A range of 2-way indirect acting **pilot-operated membrane or piston solenoid valves**, N.C., N.O., for high flow rates and optimal handling of fluids at specific temperature.

CONNECTIONS
1/2" G, 3/4" G, 1" G, 1/2" NPT, 3/4" NPT, 1" NPT
PRESSURE
0,1-20 bar



MANIFOLDS AND CUSTOM SOLUTIONS

Integrated plug-and-play systems made from various construction materials such as brass, aluminium, stainless steel and PPS technopolymer. Thanks to its compact design, this solution makes it possible to **combine space-efficient footprint with robust seal capacity and ease of installation and maintenance**.

ELEMENTS
Electromagnetic kits, non-return valves, connectors, pressure transducers e sensors.
PRESSURE
0-100 bar





TOTAL SEPARATION SOLENOID VALVES

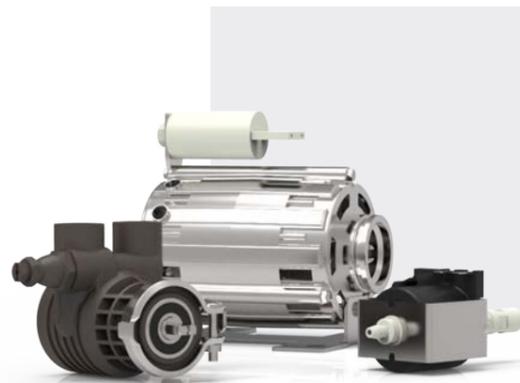
Solenoid valves particularly suitable for the proper handling of aggressive or non-contaminable fluids. The fluid is solely in contact with the valve body and the isolation elements, **hence free from any kind of chemical contamination.** Particularly suitable for applications in the food and beverage, chemical and medical environments. Available in different materials: PSU and aluminium.



HIGH PRESSURE SOLENOID VALVES

A Range of 2-way solenoid valves direct and indirect acting, N.O., N.C., for high pressures and high flow rates. Available in direct drive configuration or **piston solenoid valves ensuring an optimal management of pressurized fluids up to 100 bar.**

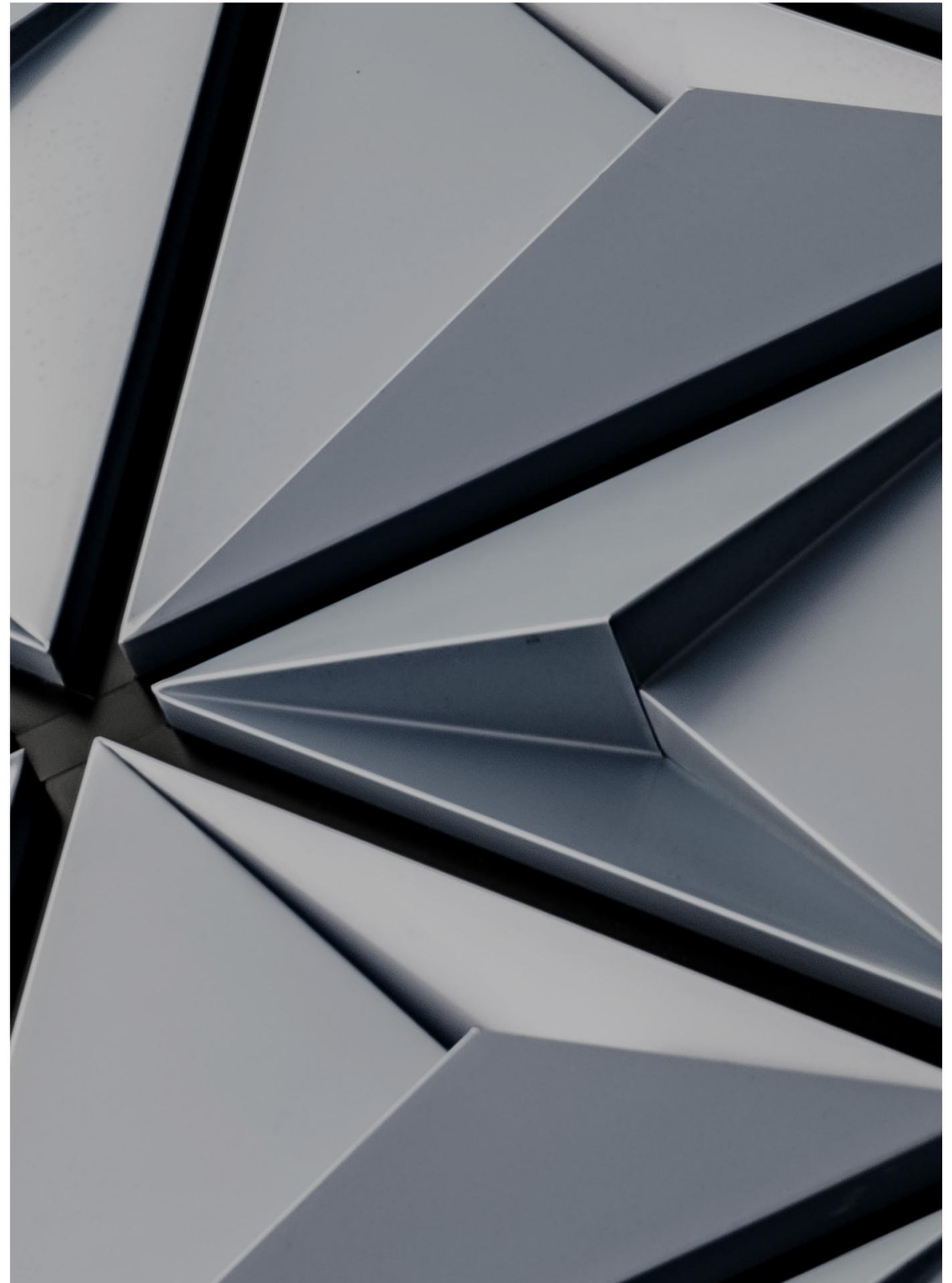
CONNECTIONS
Flanged, G 1/8, G 1/4, G 1/2
PRESSURE
0-100 bar



