

MAXIMUM SAFETY,  
MAXIMUM PROTECTION.



## engineBoll®

The new standard in smart filtration technology



Lube oil & Fuel oil filtration with engineBoll®

# The enormous challenge: Developing a new standard filter for lube oils & fuels

“Together, making the good even better” was the slogan for the development of the new engineBoll® at BOLL & KIRCH. As market leader and expert in filter construction, we traditionally stand for safe systems. For Boll & Kirch, however, this does not mean that we

cannot innovate. In order to set a new technology standard in a targeted and market-oriented manner, we have relied on our network and gained excellent development partners with long-standing customers. The result: a compact, highly efficient, tailor-made automatic filter.

# engineBoll®

- ☑ The new automatic filter
- ☑ Made by filtration experts



Flange connection	☑ DN 50 to DN 300
Filter element	☑ Multi Segment
Grade of filtration	☑ 1µm - 50µm
Pressure stage	☑ PN10/16
Filter housing	☑ Nodular cast iron
Operating temperature	☑ max. 150°C

Compact. Highly efficient. Tailor-made.



## The best solution: Dynamic development concept with focus on customer needs

We have made it our business to cover the collected requirements in the best possible way – and that with only one modular filter type. Engine builders, module builders, shipyards, operators and owners have

different focuses on their requirements. The engineBoll® from BOLL & KIRCH covers them completely. No matter whether in use for lubricating oil, oil for servo systems or liquid fuels.

- ✓ Highest flow rates and highest filtration grades at smallest filter size
- ✓ Strong power backflushing
- ✓ Highest reliability
- ✓ Halving the number of individual parts
- ✓ Weight reduction through use of high performance polymers
- ✓ Integrated bypass filter
- ✓ Improved overflow valve technology
- ✓ With e-motor or with turbine
- ✓ Easy and fast maintenance



Developable. Reliable. Individual.

# The essential advantage: engineBoll® as your customised solution

More reliable filtration, finer filtration, higher volume flows, more compact design. All requirements are met – the field of application becomes versatile. As the

market leader, we see it as our responsibility to constantly develop our products and implement innovative ideas; we put out our feelers and are not afraid to develop

something new. BOLL & KIRCH is at the customers side with its sales teams and service staff and works out new concepts together, tests them in the field and

optimizes them. Thanks to new, patented element structures, we at BOLL & KIRCH can offer the best solutions, regardless of the industry.



Maritime

Power Plants



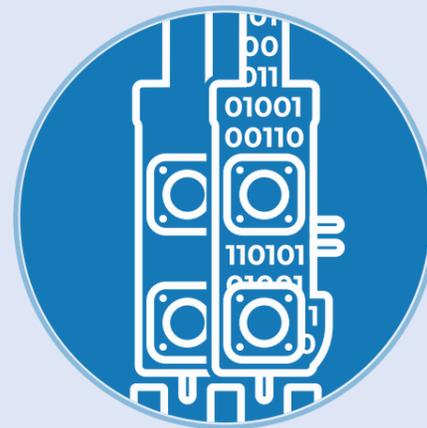


## The highest priority: Maximum protection for your application

- ✔ Innovative power backflushing technology
- ✔ Integrated bypass filter

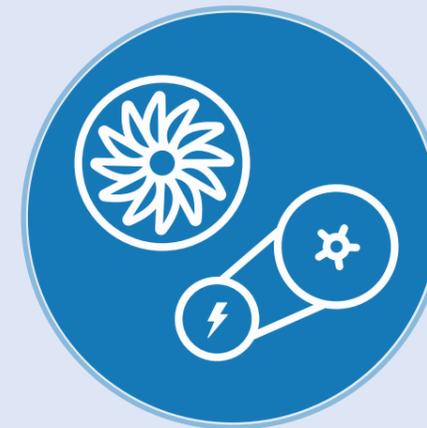
The engineBoll® filter type establishes itself as a convincing automatic filter in all important aspects. In addition to the important points of economy and compact design, the new technology standard convinces with time-tested features. These include

turbine drive and double safety. Furthermore, the number of parts in the engineBoll® has been drastically reduced, thus simplifying the maintenance time and making it a breeze to carry out.



### Ready for smart filtration

With the use of sensors, customers and BOLL & KIRCH have the option of diving even deeper into the filtration process and filtering intelligently.



### Gear motor or Turbine drive

Economical drive system via flow-driven turbine or economical electric motor.



### Double safety

If automatic cleaning is disrupted, an overflow valve forms the "Plan B". In the event of increased differential pressure, this valve opens automatically and directs the medium through a separate filter back into the outlet.

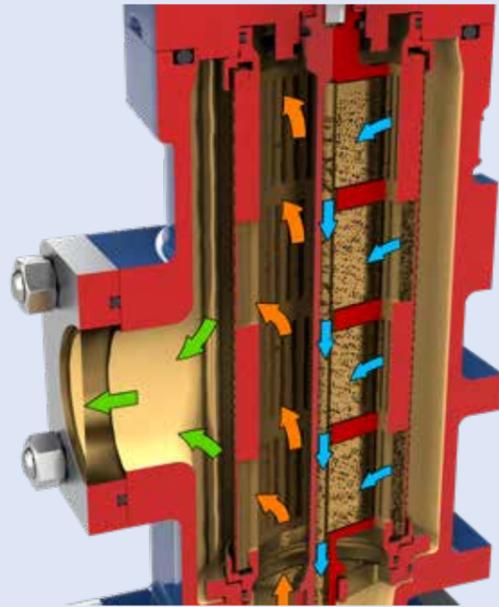


An electrical control unit for the engineBoll® is not absolutely necessary for the continuous operation in lube oil filtration, but can be advantageous for special requirements. For fuel filtration, the engineBoll® must trigger backflushing depending on time or differential pressure. For this, a control unit such as our 2300+ is required.

