

# WHEN THINKING AHEAD CREATES CLEAR PROCESSES AND CLEAN SOLUTIONS

### PERFORMANCE WITH PASSION!

Passion is in our DNA. This makes Contec much more than a German technology company with products for filtration and fill level measurement. Contec is a solution provider with multifaceted experience in process engineering, the process industry, and mechanical engineering. And you can count on Contec!

The following pages show typical fields of application for our products. And even though their tasks are fundamentally different, they all share a common element: passion. It is that excitement with which our staff meet individual customer requirements and support projects holistically.

We rely on experienced colleagues, short lines of communication, and a high standard of quality.

This idea of quality is indispensable to us. Contec products must almost always guarantee reliability in manufacturing procedures or operation, a clean filter result, or great stability. Our customers benefit from our experience in the industry – more than 50 years of it. Become familiar with a few of our passion projects.





Jochen Lehmkuhl Managing Director Sebastian Muck Managing Director

# WHEN RELIABILITY LEADS TO A LONG-TERM PARTNERSHIP

The COGA® (Contec gas and air filters) product range includes customized solutions as well as over 1,000 standard filters and filter housings for a wide variety of applications.





#### WE ENSURE CLARITY FOR BASE

There are only a few minutes in which the "blue hour" makes the world's largest chemicals plant look like a fascinating work of art made of steel, glass, and concrete. During this time, the plant complex appears clean and pure – two attributes for which the chemical company stands, internally and externally. Especially in the labo-

> ratories, where Contec air and gas filters perform at the highest level every day.

Contec filter systems have almost unlimited usage alternatives for BASF at the Ludwigshafen industrial branch. In addition to exhaust and vacuum filters in manufacturing areas, Contec air and gas filters are especially useful in sensitive measurement and analysis technology.

For example, they filter particles and aerosols out of the measuring system so that they do not collect on sensitive probes. The goal is to keep the process air or gas as pure as possible in order to deliver precise, reproducible measurement results. This is indispensable for smooth production. But the chemical industry is not the only place where Contec air and gas filters can be used.

portant conditions for many manufacturing processes, analysis techniques, and transfer stations. Most of them can be covered from our proven, standardized air and gas filters. For all others, we develop customized solu-



BASF's industrial site in Ludwigshafen.

Effective filtration, adsorption, and separation are imtions.

We aspire to finding the solution that is the most reliable and cost-effective in the long term. Stable. Safe. Practical. It is not a coincidence that blue designates this Contec product area - clean air is blue.

Simon Bayer, Rotating Equipment Maintenance Engineer

We work in a highly sensitive area, so we need reliable partners who

understand the problems and find

practical, affordable solutions.



Reliable measuring results and reproducibility are essential for the manufacturing processes below.



In the BASF plant complex, each element must interact smoothly with every other.

#### CHARACTERISTICS OF COGA® CONTEC AIR AND GAS FILTERS:

- Extensive standard product range with well over 1,000 different filter types
- Various sizes and filter types
- Various material designs
- Long service life robust industrial quality
- Low spare parts prices
- Filtration of condensate and solids
- Protection for high-quality analysis systems and sensitive components (sensors)
- Specific separation of gases and vapors with adsorption
- Ensuring operational reliability and process availability

#### CONTEC® COGA AIR AND GAS FILTER PORTFOLIO OVERVIEW:

- Exhaust and vacuum filters
- Absorber housings
- Compressed air filters
- Stainless steel filters
- Disposable filters
- Plastic filters
- Special designs
- Filter elements such as activated carbon filters
- Generators for air and gas treatment



#### WHEN FUNCTION SECURES OPERATION

COMS (Contec oil mist separators) are high-performance filters that are usually installed in lubricating oil tanks for turbines, compressors, and turbomachinery to prevent oil mist from escaping. This filters 99.98% of oil aerosols from the exhaust.