PUMPS AND MOTOR-PUMP

A wide range of **compact or standard solenoid pumps**, from 2,5 to 20 bar, certified VDE, CE, CQC, UL, CB, NSF, LFGB.

MOCAREEL®, the innovative **rotary vane pump** made of **PPS, carbon graphite** and **stainless steel** completes the range. Available in different sizes, from 100 l/h to 300 l/h, with a maximum pressure of 16 bar. Also available in motor-pump version.



INDUSTRIAL VALVES



PNEUMATIC VALVES

A range of angle-seat or in-line pneumatically actuated valves **made from very high-quality, corrosion-resistant materials**. A complete series of 2-way valves available in normally closed, normally open and double-acting configurations, with above/below seat flow direction. Angle seat or coaxial valves with stainless steel AISI 304 or AISI 316 body.

CONNECTIONS

1/2" G 4" G, 1/2" NPT 4" NPT, tri-clamp, DIN 11850-2 and 11850-3, ANSI 150 flange, DIN 2576 flange, DIN 2543 flange. Modular version available.

PRESSURE

0 - 40 bar



CONTROL VALVES

Our range of self-actuated valves has been developed to meet every need in the fluid management field. **The range includes pressure reducers, overflow valves and filter pressure reducers, all of which are highly customizable.**

Self-actuated valves allow a flow to be regulated with no need of an external power source as they use only the power generated by the fluid itself.



ASEPTIC VALVES

The new line of aseptic membrane valves is made from high-quality, corrosion-resistant materials. This type of product is characterised by pneumatic or manual actuation and is capable of operating with pressure under seat and with bidirectional flow.

The EDPM + PTFE "dual layer" confers great resistance on the membrane, making it suited to use in particularly critical environments.

This range of valves, compliant with the PED, FDA and USP standards (EC 1935/2004; FDA 21CFR 177.1550; USP40), is ideal for aseptic/hygienic applications.

INDUSTRIAL ACCESSORIES



"Y" ANGLE SEAT FILTERS

The "Y" angle seat filter range fits as accessories dedicated to all the ODE pneumatic valve ranges. This product functionally operates by means of **collecting impurities along the pipes**. Its task is to protect plant sections or equipment installed downstream.



