

# -4H-Debubbler



## EFFECTIVELY REMOVE UNWANTED BUBBLES FROM SAMPLE AND SYSTEM WATER

*Unlock even more precise and dependable data from diverse water sampling applications*

The -4H-Debubbler continuously removes bubbles from the flow but ensures that the composition of the sample water is not affected by the process. Its performance and reliability have been proven in countless scientific applications as well in the measurements of parameters in water used for exhaust cleaning of ships. With such a diverse user-base, -4H-JENA ensures that the Debubbler is available in different sizes for use with a range of water flows with short lead times.

### OPERATING PRINCIPLE

The -4H-Debubbler removes unwanted bubbles from process waters so that trustworthy data can be acquired from water samplers more effectively. Available in various volumes and materials the system can be completely customised to fit any need.

The -4H-Debubbler principle is based on an internal riser pipe and an overflow drainage, which allows for some sample water and all air bubbles to efficiently exit the sampler. The remaining sample water is subsequently guaranteed to be free of air bubbles and will always be ready to be measured or processed.

An important aspect of the -4H-Debubbler's proven dependable operation is -4H-JENA's commitment to selecting the best connectors to the measuring instrument. Our systems are configured in close consultation with the user and customized to the demands of specified application.

### CUSTOM PROJECTS

- System length, diameter, volume and max. flow can be configured with 4H-JENA support
- Choose between PVC or stainless steel
- Various connector types selected by application for watertight integration to sampling system
- Custom designed mounting frames available

# -4H-Debubblers

## MARINE SCIENCE & COMMERCIAL APPLICATIONS

-4H-Debubblers can be used in various industrial and research related applications including:

- Improving precision of data obtained from water sampling instruments used by marine biologists
- Improving precision of data obtained from environmental monitoring systems used by marine authorities and climate change researchers
- Improving measurements of parameters in water used for exhaust gas cleaning processes on commercial ships

## FEATURES

While many marine applications depend on an effective solution like the -4H-Debubbler for precise data and results, the system is also used by diverse organisations on land. Various industrial process applications where bubbles in system water and liquids can have a detrimental effect on operational capabilities can be significantly improved with the simple integration of a -4H-Debubbler.

## VERSIONS

### PVC:

To prevent corrosion, the -4H-Debubbler is made entirely of PVC or corrosion-resistant materials. This enables the debubbler to be used even when submerged in seawater with a high salt content.



### Stainless steel:

Some applications require the use of steel instead of PVC for easier integration. The operating principle is the same as in the PVC version.



## CONTACT -4H-JENA

Get in touch to find out how -4H-Debubblers can improve the quality of your data by effectively removing bubbles from sample water.

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## CONTACT YOUR LOCAL REPRESENTATIVE

The -4H-Debubblers enable climate researchers to contribute towards meeting the United Nations Sustainable Development Goals.