# The Operating Principle: New power backflush technology

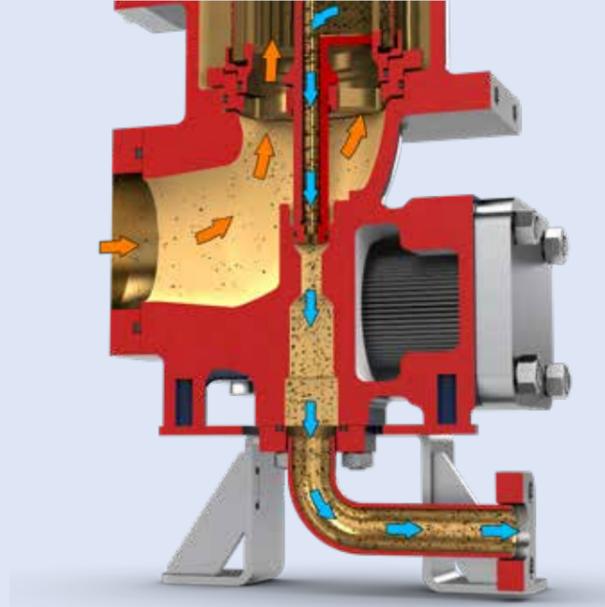
The secret behind our low pressure drop is large filter surfaces for the medium and optimized flow geometries. The highly efficient cleaning mechanism of the filter element ensures a long service life of

the filter elements and a permanently high flow rate; in the case of particularly heavy contamination, the element can be additionally cleaned intensively with a power flush.



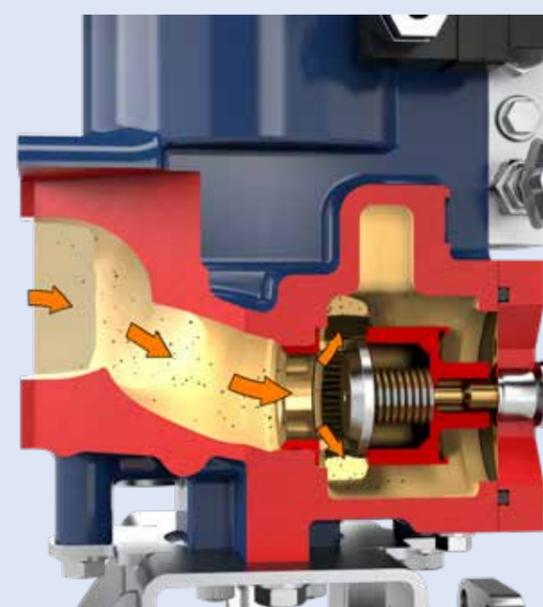
## Filtration

The medium flows from the inlet through the filter element to the outlet. The filter retains particles, which collect on the inside of the filter.



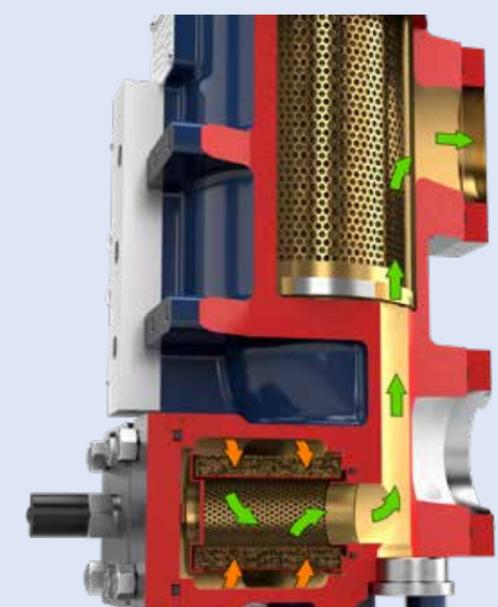
## Backflush

The backflushing arm moves down the inside of the filter element. Due to the pressure difference, medium flows backwards through the filter and flushes the dirt particles out of the filter through the backwash arm. The best cleaning results are achieved due to the backflushing arm being in direct contact with the filter surface.



## Overpressure

If the filter is limited in its function and the differential pressure reaches a critical value, the overflow valve opens and provides a further path for the medium.



## Double protection

If the overflow valve is open, the medium is passed through a separate filter and fed to the outlet. This ensures that the filtration function is also provided in exceptional situations.

Flexible filtration concepts.

The premium products of BOLL & KIRCH are setting the benchmark in the field of cleaning process fluids. Our constant and continuous engineering guarantees self-cleaning solutions in filtration to increase the overall efficiency of your application to a new level.

- Improved cleaning result
- Effective plant protection
- Considerable cost reduction

Regarding the realisation of application-oriented solutions, our customers rely on the flexibility of our processes and appreciate personal consulting and reliable service.

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