



Suco

Pressure Monitoring

Plasma Cleaning



Pressure switches and Transmitters

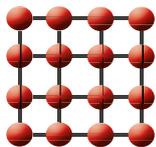


Plasma cleaning

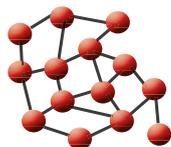
Plasma = reactive gas consisting of free, energy-rich electrons, ions and neutral particles (free charge carriers)

Plasma is also known as the fourth state of matter

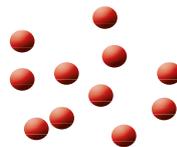
solid



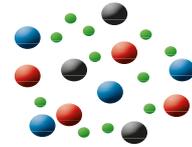
liquid



gaseous



plasma



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 (O_2) 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

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

Level 2

Plasma cleaned e.g. for oxygen applications²⁾



- ✓ free of hydrocarbonbased substances
- ✓ individually sealed and packed in silicon-free PE bags



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

Level 3

Plasma cleaned PWIS-free³⁾



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



³⁾ PWIS are substances that interfere with paint wetting, such as silicones, lubricants, oils, greases and cosmetics

For every application the

Perfect Solution



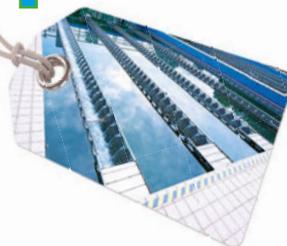
Mechanical pressure switches monitor the oxygen supply in anesthesia equipment and ventilators



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



Mechanical pressure switches with a brass housing monitor the oxygen / ozone supply in oxidation processes during the treatment of drinking water and waste water



Electronic pressure transmitters monitor the central gas supply in hospitals as well as various systems in the treatment room



Mechanical pressure switches monitor the oxygen supply during autogenous welding and flame cutting



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SUCO Robert Scheuffele GmbH & Co. KG

Keplerstraße 12-14
D-74321 Bietigheim-Bissingen
Germany

Phone: +49(0)7142 579-0
Fax: +49(0)7142 579-19
Email: info@suco.de



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.

