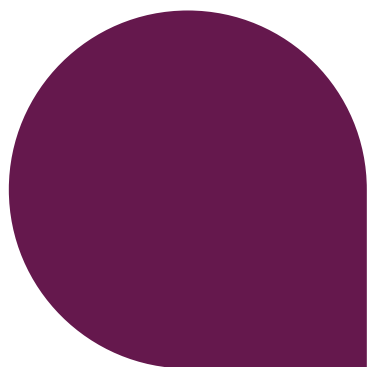




SFL

A Sphering Company



INDUSTRIAL SOLUTIONS

SAFE AND EFFICIENT FLUE, CHIMNEY,
AND VENTILATION SYSTEMS



Sphering
Group

Leading industrial player for
Flue and Air Care in Europe
www.sphering-group.com

ABOUT US

Sphering is the leading industrial player in flue and chimney systems in Europe.

With 1000+ experienced people across Europe, Sphering is an EU market maker with renowned expertise in design, manufacturing and distribution of advanced air and flue care systems.




1000+
Employees


8
Production Plants


26
Distribution Branches

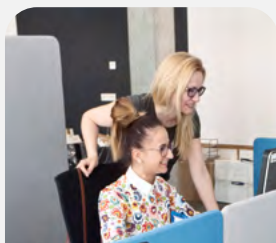
A UNIQUE COMBINATION OF LOCAL APPROACH AND GLOBAL EFFICIENCY

WE CARE TO DO WELL BY DOING GOOD

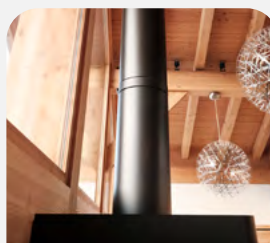
With customers



With employees



With safe and efficient product



With the environment & society



EVERYTHING CHANGED IN 100 YEARS EXCEPT

OUR VALUES

Staying loyal to its historical values and operating with an exclusive industrial model based on the autonomy of its brands, Sphering has become, in a century, an ethical industrial collider in Europe.

Since 1919
100 YEARS
of passion



Reliable Partner



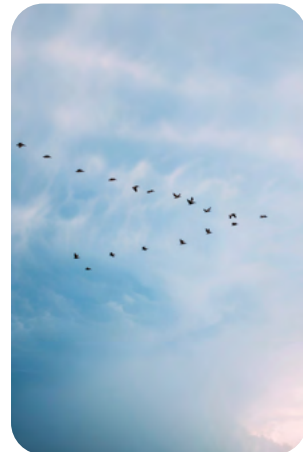
Leading Edge



Family long-term horizon



No Shortcut



Local approach



OUR R&D AND INNOVATION CENTRES

We are here to stay and we collectively enable our capacity to answer our industry requirements.

MORE THAN 150 TESTS PER YEAR

These tests are based on requirements we have set up in order to guarantee our customers the highest levels of security and performance.



Thermal



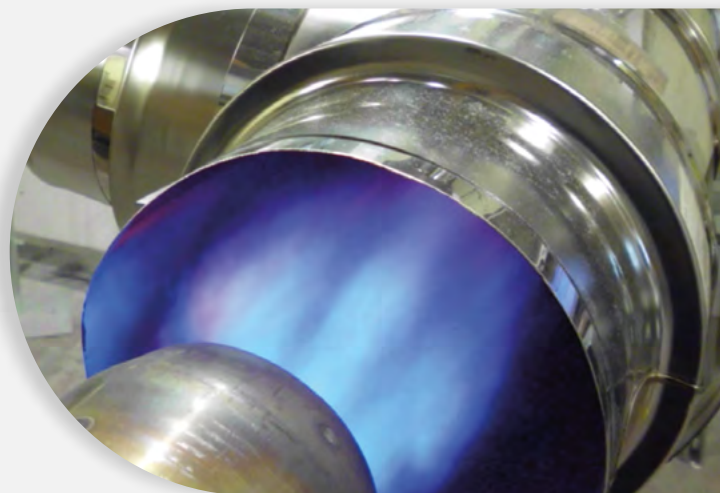
Mechanical



Tightness

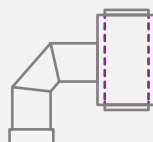


Fine dust



DESIGN & TEST FOR MANUFACTURERS

To ensure advanced safety, performance, quality and innovation.



