





#### CORONA TREATMENT

Corona treatment is a high frequency discharge that increases the surface energy of plastic films, foils, and paper to improve wettability and adhesion of inks, coatings, and adhesives.

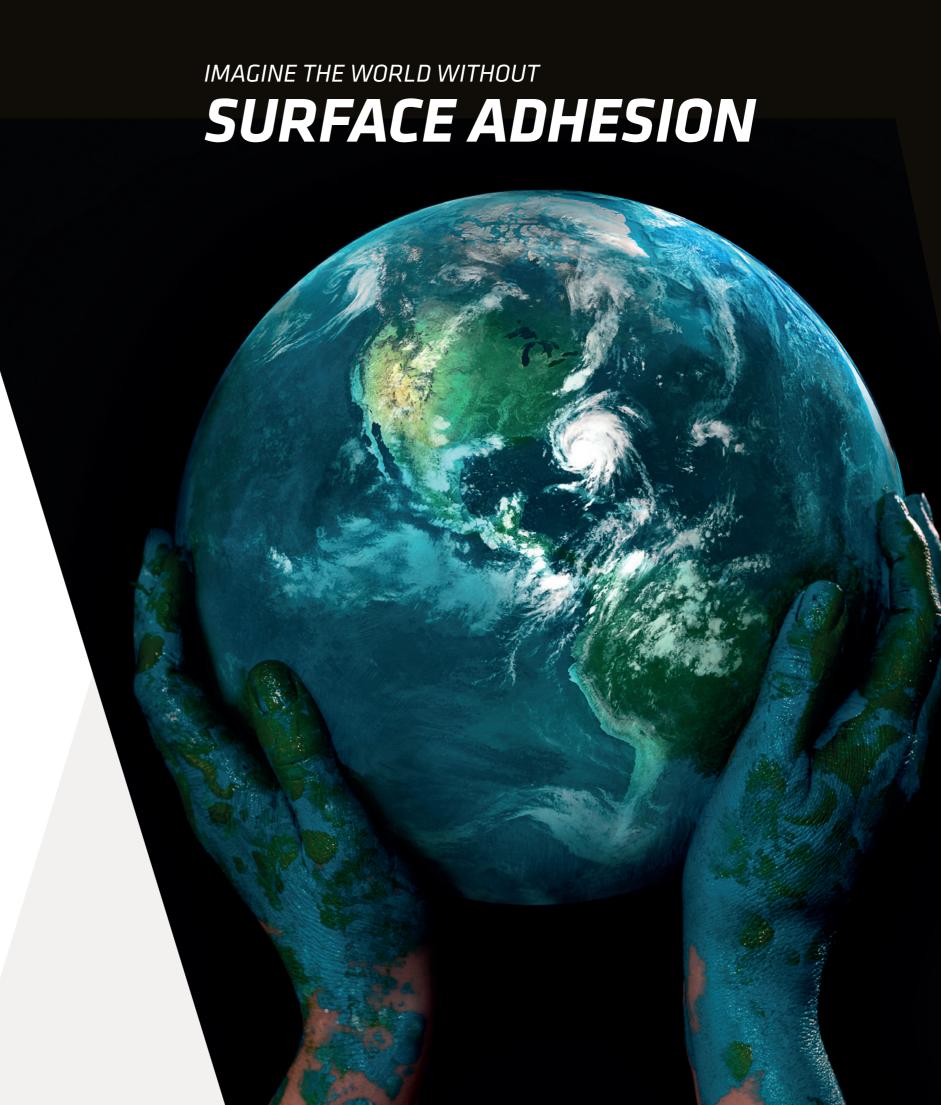
The problem with writing or printing on plastic film is well known. You have a plastic bag that you would like to write on with a pen, but unfortunately the ink doesn't stick because the structure of the untreated plastic has poor adhesion, which makes it impossible. Corona treatment solves this problem.

#### PLASMA TREATMENT

The difference between corona and plasma is: corona treatment is carried out under normal uncontrolled atmospheric conditions; plasma treatment is carried out in a 100% controlled atmosphere.

