



INSTITUTE FOR RESEARCH
AND TECHNOLOGICAL
DEVELOPMENT
IN **CONSTRUCTION,**
ENERGY, ENVIRONMENT
AND SUSTAINABILITY







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ITECONS

Itecons is a non-profit organization with extensive experience in providing **Research, Consulting, and Testing** services in a range of areas such as **Construction, Energy, Environment** and **Sustainability**.

Itecons is staffed by **a multidisciplinary technical team** and its **laboratory facilities** are **modern**. It has a Quality Management System in place that is certified by the Portuguese Certification Association - APCER (NP EN ISO 9001) and performs over **300 tests accredited** by the Portuguese Accreditation Institute – IPAC (NP EN ISO/IEC 17025). Itecons is also a **Notified Body (System 3)** and a **Technical Assessment Body for the CE marking** of a wide range of construction products.

Itecons is also recognized as an **Institute of Public Purpose** and as a **CTI - Technology and Innovation Centre, promoting innovation and qualification in businesses**, and is qualified to provide services to SMEs in the context of funding “vouchers”.

MAIN COMPETENCES

The background of the slide shows a blurred office or laboratory environment. Several people are seated at desks with multiple computer monitors. The lighting is soft and even, creating a professional and collaborative atmosphere. The overall color palette is neutral, with light blues and greys dominating the scene.

- Relevant scientific and technological competences in the fields of Construction, Energy, Environment, and Sustainability
- Active interface between academic research and industrial development
- Strong technical capacity to help industries develop products and processes
- Technical ability to help manufacturers implement CE marking of a wide range of construction products
- Highly qualified, flexible, multidisciplinary technical team
- Modern laboratory facilities able to adapt to new challenges posed by industry
- Extensive experience in executing a range of projects funded at national and European level
- Experience and knowledge relevant to the implementation of integrated management tools and collaborative platforms
- Comprehensive experience in organizing training sessions and scientific and technical events



INTERNATIONAL COLLABORATION

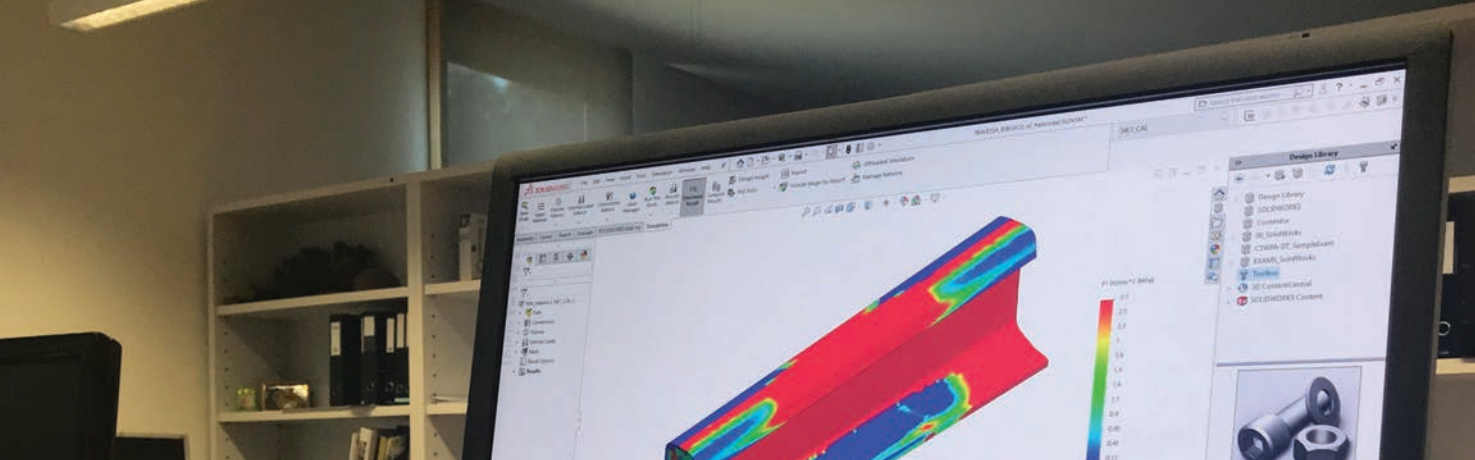
- Itecons is a member of the European Organization for Technical Assessment (EOTA)
- Active participation in sectoral clusters and technology platforms, with significant input
- Promotion of joint innovation actions, particularly through involvement in technical and scientific committees
- Establishment of strategic partnerships with well-known scientific and industrial entities
- Involvement in setting up consortia for submitting proposals for project funding
- Promotion of technical exchange between technical staff and researchers from different scientific and industrial entities
- Hosting foreign researchers and students
- Collaboration with higher education institutions in the supervision of Masters and PhD theses
- Promotion and collaboration in the organization of technical and scientific events