ELECTRICAL POSITION INDICATOR

The electrical position indicator, that can be installed on all pneumatic angle seat valves series 21IZ1 and 21IZ3, allows to **monitor the opening and closing valve status** through a local visual control (LED) or remotely via electrical signal.



STROKE LIMITER

The stroke limiter, available only preassembled onto the valve, can be installed on all ODE pneumatic angle seat valves series 21IZ1/21IZ3. **Its function is to influence the plug position by limiting the stroke** of the valve and consequently by adjusting the flow rate through the valve combined to it. In case of lack of pilot pressure or due to mechanical/electrical failures it can act as emergency manual override.



INDUSTRIAL HI-TECH



+SMART ONE

A completely new product in the market of solenoid valves. This system allows the development of any application in a **simple and intuitive way, as well as control, monitoring and wireless operation** of the solenoid valves applied. The main features include the integration of a PLC with the Wi-Fi system through which it is possible to manage a control terminal block for digital inputs/outputs.



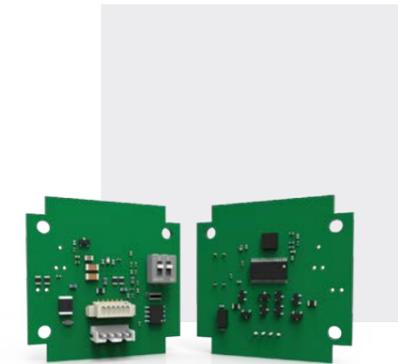
DYNAMIC PRESSURE SYSTEM

A three-element system: **stepper motor valve, driver and pressure transducer**. Combined together these three elements give rise to a system that can change the brewing pressure in a few hundred of milliseconds and with a precision never seen before.



+SMART COMPACT

An extremely compact solution. It can easily be housed in sensors or other small devices. Thanks to a **powerful CPU, it can process signals from external devices** adding other information to the measurement. All the information processed on the device can be sent by Wi-Fi connectivity to a cloud platform.



DRIVER ACTUATORS

The **electronic driver** can be programmed to **control circuits** in a closed loop or in an open loop. **In the first case the aim is to regulate the flow respect a target**, using a feedback that comes from a sensor (e.g. pressure, flow, temperature). In the case of open loop, the aim is to regulate the flow proportional to a control signal, that originates from the host system.



+SMART CUBE

The intelligent control choice to meet the demands of market from primary and secondary to end of line solutions. Real-time communication is the standard with an integrated ETHERNET bus with expandable I/O that allows flexibility when changes to machinery requirements are necessary. The scalable CPU allows to **upgrade/downgrade performance and can be adapted precisely to the respective application**.



PRESSURE TRANSDUCERS

Pressure transducers generate an electrical output signal proportional to the inlet pressure. The ceramic sensor detects the pressure of the most common fluids: air, water, gas, steam and light aggressive media. PT Series fulfil the requirements of the EMC Directive.

CONNECTION
G 1/4, 1/4 NPT
PRESSURE
1-400 bar

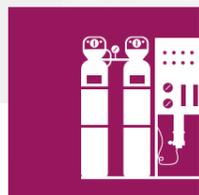
SYSTEMS IRON & STEEL

SOLENOID VALVES

- Process solenoid valves
- Pilot solenoid valves
- Steam and temperature solenoid valves
- Proportional valves
- Total separation solenoid valves
- Atex solenoid valves

VALVES

- Pneumatic valves
- Control valves
- Aseptic valves
- Rotary vane pumps Mocareel
- Pressure transducers
- +Smart Cube



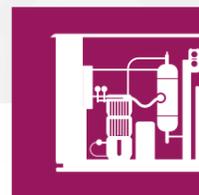
GAS GENERATORS



WATER MANAGEMENT



LUBRICATION



FILTERING

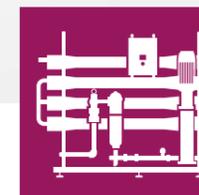
SYSTEMS CHEMICAL / PETROLCHEMICAL

SOLENOID VALVES

- Process solenoid valves
- Pilot solenoid valves
- Proportional valves
- Total separation solenoid valves
- Manifold

VALVES

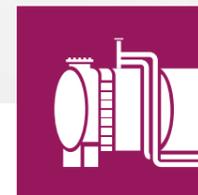
- Pneumatic valves
- Control valves
- Aseptic valves
- Solenoid Pumps
- Pressure transducers
- DPS
- +Smart One
- +Smart Cube
- +Smart Compact



