Products and solutions in the fields of industrial filtration, separation and level measurement.

www.contec-filtration.de
As an internationally operating technology company headquartered in Bad Honnef/Germany, we have increasingly focused on quality engineering and system solutions in the segments of air and gas filtration, dust collectors, oil mist filtration, liquid filtration and level measurement, since our foundation in 1972.

For our customers, we are an estimated and reliable partner because:
- we work closely with our customers due to our flexibility, from planning to production, to create optimum and technically efficient and appropriate solutions.
- we offer a broad product portfolio due to our long-standing partnerships and networks in the filtration industry, covering almost all customer requirements.
- we optimize industrial processes and protect investments thanks to over 40 years of know-how.

contec products are used in diverse industries, including energy, oil and gas, chemical, laboratory technology, food technology, shipbuilding, water treatment, process engineering, automotive and commercial vehicles.

Count on us. Our high levels of consulting and product quality are the culmination of many years of experience. Our discussions will be based on a technically competent, partnership approach, including the planning and professional execution on schedule.

Cooperative and fair from the very beginning. Our philosophy.

The principles, based on which we operate, are as simple as they are logical:
- We focus on the individual needs of our customers - regardless of its position in the market or the volume of its order.
- In the consultation, project planning and in terms of our products, we stand for solutions that meet the highest standards.
- Every order is carefully planned and implemented with a clearly defined goal.
  Through a lean project management with professional contacts, we ensure maximum transparency of the project’s progress. We are a strictly respectful and honest company.
- It is with maximum team spirit and commitment that we run our daily business - regardless of the subject matter.

In this sense, our slogan “clean solutions on demand” is claim and promise at the same time.

Find out for yourself how we distinguish ourselves from our competitors.
For example by sending your enquiry to us.

Start by implementing your goals. contec GmbH will support you.
Air and gas filters

contec-components for the cleaning of air and gases.

Delivery program
- Suction and exhaust air filters
- Particle and coalescence filters
- Fine and coarse filters
- Depth and surface filters
- By-pass filters
- High-pressure and high-temperature filters
- Adsorber and adsorber cartridges
- Catalysts for zero air generators
- Chemically highly resistant filters
- Quick-change filters
- Disposable filters for hose lines
- Water barrier filters
- Zero air generators
- Exhaust air filters for oil lubricated vacuum pumps
- Pump protection
- Air suction filter for fans and blowers
- Aeration and ventilation filters
- Connections 1/8" to DN 100
- Flow rate up to 745 m³/h
- housings made of stainless steel, aluminium or plastic

2. Suction and exhaust air filters

3. Disposable filters and adsorber for hose lines
- Housings made of PA or PVDF
- In-line filters in various sizes
- Water barrier
- Filter cartridges made from glass fibre, PE, PTFE, stainless steel etc.
- Filled with sorbents such as active carbon, silicon gel, molecular sieves etc.
- Connections for 4, 6 and 12 mm hose or various threaded connections 1/8", 1/4" and M5
- Various connectors and conduit fittings available

4. Filter housings made of stainless steel
- Housings of stainless steel, Hasteloy, Monell and Titanium
- Transparent version with glass cylinder
- Optical or electrical differential pressure monitoring optional
- Connections 1/8" to 2"
- High-pressure housings up to 1.300 bar
- High-temperature up to 500°C
- Heatable filter housings with and without trace heating
- Membrane filter housings
- In-line filter housings with or without bypass
- Automatic drains and condensate drain reservoirs

5. Filter housings made of aluminium
- Typical compressed air filters with manual or fully automatic condensate drain
- Optionally with differential pressure gauge
- Complete filter housing from aluminium (black anodized) or with transparent nylon sump
- Connections 1/4" to 2"
- Thermally stable up to 150°C

6. Filter housings made of plastic
- Housings made of PA, PP, PVDF, PTFE and PTFE/glass
- Filter sumps, also available in transparent design
- Connections 1/8" to 1"
- Maximum pressure of up to 7 bar
- Thermally stable up to 150°C

