Plasma technology provides optimal bonding preparation for CFRP structures

Roding Automobile GmbH is an international technology company in the field of lightweight construction and electromobility. As specialists in the development and production of lightweight CFRP structures for the automotive and aviation industries, it is particularly important for Roding Automobile to operate with the latest manufacturing processes.

Surface tension and the associated wettability of the material play an important role, especially in the areas of bonding and laminating. With the aid of the Plasmatool, a highly efficient plasma hand tool for surface treatment, these parameters can be optimized quickly and easily.

Using the Relyon Plasmatool, an atmospheric pressure plasma is applied to the workpiece so that the surface is freed of fine impurities and chemically modified. This delivers optimal preparation for subsequent processes such as gluing or laminating. An example of part treated material is shown below.
After plasma treatment, inserts made of various materials with significantly improved mechanical properties can be incorporated into the laminate. Thermoplastics that would have been impossible to bond before due to their low surface energy can also be processed.

**Relyon Plasmatool**

- Improves wettability for more consistent, stronger bonding
- Effective for large or hard to reach areas
- Convenient and portable design
- Suitable for different processes, substrates and geometries
- Robust, intuitive and easy to use
- Stand-alone unit, no compressed air

**Applications include:** In addition to pre-treating hard-to-bond surfaces to improve wetting and therefore adhesion, the Plasmatool can also be used for fine cleaning and germ reduction on a great variety of surfaces such as glass, plastics or metals.