Special pieces co-development



Pairing test certification

MOST COMPREHENSIVE PRODUCT RANGE

FOR THE NEEDS OF ANY PROJECT AND ANY CUSTOMER PREFERENCE



FLANGE PRODUCT RANGE

EUROPA®

MOSTLY USED IN: Power Generators, Data Centres, Bakery Ovens, CHPs, Industrial Kitchen, Biomass, Furnaces, Laundry Chutes



EI180

certified
fire rating



15000 Pa T600 DRY & WET

used in most
demanding
applications



CE, UKCA UL, ULc

has approvals
from most of
the world



EASY TO INSTALL

with patented U-band,
graphite gasket &
centred spigots



DOUBLE WALL GENERATOR PRODUCT RANGE

KEPLER HPT®

MOSTLY USED IN: Power Generators, Data Centres, Coffee Roasters



EASY TO INSTALL

quick and easy
with external seals



5000 Pa T600 DRY

high pressure &
high temperature
dry applications



NO BELLOWS

no need for any
expansion joints
or bellows



IDEAL FOR GEN-SETS

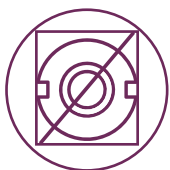
perfect for dry
generators and
generators sets



CONICAL PRODUCT RANGE

ARTEMIS®

MOSTLY USED IN: CHPs, Condensing systems with By-Pass, Biomass, Furnaces



**NO GASKET /
SEAL**

conical
connection



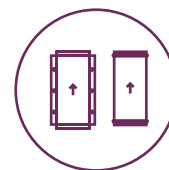
5000 Pa

high pressure



**T600
DRY & WET**

high & low
temperature



SW & DW

single and double
wall compatible
design



TWIST LOCK, DOUBLE WALL, MULTI-USE PRODUCT RANGE

NOVA®

MOSTLY USED IN: Bakery and Pizza Ovens, Coffee Roasters, CHPs, Biomass, Furnaces, Gas and Biomass Boilers, Boiler Sets and Stoves



EI90

certified
fire rating



**UP TO
5000 Pa**

high pressure
with seals



**T600 DRY
T200 WET**

high T°C without seals
low T°C with seals



**MULTI
FUEL**

used in multiple
fuel applications

MOST COMPREHENSIVE PRODUCT RANGE
FOR THE NEEDS OF ANY PROJECT AND ANY CUSTOMER PREFERENCE



DOUBLE WALL, MULTI-USE PRODUCT RANGE **MERCURY**

MOSTLY USED IN: Bakery and Pizza Ovens, Coffee Roasters, CHPs, Biomass, Furnaces, Gas and Biomass Boilers, Boiler Sets and Stoves



TRUSTED BRANDS

with their safety and quality



UP TO 5000 Pa

high pressure with seals



T600 DRY T200 WET

high T°C without seals
low T°C with seals



MULTI FUEL

used in multiple fuel applications



FREE STANDING CHIMNEYS **FSC**

MOSTLY USED IN: Power Generators, Data Centres, Industrial Processes



structure that can support one or multiple chimneys



free standing chimney with one core



free standing supporting chimney with multiple cores



free standing chimney with walking platforms



SINGLE WALL, MULTI-USE PRODUCT RANGE **SUPRA**

MOSTLY USED IN: CHPs, Condensing Systems with By-Pass, Furnaces and Biomass & Gas Boilers



