

Chaang Horng Electronic Co., Ltd.

With corona treatment, made coating easy!

Why do I need corona treatment and how does it work?

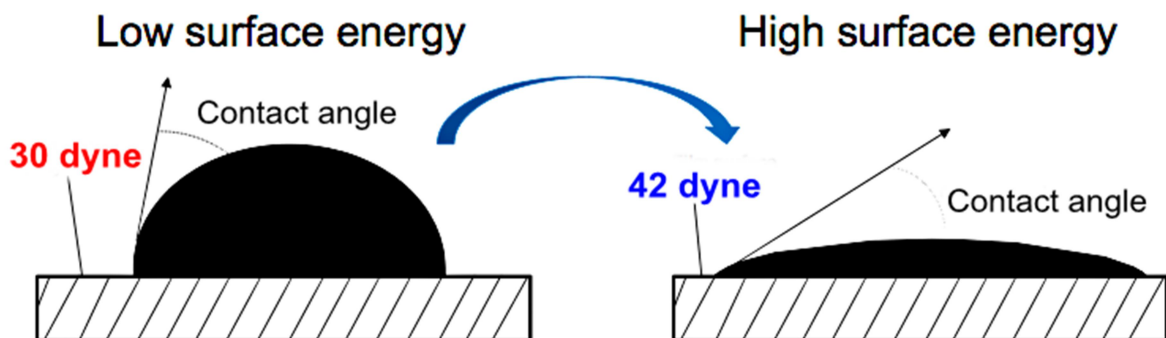
Corona treatment increases the surface energy of textiles, plastic films, and paper to improve the wettability and adhesion of inks, coatings, and adhesives. Best treatment works when a substrate is treated at the time of extrusion and in-line prior to converting. Corona treatment increases quality and productivity through improved printing and coating quality with faster production speeds and less scrap.

Why do I need it?

Polymer films and textiles have chemically inert and non-porous surfaces with low surface tensions, causing them to be non-receptive to bonding with substrates, printing inks, coatings, and adhesives. Each film type has inherent surface energy (dyne level) that can be increased through corona treatment at the time of production. This level of treatment diminishes over time.

So, material that can be easily printed and coated immediately after production can, within a few days or weeks, lose sufficient surface energy to become unable to print and coat. Since it's nearly impossible to guarantee that the material you receive will be converted within the required time limit, retreating in line is often a necessity. To ensure

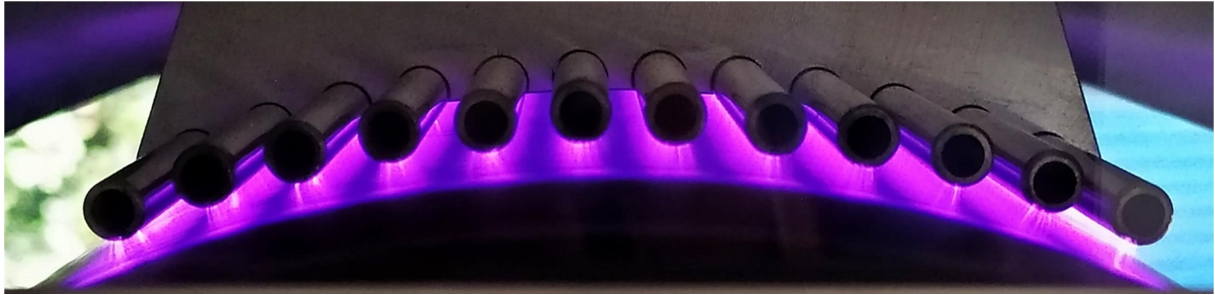
SURFACE ENERGY



consistent quality, use material that has been treated at the time of production and retreat in-line prior to converting.

How does it work?

A corona treatment system consists of two major components: the power supply and the treater station. The power supply accepts standard 50/60 Hz utility electrical power and converts it into the high voltage(6~15kV), higher frequency (10~ 30 kHz) power that is supplied to the treater station. The treater station applies this power to the surface of the material, through an air gap, via a pair of electrodes at high potential and rolls at a ground potential that supports the material. Only the side of the material facing the high potential electrode should show an increase in surface tension. In the corona treating system, the voltage buildup ionizes the air in the air gap, creating a corona, which will increase the surface tension of the substrate passing over the electrically grounded roll.



For more info, please visit our website : www.chaang-horng.com