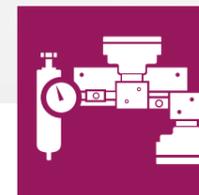
OSMOSIS



STEAM GENERATORS



FUEL STORAGE



PROCESS VALVE AUTOMATION

SYSTEMS PHARMACEUTICAL / MEDICAL

SOLENOID VALVES

- Process solenoid valves
- Pilot solenoid valves
- Proportional valves
- Total separation solenoid valves
- Manifold

VALVES

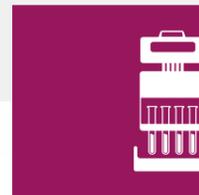
- Pneumatic valves
- Control valves
- Aseptic valves
- Solenoid Pumps
- Pressure transducers
- DPS
- +Smart One
- +Smart Cube
- +Smart Compact



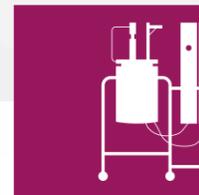
STERILIZATION



DENTAL



ANALYSIS



PHARMA

SYSTEMS MECHANICAL

SOLENOID VALVES

- Process solenoid valves
- Pilot solenoid valves
- Steam and temperature solenoid valves
- Proportional valves

VALVES

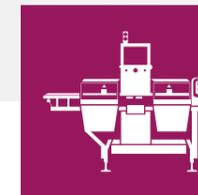
- Pneumatic valves
- Control valves
- Pressure transducers
- +Smart One
- +Smart Cube



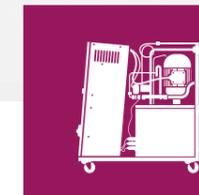
COMPRESSORS



MOLDING



SORTING



THERMOREGULATION

SYSTEMS AUTOMOTIVE

SOLENOID VALVES

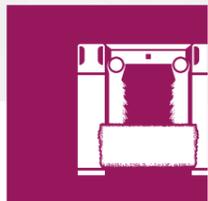
- Process solenoid valves
- Pilot solenoid valves
- Steam and temperature solenoid valves
- Manifold

VALVES

- Pneumatic valves
- Pressure transducers
- DPS
- +Smart Cube
- +Smart Compact



FREON
RECOVERY UNIT



CARWASH



PNEUMATIC
SEAT



ENGINE
REPOWERING

SYSTEMS FOOD & BEVERAGE

SOLENOID VALVES

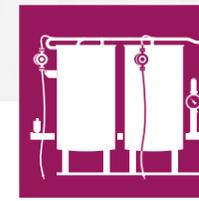
- Pilot solenoid valves
- Process solenoid valves

VALVES

- Pneumatic valves
- Control valves
- Aseptic valves
- Pressure transducers
- DPS
- +Smart Cube



