

## Article: Cold plasma in electronics industry

The latest September 2020 issue of ***Global SMT & Packaging*** (*The Global Assembly Journal for SMT & Advanced Packaging Professionals*) contains an article from us entitled ***Cold Plasma in Electronics Industry***.

Adhesion plays a decisive role for product quality and process stability in many areas of the electronics industry. These include bonding and marking of plastic components, wire bonding processes on metallic contact pads and the development of energy storage devices. Plasma is increasingly being used in electronics manufacturing to optimally prepare the surfaces of a wide variety of materials for processes which require reliable adhesion. The technology enables selective treatment of functional surfaces on plastics, metals or composites to improve a number of subsequent processes like bonding and printing. Conventional atmospheric pressure plasma treatment processes may require special gasses, or automated handling and extraction in order to comply with health and safety requirements. Uniquely, the **PiezoBrush® PZ3** is a handheld cold plasma device, which enables uncomplicated and manual optimisation of surfaces.

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## Cold Plasma in Electronics Industry

Adhesion plays a decisive role for product quality and process stability in many areas of the electronics industry. These include bonding and marking of plastic components, wire bonding processes on metallic contact pads and the development of energy storage devices. Here Peter Swanson, Managing Director at adhesives specialist Intertronics, explains how cold plasma is being used in the electronics industry.

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### Improved adhesion processes on enclosures

A wide variety of materials and material combinations are used to house



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treating the surfaces with cold atmospheric pressure plasma, the wettability

is applied as a cuff to the horse's leg to track the horse's state of health and detect and report early symptoms of colic. The Colicheck housing has to be very robust and dependably bonded, despite being fitted to a large animal which is moving outside in all weathers.

"Only through the use of the relyon plasma piezobrush PZ3 have we succeeded in producing a reliable and durable bond between our plastic housing parts. Both the ABS material of the plastic shells and the TPE intermediate ring show an almost inseparable bond with the adhesive we used due to the plasma

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