MULTI FUEL

used in multiple fuel applications



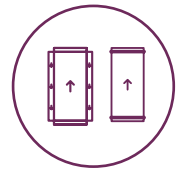
UP TO 5000 Pa

high pressure with seals



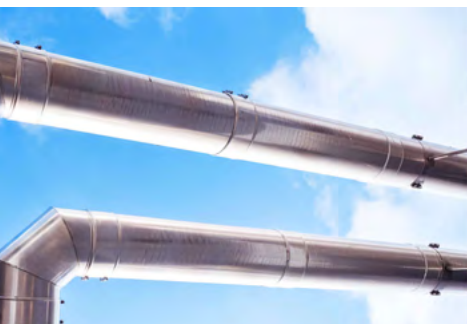
T600 DRY T200 WET

high T°C without seals
low T°C with seals



SW & DW

single and double wall compatible design



SPECIAL PRODUCTS **BESPOKE PRODUCT DESIGN**

HIGH FLEXIBILITY : Bespoke design and manufacturing to customers needs



SILENCERS



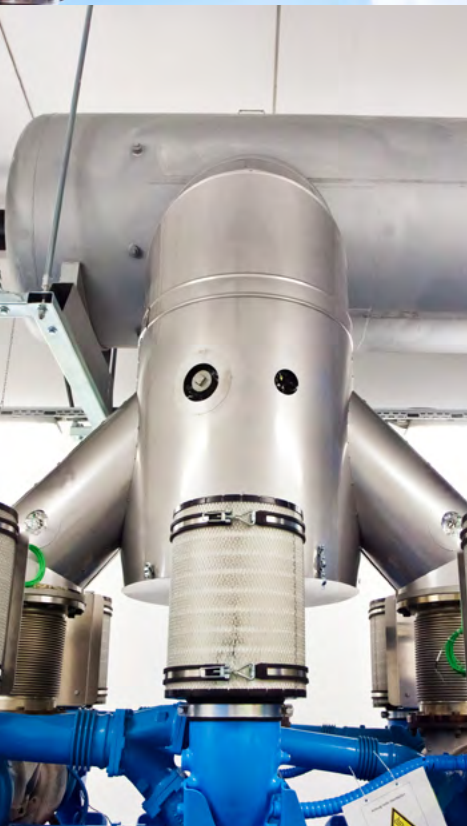
COOLING CYCLONES



EXPLOSION IMPLOSION DAMPERS



INDUSTRIAL KITCHEN SMOKE HOODS



MOST COMPREHENSIVE PRODUCTION

FOR THE NEEDS OF ANY PROJECT AND ANY CUSTOMER

MATERIALS

WIDE RANGE OF MATERIALS AND INSULATION

STAINLESS STEEL

wide range
304, 316, 316L, 904L,
309, 444, 441

THICKNESS RANGE

we can work
from 0,4 to 3mm
thickness

INSULATION THICKNESS

air gap, 25, 30
50, 60, 75, 80
and 100mm

QUICK SPECIALS

short lead
time on special
products



PROJECT OFFICES AND MANUFACTURING

ALWAYS LOCAL TO YOU

LATEST TECHNOLOGY

manufacturing
with latest
technology

6 LOCATIONS

France, UK,
Germany, Italy,
Poland, Belgium

2D AND 3D SUPPORT

project support with
drawings and site
installations

LOCAL APPROACH

understanding and
complying with
local regulations

OVER 100 YEARS OF EXPERIENCE IN THE DEVELOPMENT AND PRODUCTION OF INNOVATIVE STAINLESS STEEL FLUE GAS, CHIMNEY AND VENTILATION SYSTEMS.

MEET A LEADING GROUP IN EUROPE

We are one of the leading manufacturers of stainless steel chimneys, flue and ventilation systems in Europe.

Our systems are renowned for their innovation and their high quality in Europe, Asia and America. We are one of the most efficient European market makers in research, development, production and sale of advanced air care systems.

