

## **Cold Spray of Polystyrene Particles on Various Substrates**

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This study focuses on cold-spray deposition of polystyrene particles on a variety of polymeric and aluminum substrates. A variety of different process conditions were studied to achieve buildup of particles on the substrates. Imaging analysis was performed to characterize the deposition thickness on each substrate. Promising results were obtained with polymeric substrates when the gas temperature and the substrate heating was kept around the glass-transition temperature of the particle. The deposition on the aluminum substrates is still an ongoing investigation that is mainly focused on the first-layer adhesion, since the first couple of layers of deposited particles plays a key role during the whole process.