

Muttenz, 30.11.2022

## Temporary exclusion of O2 (oxygen) applications for d-flux.

Dear Sir or Madam,

As a result of a review of applicable standards for oxygen service, we have decided to verify the compatibility of the d-flux product line with oxygen applications : the extended flow range and pressure range, the new geometry and surface area in potential contact with oxygen has led us to reconsider the safety aspects. We cannot rely only on experience from past products to evaluate the risks of using the d-flux MFM/MFC in combination with enriched oxygen mixes.

As explained in the standard ASTM G128 "Standard Guide for Control of Hazards and Risks in Oxygen Enriched Systems" chapter 14, there are currently no certification existing that would give a blanket approval for an instrument for oxygen service. The user must determine whether the properties of the particular products (whether or not they are marketed for oxygen service) actually meet the needs of the user's specific application.

While the standard seems to indicate that the liability lies with the user and system-designer using our products, we want to be thorough and verify with the help of an external specialist consultant that our current mechanical design and production process does not induce an excess of risk for the user in normal operating conditions.

This investigation and analysis will occur in December 2022 and January 2023. Following the result of this investigation, we will know if specific measures need to be taken or if our design and production processes can remain as is. In the meantime, we have decided to act conservatively, as safety should always be our prime objective, and will pause the sale of d-flux for oxygen applications. Once we have acquired the assurance that d-flux does not cause an excess of risk, we will release it again for oxygen applications. We will update you once more on this situation by the end of December 2022.

For customers who already own a d-flux and using it or are planning to use it with oxygen, the current disclaimer from our product manual remains valid :



## Oxygen service

Vögtlin Instruments GmbH is not liable for any damage or personal injury, whatsoever, resulting from the use of our standard mass flow meters or controllers for oxygen gas. You are responsible for determining if this mass flow meter or controller is appropriate for your oxygen application. You are responsible for cleaning the mass flow meter or controller to the degree required for your oxygen flow application.

We remain at your disposal, should you have questions regarding this temporary measure.

Best Regards / 致礼,

Romain Lardet Global Product Director

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Paul de Waal d·flux Product Manager & Business Development Director

## gas flow technology since 1986 - designed in Switzerland