Adhesion Strength Measurement of Ni Coating on PMMA and PU Substrate

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Abstract

Polymer materials have been applied in a variety of fields. Due to its excellent corrosion resistance and flexibility, it was reported recently to apply these materials for many electric devices as substrate materials. However, due to lack of electric conductivity of polymer, metal coating on polymer substrate is a must. As a coating material, the adhesion of coating to substrate is a critical property of any coating system for mechanical integrity. The measurement of the adhesion strength provides fundamental acknowledge in order to understand majors factors contributing to the
adhesion strength of coating. The durability and longevity of a coating required that its adhesion is to be maintained. Several techniques have been developed to measure the adhesion strength of coating. Lap shear test method is the most commonly used technique for this measurement.

Keyword：Ni,Coating,PMMA