Our approach to customers is based on partnership. We see ourselves not only as a supplier, but also as reliable partner in achieving your success. As a recognised problem solver, we have built a reputation over the past decades based on quality, expertise and reliability. We are proud to be able to provide you with comprehensive, competent advice, both technically and professionally.

WIDE RANGE OF PRODUCTS IN HIGH QUALITY

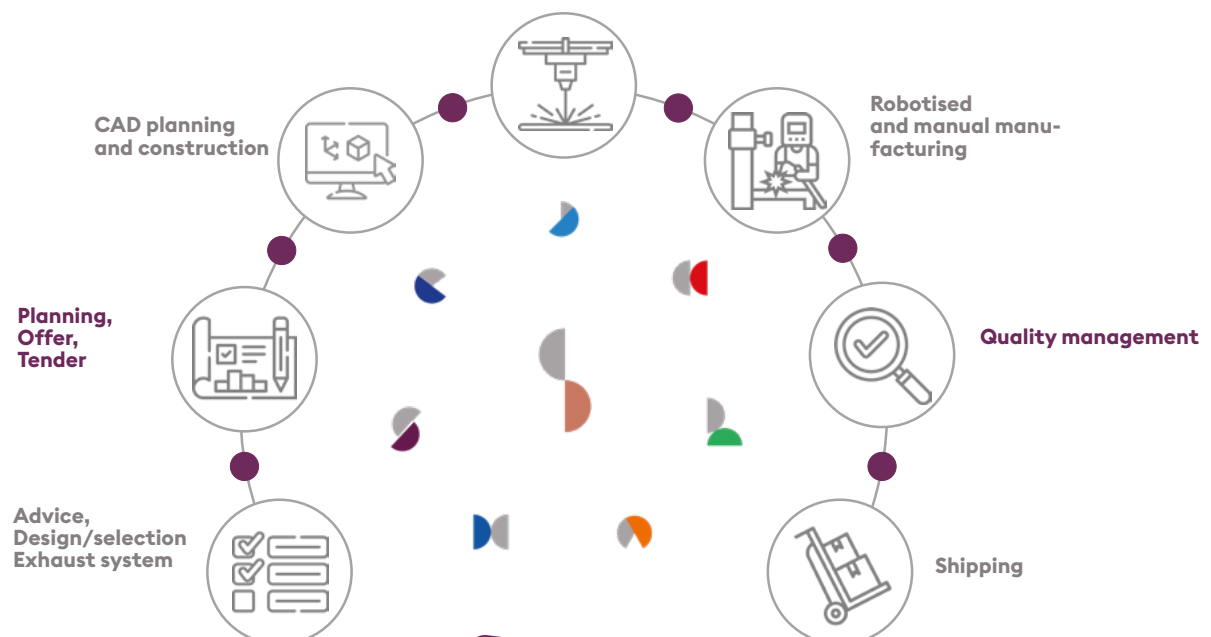
With our large and comprehensive product range, we are able to cover all applications in industrial projects.

When producing our stainless steel flue gas, ventilation and exhaust air systems, we place particular emphasis on quality, safety and durability. All our products are carefully tested and comply with the applicable regulations and standards. With our state-of-the-art-machinery, we are able to produce both standard and special parts with the same care, quality and speed.

The entire planning and manufacturing process, from well organised project management, project development, comprehensive planning and calculation, CAD design up to the on-time production of the system with state-of-the-art-manufacturing technology in one hand. We build efficient systems that you can rely on.



Latest Technology



INDUSTRIAL SEGMENT

DATA CENTRES



By definition, data centres are critical business operations that demand zero downtime.

We know, that keeping the digital world running is imperative in these times; from security to financial trading, 'down time' is not an option. A single data centre can have 20, 30 or more standby generators that all needs to be vented, often requiring 10-30m exhaust systems.