7. Filter elements made of glass fibre
- Bionanofibres - single or double layer
- Very low differential pressure, high flow rate
- Coalescing and particle filters at different degrees of fineness
- Separation efficiency 0.1 microns from gas: 75% to 99.999%
- Separation efficiency particles 0.1 microns from gas: 75% to 99.99999%
- Excellent chemical resistance with PVDF binder
- Heat resistant up to 500 °C with silicate binder

8. Alternative filter elements
- Porously sintered PTFE - highly resistant and inert
- Porously sintered polyethylene
- Fiberglass elements with sintered PE type Polyglas®
- Stainless steel sieve elements - regenerable and for high differential pressures
- Nylon sieve fabric elements
- Activated carbon elements
- PP meltblown
- Adsorber cartridges

9. Adsorber vessels sorbents and catalysts
- 8 different series with container sizes from 25 ml to 3.6 l volume
- Vessels of plexiglas, PVC or aluminium
- Larger containers made of PP or PVDF
- Various sorbents and catalysts

Interesting facts
Due to our long-standing collaboration with Headline Filters GmbH, we offer a wide range of standard filters that cover a variety of applications. We also develop and manufacture custom-made filtration solutions. Benefit from short delivery times and competitive prices.

contec air and gas filter housings for all industry standards are available in stainless steel, aluminium or various plastics. Filter housings and components can be used at high pressures and temperatures and in aggressive media.

You want the best possible technical solution? It will be our pleasure to support you. Contact us.

Applications
- Separation of particles, dusts, aerosols and droplets
- Elimination of vapours, disturbing amounts of gas, drying of gases
- Separation of oil, condensates and solids from compressed air
- Separation of oil mist from the exhaust air of oil lubricated vacuum pumps and tank systems
- Filters for protection of gas analysis systems, pumps, blowers, fans, etc.
- Filters, adsorbents and catalysts for the treatment of reference gases in gas analysis
- Treatment of process gases
contec solutions for suction of dry dust.

Applications
- Chemical plants
- Plastic and metal processing
- Glass processing
- Rubber and textile industry
- Timber industry and joineries
- Detergent industry
- Food and beverage industry
- Feed and fertilizer industry
- Stone and earth
- Foundries
- Sandblasting plants
- Recycling plants

Suction and filtration plants
- Cartridge filters
- Hose filters
- Cyclones
- Fans and sewage gas blowers
- Pipe systems in-house production
- Recycling plants
- Turnkey plants
- Filter elements and filter hoses

3. Cartridge filters
Compact series with a large filter area in the smallest space. The cartridge filters can be manufactured according to customer requests, made of different materials and with different connections, depending on the application.

Properties:
- Compact design
- Long service life
- Easy handling
- Separation efficiency of 99.9%
- Filtration degrees up to 10 µ
- Housing made of painted carbon steel
- Filter elements from polyester needle felt, polypropylene, Nomex®, special coatings
- Flow rates up to 12,000 m³/h
- Air flow rate up to 60,000 m³/h

Options:
- Valve control
- Automatic pulse jet cleaning
- Control cabinet
- Downstream absolute filter (H13/H14)
- Noise absorbing element
- Raw gas pipeline
- Clean gas pipeline

3. Hose filters
Series with a large filter area for high separation efficiency - ideal for machine extraction. Hose filters are used to separate dust and volatile and pneumatically and dry dust from the raw gas according to MKA (maximum workplace concentration) and TRK (technical guidance concentration).

Properties:
- High dust holding capacity
- Long service life
- Easy handling
- Separation efficiency up to 99.9%
- Filter fineness up to 10 µ
- Temperatures up to 160 °C
- Housing made of painted carbon steel
- Filter elements from polyester needle felt, polypropylene, Nomex®, special coatings
- Flow rates up to 12,000 m³/h
- Connections DN100 to DN500

Options:
- Valve control for automatic cleaning
- Control cabinet
- Downstream absolute filter (H13/H14)
- Noise absorbing element
- Raw gas pipeline
- Clean gas pipeline

4. Separators and suction plants
Rotation-, pre- and gravity separators such as cyclones for processing machines with high dust quantity and/or coarse dust particles.