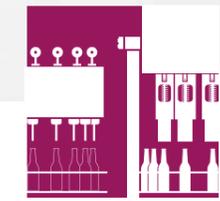
PACKAGING



WASHING



WINEMAKING



BOTTLING

SYSTEMS AGRICULTURAL

SOLENOID VALVES

Process solenoid valves

Pilot solenoid valves

Steam and temperature solenoid valves

Proportional valves

Total separation solenoid valves

Atex solenoid valves

VALVES

Pneumatic valves

Control valves

Aseptic valves

Rotary Vane Pump Mocareel

Pressure transducers

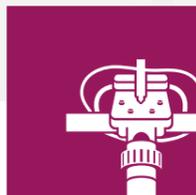
+Smart One

+Smart Cube

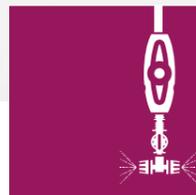
+Smart Compact



IRRIGATION



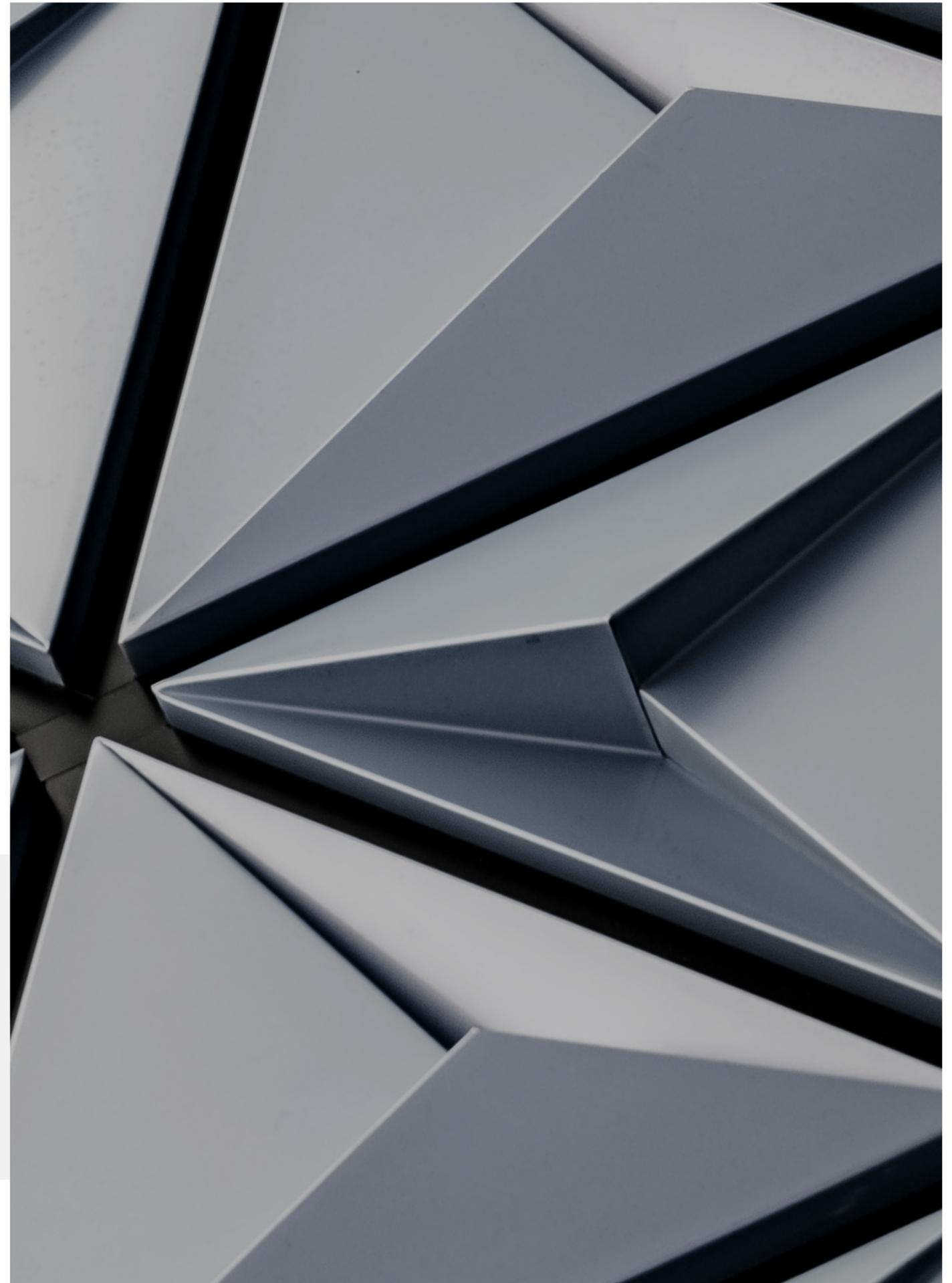
ANIMAL FEEDING



MISTING



FERTILIZATION



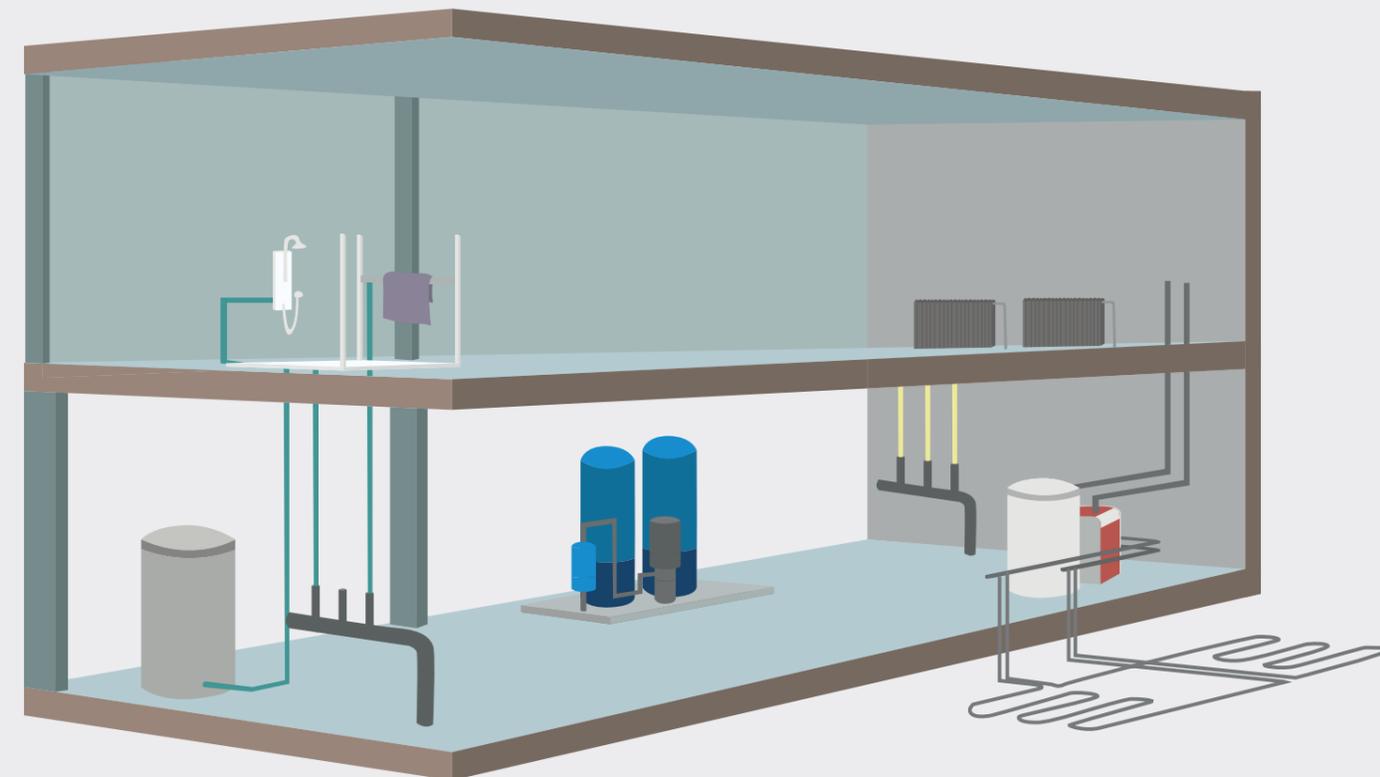
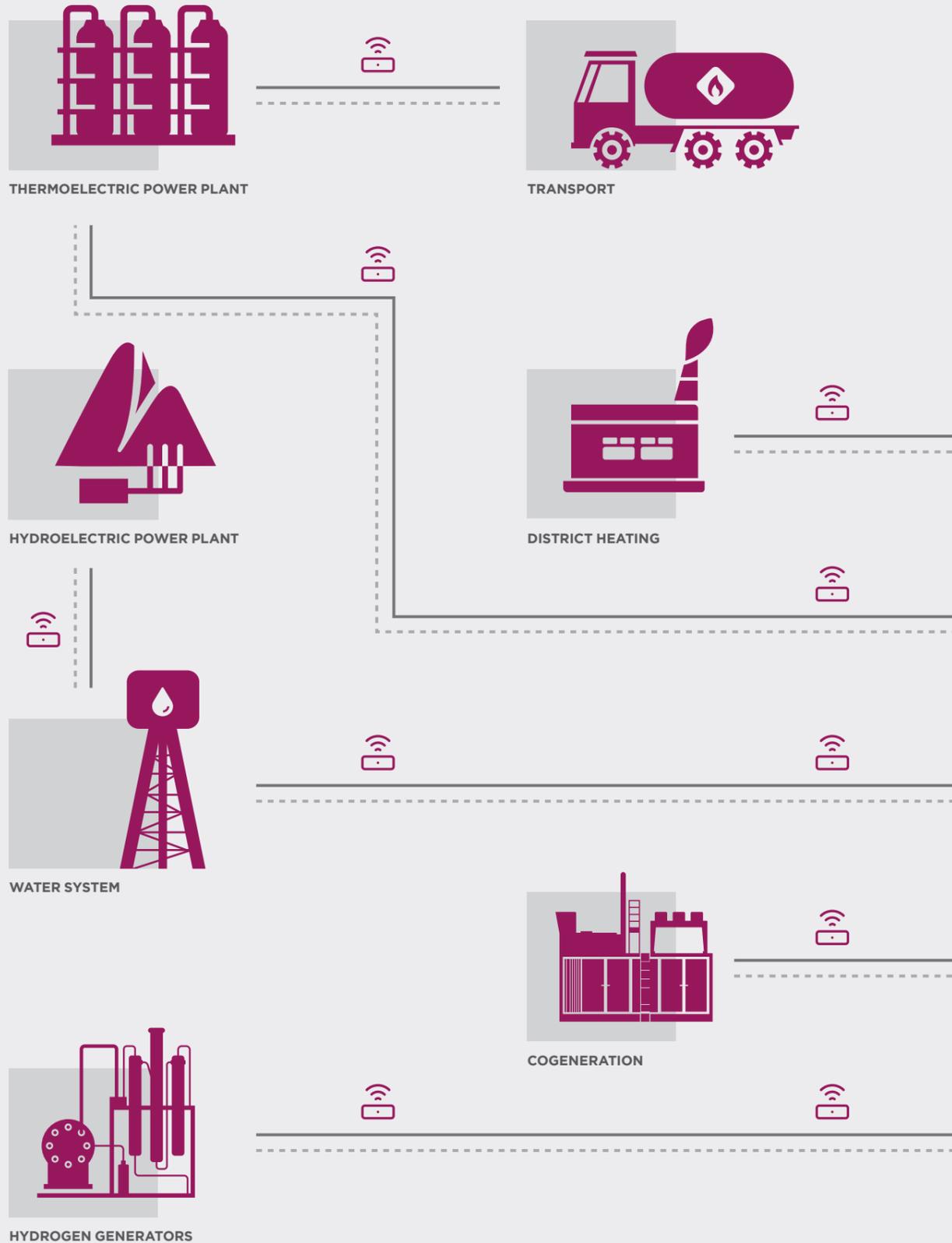