We deliver turnkey solutions, installing exhaust systems with the industry's most thorough testing and approvals rating ensuring trouble free operations and peace of mind for secure environments. Backup generators are also key to ensure power outages are a thing of the past. Our chimneys come with the latest and highest regarded fire rating certification and are used all around the world.

We cover diameters from 100mm through to 1200mm. Standard insulation being 25 and 30mm with options for 50, 60, 80 and 100mm should the application demands. The explosive growth of data traffic worldwide requires the construction of more and more data centres.

The continuous functioning of the data centre is very important and at the same time challenging, as the availability of the information must be assured at all times.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Pressure-tight design

Proper flue design ensures a pressure-tight exhaust system suitable for high exhaust temperatures and high pressures.

Fire safety certification compliance

High-quality, certified exhaust systems tailored to meet the latest fire safety standards.

Noise attenuation

Resonance silencers installed near sound sources to minimize low-frequency noise propagation throughout the exhaust system.

Therefore, each data centre has backup generators which ensure uninterrupted working in the event of a power failure. The backup generators need a pressure tight exhaust system which also suitable for high exhaust temperatures.

At Sphering, you get high-quality, certified exhaust systems that are perfectly tailored for this application. Our team of experienced data centre experts are on hand to assist you at every stage.

INDUSTRIAL SEGMENT

AIR HANDLING UNITS



Air handling units usually distribute the conditioned air through a range of ductwork with the aid of a centrifugal or plug type fan powered by a motor. Modulated percentages of supply air will be brought in from outside the building or recirculated within according to environmental requirements. Many grades of filtration, cooling or humidification can also be specified and included within the package unit.

Alongside the push towards extra heat exchanger control and efficiency comes the focus on condensing products, this highlights the importance of specifying a fully sealed, positive pressure stainless steel flue systems designed to match technically advanced appliances.

Providing a suitable flue and chimney system to serve many different types of air handling units that meet local and national standards is an important consideration for consultants, specifiers and specialist installers.

Sphering has the product range and knowledge to provide the quality, safe and efficient flues and chimneys required by this demanding segment.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Condensation management

High efficiency can cause condensation. Sealed systems with proper materials prevent leaks, enhance corrosion resistance and ensure durability.

Product selection

Tailored flue design to the system's needs, using single-wall flues indoors and twin-wall insulated flues outdoors to reduce costs and simplify installation.

Expert support

Partnering with Sphering experts ensures informed and accurate flue product choices.



INDUSTRIAL SEGMENT

PIZZA OVENS



Able to withstand the temperature of 600°C, our double wall products are perfectly suited to wood, gas and dual fuel pizza ovens. Ovens often installed in hotels and commercial buildings, and we are able to support, design and arrange installation of the perfect flues for pizza ovens.

Wood-fired pizzas are an ever-increasing go-to cooking appliance for many top hotels and restaurants. Sphering solutions has long become the flue of choice for such installations. Ease of installation, wide range of components and well-finished look make it very popular with installers and restaurateurs alike.

It's important to have the correct flue design carried out when planning your pizza oven installation. We ensure service points for cleaning and inspection are incorporated into the design to allow planned maintenance to take place. Inspection hatches, cleaning points at changes of direction on the flue will ensure your flue will need limited downtime for cleaning and a pristine look.

High temperature extraction fans can also be installed to allow flexibility on the design and route of the flue. This can overcome many challenges faced on site with complex flue routes.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Cleaning

Ease off access for cleaning flue throughout its entire length.

Perfect draught = perfect pizza

Flue diameter for perfect draught as many projects take complex flue routes through commercial buildings.

Reduce emissions

Powered flue draught & emissions can potentially have an impact on the local environment.



INDUSTRIAL SEGMENT

HEAT RECOVERY SYSTEMS



Heat recovery systems are increasingly popular with the drive for business to become more efficient, energy-savvy and air quality conscious. Waste hot flue gasses can be removed and utilised within production plants for heating, washing or using within the manufacturing process itself.

