

**STUDY ON THE EFFECTS OF RUBBER FILLER
IN THE WATER UPTAKE MECHANISM OF
COMMERCIAL EPOXY AND POLYURETHANE COATING**

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ABSTRACT

STUDY ON THE WATER UPTAKE MECHANISM OF COMMERCIAL EPOXY COATING AND POLYURETHANE COATING.

Corrosion and its effect have a profound impact on the infrastructure and equipment of countries worldwide. Thus, this study is conducted in order to determine the effect of rubber fillers addition in the organic coating in order to prevent water uptake. Water uptake measurement of the organic coating was done by immersing the coated sample metal in the distilled water for 24 hours and the weight difference was observed. The excess addition of rubber fillers into the coating has improved the efficiency of the coating to prevent water absorption. However the properties of the organic coating used also act an important role in order to reduce water absorption. In the experiment, two types of organic coating used in order to measure the water uptake, epoxy and polyurethane coating. Result shows that epoxy coating is more durable than does the polyurethane.