Corona is still the most cost effective solution for improving adhesion with increased wettability on 95% of all materials. However, the remaining 5% of materials pose a challenge for the industry to find an environmentally safe and inexpensive solution.

Plasma is more homogeneous and 'softer' than corona, with low heat impact to the surface that offers controlled and tuneable surface chemistry. It can be considered as a gas primer that effectively replaces corona treatment and liquid primer for special applications.



# THE IMPORTANCE OF CORRECT **SURFACE** ADHESION The objective of polymer treatment is to increase the surface energy and subsequent wettability and adhesion for laminating, printing, and other converting processes. Our uniform corona treatment ensures perfect surface adhesion for perfect print quality.

#### TREATMENT SYSTEMS







#### **NARROW WEB**

The narrow web corona system, using ceramic electrodes, is designed extruded substrates ensures higher for label converters that require no limitations with conductive or non-conductive substrates.

#### **EXTRUSION**

The corona pre-treatment of surface tension that is essential for further converting processes. Our corona treaters for extrusion lines produce higher dyne levels because of the ultra-efficient design of the generators and treatment stations.

#### **CONVERTING**

The corona system for converting boosts the adhesive properties of pre-treated substrates to create a clean surface that is receptive to inks, glues, and lacquers.





The corona system for coating is designed to offer high performance, production security, and ease of use. Metallised substrates can be treated at speeds of more than 450m/min without damage with our new DHP® system.



#### **IPLASMA**

iPlasma is an advanced surface treatment technology. It uses a controlled atmosphere, and adds small quantities of dopant gas for grafting. This provides greater functionality, and a wider range of surface capabilities.



#### **GENERATORS**

Our series of intelligent generators offer power output from 1-200kW, with proportional control related to line speed. They can also display either the actual power output in kW, or the energy delivered to the substrate in W\*min/sqm.

## **VETAPHONE MILESTONES**

AN INTRODUCTION
TO A MARKET LEADER

From the time Verner Eisby invented the corona process in 1951, Vetaphone has been at the forefront of surface treatment technology, and today is a global market leader that continues to pioneer solutions for surface adhesion problems.

1951

Verner Eisby invents corona treatment

Vetaphone A/S is founded in Denmark

Vetaphone delivers first corona system in the world and builds first corona generator (the T-series) 1959

Verner publishes his book 'E-NORM' explaining the theory equal to today's industry standard for calculating Watt Density, Material Factor or Corona Dose 1965

Vetaphone expands and moves into larger premises in Fabriksvej, Kolding 1993

After many years of success -Verner's eldest son Frank Eisby takes over as CEO 1999

Verner's younger son Jan Eisby joins the company as Head of Sales

2001

Vetaphone celebrates '50 years in business'

Vetaphone launches an OEM concept making it simple for original manufacturers to incorporate the company's corona systems in their printing and laminating lines

2003

Vetaphone develops Corona Powersync allowing power synchronisation of multiple generators giving higher Kw power options 2011

Vetaphone trademarks 'iCorona' and iPlasma' brand names and sells first iPlasma system 2014

Vetaphone launches UL approved products

2016

Vetaphone builds more than 1000 corona and plasma systems in one year - for the first time

2017

Vetaphone builds new HQ in Fabriksvej, Kolding, and more than doubles the size of its office and production facilities 2018

Vetaphone achieves ISO:9001 certification

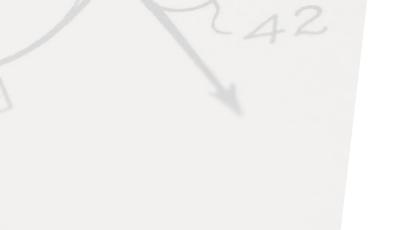
2020

Vetaphone opens a state-of-the-art test lab

2021

Vetaphone celebrates
70 years in business

YEARS



### **JUST IMAGINE**

### OUR FUTURE SURFACE ADHESION