Steinhagen, January 10th, 2023

**Euroguss 2024: Plasma technology revolutionizes metal surface cleaning and coating**

Plasmatreat presents live plasma cleaning and coating and the latest test method for AntiCorr coating

**Reliable and environmentally friendly inline cleaning and coating in metal processing: At Euroguss 2024 in Nuremberg, Hall 8, Stand 616, Plasmatreat GmbH will demonstrate how various metals and alloys can be optimally prepared for subsequent processes such as coating, bonding or painting. Plasmatreat's innovative atmospheric pressure plasma processes Openair-Plasma and PlasmaPlus not only ensure maximum effectiveness, but also make the processes more efficient and environmentally friendly. From January 16 to 18, visitors will be able to find out about the possibilities of plasma treatment and the latest Plasmatreat test method for the detection of corrosion protection coatings.**

**What visitors can expect at booth 616 in hall 8:**

In a PTU 1212 (Plasma Treatment Unit), the Steinhagen-based company will demonstrate how cleaning with Openair-Plasma and subsequent coating with an anti-corrosion layer works. This nanolayer is applied using the PlasmaPlus AntiCorr process. To demonstrate the effectiveness of the AntiCorr coating, Plasmatreat has prepared various aluminum die castings (with and without plasma treatment) for comparison after a 720-hour salt spray test. At a Plasma-Live-Table, visitors will have the opportunity to see both the ultra-fine cleaning of metal components and various analytical methods for detecting plasma treatment: The company has developed an innovative and fast test procedure - the AntiCorr Test Fluids - especially for the detection of the AntiCorr coating. Visible and analyzable results are obtained within seconds, allowing reliable conclusions to be drawn about the success of the coating. This state-of-the-art approach changes the evaluation process and offers unprecedented efficiency.

**Ultra-fine cleaning with Openair-Plasma - perfectly prepared for the next process step**

The surfaces of metal components are often contaminated by the release agents and lubricants, cutting oils or drawing greases used in the manufacturing process. These contaminants must be removed to ensure proper processing. Conventional cleaning processes usually involve chemicals. However, residues are often left behind that make further processing of the components, e.g. bonding or coating, more difficult. Plasmatreat's Openair-Plasma technology is a thorough and environmentally friendly alternative to wet chemical cleaning. This technology uses only compressed air and electricity to remove organic contaminants. It is therefore a very clean technology that is efficient, in-line and selectively applicable.

**PlasmaPlus AntiCorr coating - preventing infiltration corrosion**

PlasmaPlus, another process developed by Plasmatreat, applies a nanocoating to metal substrates. A precursor is added to the plasma to create an ultra-thin, highly effective layer on the metal surface that performs a specific function depending on its composition: The PlasmaPlus AntiCorr process is used to create a high-performance anti-corrosion coating that can be used, for example, to protect housing seals from infiltration and thus effectively protect electronic components from damage. The key advantage of AntiCorr is the ability to perform selective in-line treatment, where only the desired and necessary areas of the component are treated. Compared to other corrosion protection methods, this saves a lot of chemicals, logistics, time and money, while protecting the environment.

More information is available at: [www.plasmatreat.com](http://www.plasmatreat.com)

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**Images and captions can be found at the end of the press release.**

***Info box:***

**How Openair-Plasma and PlasmaPlus optimize industrial processes.**

When plasma with its high energy level comes into contact with materials, it changes the surface properties, for example from hydrophobic to hydrophilic. Plasma technology requires only compressed air and electricity for operation. Fine cleaning with Openair-Plasma gently and reliably removes dust, release agents, additives, plasticizers and hydrocarbons from surfaces. Especially with non-polar plastics, plasma treatment achieves surface activation. It supports the increase of surface energy by introducing hydroxyl groups and thus improves adhesion in subsequent processes such as bonding, printing, painting and sealing. Plasmatreat's PlasmaPlus technology can also be used to create targeted functionalized surfaces with defined properties by applying (depositing) nanocoatings, e.g. as an additional adhesion promoter layer.

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**About Plasmatreat**

Plasmatreat is an international leader in the development and manufacture of atmospheric plasma systems for the pretreatment of substrate surfaces.

Whether plastic, metal, glass or paper – the industrial use of plasma technology modifies the properties of the surface in favor of the process requirements.

Openair-Plasma® technology is used in automated and continuous manufacturing processes in almost every industrial sector. Examples include the automotive, electronics, transportation, packaging, consumer goods and textile industry, but the technology, cost and environmental advantages of the plasma technology are used in medical technology and in the renewable energy sector as well.

The Plasmatreat Group has technology centers in Germany, USA, Canada, China, and Japan. With its worldwide sales and service network, the company is represented in more than 30 countries by subsidiaries and sales partners.

More information is available at: [www.plasmatreat.com](http://www.plasmatreat.com)

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**Images:**



The PlasmaPlus process applies a nanocoating to metal substrates, while the AntiCorr process applies a high-performance anticorrosion coating.

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Aluminum die-cast parts (with and without plasma treatment) after a 720-hour salt spray test for comparison.

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