FERRARINI & BENELLI

CORONA & PLASMA TREATMENT

GENERATORS

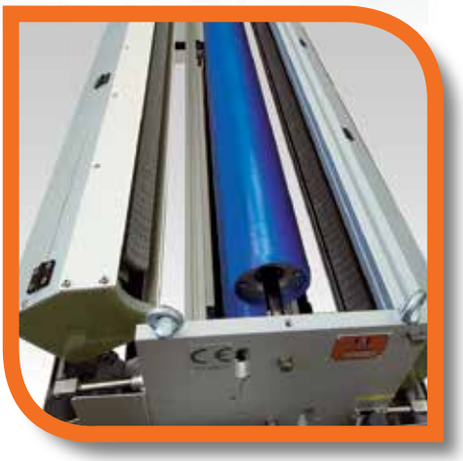
F&B corona treatment stations are powered by igbt technology high frequency generators with digital circuitry. This generator is very efficient and reliable, cost effective and capable of limiting current absorption. The control system is completely digital. Optimal treatment is ensured by means of interactive software in conjunction with user-friendly symbols and multilingual display panel. Control functions are all integrated into this control system. A wide range of power options is available.

BIKAPPA and ROTARY

Double sided treatment stations for plastic films, particularly suitable for installation on blown-film extruders or flexographic printing units inline with extruders. The stations are equipped with electrodes that can be segmented so as not to treat the areas of film which are to be sealed. The BIKAPPA version is also available with ceramic electrodes for treating conductive materials in printing and laminating processes.

BIKAPPA TUNNEL

Single sided treatment station designed for installation on blown film extruders for treating the inside of the bubble.



CARTONPLAST

Corona treatment station for sheets or hollow profiles. It assures high performances on high thickness (up to 8mm for rigid sheets and up to 13mm for hollow profiles). Cartonplast comes in single or double side models.

TM STRIPE

Mobile unit to treat a small strip of a wide width film. Excellent for treating small areas where a trademark has to be printed. Designed to be mounted on any idle roller of the customer's line that has a diameter of 120-150mm, the unit can be rotated for easy access to allow threading of the film and for maintenance.

Ferrarini&Benelli has developed special corona treatment systems for various applications.

Blown-film extrusion: double sided or single sided treatment systems for LDPE, LLDPE, HDPE and multilayer films.

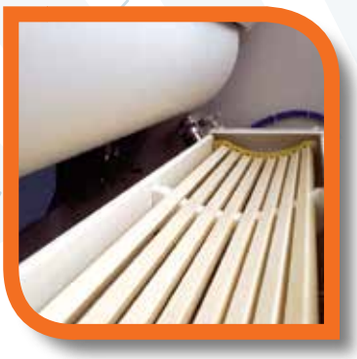
Cast extrusion: High-performance single sided and double sided treatment systems for OPP, CPP, BOPP and PE for high-speed processing.

Sheet and hollow profile extrusion: single sided and double sided treatment systems for high thickness sheets or hollow profiles.

Foil extrusion: single sided and double sided treatment systems for semi-rigid or foam foils.

Pipe extrusion: Corona systems for treating the inside of pipes and improving the adherence of polyurethane foams. Suitable for pipes used in district heating (patented system).

Laminating and coating: Corona treatment systems for improving the



POLIMETAL KAPPA PLUS

Universal corona treatment station. Thanks to the technology of the ceramic electrodes it is fitted with, it can treat all types of conductive and non-conductive materials: plastic films, metallized films, paper, aluminium foils and laminates. Due to its versatility, it can be installed on flexographic and rotogravure presses, coating and laminating machines with or without solvent and on all converting equipment. Available in single-side or two-side versions, with different models for different performance levels.

POLIPLAST KAPPA PLUS

Treatment station for non-conductive materials such as plastic films, paper and foam. Equipped with single bar or segmented aluminium electrodes adjustable according to materials thickness. Particularly suitable to be installed on cast film extrusion lines, extrusion coating lines, flexographic and rotogravure presses, coating and laminating machines with or without solvent. A special air-gap system makes this unit particularly effective for treating variable-thickness substrates, such as semi-rigid foils or foam materials. Available in single-side or two-side versions, with different models for different performance levels.

AT

Corona treatment unit for adhesive tapes. Necessary for assuring a good bonding of inks when printing on adhesive tapes.

ET

Narrow web treatment station, mainly used in label-printing lines. Equipped with ceramic electrodes for treating conductive or non-conductive materials. Provided with a simplified system for opening and removing the electrodes. Guarantees excellent adherence of printing inks.

adherence of solvent, solvent-free and water-based adhesives.
Flexographic printing and rotogravure: Corona treatment systems for improving the adherence of solvent, solvent-free, water-based and UV/EB inks.
Extrusion coating: Corona treatment systems for improving the adherence of PE coatings on various substrates, including paper and aluminium.
Narrow web: high-performance narrow web treatment systems mainly used in label and tape printing.

Production of cables, tubes, sections: Corona treatment systems for increasing the surface tension and improving the adherence of inkjet printing or adhesives.
Production of panels: Corona treatment systems for metal sheets.
No-noise effect: Treatment systems to guarantee "no-noise effect" on adhesive tapes.

TTU – PIPE TREATMENT

Patented corona treatment for polyethylene pipes used in district heating systems as protective sheathings of the combination "steel pipe-insulating material". These pipes are mainly used for transporting hot fluids from thermic-power plants to industrial or household units. Corona treatment is applied inside the pipe for enhancing the adhesion of polyurethane foam.

FORMAT

Corona system for single sheets treatment of different sizes.

TNN FLAT

Corona treatment for metal sheets.

OZO-NO!

Multi-stage catalytic ozone destruction system. Useful for the destruction of the ozone produced by the corona treatment discharge, in compliance with the EC rules (EC Rule 92-72 of 21/02/92). Ozo-no! is an ecological system protecting the environment.
Catalyst regeneration service is available at Ferrarini&Benelli's.

TEST INKS

A wide range of dyne/cm value test ink sets are available from the factory for measuring corona treatment levels.

PLASMA 3D

Atmospheric Plasma Treatment is a surface treatment that enhances wettability properties of polymer-based materials and metals. High surface wettability levels are necessary for good adhesion of inks, glues, coating etc.

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