

## **How to assess the compatibility of sintered getter pumps with particle-sensitive vacuum applications?**

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The monitoring of particle release is crucial in many different vacuum applications that are sensitive to dust, such as accelerators, optical chambers and scanning/transmission electron microscopes. Getter pumps with porous sintered elements have been qualified by several industries and laboratories working with particle-sensitive vacuum systems. However, the scientific community does not provide a standard and unified procedure for measuring the particle release from vacuum components. Hence, SAES research team has been focusing on the development of an optimized method combined with a robust measurement system, in order to assess the compatibility of getter pumps with ultra-sensitive devices in a controlled and repeatable way. This has been particularly challenging, due to the extremely low level of counts coming from the sintered getter samples and the need to minimize background effects.