

PRESSEINFORMATION

Take a look inside a vacuum gauge:

Pfeiffer Vacuum publishes easy-to-understand videos that explain how to choose the right measurement principle

- **The inner workings and functionality of vacuum gauges**
- **An introduction to all the relevant measurement principles**

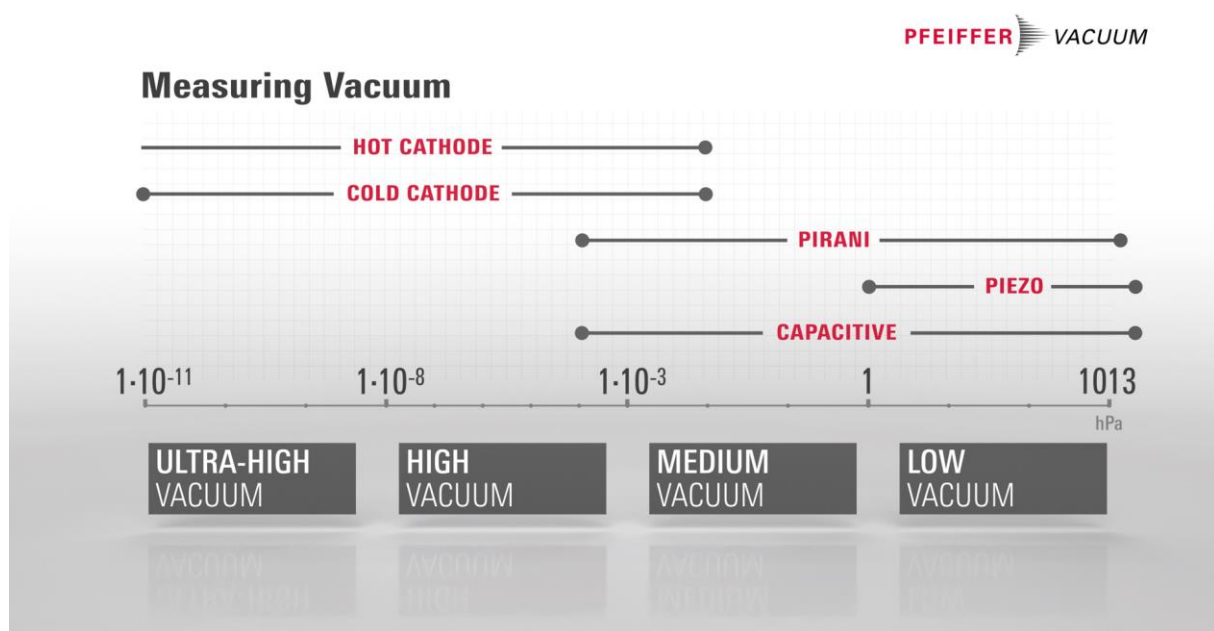
Asslar, Germany, 19. April 2023. To assist in choosing the right measurement principle, Pfeiffer Vacuum has made helpful explanatory videos that give a detailed insight into the inner workings and functionality of vacuum gauges. If the target vacuum is to be successfully measured and controlled, it is essential to select the right measurement gauge.

“Pressures and pressure curves must be maintained with precision if you wish to achieve optimal efficiency in production and the highest level of product quality. Our vacuum gauges are important quality indicators. Modern technology makes it possible to carry out total pressure measurements from atmospheric pressure through to ultra-high vacuum, covering all vacuum ranges precisely. We explain the relevant measurement principles in five videos: From capacitive through to piezo, Pirani, cold cathode and hot cathode measurement”, explains Patrick Walther, Strategic Product Manager Instruments at Pfeiffer Vacuum.

Important questions are addressed in detail: “How exactly does physics apply in a vacuum gauge?” or “How can the properties of the gas be used to deduce the total pressure?”

The video on capacitive vacuum measurement shows how the diaphragm inside the gauge moves in relation to changes in the total pressure.

In the case of piezo-resistive vacuum measurement, viewers learn how the strain resistances in the diaphragm change depending on the pressure. The video on Pirani vacuum measurement explains how a thermal conductivity vacuum gauge works. It shows clearly how the transfer of heat through the vacuum inside the gauge is dependent on the total pressure. It also demonstrates how the heat transfer and thus the displayed pressure depend on the type of gas. The video on cold cathode vacuum measurement shows how gas molecules are ionized by high-voltage electricity to create a plasma. In the video on hot cathode vacuum measurement, you will see how a hot cathode transmitter works and how the gas molecules are ionized by electrons emitted from a hot heating filament.



Caption: Pfeiffer Vacuum offers easy-to-understand videos that explain how to choose the right measurement principle

Find the high-resolution image for download [here](#).

You can find the explanatory videos [here](#).

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About Pfeiffer Vacuum

Pfeiffer Vacuum (stock exchange symbol PFV, ISIN DE0006916604) is one of the world's leading providers of vacuum solutions. In addition to a full range of hybrid and magnetically levitated turbopumps, the product portfolio comprises backing pumps, leak detectors, measurement and analysis devices, components as well as vacuum chambers and systems. Ever since the invention of the turbopump by Pfeiffer Vacuum, the company has stood for innovative solutions and high-tech products in the analytical, industrial, research & development, semiconductor and future technologies markets. Founded in 1890, Pfeiffer Vacuum is active throughout the world today. The company employs a workforce of some 4,000 people and has more than 20 sales and service companies as well as 10 manufacturing sites worldwide.

For more information, please visit www.pfeiffer-vacuum.com.

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