Properties:
- Low maintenance
- Compact
- Cost-efficient
- Material painted carbon steel
- Flow rate up to 4,000 m³/h
- Filter fineness up to 100 µ
- Connections to DN250

Options:
- Agitators
- Cutting systems
- Rotary valves
- Big-Bag mount

4. Fans
Centrifugal fans to support air flow at low, medium and high pressure applications.

Low pressure area 600 - 1500 Pa:
Suction of workplaces and cabins, as well as ventilation of working areas

Medium pressure range 1200 - 4000 Pa:
Suction behind cartridge or hose filters

High pressure area 4000 - 8000 Pa:
Selective suction and production of sewage gases

Properties:
- Material carbon steel, stainless steel or aluminium
- Flow rates 600 to 40,000 m³/h
- Connections DN100 to DN500

Options:
- Direct drive
- Belt drive
- Clutch drive
- FU operation
- Raw gas pipeline
- Clean gas pipeline

5. Filter cartridges and filter hoses
Needle felts for effective particle separation and separation of dusty media – ideal for machine suction in the field of machining at elevated dust and dirt emergence, in pressure or vacuum systems. Separation of ultrafine particles and dry dust.

Properties:
- High flow rates at low pressure drop
- High dust holding capacity
- Long service life
- Easy filter change
- Very good filtration properties and separation efficiency of up to 99.9%
- Filtration degrees up to 0.1 µ (absolute filter), single-stage class M, two-stage class H13/H14
- Automatic cleaning possible (pneumatic or by vibration)
- Material stainless steel (knitted fabric, mesh), polyester needle felt, polypropylene, polyamide, Nomex® or special coatings

Options:
- With thread
- With metal cap
- With perforated support basket inside or outside
- Custom-made products

Interesting facts
Since the acquisition of Glander and Bensberg Entstaubungstechnik GmbH, we now also offer industrial systems and components for the suction of dry dust through our subsidiary Glantec GmbH.

This suction and filtration plants are designed for all machines in the machining sector according to MKA (maximum workplace concentration) and TRK (technical guidance concentration). With separation efficiency up to 99.9%, even the smallest particles are separated from raw gases.

Components for air pollution control are built and constructed for over 40 years.

In addition to our standard product range, we are producing complex technical systems in the field of dust collectors in accordance with customer specifications. We manufacture pressure shock resistant versions according to ATEX and TA Luft (German Clean Air Act).

As an accessory to our facilities, we have agitators, deflector hoods, double dump valves, cutting systems, differential pressure indicators, rotary valves, downstream absolute filters (H13/H14), silencers, compensators and throttle elements.

Properties:
- Compact design
- Long service life
- Easy handling
- Separation efficiency of 99.9%
- Filtration degrees up to 10 µ
- Housing made of painted carbon steel
- Filter elements from polyester needle felt, polypropylene, Nomex®, special coatings
- Flow rates up to 12,000 m³/h
- Air flow rate up to 60,000 m³/h

Options:
- Valve control
- Automatic pulse jet cleaning
- Control cabinet
- Downstream absolute filter (H13/H14)
- Noise absorbing element
- Raw gas pipeline
- Clean gas pipeline

Properties:
- High dust holding capacity
- Long service life
- Easy handling
- Separation efficiency up to 99.9%
- Filter fineness up to 10 µ
- Temperatures up to 160 °C
- Housing made of painted carbon steel
- Filter elements from polyester needle felt, polypropylene, Nomex®, special coatings
- Flow rates up to 12,000 m³/h
- Connections DN100 to DN500

Options:
- Valve control for automatic cleaning
- Control cabinet
- Downstream absolute filter (H13/H14)
- Noise absorbing element
- Raw gas pipeline
- Clean gas pipeline

Properties:
- Low maintenance
- Compact
- Cost-efficient
- Material painted carbon steel
- Flow rate up to 4,000 m³/h
- Filter fineness up to 100 µ
- Connections to DN250

