

HIGH PERFORMANCE IGBT SHEET TYPE CORONA TREATMENT SYSTEM.

For offset industries to treat single sheet

Sheet Treater

GENERAL DESCRIPTION

Water-based and UV inks printed on plastic Sheets /films and other substrates create a need for the substrate to be treated prior to printing.

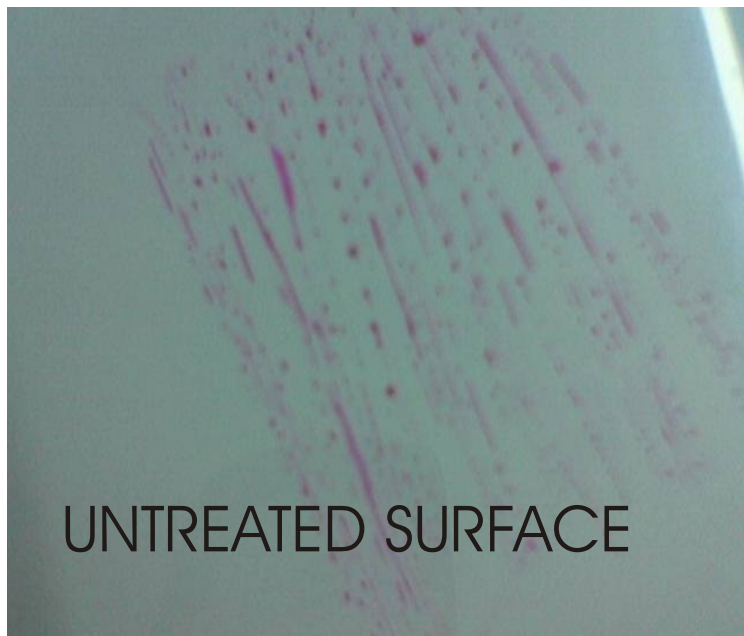
Corona treating is a very effective way to increase the adhesion of virtually any plastic material. Corona treatment increases the surface tension of the Sheets /films receptive to inks by inducing molecular changes in the surface of the films/sheets.

Conventional method of Roll to Roll treatment is standard practice, but in Offset , Sheet type Corona Treatment is required to increase surface tension or to improve the printability.

The surface energy of the substrate needs to be significantly higher than the ink in order the ink to adhere.

Water-based and UV inks have higher surface energies than solvent-based inks. To use them, the substrate surface energy needs to be raised higher.

Corona treaters create a spark between electrodes and which passes through the substrate, raising its surface energy.





Some substrates are corona-treated when they are manufactured. Many of these substrates require a surface energy boost to match a particular ink or coating. This is done with **corona pretreaters** on the press just prior to the Printing / coating application point.

Corona treatment should be applied to plastic surfaces before lamination, glue coating or printing to prevent shedding of the ink or coating ensuring the best quality is achieved.

PVC,PP,LD,Foam,Flex, metallised polyester ,PE, OPP, and other high-low density plastic materials should particularly be Corona treated to enhance the quality of the final product.

The equipment consists of mainly .transformer, Dielectric insulated electrode ,earthed rollers and free rollers which are enclosed in a properly made casing .Corona is generated by applying a high frequency, high voltage signal to an electrode separated from an earthed plane by an air gap.

The sheet is passed from free roller through the airgap between Dielectric insulated electrode and the earthed roller which generates continuous shower of ionised air called as **CORONA**.



FEATURES

- ✓ ADVANCED IGBT Technology.
- ✓ Aluminium station assembly for light weight and low corrosion.
- ✓ D.C.Motor & D.C.Drive for self conveyor roller
- ✓ Ozon extraction system efficiently remove ozone and to cool the electrode. This reduces warping of the electrode and provides more consistent treatment across the sheet
- ✓ Compact simple construction
- ✓ Ultra High Frequency.
- ✓ Soft Start.
- ✓ Maximum Operator safety.
- ✓ Treatment Rolls with Silicon Sleeves.
- ✓ Force cooled convertor for longer life.
- ✓ Fully enclosed treater station.

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