



# LVH | LOW VISCOSITY HOUSINGS



# STATE-OF-THE-ART TECHNOLD

Stricter emissions directives and increased power output in engines have raised the standards for diesel fuels. As a consequence, suppliers must guarantee that there is significantly less contamination and lower water content in their fuel. In addition, the increasing share of biogenic fuels has the effect that existing systems need to be retrofitted with diesel fuel conditioning systems.

In order to meet the requirements, it is not sufficient to only condition the diesel fuel just prior to usage in the machine. The fuel needs to be filtered and dewatered throughout the entire supply chain: from production in the refinery to the end consumer. To comply with the high quality requirements, it is essential to monitor particle contamination and water content levels.

Schroeder Industries' wide product range comprises appropriate sensors, filters and fluid conditioning systems. For every step of the process – from production to consumption – Schroeder Industries provides specific products for safe and reliable fluid monitoring and conditioning.

Products for high flow rates are added to supplement the on-board products, which are designed for smaller quantities of diesel used in mobile equipment. High flow product is applied during transport between different handling and storage facilities and at filling stations.

> Guaranteed Schroeder quality

for housings & elements

High product variability

through a great selection

of housing materials, port

Wide range of applications

Simple system integration

**High filtration efficiency** 

Optimizing operating costs through low life cycle costs

sizes, housing sizes & housing orientations

through flange connected housings

through high performance filtration LVH-F Particle Elimination

LVH-C Dewatering Unit

### Low maintenance costs due to simple element change

### Worldwide usability

through standard ASME "U" Stamped Vessels and available CRN and other Global Approvals

### Excellent water separation

through 2-step dewatering by coalescence and separation

#### High performance stability

through effective filtration and water separation over the entire operating time

### **Conservation of** resources and environmental protection

through wear-free dewatering, incinerable/recyclable filter elements, reduced emissions thanks to improved diesel quality



# GY FOR SAFE SUPPLY CHAINS

# Low Viscosity Housings: All The Best Qualities In One Product

High production variability:

Wide range of applications:

Worldwide usability:

Simple system integration:

Optimizing operating costs:

Low maintenance costs:

Resource conservation and environmental protection:

Customer-specific system integration is additionally supported by a great selection of housing materials, port sizes, housing sizes and housing orientations (vertical and horizontal)

Thanks to high product variability, the housings cover a wide range of applications

Although the customer's goal is the measure of all solutions, the standards are the foundation of the sizing of our housings. We offer ASME stamped vessels as well as CRN, ABS, AS/NZS 1200, and other approvals required to meet global design needs

The international standards and the constructionally and individually definable components from flange to periphery make upgrading existing customer systems easier

The long service life of Schroeder's Optimicron® diesel elements is obtained through high packing density and an adjusted housing and element design. These allow for extended maintenance intervals and suitably low life cycle costs

The integrated Schroeder Quality Protection not only rules out any incorrect installation of the elements, but also makes the change easier, faster and safer

The long service life of the filter elements and the lack of wear of the of the coalescing and separation elements minimize the use of material and thus protect resources. The possibility of incinerating and recycling elements protects the environment along with reduced emissions through improved diesel quality

# LVH-F | Low Viscosity Housing Filter

- 211 gpm 951 gpm (799 L/min 3,600 L/min)
- ♦ ASME "U" Stamped Vessels in carbon or stainless steel
- Excellent single-pass filtration performance
- Low pressure drop and high dirt holding capacity (DHC) due to the innovative element design

LVH-F

# LVH-C | Low Viscosity Housing Coalescer

- 211 gpm 476 gpm (799 L/min 1,802 L/min)
- ASME "U" Stamped Vessels in carbon or stainless steel
- Excellent single-pass water removal performance
- Low pressure drop ensures long element life and high efficiency water removal

LVH-C

## On-Board Diesel Filtration - Why is it Required?

Mobile machines and commercial vehicles are subject to the toughest working conditions all over the world. To ensure continuous operation of vehicles and to protect both the engine and the drive system from damage, optimum diesel fuel conditioning is particularly important. With our on-beard diesel coalescing/particulate filter (HDP), Schroeder offers a modern system for diesel filtration, which protects vehicle manufacturers and operators from failures, breakdowns and expensive service interventions.

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# **Fuel Condition Monitoring**

In order to be able to guarantee the quality of the filtration carried out over the whole process chain, the contamination of the diesel must be checked regularly.

The Schroeder TestMate® Contamination Monitor (TCM) and FluidControl Unit (FCU 1315) can be used to monitor these levels. From the measurements collected, it is possible to check and evaluate the entire transit path of the diesel in respect to required cleanliness, and if necessary, appropriate measures can be devised to optimize the diesel conditioning.



Contamination

Monitor | TCM

HY-TRAX

Manually Controlled Fluid Sampling

System

## **Protection by Filtration**

Efficient fuel filtration should achieve or exceed the recommended ISO cleanliness class . Machine users and OEMs demand application-specific filter systems and elements with the highest possible contamination retention capacities, coupled with compact dimensions, compatibility of the elements with biodiesel fuels and environmentally-friendly disposal.

## Protection by Dewatering

Consumers with large tanks which are only seldom used and in which the diesel is stored for a long time (emergency diesel generators) are particularly prone to heavy deposits of contamination in the form of particle contamination on the tank floor as well as raised water content in the tank (due to condensation).

Furthermore, free water remaining in the tank over a long period gives rise to diesel bug (formation of micro-organisms such as types of bacteria, algae, fungi, etc.), which can also clog the filter and diesel fuel system. For these reasons, the water must be removed efficiently in a single pass from the fuel to ensure that the water content is below 200 ppm water content.



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