Options:
- Agitators
- Cutting systems
- Rotary valves
- Big-Bag mount

Properties:
- Material carbon steel, stainless steel or aluminium
- Flow rates 600 to 40,000 m³/h
- Connections DN100 to DN500

Options:
- Direct drive
- Belt drive
- Clutch drive
- FU operation
- Raw gas pipeline
- Clean gas pipeline

Properties:
- High flow rates at low pressure drop
- High dust holding capacity
- Long service life
- Easy filter change
- Very good filtration properties and separation efficiency of up to 99.9%
- Filtration degrees up to 0.1 µ (absolute filter), single-stage class M, two-stage class H13/H14
- Automatic cleaning possible (pneumatic or by vibration)
- Material stainless steel (knitted fabric, mesh), polyester needle felt, polypropylene, polyamide, Nomex® or special coatings

Options:
- With thread
- With metal cap
- With perforated support basket inside or outside
- Custom-made products
Oil mist separators

**Facts and figures**

Our oil mist separators (COMS) comply with all legal requirements and are significantly below the statutory limit of the German TA Luft. The filter elements excel with an separation efficiency of 99.98%.

The residual oil content is verifiably less than 0.1 mg/m³ and does not contain any particles between 0.2 µm and 0.9 µm in clean gas*.

**Applications**

- Lubrication oil tanks of turbines
- Gas and steam turbines
- Turbo-compressors and turbo-engines
- Gas and diesel engines
- Vacuum pumps
- Rotating machines
- Large-scale compressors
- Crankdrives
- Generators
- Other equipment with oil systems

**Tasks**

**Technical task:**
- Filtering, separation and almost 100% regaining high-quality lubrication oil including all its additives

**Operational task:**
- Avoiding oil leakage (at bearings etc.) by creating a permanent slight negative pressure in the lube oil system

**Environmental task:**
- High-efficiency filters prevent the emission of oil mist into the atmosphere
- Protecting the environment by reducing oil mist emission down to ≈ 0.1 mg/m³, cleaner than the German TA regulations of clean air and long-term protection of the environment

**Special versions**

- Explosion-proof versions/ATEX
- EX protective version
- EX pressure-resistant
- Special voltages
- Without side channel blowers
- Project specific process connections
- Materials: carbon steel, stainless steel 304/304L and 316L
- Special paint coatings, e.g. for off-shore applications

**Standard versions**

- ATEX version for applications up to Zone 2 (3/3G)
- Compact frame construction for large and heavy Zone 1 side channel blowers and motor/blower units

**2. COMS-series with side-mounted blower**

Type 180/435-M04 to 9.200/762-M04
- 24 Nm³/h to 1.200 Nm³/h at 50 Hz
- ATEX version for applications up to Zone 1 inside and outside (2/2G)
- Compact frame construction for large and heavy Zone 1 side channel blowers and motor/blower units

**4. COMS-series with bypass**

- Complete bypass with integrated check valve
- The bypass normally mounted on the oil tank is compactly integrated in the system
- „Emergency“ bypass to avoid high pressure in the lubrication oil system in the event of system failure

**Picture credits:**

With kind permission of Gesellschaft für DETECHNIK mbH

*Tested by the Institute of Energy and Environmental Technology e. V. (IUTA) in Duisburg in accordance with ISO 12500-1:2007.

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**Interesting facts**

Oil mist separators from contec convince due to their high efficiency, compact construction and minimal maintenance. On that you can rely:

- Approximately 3,000 sold COMS units in use worldwide
- Approved oil mist separators on facilities from Siemens, MAN Diesel & Turbo, Dresser Rand, Mitsubishi, Hitachi, Toshiba, GE, Alstom and many more
- Modular system allows a simple constructional adjustment to the respective application
- Rapid and long-term supply of spare parts
- Long service life and easy change of the filter elements
- Automatic oil recycling system with oil drain sight glass
- Environmental Technology Price for 1990
- Project-specific planning and construction
- Various options

You want to get the best possible technical solution? From planning through duration of the entire project to the desired result, we work closely with you!
5. COMS-series with double blower

