Steinhagen, March 14th, 2024

**Reducing the carbon footprint of the coil coating process using plasma technology**

Plasmatreat exhibits for the first time at the Coiltech trade fair in Augsburg

**Plasmatreat GmbH, the world's leading supplier of atmospheric pressure plasma systems and equipment, based in Steinhagen, North Rhine-Westphalia, Germany, will be exhibiting its plasma technology for the first time at the Coiltech trade show in Augsburg, Germany. From March 20 to 21, visitors can learn more about the environmentally friendly method for cleaning and coating metal coils at booth C21 in hall 2.**

At the Plasmatreat booth, the focus will be on pretreating the surface of metal coils: which can be cleaned by using patented Openair-Plasma technology. Release agents and lubricating greases from previous process steps are removed just as reliably as dust or dirt particles. This ultra-fine cleaning process ensures that the surfaces are optimally prepared for subsequent painting or coatings, such as corrosion protection. Powered only by compressed air and electricity, this technology enables manufacturers of electric motors, generators or transformers in the coil coating process to eliminate environmentally harmful and costly wet chemical cleaning processes. Expensive ovens for drying or disposal costs for wet chemistry are a thing of the past with the dry, inline plasma process for any coil coating process.

**PlasmaPlus for Corrosion Protection of Metal Surfaces**

Not only ultra-fine cleaning with Openair-Plasma, but also dry coatings using the PlasmaPlus process have become a reality in the coil coating industry thanks to the plasma experts from Steinhagen. After the surfaces have been cleaned and prepared for the next process steps, PlasmaPlus can also be used to apply an anticorrosion coating, for example. An organosilicon compound is added to the plasma as the starting material for this so-called anti-corrosion coating. This compound is fragmented by the high-energy excitation in the plasma and deposited as a glass-like layer on a surface. The chemical composition of the anti-corrosion coating can be varied depending on the application to achieve the best results on different materials. Compared to conventional coil coating processes, the AntiCorr coating has several advantages: The process is dry, can be used in-line in the production process, is cost-effective, requires no handling or intermediate storage, and is environmentally friendly. Plasmatreat's anti-corrosion coating has been proven to withstand more than 1,200 hours of salt spray testing without surface corrosion.

Visitors to Coiltech can expect live demonstrations of Openair-Plasma cleaning on various metal surfaces, as well as contact angle measurements and water spray tests to prove that the plasma cleaning has worked. By testing with Plasmatreat's latest test fluids, visitors can also see that the anti-corrosion coating has been applied by PlasmaPlus: the company has developed an innovative and fast test procedure - the AntiCorr test fluids - especially for the detection of this anti-corrosion 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.

Visit Plasmatreat GmbH in Hall 2, Stand C21.

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

***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.

(897 characters with spaces)

**About Plasmatreat**

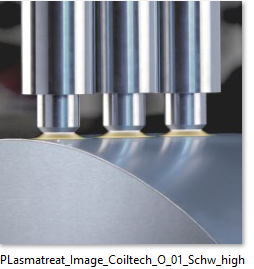
Plasmatreat is an international leader in the development and manufacture of atmospheric plasma systems for the pretreatment of substrate surfaces. Whether plastic, metal, glass or paper - the industrial use of plasma technology modifies the properties of the surface in favor of the process requirements.

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.

(968 characters with spaces)

**Picture captions:**

****

With Openair-Plasma, release agents and lubricating greases from previous process steps are removed just as reliably as dust or dirt particles.(Copyright Plasmatreat GmbH)



Aluminum die-cast test specimen with aluminum alloy with and without anti-corrosion coating (after 720 hours salt spray test according to DIN ISO 9227).

(Copyright Plasmatreat GmbH)