Steinhagen, Germany, December 2nd, 2025

**Euroguss 2026:**

**Openair-Plasma Makes the Difference: Clean, Stable, and Efficient Processes in Metalworking**

From fine cleaning to corrosion protection: Preparing metal surfaces specifically for subsequent processes

**Steinhagen, November 2025 – At Euroguss 2026 in Nuremberg/Germany, Plasmatreat GmbH will demonstrate how atmospheric pressure plasma makes metal surfaces reliable for subsequent steps such as coating, sealing, bonding, and printing.**

From January 13 to 15, 2026, visitors to Hall 6, Booth 219 can experience live how plasma is revolutionizing surface treatment – with a focus on highly effective cleaning, innovative nano-coating as corrosion protection, and maximum inline process capability.

Plasmatreat's innovative plasma processes, such as Openair-Plasma, HydroPlasma, and PlasmaPlus, not only ensure effective surface modification and maximum efficiency, but also make processes more efficient and environmentally friendly.

**Removing inorganic residues with HydroPlasma**

With HydroPlasma, Plasmatreat has developed a new cleaning process that combines the physical effect of Openair-Plasma with the chemical reactivity of water. Water is fed into the plasma process and ionized. The resulting reactive species dissolve organic and inorganic residues and convert them into soluble or gaseous components. The effect is similar to intensive cleaning with detergent in warm water, but without the need for additional chemical cleaning agents. The focus of the trade fair presentation is therefore on the PTU cell (Plasma Treatment Unit) type 1212. This demonstrates how workpieces are cleaned of contaminants using HydroPlasma.

**Live demonstrations at booth 219 in hall 6**

Various aluminum and magnesium sample parts will be treated at a live table. Visitors will be able to see directly how the ultra-fine cleaning of metal surfaces improves wetting and adhesion. In addition to the illustrative fine cleaning of metal components, visitors will also have the opportunity to see analysis methods for verifying plasma treatment. The company has developed an innovative and rapid test procedure – the AntiCorr test fluids – specifically for the fast verification of AntiCorr coating.

Within seconds, visible and evaluable results are achieved that allow reliable conclusions to be drawn about the success of the coating. This state-of-the-art approach is transforming the evaluation process and offering unprecedented efficiency.

**Ultra-fine cleaning with Openair-Plasma – precise and chemical-free**

The surfaces of metal components are often contaminated by the release agents, lubricants, cutting oils, or drawing greases required in the manufacturing processes. These contaminants must be removed to ensure flawless further processing. Conventional cleaning processes usually involve chemicals. Nevertheless, residues often remain, which make further processing of the components, e.g., bonding, sealing, or coating, difficult. Plasmatreat's Openair-Plasma technology is a thorough and environmentally friendly alternative to wet chemical cleaning. This technology requires only compressed air and electricity to remove organic contamination. It is therefore a very clean technology that is efficient, suitable for inline use, and can be applied selectively.

**PlasmaPlus AntiCorr coating – preventing corrosive infiltration**

PlasmaPlus, another process developed by Plasmatreat, applies a nano-coating to metal substrates. A precursor is added to the plasma to create an ultra-thin, highly effective layer on the metal surface, which performs a specific function depending on its composition: The PlasmaPlus AntiCorr process is used for high-performance corrosion protection coatings, which serve, among other things, as a protective layer under housing seals. This protects components from infiltration corrosion, effectively preventing damage to electronic components, for example. The key advantage of AntiCorr is its selective inline treatment, which means that only the desired and necessary areas of the component are treated. Compared to other corrosion protection processes, this saves a lot of chemicals, logistics costs, time, and money, while also protecting the environment.

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For more information, please visit: [www.plasmatreat.com](http://www.plasmatreat.com)

**Images and captions can be found on the last page of this document.**

***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. Even oxide layers on metal surfaces can be reliably removed inline during the production process using plasma technology. 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. Plasmatreat's HydroPlasma® is used to remove stubborn organic and inorganic soils - an innovative cleaning method that uses only water, compressed air and electricity in an environmentally friendly manner.

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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.

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**Pictures and captions:**

Picture 1

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Ein Bild, das Im Haus, Maschine, Waschbecken, Bautechnik enthält.

KI-generierte Inhalte können fehlerhaft sein.

Selective use of PlasmaPlus - AntiCorr for applying a corrosion protection layer to the sealing surface of battery housings. (Copyright Plasmatreat GmbH)

Picture 2

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Ein Bild, das Maschine, Zylinder, Im Haus, Tasse enthält.

KI-generierte Inhalte können fehlerhaft sein.

Removal of persistent organic and inorganic contaminants by means of HydroPlasma to improve surface adhesion. (Copyright Plasmatreat GmbH)