Especially popular within bakery, metal, paper and food production plants. Significant energy savings can be gained by installing waste hot flue gas heat recovery.

Our double wall flue systems can be designed to work with all brands of heat recovery and with its high-density insulation ensures that vital heat and energy aren't lost through the flue itself.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Flue calculations

Accurate calculations are crucial. Incorrect design can impact natural draught, requiring fan assistance for proper control.

Linking flues

Connecting multiple flues to the heat recovery system boosts the amount of energy recovered.

No loss of production time with bypass

Installing flue bypasses allows maintenance on heat recovery systems without halting production.



INDUSTRIAL SEGMENT

GENERATORS AND GENERATORS SETS



Generators guarantee backup for short to medium term power outages using high pressure flue systems.

For Data Centres, Hospitals and Care homes, our reliable, high-quality flue systems exceed all demands. Standby or constant use generators are critical support systems for a variety of business and government buildings.

Ranging from Hospitals to finance houses, city centers to remote locations, dependability is fundamental. With flexibility of components, our double wall systems are designed with engineers and high quality in mind.

We offer options of 25mm, 30mm, 50mm, 60mm, 75mm, 80mm & 100mm insulation to suit varying touch temperature requirements.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Attenuation / Silencers

Sound attenuation can be incorporated into the design of our flue systems.

Touch temperature

Varying insulation is available to suit consultants demands on external touch temperatures.



INDUSTRIAL SEGMENT

CONDENSING BOILER FLUE SYSTEMS CASCADE SYSTEMS



Our commercial flue systems are the perfect partner for high efficiency condensing boilers. Quality of design and performance of flue has never been so important. Our different product families are all perfectly suited to condensing applications.

Condensing appliances are compact efficient solutions to suit many commercial plant rooms, ranging from hotels, stadiums, district heating, communal heating and residential care homes. Flue design is extremely important with condensing appliances due to the volume and acidity of the condensation itself. Correct falls and traps on condensate drains are a key part of the flue design.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Reduce pooling

Correct flue design with falls between 3-5% for effective draining of condensate to reduce pooling.

Condensate drains

Condensate drains to have traps to avoid affecting flue draught.

Test points

The system must incorporate test points into the flue.



INDUSTRIAL SEGMENT

COFFEE ROASTERS



Our flue systems are recommended by top coffee roasting machine manufacturers as their preferred chimneys system.

Having the correct flue for coffee roaster is imperative. Some roasting machines are pushing out flue gas temperature in excess of 600°C!

Our systems are capable of continuous use of 600°C and 1000°C intermittently, safety and durability are the main benefits. There are different options on insulation thickness to choose from keeping the flue touch temperature low, this ensures both the building and master roasters are protected from the hot flue gasses.

Flue design is a key factor in ensuring coffee roasting does not have a negative impact on the residential or commercial surroundings.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Site requirements

Ensure external flue surfaces are safe to touch, especially in public or operator-accessible areas.

Terminal location

Control emissions to prevent disturbances in residential areas, using fan assistance if needed.

Site location

Incorporate fan assistance, filtration, and noise reduction into the flue design to ensure the surrounding community experiences only the benefits of your freshly roasted beans.



INDUSTRIAL SEGMENT

CHP'S

(COMBINED HEAT & POWER)



CHP's have been a growing market for some years due to their high efficiency and positive environmental impact over other appliances. CHP provide an efficient and secure source of power. The modular systems can be installed quickly with very few restrictions on geographical site locations.

They can run on LPG, natural gas or biomass fuels of which our high pressure and condensing range of flues are perfect for.

The attraction for off-grid energy supply is growing fast with companies wishing to become more autonomous from the volatile energy market.

Our products and designs ensure safe and efficient CHP systems.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Attenuation / Silencers

Experience in measuring and dimensioning custom-made silencers is essential, as CHPs may require either built-in sound absorption or calculated attenuation integrated into the flue system.

