Surface treatment provides increased efficiency

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Softal has invested heavily in R&D to create “more adhesion with less effort”, over the last few years, advancing traditional corona generation methods by optimising the electrodes. This has resulted in the Intelliblade, which offers up to 30 per cent increased efficiency. New levels of effectiveness and efficiency have also been reached using plasma technologies.

Instead of increasing adhesion through the linear progressive use of energy, Softal aimed for improved, more reliable adhesion of various materials at the same time as reducing the amount of energy spent.

Claimed to take traditional corona pretreatment methods “to the next level”, the key innovation in the Intelliblade electrode is said to be the minimisation of harmful hot surface discharges in the inlet and outlet areas.

Reaching high treatment levels without stressing or even damaging the material has always been a major goal of electrode developments. In order to achieve this, the ability to generate high treatment levels with low electric power, proper heat management and the elimination of surface streamers is essential.

The latest refinement of Softal’s patented Multi Blade, the Intelliblade high-power, small sized, low material stress corona electrode is claimed to overcome the problem of surface streamers.

In collaboration with Air Liquide, a system was developed that allows surface modification in a controlled gas atmosphere to provide “guaranteed adhesion at minimised costs”. The integrated Aldyne Flex system is based on Aldyne plasma technology. Softal says it is easy to install and operate – and makes it possible to replace expensive coated films for UV printing with low cost plain films in the mid-web range up to 850 mm at line speeds of 300 m/min.

Linear plasma makes the advantages of corona treatment applicable to both very thick and sensitive materials.