





Pressure monitoring

Plasma Cleaning

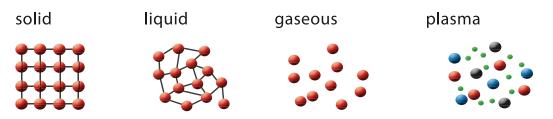




Plasma cleaning for Pressure switches and Transmitters

Plasma = reactive gas consisting of free, energy-rich electrons, ions and neutral particles (free charge carriers)

Plasma is also known as the fourth state of matter



Plasma cleaning - Process and Operating principle

1. Evacuation of process chamber

- Pressure switches and transmitters are placed inside the process chamber
- The process chamber is hermetically sealed and evacuated by a vacuum pump

2. Oxygen enrichment

- Pure oxygen (O2) is supplied as process gas at approx. 1 mbar
- A high-frequency generator forms an electromagnetic field as energy source
- The oxygen molecules are ionized and transferred into the highly reactive plasma
- 3. Plasma cleaning
 - The process chamber is continuously supplied with oxygen while the used gas (= decomposition product of the hydrocarbons) is removed by the vacuum pump
- 4. Venting of the process chamber
 - Ventilation of the process chamber with ambient air
 - The cleaned products are individually packed and sealed in silicone-free PE bags



Plasma Cleaning for Pressure Switches and Transmitters

Free of oil and grease for oxygen applications PWIS-free for coating and painting processes Purity levels for Pressure Switches & Transmitter

PURITY

Maximum quantity of hydrocarbon-based compounds is 20 mg/m2 (Level B according to ASTM G93:2019)



SAFETY

Approved burnout resistance of EPDM sealings by the Federal Institute for Materials Research and Testing (BAM)



EFFICIENCY

Regular verification and approval by a national accreditation body (DAkkS)

Level 1 Free of oil and grease¹



- Individual parts free of oil and grease
- Assembly and adjustment free of oil and grease

¹⁾ Not recommended for oxygen applications



Plasma Cleaning for **Pressure Switches** and Transmitters



Level 2

Plasma cleaned e.g. for oxygen applications²⁾



- Free of hydrocarbonbased substances
- Individually sealed and packed in silicon-free PE bags



Level 3

Plasma cleaned PWIS-free 3)



- Free of paint-wetted impairment substances (PWIS)
- Individually sealed and packed in silicon-free PE bags

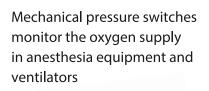


- **Oil & grease-free**
- ³⁾ PWIS are substances that interfere with paint wetting, such as silicones, lubricants, oils, greases and cosmetics

²⁾ SUCO only recommends the use of EPDM sealing for oxygen applications. The maximum permitted pressure depends on the housing material.



For every application the **Perfect Solution**





Electronic pressure switches monitor the pressure of chemical solutions and highly combustiblegases during the production of pharmaceuticals

Mechanical pressure switches with a brasss housing monitor the oxygen / / ozone_spiry in oxidation processeduring the treatment of drking water and waste war



Electronic pressure transmitters monitor r the central gas sisupy v in hospitals as well a various systems in th treatment room

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We offer our customers plasma-cleaned pressure switches and transmitters for various industrial and medical applications. Our products are used in ventilators, autoclaves or welding systems.

