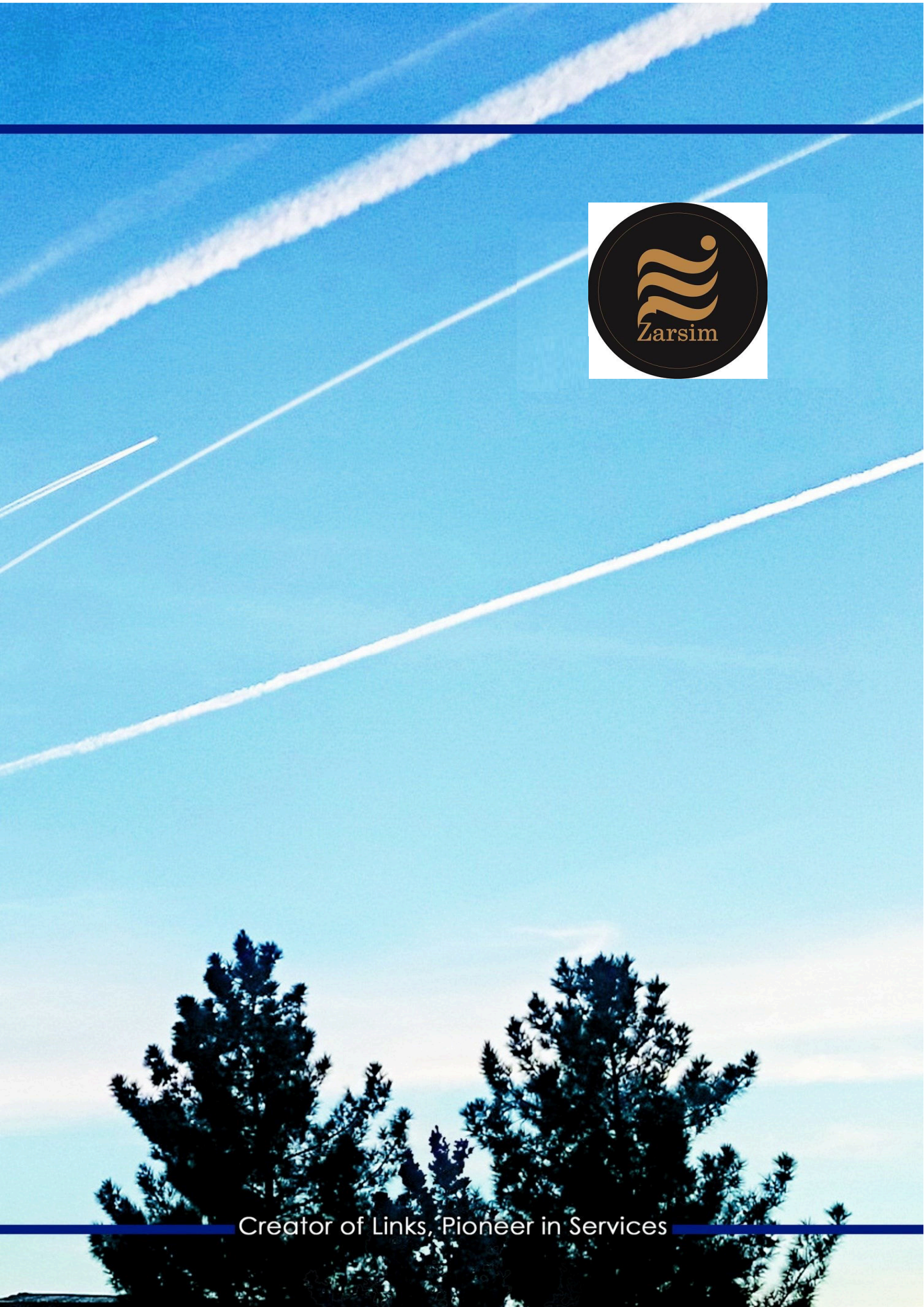

Zarsim
Creator of Links, Pioneer in Services

Where do you want to go today?