Condensate drains

Careful consideration of condensate drains when designing the flue system for CHP systems.

Test points

The system must incorporate test points into the flue.



INDUSTRIAL SEGMENT

BIOMASS



Synonymous with the biomass market, our chimney systems are the go-to flue system for biomass boilers. Pellet, woodchip and log burning batch boilers operate perfectly with our flue ranges installed with them.

Careful design considerations with draft regulation, explosion relief and fans should be considered when designing flues for biomass installations.

Performance of the appliances can be significantly affected with incorrect flue design potentially affecting RHI payments and production outputs.

With its variety of diameters and custom-made options, our chimneys are suitable for both domestic and commercial applications.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Explosion relief

Biomass boilers may require explosion relief in the flue system to prevent ignition of accumulated gases.

Draft regulation

Draft regulation ensures consistent performance by counteracting external factors like temperature, pressure, and wind.

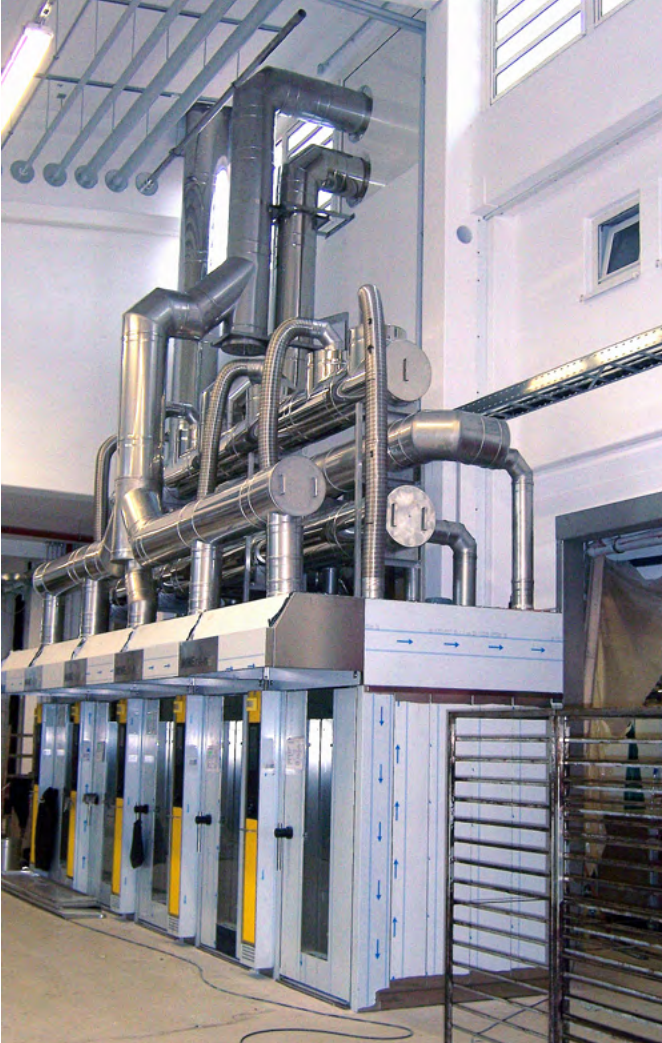
Fan assistance

Fan systems may be necessary to maintain constant pressure in the flue, either provided by the boiler manufacturer or custom-designed.



INDUSTRIAL SEGMENT

BAKERY OVENS



From small artisan rolls or large scale loaf population, the gas-fired bakery ovens need a quality flue to safely remove waste flue gasses. With flue gas temperatures from 150-400°C our double wall products with T450 and T600 temperature rating is the natural choice for these appliances.

Biscuits bloomers and baguettes are produced in vast quantities on a daily basis, not to mention other bakery products. Our staple foods are produced 24 hours a day, 365 days a year on a vast array of bakery ovens.

