





Introduction

Customers, both nationally and internationally, ask for increasing guarantees regarding the quality and safety of the products and services they purchase, which manufacturers are called upon to guarantee in compliance with the legislative requirements of the sector in order to compete in increasingly complex markets.

Sada Cavi S.p.A. works constantly to ensure continuous improvement in customer response and it is with this aim that our cable testing laboratory was created.

ISO/IEC 17025 cable laboratory

Accredited testing and calibration laboratories are able to provide the market with reliable, credible and internationally accepted statements of conformity to guarantee the quality, reliability and safety of the supplied products.

Accreditation certifies the conformity of the laboratory's activities with the requirements of the international standard ISO/IEC 17025: "General requirements for the competence of testing and calibration laboratories" ensuring technical competence, confidentiality and efficiency of services.

Sada Cavi S.p.A. planned and realized the construction of a highly qualified laboratory, within its own structure, specifically aimed at testing and ensuring the quality and conformity of the cables supplied to the market.

Sada Cavi laboratory also operates according to the basic principles of quality management in accordance with European ISO 9001 standards, guaranteeing the identification and traceability of technical specifications and ensuring at the same time the confidentiality of information.

The **main tests** that currently characterize Sada Cavi's laboratory are:



Tests for measuring the tensile strength and stretching of insulators and sheaths

This is a very important test to determine the mechanical properties of insulators and sheaths, i.e. to establish the force required to bring that material to the breaking point and to establish its extension, to verify their compliance with the requirements imposed, guaranteeing safe and long-lasting performance of the cable, in order to avoid damage and premature breakage.

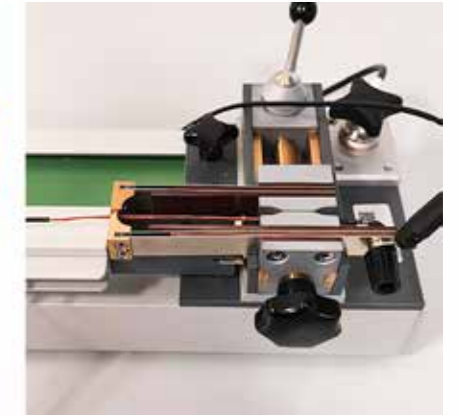
This test is performed on materials in the condition as manufactured, but it is also essential to perform the test after accelerated ageing treatments, which are useful to appreciate how ageing affects the mechanical properties of the materials.



Tests for dimensional measurements of outer diameters, sheath and insulation thickness

The insulation thickness test allows to determine whether sufficient insulation material has been applied, necessary to provide electrical integrity for safety and good mechanical strength to protect the cable against stress.

Equally important is the sheath thickness measurement, which is necessary to verify the cable's compliance with mechanical stress requirements and to ensure safe cable performances throughout its life cycle.



Test for measuring the electrical resistance of conductors

The conductor resistance is a fundamental test because a too high value is a major safety problem. Current, passing through the intrinsic resistance of the conductor, produces heat due to a phenomenon called the Joule effect. A too high resistance value can cause excessive heating and a subsequent failure of the insulation, which can lead to a fire or a short circuit.





Via dell'industria, 12
41042 Fiorano Modenese (MO) Italy
+39 0536 991911 - +39 0536 991999
P.IVA 01922550361 - sadacavi@sadacavi.it
www.sadacavi.it