





## Pressure monitoring

## Plasma Cleaning

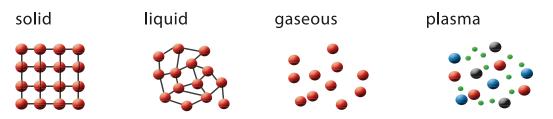




# Plasma cleaning for Pressure switches and Transmitters

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 grease<sup>1</sup>



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

<sup>1)</sup> Not recommended for oxygen applications



# Plasma Cleaning for **Pressure Switches** and Transmitters



## Level 2

## Plasma cleaned e.g. for oxygen applications<sup>2)</sup>



- 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

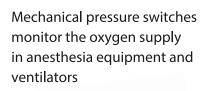


- **Oil & grease-free**
- <sup>3)</sup> PWIS are substances that interfere with paint wetting, such as silicones, lubricants, oils, greases and cosmetics

<sup>2)</sup> 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

Mechanical pressure switches monitor the oxygen supply dring autogenous weldig and flame cutting

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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.