# WE BUILT THE FIRST OIL MIST SEPARATOR IN THE WORLD

There are huge drilling and refining vessels operating on the world's seas every day as floating drilling and oil distribution systems. And even though oil is extracted from thousands of meters below the surface of the water, the effort pays off.

Drilling vessels are huge production plants – they are just afloat and have very little space. Once the oil is

brought up and processed, these floating giants transfer the "black gold" to tankers for distribution in a ship-to-ship process. The overall system is as complex as it is sensitive, requiring each tanker's 200,000 barrels of oil to be pumped and processed in interminable pipelines with tight angles. And extremely strict environmental regulations apply, since oil and water don't go well together, as everyone knows.

One element ensuring operational reliability in this highly complex, sensitive

system is Contec products such as COMS oil mist separators. COMS (Contec oil mist separators) are used in lubricating oil tanks for compressors and motors. Unlike simple filters and separators, Contec oil mist separators ensure constant negative pressure in the lubricating oil system, separate oil mist from the air, and release clean exhaust into the environment. It does not matter to COMS whether the waves are breaking meters above

them, their housings are subject to salty air, or icy temperatures crank up the viscosity. COMS are robust oil mist separators created specifically for challenging tasks. Made in Germany and invented at our premises.

COMS exceed requirements for quality, service life, and emission limit values. They are used in all kinds

Contec addressed the complexity of the task and process and integrated those insights into the product solution. The result is a reliable system that gives us absolute operational reliability."

Pavan Kshirsagar, , Projects Team Leader, ATLAS COPCO Ltd. – Gas & Process Application







of motors, compressors, turbines, and machinery with an integrated or external lubricating oil system – at sea, in permafrost regions, or in continuous use in biomass district heating and garbage incineration plants (waste to energy). Our customers benefit from more than 50 years of experience in the industry and the three-level Contec development concept: Individuality. Flexibility. Efficiency.

#### FEATURES OF CONTEC COMS® OIL MIST SEPARATORS:

- Almost 100% of lubricating oil, including additives, are recovered
- Low-emission classification 99.98% filter efficiency
- Ensuring operational reliability and process availability for lubrication oil systems
- Industrial quality made in German
- Service-friendly design simple filter replacement
- Low maintenance effort and costs
- Certified according to Directive 2014/34/EU for explosion protection
- Validated according to ISO 12500-1:2007

#### CHARACTERISTICS OF THE CONTEC OIL FILTER DIVISION:

- Guaranteed global spare and
- Wear part procurement
- More than 50 years of experience
- Project-related planning, design, and development
- Inventor of oil mist separator technology
- Received the German Environmental Prize



#### WHEN EXPERIENCE CONSERVES RESOURCES



Among the features of products in the COLF (Contec liquid filters) area are self-cleaning filter systems that minimize operating costs.



## ULTIMATELY, THE CONCERN IS SUSTAINABILITY AND ECONOMICAL PROCESSES

The test engineer can tell by the noise the filter elements make how dirty the water coming from production is. He can confirm his assessment with a glance at the control indicators. Today, the plant has to deliver top performances. The dirty water is pressed through

the cartridge filter's stainless steel housing at almost 10 bar, then routed to the intermediate tanks. The water arriving does not look much like process water, though. Clean and clear, it is ready to be reused as process water.

Just the smart processing and the return to the production cycle saves the company thousands of euros each year. Sustainability included. The fact that machine failures have fallen significantly since the system's filter performance increased is a

nice side effect. Discards have also decreased, and end product quality has greatly increased.

But Contec cartridge filters are not always the first and best choice. Significant factors to be taken into account are media type, viscosity, and volume flow and filter performance and installation location. This is one reason why Contec consultants consider each application case individually and why experience is so important in these cases. In addition to the many filter elements, Contec offers a wide variety of filter housings, various self-cleaning filter systems, and diaphragm filters for

Filtration ensures smooth processes and a pure end product in the food industry as well.

fresh water and seawater, for chemicals or mineral oil substances, for cooling water, and for viscous and non-viscous media, from bitumen to chocolate.

