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## QUALITY ASSURANCE FOR TESTING THE PROTECTIVE PERFORMANCES OF MATERIALS - AN ESSENTIAL PREREQUISITE IN SUBSTANTIATING LABORATORY COMPETENCY

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## Abstract

Static electricity represents one of the potential ignition sources for the explosive atmospheres. The test methods for materials, in general, and especially the test methods for textile fabrics for assessment of the protective performances in static electricity, have known a permanent evolution alongside newly developed electrostatically dissipative materials. Within the National Institute of Research and Development for Safety in Mines and Explosion Protection (INCD-INSEMEX) new testing stands had been developed and new testing methods had been implemented for assessment of the charge dissipative capacity, in accordance with the European standards requirements. By modernizing the laboratory testing/research-development capacity, the physical tools for testing of materials are assured, having in view conformity assessment with the European Directives requirements, in the framework of the Notified Body for Conformity Assessment (OEC-INSEMEX). The paperwork presents aspects regarding competency testing provided in the RENAR policy for accredited or accrediting-in-progress laboratories, as requirement for proving and monitoring laboratory competency for testing/calibration in the field for which accreditation was applied for/granted.

Key words: electrostatics, explosive atmosphere, laboratory tests, materials

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