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“Replacement of Electroplating Produced in a Flexible Inline Production Platform”

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Chrome plating has long been seen as the only solution for decorative coatings on plastics, to ensure hardness and a bright colour. All environmentally friendly alternatives involve using a transparent top layer, which influences colour values and metal appearance . Cromatipic® is a dry plating Cr-process that achieves Cr(VI)-free decorative Chromium coatings. It is an environmentally friendly process, which brings no corrosion risk is copper and nickel free, provides excellent adhesion and gives shiny metal-look appearance on thermoplastics. It is a twolayer process consisting of a spray Zero VOC’s UV coat layer and Physical Vapour Deposition (PVD) coating. The regular ten process steps needed for plating on plastic are reduced to only three in case of Cromatipic®.

The equipment needed for this process can be hybrid batch machines as well as an inline production platform. This presentation illustrates the key features of the latter platform, including the modular design, rack return and linear motion systems and short takt times. Furthermore, the possibility to combine the Cromatipic® process in this platform with other technologies, such as arc evaporation or plasma enhanced chemical vapour deposition (PECVD) is shown.

Keywords
sputtering