We want nothing less than the technically optimal solution for each application. We supply the necessary experience.

Our application clearly shows the

versatility with which Contec can

tackle individual requirements. We

use slot tube filters developed just

for us in continuously operating

Hans-Joachim Kamphowe, Works

Manager, Ludwig Weinrich GmbH &

piping systems."

Co.KG



Also in the food industry filtration ensures a trouble-free process and a pure end product.

#### FEATURES OF CONTEC COLF LIQUID FILTERS:

- Extensive standard product range with a wide variety of filter types
- Various sizes, designs, and connection points
- Various material designs
- Long service life robust industrial quality
- Low spare parts prices thanks to
- Filter unit standardization
- System protection
- Active contribution to sustainability and environmental protection
- Ensuring operational reliability and
- Process availability

#### CONTEC COLF LIQUID FILTER PORTFOLIO OVERVIEW:

- Cartridge filters made of stainless steel and plastic
- Diaphragm filter housings made of stainless steel
- Bag filter housings
- Slot tube filter systems
- Self-cleaning automatic filter systems
- Filter elements (cartridge filters, filter bags, flat filters, diaphragm filters, etc.)



# WHEN QUALITY ENSURES THAT PROCESSES RUN RELIABLY AND ECONOMICALLY

roducts obust and ults.

The mechanical fill level indicators for our COLM (Contec liquid measurement) products are the ideal solution for mobile fueling systems and construction machinery. Robust and virtually indestructible, they deliver clear, quickly obtainable measurement results.



# FIND OUT WHAT IS IMPORTANT WITHIN A SECOND

Deep below the earth's surface, excavators with their pneumatic hammers break apart rock, and wheel loaders carry off the debris. This environment demands workers who can really get down to business – workers whose helmet is more important than their smartphone and whose colleagues are like family to them. It requires people who can count on each other and who need technology that is reliable and resistant.

Collaboration with Contec confirms that quality is not confined to the product side. Technical support and the variety of Contec products give us and our products success.

Manuel Albrecht, Technical Head of Tank Technology, Rietbergwerke GmbH & Co. KG

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When construction machinery is checked before the shift starts, the contribution of robust Contec fill level indicators to smooth, safe routines is inestimable. They allow tank content to be determined at a glance and documented. No tiresome climbing, starting the machine, and reading instruments in the cockpit. No additional risk due to climbing to operator cabs. No loss of time, either, since a simple check on the ground can save up to ten minutes per machine.

And it is just these features – safety and reliability – that the fill level measurement product division stands for. Clear information is the foundation specialists use to make sound decisions. The standard Contec series of float switches and fill level indicators and sensors are manufactured according to customer specifications. Essential parameters such as material, immersion depth, tension, and number and function of switching points are freely configurable within technical capabilities.







Small tanks systems ensure safety, flexibility, and downtime minimization on construction sites.

And our thinking is not one-dimensional. In addition to proven mechanical indicators and analog sensors, we use everything from standard radar sensors and switches to radar sensors we have developed ourselves and internet-supported cloud solutions that can be read out anytime, anywhere to perform each measurement task.

#### CHARACTERISTICS OF CONTEC COLM FILL LEVEL MEASUREMENT TECHNOLOGY:

- Precise, reliable fill level measurement
- Functional precision even with changing media
- Fields of application with oils, fuels, acids, lyes, and other liquids
- Configurable parameters for sensors,
- Indicators, and switches
- Extensive standard product range as well as customized solutions
- Robust industrial quality

#### CONTEC COLM FILL LEVEL MEASUREMENT TECHNOLOGY PRODUCT RANGE OVERVIEW:

- Fill level sensors (capacitive/electromechanical)
- Fill level indicators (digital/analog/radar-guided)
- Fill level switches
- Temperature switches





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