

Revolutionising the World of Plasma and Corona Surface Treatment Systems

Tantec UK & Ireland manufacture Plasma and Corona Surface Treatment Systems, which improve the surface of materials, especially non-stick polymers like polypropylene, so that they can be adhered to when bonding, printing and coating.

The company has a rich history supplying some of the world's leading manufacturers since 1974, producing plasma and corona surface treatment systems for cutting-edge industries including aerospace, automotive and medical. Their products play a critical role in everyday life.



Revolutionising the world of surface treatments by inventing plasma and corona systems for 3D components, Tantec have continued to operate at the forefront of the sector, being one of the few organisations worldwide specialising in both technologies.

"For almost half a century we were developing thousands of surface treatment solutions and we continue to work closely with a broad range of industry sectors, supplying standard and bespoke systems to meet their requirements," says Managing Director Chris Howey.

"Each material, adhesive and process is different, or has different performance requirements, so we must test to ensure the process works well for the specific application requirements, which is where Tinius Olsen have become a proven partner. "

Most of Tantec's testing is currently for project based applications. This allows for the proving of processes using the customer's parameters, materials and adhesives to get real world numbers and a formal report. They also use the equipment for quality testing as part of the Ebble Manufacturing side of the business, which is the sub contract manufacturing arm of Tantec-UK and offers support to those customers with lower volumes who cannot purchase the equipment for use on site.

"Performing a variety of parameter tests on the available materials and using preferred adhesives to make up lap shear tests, allows us to put numbers for adhesion against the treatments –

proving the effectiveness and repeatability of the treatments. This gives us confidence when supplying the plasma and corona equipment as well as the customer buying the machine. They know they will be getting exactly what they need."

A perfect case study has seen a client interested in the performance of a new adhesive used alongside Tantec's treatment, which was difficult to prove against an older adhesive.

"Utilising testing instruments such as a Tinius Olsen 5ST UTM and Horizon testing software, performing lap shear testing gives us firm numbers on the samples and gives impressive results. Lap shear samples are ripped apart, with material failure on the best performing parts. This proof in numbers, and visual display of strength in the part gave the customer confidence in the corona treatment process which will streamline their production and give them unrivalled repeatability with no need for chemicals or primers. The Tinius 5ST unit was a key part of giving everyone involved the confidence to use the machines we offer" says Chris.

"Before we took delivery of our own machine, Tinius Olsen offered strong support during the specification stage of supplying a system, and helped with installation and further questions. Everyone we dealt with helped in their own way without any frustrations or delays," says Chris.

"They have offered support to us for years, working closely with us when we needed them. The price of the equipment was extremely competitive, especially for the quality. The key aspect that really pushed us toward Tinius was their approach to discussing the wide variety of testing requirements we had; speaking with others, we were lead down the route of over-complex machines and systems we wouldn't use. The Tinius Olsen machine does everything we want and more while still being simple and easy to use."

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