- Redundant motor/blower unit on a special frame construction
- The motor/blower units can be controlled independently from each other, using hand-valves and check valves
- The motor/blower unit can easily be decoupled and disassembled with the butterfly or ball valves
- Easy maintenance due to mirror-inverted construction

6. COMS-series with hinged cover

- Only for compact series, especially for Type 1.500/980 and type 2.200/630
- Specially developed mechanical eccentric lifter
- Slight lifting of the filter cover and easy replacement of filter elements, especially when no indoor crane is available or can't be used

7. COMS-series without motor/blower unit

- Filtration and separation of oil mist for lubrication systems with sufficient high pressure

Technical data for contec oil mist separators

At present, 16 standard types with flow volumes from 8 Nm³/h to 1200 Nm³/h at 50 Hz operation and -60 mbar dp differential pressure are available.

<table>
<thead>
<tr>
<th>COMS-Type</th>
<th>100/130°</th>
<th>100/154°</th>
<th>200/425°</th>
<th>200/448°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow rate</td>
<td>0 - 15 Nm³/h</td>
<td>15 - 30 Nm³/h</td>
<td>30 - 50 Nm³/h</td>
<td>50 - 100 Nm³/h</td>
</tr>
<tr>
<td>Compressed air demand</td>
<td>0 - 1.000 Nm²/sec</td>
<td>1.000 - 2.000 Nm²/sec</td>
<td>2.000 - 4.000 Nm²/sec</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMS-Type</th>
<th>180/425°</th>
<th>200/435°</th>
<th>300/500°</th>
<th>350/750°</th>
<th>500/980°</th>
<th>550/980°</th>
<th>600/980°</th>
<th>650/980°</th>
<th>800/630°</th>
<th>850/630°</th>
<th>1000/1200°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow rate</td>
<td>30 Nm³/h</td>
<td>50 Nm³/h</td>
<td>75 Nm³/h</td>
<td>90 Nm³/h</td>
<td>100 Nm³/h</td>
<td>100 Nm³/h</td>
<td>100 Nm³/h</td>
<td>125 Nm³/h</td>
<td>160 Nm³/h</td>
<td>200 Nm³/h</td>
<td>250 Nm³/h</td>
</tr>
<tr>
<td>Compressed air demand</td>
<td>0 - 1.000 Nm²/sec</td>
<td>1.000 - 2.000 Nm²/sec</td>
<td>2.000 - 4.000 Nm²/sec</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor power</td>
<td>0.10 kW</td>
<td>0.17 kW</td>
<td>0.75 kW</td>
<td>1.10 kW</td>
<td>2.20 kW</td>
<td>2.20 kW</td>
<td>3.00 kW</td>
<td>3.00 kW</td>
<td>4.00 kW</td>
<td>5.00 kW</td>
<td>7.50 kW</td>
</tr>
</tbody>
</table>

8. COMS-series with ejector

- Four COMS types with flow rates of up to max. 100 Nm³/h
- Optional with filter regulator incl. pressure gauge for setting the optimum operating pressure to 6 bar
- Carbon steel variant, ejector made of anodized aluminium
- Stainless steel version, 304/304L or 316L, ejector made of stainless steel 304/304L
- Compressed air connection G 3/8, G 1/2
- Powered by compressed air, resulting in problem-free utilization in EX areas Zone 1 and 2

9. Validation of filter elements

contec oil mist separators meet all legal requirements and are well below the limit of the TA Luft (German Clean Air Act). The residual oil content in the clean air is verifiably less than 0.1 mg/m³ and contains no particles between 0.2 µm and 0.9 µm**.

10. Level measurement

- Innovative tank sensor for transport refrigeration

11. contec products in use

** As per test by Institute of Energy and Environmental Technology e. V. (IUTA), Duisburg with reference to ISO 12500-1:2007.