With the varying building shapes and sizes, our double wall chimneys have an extensive range of components that make any installation a simple job. Whether it is single or multiple ovens we have all the accessories needed, even to connect to heat recovery systems.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Performance and design

With extensive experience in structural design, 2D/3D planning, and fitting layouts, we ensure proper flue system design that supports optimal oven performance without compromising cooking quality.

Access

Incorporate easy cleaning access for efficient and simple flue maintenance.

Bypass systems

Include bypass systems with heat recovery setups to prevent production downtime during maintenance.



INDUSTRIAL SEGMENT

INDUSTRIAL PROCESSES (PAINT / PRODUCTION LINES)



For proper, efficient process ventilation that meets the strict Health and Safety Regulations, there is no such thing as an off-the-shelf solution - buildings vary too much in structure, use and design. From the supply of flue systems, complete with roof-mounted galvanised jet cowls to more challenging industrial exhaust systems, we can supply a full design, supply and install solution.

We can offer a full package, covering detailed site survey, flue size calculations, design, CAD drawing services and installation. We can also provide a full design specification and installation service where required, with full technical back up. Our technical teams all around Europe can work with you on the most effective solution for process ventilation in schools, Colleges and Universities.

We also work with Industry, creating safe and environmentally responsible workplaces for the application of powders, wet paints or lacquers - all require the use of process ventilation and bespoke flue and chimney solutions.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Cleaning

Ease off access for cleaning flue throughout its entire length.

Perfect draught = perfect ventilation

Flue diameter for perfect draught as many take complex flue routes through commercial buildings.

Reduce emissions

Powered flue draught & emissions can potentially have an impact on the local environment.



INDUSTRIAL SEGMENT

OIL RIGS



The oil rig industry operates in one of the most challenging environments, where equipment must endure extreme weather conditions, high pressures, and corrosive elements. The technical demands of this sector require highly specialized solutions that ensure both safety and operational efficiency.

In such environments, reliability and durability are paramount. Components and systems must be engineered to withstand constant stress and exposure to harsh conditions, from offshore platforms to deep-water rigs. High-performance materials and cutting-edge technology are essential to ensure the smooth running of operations and reduce costly downtime.

Tailored solutions that meet these stringent requirements are crucial for maintaining productivity and safety in the oil and gas industry. Innovative designs and rigorous quality control processes play a central role in delivering equipment that can perform under extreme conditions, supporting the continued advancement of exploration and production capabilities.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Harsh environments

Incorrect flue design can compromise efficiency and safety in extreme weather and corrosive conditions on oil rigs.

Pressure and temperature extremes

Poorly designed flues can cause overheating and operational inefficiency in high-pressure environments.

Corrosion and maintenance

Improper flue systems increase wear and tear, leading to higher maintenance costs and downtime.



INDUSTRIAL SEGMENT

CONTAINERISED SOLUTIONS GENERATORS AND BOILERS



Containerised generators offer flexible, reliable power solutions for critical applications. In hospitals and data centers, they provide essential backup to prevent costly downtime during power outages.

On construction sites, these generators power tools and machinery in remote areas without permanent electricity access. The oil and gas industry relies on portable, robust power systems for drilling platforms and extraction facilities.

For wastewater and water treatment plants, uninterrupted power is essential to avoid environmental and public health risks. Telecommunications base stations also depend on containerized generators for consistent service.

These solutions support outdoor events, providing power for lighting and equipment, and can be rapidly deployed in military and emergency situations to restore power and heating to affected areas.

KEY POINTS

Performance of the appliances can be significantly affected by incorrect flue design and many other factors.

Ventilation and cooling

Incorrect design or inadequate ventilation in containerized generators can cause overheating, reducing performance and lifespan.

Fuel efficiency

Poorly designed fuel systems or exhaust management can lead to inefficient fuel consumption, impacting overall operational cost-effectiveness.

Noise and emissions control

Improper flue or exhaust system design can result in excessive noise or emissions, potentially violating environmental regulations and affecting generator performance.





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