

Surface treatments made in Italy

Ferrarini & Benelli, Italian company that has been leader in the fields of corona and plasma surface treatments for nearly 60 years, will attend the K 2022 exhibition to present its latest innovations (BOOTH G18 HALL 10)



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Corona Treatment

The three-phase digital Evo Smart generator with HMI touch-screen display and intuitive interface will be the main novelty in the field of corona treatment (extrusion, extrusion coating, coating, laminating and flexo and gravure printing).

Entirely designed and manufactured by Ferrarini & Benelli, Evo Smart achieves the power needed to treat every substrate, at the highest line speeds.

The navigation system of the generator is user-friendly and multilingual, allowing immediate management of all the main working parameters and real-time monitoring of production data from any device (PC, laptop, tablet and smartphone).

The innovative features of the system allow to store events on SD card for downloading to a PC even via USB stick and to look up instruction manuals directly from the display.

The Evo Smart generator can be connected to the FB Cloud platform, to receive technical assistance with remote monitoring and diagnostics, view the real-time data dash-

board and process and download reports and analysis of production data.

Ferrarini & Benelli technicians can thus monitor from Italy the main parameters of a generator installed anywhere in the world and provide online support and useful advice to operators, further improving after-sales and tech support services.

Bikappa Rotary

Bikappa Rotary is the double-sided treatment system (also available in the one-sided version), designed to be installed on high-performance extruders or flexographic presses in line with extruders. This treatment system, coming in different models, is equipped with:

- multiple discharge electrodes in aluminium or stainless steel, with sectors or segments of different lengths allowing zoned corona treatment
- discharge rollers with silicone sleeve or vulcanised sleeve coating.

The rotating opening of the rollers eases film threading and access to the electrode-insulators assembly.



Polimetal

Polimetal is the universal corona treatment system suitable for all converting applications (laminating, coating, extrusion coating, flexo and gravure printing). It can treat any material, such as plastic and metallised films, aluminium foil, plastic-coated paper and laminates. The system comes in four different models, each designed for specific production needs. Equipped with ceramic electrodes and ceramic-coated roller.

Dyne Test Inks and pens

Knowing the surface tension of a surface is important to check if a substrate is suitable for printing, coating or gluing and to evaluate the effects of corona treatment. At K 2022, Ferrarini & Benelli will exhibit a kit of solutions designed for these ends: Dyne Test Inks, Dyne Test Pens and Corona Markers.

Dyne Test Inks are liquid solutions used to check accurately the adhesion of a liquid to a plastic surface and the effects of corona treatment.

Dyne Test Pens are used to quickly check if a substrate has been surface treated. Corona Markers underline, owing to an ink, which remains visible on the surface, the corona treated areas.

Plasma treatment

In Air Plasma

Ferrarini & Benelli will exhibit In Air Plasma, the system formed by a digital generator with integrated transformer and one or more discharge nozzles, using plasma under atmospheric pressure conditions to



treat three-dimensional plastic objects or small surfaces.

Plasma treatment has many applications: pad printing, coding of tubes and electrical cables, ink-jet marking of pex tubes, increasing the durability and sealing of gaskets and boxes in folder-gluer lines, removing of grease from plastic, steel, metal and semi-finished products.

The possibility to use up to three discharge nozzles at the same time, controlled by a single generator, allows larger areas to be treated.

In Air Corona

In Air Corona uses a corona discharge by means of airflow to treat metal components, three-dimensional plastic objects and small areas of flat plastic surfaces.

Formed by a digital generator with integrated transformer and one or two discharge heads, it is ideal to:

- *Improve the quality of pad and ink-jet printing*
- *Optimise readability of codes in coding and marking*
- *Ensure perfect adhesion of labels on three-dimensional objects*
- *Better ink adhesion on plastic substrates. ■*

