



## Corona Treating Equipment is the surface activation method of choice for STERIS healthcare...



Albert Browne, part of the STERIS Healthcare Corporation who provide sterile processing equipment to the medical

industry contacted Dyne Technology when looking to improve the adhesion quality of their printing ink on the sterile indicators that are widely used in hospitals throughout the UK & Ireland.

The sterile indicators are vital to the Sterility Assurance Program, their Process Control Products are in-process control check points to prevent the mix-up of processed and un-processed packs (container, pouch or wrapped tray) and enhance patient and personnel safety.

The Dyne Technology engineers conducted an initial on-site assessment to better understand the problem faced by Albert Browne. The sterile indicator tabs underwent a series of tests and it became clear that the surface of the plastic material would achieve a stronger level of adhesion with Plasma Surface Activation. Plasma Surface Activation would allow the printing ink to fully wet the surface and achieve the high level of adhesion required.

When choosing Surface Activation method, it was critical for the Dyne Technology engineers to work closely with Albert Browne to ensure most efficient treatment method is selected. From this, High Frequency Corona Treating equipment was chosen as the most effective treatment method for both the part requiring treatment and the manufacturing process utilised. High Frequency Corona Treating equipment was successfully installed by Dyne Technology engineers on the current printing line for surface modification at their manufacturing facilities.

The high frequency corona treating equipment system supplied by Dyne Technology is designed for the pre-treatment of conductive and non-conductive narrow webs and can treat either one or both sides of the web as well as accommodating production speeds of up to 150m per minute. The compact design and construction enables the equipment to be mounted directly onto the treating station which completely removes the need for trailing



high voltage cables. Running from standard 230Volt, 13Amp socket outlets the corona treating equipment easily fits to new or existing production lines and presses.

***“Dyne Technology has worked very closely with us to provide a cost effective and robust solution. The treatment system installed has improved the print adhesion enormously and therefore the overall quality, reliability and performance of our Process Control Products.”*** - Jonathan Coleman, Deputy Manufacturing Manager at Albert Browne

Corona Surface Activation is achieved by creating a high voltage, high frequency electrical discharge, known as Corona discharge in close proximity to the parts to be treated. This high energy corona discharge is attracted to the material and modifies the molecular bonds on the surface. These modified bonds are now free to attach to free radicals and other particles that exist in the highly active corona discharge environment. The resulting formation of additional polar groups on the material surface have a strong chemical attraction to inks, paints, coatings, adhesives etc, the increase in surface energy significantly contributes to the bond strength that can be achieved. If you are interested in finding out more about state of the art Corona Treating equipment, please do not hesitate to [get in touch](#).

**Do you want to find out more?**

**ASK US A QUESTION!**



**OR YOU CAN CALL ON:  
01543 411 460**



Dyne Technology are the UK and Ireland's Number One Plasma Treating technology supplier. *The Dyne Technology engineers* have over 40 years practical experience and have cemented their position as the trusted

advisor to the UK and Ireland's engineering and manufacturing industries when looking to improve adhesion, surface wetting and surface cleanliness.

If you feel Plasma Treating could have a place in your production and engineering processes, please do not hesitate to [get in touch!](#)