



Preparing ISO 17025 for Magnetic Field Tests and Measurements

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Abstract. It is well recognized that the Quality Assurance plays a major role in the most engineering projects. The quality control of the procedures assures the implementation of formal results and review of verified programs. Testing and calibration in the field of magnetic measurements is very important, due to the versatile and numerous applications in different sciences and the advantage of accuracy, non destruction and contact less techniques. The ISO/IEC 17025 standard states as the basis for the accreditation system. The system will be investigated is a part of the Electronic Sensors Laboratory of the School of Electrical and Computer Engineering of the NTUA. In this paper the preparation of the systems is analyzed in order to get a better insight of the availability of the resources. The facility to be prepared refers to the standardization of the Steel Health Monitoring (STEHEMON) procedures, the magnetometers calibration and the Electrocorrosion test and calibration. Following a review on the advances of the quality systems implementation, specific focus is given for the laboratory facilities needs, the optimization of the proficiency testing of the procedures, the work flow and documentation compliance, the management and technical requirements according to this standard.