

OBSERVATIONS AND RESTRICTIONS FOR TRACKING INDICES MEASUREMENT IN MATERIALS TESTING

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Abstract- The testing of various carrier materials for circuit paths on the basis of tracking indices determination is of particular interest for many modern sensing technologies, especially for technologies based on capacitive methods, as well as for the protection of circuitries by means of sealing in insulator material. This paper discusses observations for the determination of the tracking indices for elastic insulators according to the DIN standard EN 60112. The appearance of burn-in patterns on the insulator surface and the peculiar decrease of current peak amplitudes with increasing number of electrolyte droplets are investigated and possible causes are discussed, based on Finite Element Analysis and camera images of conducted experiments.