ENGINEERING EPC

With over **60 years of experience**, ODE has become a partner of engineering companies with core business design, construction and maintenance of **high-efficiency technological systems**.

ODE CREATES SOLUTIONS FOR THE MANAGEMENT OF FLUIDS USED IN PLANTS IN ORDER TO PRODUCE ENERGY AND FOR THE TRANSPORT AND STORAGE OF LIQUIDS AND GASES.

Our primary goal is to ensure customers products that **combine great performance and energy savings, respecting the environment and with high attention to human health.**





CERTIFICATIONS

All ODE products of the Industrial range are manufactured in accordance with the most important European and American standards. All the assembled materials have been accurately selected, to ensure the highest level of safety in industrial application.



ATEX

ODE's range of solenoid valves also includes models with Ex d, Ex mb, Ex nA and Ex h ATEX certifications, relating to products and their protection systems designed for use with potentially explosive atmospheres as per Directive 2014/34/EU.



PED

ODE's products are compliant with European Directive 2014/68/EU (Pressure Equipment Directive or PED), applied to the design, manufacture, inspection and testing of pressure equipment.



MOCA

(Materials and Objects in Contact With Food). The products in the Industrial range are designed and manufactured in accordance with European Regulation No. 1935/2004 and European GMP Regulation No. 2023/2006.