SERVICES



LABORATORY TESTS

- Physical, mechanical resistance, fatigue and durability
- Acoustic behaviour of building elements and equipment; room acoustics
- Hygrothermal behaviour of materials and building components
- Characterization and quality control of construction products, including soils, aggregates, natural stone, mortars, window frames, etc.
- Geological and geotechnical studies for engineering works
- Construction monitoring and materials quality control
- Environmental analysis and chemical quality control
- Assessment of the conformity of raw materials and chemical products
- Evaluation of the release of dangerous substances from materials
- Assessment of air quality in residential and occupied environments
- Fire behaviour and fire resistance of materials and building components
- Equipment efficiency calculation, particularly of heat pumps, air conditioning systems, biomass boilers and tanks
- Electrical equipment safety tests



CONSULTING

- Technical expert consulting and inspection of buildings, structures, roads, and technical infrastructure
- Structural safety assessment and accident evaluation
- Design, analysis, review and optimization of complex engineering projects, as well as analysis of conformity between design and construction
- Technical support, supervision and quality control services for construction monitoring
- Development of new materials and construction systems with high physical, mechanical, hygrothermal and acoustic performance
- Energy certification of buildings
- Implementation of quality and factory production control systems
- Evaluation of measures to improve thermal comfort, increase energy performance and reduce the probability of the occurrence of anomalies
- Carrying out Life Cycle Assessment (LCA) studies and preparing Environmental Product Declarations (EPDs)
- Preparation of Environmental Impact Assessment studies
- Supporting compliance with legal obligations associated with waste management
- Development of studies/projects for efficient and sustainable water supply and drainage systems



RESEARCH AND DEVELOPMENT

- Identification of research and development opportunities to respond to unmet needs on the supply side
- Development of new business innovation support competences aligned with thematic areas that are eligible for funding
- Support with preparing grant proposals and in the execution of research and industrial qualification projects
- Support in creating national and international consortia for the development of innovative products and advanced production technologies
- Providing simulation, modelling and virtualization for the optimization of products and systems with fewer resources (Economy 4.0)
- Support in the identification of measures to improve resource management, increase energy efficiency and reduce environmental impacts
- Support in the application of Eco-design and Life Cycle methodologies targeting a more circular and more sustainable economy
- Support with evaluating risks and vulnerabilities associated with the occurrence of extreme events and in the identification of adaptation measures
- Support with evaluating and establishing measures to improve industrial management and processes control



CE MARKING

- Support to manufacturers in CE marking of construction products either through the harmonized standard or through the European Technical Assessment
- Notified Body (System 3) and Technical Assessment Body under the CE marking for a wide range of construction products
- Member of the European Organization for Technical Assessment (EOTA) in construction products
- Member of the Portuguese Group of Notified Bodies

TRAINING AND EVENTS

- Organization of a great many training sessions, workshops and seminars aimed at updating professionals in various fields
- Organization of national and international scientific conferences, contributing to building a critical mass of expertise around emerging issues
- Participation in conferences, seminars and workshops, sharing new knowledge with the community
- Modern facilities that are equipped for holding events for the dissemination of technologies and ideas
- Training entity certified by DGERT in the areas of education and training: Civil construction and Civil engineering (582) and Protection of people and property (861).
- Autodesk Authorised Training Centre





FACILITIES

- Around **25.5 million euros investment** in infrastructure and equipment
- **Modern laboratory facilities** based in three connecting buildings occupying around **11100 m²**
- **Large laboratory areas** that include **industrial cranes with 32 tonne capacity**
- **Anechoic chamber of about 1000 m³**
- Computational cluster with 264 cores
- **Over 800 items of equipment**, instruments and components that undergo **periodic calibration and verification**
- Conference room equipped with audio-visual equipment and seating for 100 people
- Several training and meeting rooms with natural light and capacity for around 30 people



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ITECONS IN NUMBERS

- Over **18 years** of technical and scientific activity
- More than **65 associate institutions**, including companies, local authorities and scientific and technological entities
- About **25.5 million euros investment** in infrastructure and equipment
- Over **11100 m²** of laboratory and administrative facilities
- More than **300 tests accredited** in accordance with NP EN ISO / IEC 17025
- Over **100 technicians and researchers**, of whom 35% have PhDs
- Over **95 co-financed projects** from national and European funds
- Over **500 entities use the services** of Itecons each year
- Over **50 SMEs** have used the services of Itecons in the context of funding “vouchers”
- Over **10 international conferences** have been organized in recent years



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OPENING TIMES

Monday to Friday, from 8 a.m. to 8 p.m.

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CENTROS DE
TECNOLOGIA
DE INOVAÇÃO