- Redundant measurement with the reporting function and visualization of the level via LED display directly on the vehicle or the telematics on the online portal. The integrated alarm function prevents breakdowns and cargo damage.
- The identification of tank and withdrawal transactions with the reporting function is particularly advantageous.
Liquid filters

Applications
- Water supply systems
- Microfiltration
- Food and beverage industry
- Sewage treatment plants
- Dams, reservoirs, cooling towers and fountain technology
- Surface technology
- Electronic industry
- Photo industry
- Cosmetic industry

Median
- Difficult, viscous and gel-like media such as bitumen, chocolate, coatings, polyurethane, etc.
- Aqueous media such as water, acids, alkalis, oils, emulsions, sterile water, river water, cooling water and process water etc.
- Food
- Pharmaceutical products
- Solvents

contec-solutions for the filtration and treatment of liquids.

Interesting facts
For the accurate and reliable separation of solids from liquids, contec provides various filter components and systems. The wide range of products includes standard filter elements and housings and complete components to custom designs.

contec liquid filters are available in various designs and sizes with various grades of filtration as well as for various flow rates. The robust housings are made of plastic, steel or stainless steel, depending on the application. In addition, filter housings made of special steels are available.

Together we‘ll find the best possible technical solution for your application.
contec-solutions for accurate measuring and control of liquid levels.

**Applications**
Level measurement, monitoring and temperature control of fuels, oils and other fluids, even with changing media during ongoing operation, in:
- Telemetry systems
- IBC containers
- Engines and engine cooling systems
- Mobile and stationary tanks
- Diesel engines
- Cooling and commercial vehicles
- Construction machinery and vehicles
- Motorsport vehicles

**Delivery program**
- Capacitance liquid level sensors (solid state)
- Capacitance liquid level switches (solid state)
- Electromechanical solutions with resistance and voltage signal or switching point
- Side-entry and vertical float switches
- Mechanical liquid level gauges
- Temperature switches

**Interesting facts**
contec provides numerous components for the precise monitoring of levels and temperatures that reliably measure and regulate both in changing media as well as in hazardous areas, or in respectively required applications.

All capacititive (solid state) sensors, liquid level gauges and float switches are designed and manufactured according to customer specifications. Within the technical possibilities, we configure the right solution according to the required application parameters such as output, position and number, as well as function of the switching points, immersion depth and material.

For the precise control of temperatures in motors, motor cooling systems, concrete pumps and diesel engines, contec provides temperature switches, which may vary, according to the application, in different housing forms, various electrical connection options, selectable switching temperatures and switching functions.

**1. Sensors with analogue signal**
- For use in water, diesel, fuel or oils, or even with changing media
- Configurable resistance, PWM, amperage or voltage output
- No moving parts (solid state) in capacitive sensors
- Electromechanical sensors can also be used for hazardous areas
- Control of default display instruments to PLC systems
- Optional manual or automatic calibration of the sensor to another medium

**2. Digital sensors and switches**
- Through selectable switching delays and functions, the capacitive (solid state) switches are precisely adaptable to the application
- Also available as an electromechanical solution
- Different thread forms depending on the process connection
- Various electrical connection options
- Depending on the pressure, temperature and medium, different sensors/switches can be selected

**3. Mechanical gauges**
- Design according to the application specification
- Hermetic encapsulation of the display by magnetic coupling
- Magnetic coupling enables robust mechanical level gauges for a leak-tight installation
- Different versions depending on the tank shape (swing arm or spiral indicators)
- Use in hazardous areas possible
- Various material mixes depending on the application
- Various process connections selectable
- Easy upgrade to electromechanical sensor possible (at structurally-appropriate indicators)

**4. Temperature switches**
- Wide range of switches that can be specified according to customers’ applications
- Various configurations of switching temperatures and switching functions, housing types and connector types selectable
- Robust and durable product range, designed for extensive use in demanding environments
- Suitable for use in industrial engines with strong vibrations, shocks, high temperatures and humidity

Capacitive (solid state) sensor
Electromechanical sensor
Float switch vertical/horizontal
Electromechanical solution see figure left
Commercial management/
International Sales
Phone +49 (0)2224 9893-15

Technical management/
Production
Phone +49 (0)2224 9893-13

Air and gas filters
Phone +49 (0)2224 9893-14

Dust collectors
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Oil mist separators
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Liquid filters
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Level measurement
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Administration
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Accounting
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