NSF CERTIFICATION

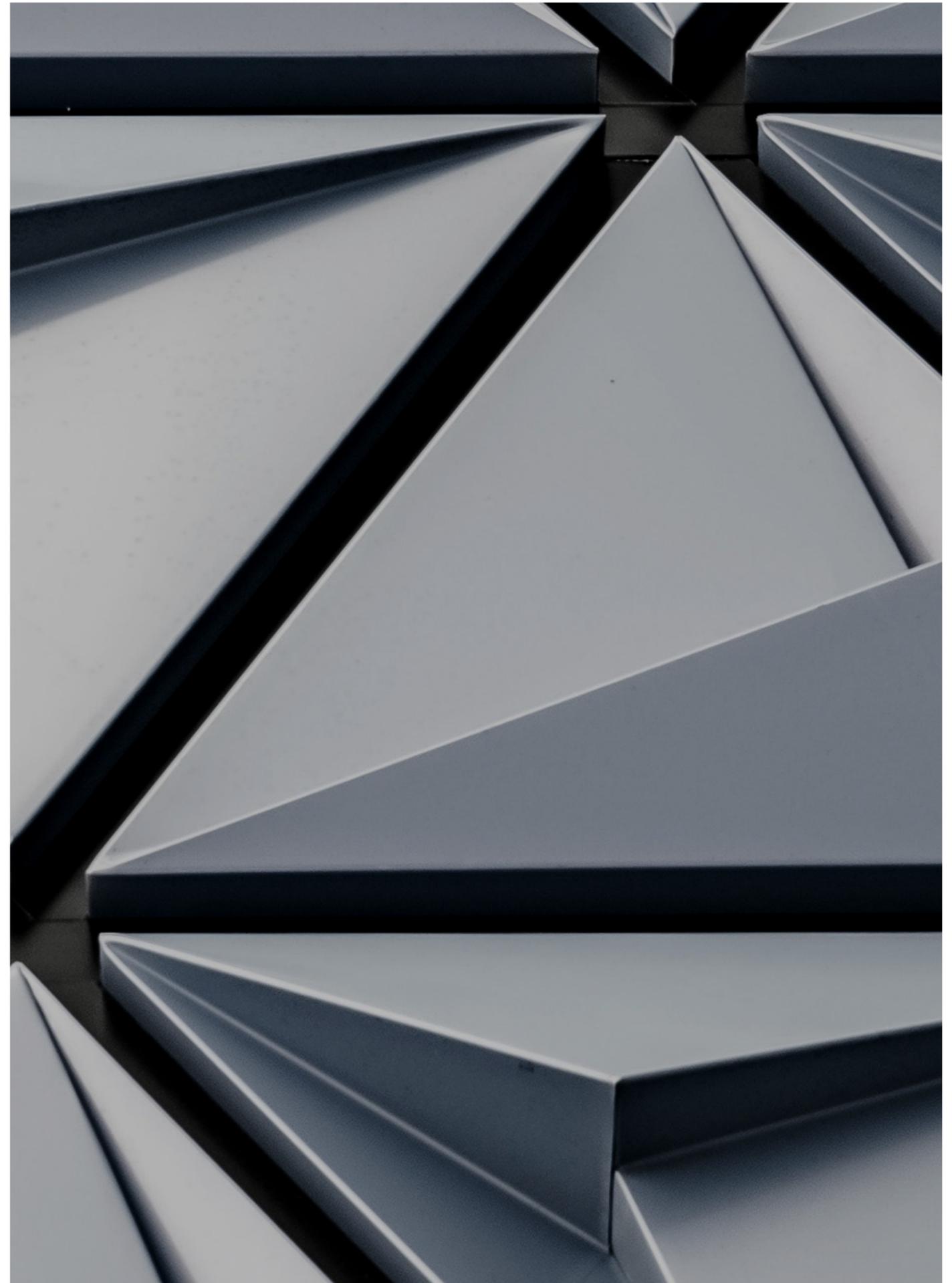
The products in the Industrial range are certified according to the US NSF 169 standard, universally recognised as a guarantee of quality, safety and reliability. Metal, plastic and elastomer materials are carefully selected to meet the established requirements for materials in contact with food.



VDE-UL-CSA CERTIFICATIONS



The coils in ODE's range are certified according to the standards set by the main European and US organisations.



CONTACT

INFORMATION

www.ode.it

Registered Office and Work Plant
Via Borgofrancone, 18
23823 Colico (LC) - Italy

Commercial and Administration Office
Via Modigliani, 45
20054 Segrate (MI) - Italy
Tel. +39.02.715429 Fax +39.02.715144
E-mail: marketing@ode.it