Zarsim Cable Test Laboratory

Headquartered in Tehran-Iran, our 150-square meter lab is an integral part of Zarsim's global commitment to innovation. The Zarsim Test Lab is one of the dominant lab in Iran to have been certified by National Accreditation Center of Iran (NACI). This certification allows test results generated at our lab to be used for product approval and certification. Without the need for an outside testing firm, our customers can complete the product testing and approval process at one location, saving both time and money.

Introduction

The Zarsim Cable Test Laboratory, located in Saveh-Iran, specializes in the testing of electrical wire and cable. This testing facility is an integral part of the Research and Development organization and provides services to all cable companies as well as to Institute of Standard and Industrial Research of Iran and to others.

Personnel

The Test Laboratory is staffed with skilled and experienced service oriented engineers and support personnel having extensive knowledge in the testing of wire and cable. Laboratory and R&D personnel have average of 10 years of experience in wire and cable, with some individuals exceeding 20 years in the industry.

Credentials

The Laboratory has been certified by the leading National Accreditation Center of Iran allowing test results generated in the Zarsim Cable Test Laboratory to be used for product approval and certification. The Laboratory is ISO9001 approved through Istituto Italiano del Marchio di Qualità (IMQ) with test equipment calibrated in accordance with ISO 10012-1 and ISO 17025, and traceable to the National Accreditation Center of Iran (NACI).


Islamic Republic of Iran

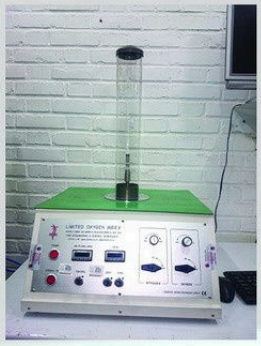
NACI

Accreditation Certificate

The National Accreditation Center of Iran (NACI) herewith confirms that:

Zarsim Co. Laboratory

آزمایشگاه شرکت زرسیم



Standards

The Laboratory uses recognized procedures for testing to current standards associated with the wire and cable industry. These include:

- •ISIRI (Institute of Standards and Industrial Research of Iran)
- •IEC (International Electrotechnical Commission)
- •ISO (International Organization for Standardization)
- •ASTM (American Society for Testing and Materials)
- •UL (Underwriters Laboratories Inc.)

Zarsim

•CSA (Canadian Standards Association)
•MilSpec (Military Specifications and Standards)
•CENELEC (European Committee for Electrotechnical Standardization)
•BSI (British Standards Institution)
•JIS (Japanese Industrial Standards)
•JASO (Japanese Automotive Standards Organization)
•PSA (Peugeot Citroën Group)
•DIN (Deutsches Institut für Normung)
•VDE (Verband der Elektrotechnik, Elektronik und Informationstechnik)

Testing Programs

The Zarsim Test Laboratory develops, implements and manages numerous tasks for the Zarsim organization. These include fulfilling basic requests for acceptance testing of standard products, first article or qualification testing, product or process modification evaluations, material and compound development evaluations and new product development evaluations. The laboratory also assists the process engineering and quality control departments in the resolution of customer complaints and defective products.

Compound Property Database

The Laboratory maintains an extensive database on all active compounders insulating and sheathing compounds.This database of compound properties is used to assist engineers in compound selection optimization as well as providing proactive and reactive resources for process engineering and quality control personnel, identifying trends or deviations in compound characteristics.

Testing Facilities and Capabilities

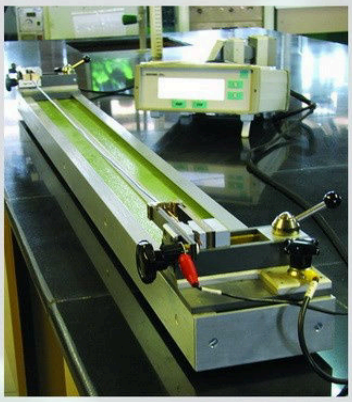
The Zarsim Test Laboratory occupies over 150 square meter of floor space adjacent to Zarsim factory in Saveh-Iran. The Lab is equipped with an extensive range of state of the art testing and data acquisition equipment. Primary fields of testing follow:

Electrical

The Laboratory is well equipped to evaluate the electrical characteristics of wire and cable manufactured by Zarsim Company. This includes performance of long-term tests under temperature extremes, both in air and in water. Electrical test capabilities include:

•Dielectric Voltage Withstand AC up to 5kV and DC up to 16kV
•Insulation Resistance
•DC Resistance - Resolution to 100 nano Ohm

- Capacitance
- Impedance
- Inductance
- Attenuation
- Transfer Impedance
- Current Overload – Up to 300 amperes DC



Physical & Mechanical Properties

Physical property tests measure the strength and quality of materials and include tensile strength, elongation and modulus. Tests are performed on unaged and aged insulation and sheath materials in accordance with numerous industry standards. The Laboratory is equipped with computer controlled tensile tester that use extensometers to measure elongation. The test equipment is:

- Santam Tensile Tester with 5kN load frame with 500N & 5kN tensile/compression load cell and extensometer.

Performance and durability of wire and cable products depend on physical integrity. The Laboratory has numerous capabilities for determining the physical and mechanical stress limits of cables and cable components. These capabilities include but are not limited to the following:

- Impact tester
- Adherence tester
- Bending tester
- Abrasion tester
- Flexibility tester

Thermal Aging

Thermal (elevated temperature) aging is recognized as a major cause of electrical insulation failure. Accelerated aging tests are generally performed using mechanical convection air ovens. The Zarsim Laboratory has the following equipment:

Air Ovens

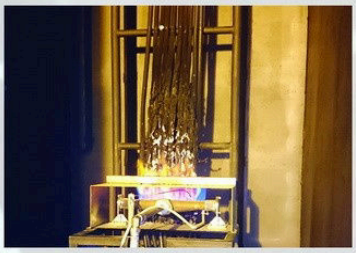
- Atsfaar-N55 oven with 55 liter volume
- Elastocon-EB 0411ht-120 oven with 120 liter volume
- Fan Gostar Azma-EF 120E oven with 40 liter volume

Zarsim

Low Temperature

The flexibility of wire and cable generally decreases as temperature decreases due to the changing elastic characteristics of insulating and sheathing materials incorporated in constructions. Test equipment used in the Laboratory to evaluate the mechanical behavior of cables and cable components at low temperatures down to -50°C include the following:

- Impact Testers
- Bending Testers



Fire Safety

The Laboratory is equipped with a flame chamber for performing vertical tray flame tests, fume hoods for performing small scale flame tests, and a sealed chamber to perform smoke generation and toxicity tests.

Fire Safety tests performed by the Lab include:

- IEC 60332-1 & 2 Vertical flame propagation test
- IEC 60332-3-10 & 21~25 Bunched cable vertical flame spread test
- ASTM D 2863 & ISO 4589-2 Oxygen index test
- ISO 4589-3 Temperature index test
- IEC 60754-1 & MIL-DTL 24643 Halogen acid gas content

during combustion test

- IEC 60754-2 pH and conductivity test
- IEC 60331-11 & 21 Circuit integrity on fire 750°C test
- IEC 61034 & BS 6853 3m cube smoke density test

Test Report

Zarsim Laboratory generates informative and thoroughly documented test reports. These include routine factory acceptance and qualification reports to government, commercial, institutional and international standards.

About Us

Zarsim company is based in Saveh-Iran, in 1983. It produces variety of wire and cables for oil and gas, building, marine, automotive, electronic and robotic industries.

Zarsim Co.

پاسداران، خیابان شهید کلاهدوز، خیابان آقامیری، خیابان چیذری، کوچه پروانه، پلاک5

کد پستی: 1945616374

تلفن: 021 74541

No. 5, Parvaneh Deadend, Chizari St., Aghamiri St., Kolahdouz St., Tehran 1945616374, Iran.

Office phone: +98 21 74541

www.zarsim.com info@zarsim.com

Think Different
Make a Difference