



İSTANBUL TEKNİK İNŞAAT SAN VE TİC. AŞ



COMPANY PROFILE



Istanbul Teknik is a Turkish construction materials and civil engineering SME, that was founded in 1998 serving to the construction industry. It has a wide product range includes Geosynthetics, Asphalt Additives, Concrete Reinforcements, Marble Strengthening products and more



Istanbul Teknik started geogrid manufacturing in 2011 April with 4 million m²/year capacity in its factory. In 2021 moved to the new factory and increased its capacity to 10 million m². The total area is 30.000 m² of which 12.500 m² is developed



Istanbul Teknik R&D Centre established in 2019 with a team of experts in various fields. Since then it has carried out research and new product/material development projects object of National and European funding.



Istanbul Teknik offers relevant solutions to its customers with over 25 scientists and architects, 99 employees and 1.000 selling point around Turkey. And exports to 72 countries including Europe, Turkic Republics and Middle East Countries



R&D MANAGEMENT SYSTEM



Conducting research studies for both foreign and domestic end-user needs



Know-how development depending on project topics



Systematically managed R&D centre, accessing to information by authorities



With qualified researchers from different disciplines we increase the number of patents, scientific publications, conference, seminar, panel attendances



Establishing in-house, national and international cooperations. Carry out projects in coordination with Universities and Research Centers, EU research projects and advanced in-house research projects

Production Site and Capacity

New factory investment in
Bolu on 30.000 m2



10 million sqm/year Geogrid
Production Capacity



20.000 tons of Asphalt
Additive Capacity per year



Production Site and Capacity

300 tons of Concrete
Reinforcement Fiber
Production Capacity



3.000 tons of Epoxy Resin
and Gel Production Capacity



3.000 tons of PVC Plastisol
production per year



Our Technology- PCM

We are also an expert In Phase Change Materials (PCM) technology and develops together with specific product solutions. We refine PCM with microencapsulation and macro encapsulation



INTERNATIONAL PROJECTS

- **"HORIZON 2020** Call: LC-GD-4-1-2020. within the scope of the **"Building and Renovating in An Energy and Resource Efficient Way"** call, under the coordination of Dynamic & Security Computations (analysis-dsc), in a consortium of 24 participants, with competence in the field, we took an active part in a business plan activity. Its application was made on January 27, 2021.
- **EUROSTARS-2** call, a project was presented as a coordinator in the field of **"Flame retardant and energy saving microcapsules for thermal comfort in buildings"** in Spain on February 4th 2021,
- **Newton-Katip Celebi Fund** Industry-Academia Partnerships- Turkey and the United Kingdom partnership project In the project **"Adaptive facade for building energy conservation"** we took part as industrial partner of the coordinator Tokat University's Department of Chemistry Professor Dr. Cemil Alkan's. The application was made to the Royal Academy of Engineering on December 11 and has been approved.

HORIZON EUROPE TOPICS

- **HORIZON-CL4-2021-RESILIENCE-01-10:** Paving the way to an increased share of recycled plastics in added value products
- **HORIZON-CL4-2021-RESILIENCE-01-11:** Safe- and sustainable-by-design polymeric materials
- **HORIZON-CL5-2021-D4-02-02:** Cost-effective, sustainable multi-functional and/or prefabricated holistic renovation packages, integrating RES and including re-used and recycled materials
- **HORIZON-CL5-2022-D4-02-01:** Designs, materials and solutions to improve resilience, preparedness & responsiveness of the built environment for climate adaptation
- **HORIZON-CL5-2022-D4-02-02:** Solutions for the sustainable, resilient, inclusive and accessible regeneration of neighbourhoods enabling low carbon footprint lifestyles and
- **HORIZON-CL5-2022-D4-02-05:** More sustainable buildings with reduced embodied energy / carbon, high life-cycle performance and reduced life-cycle costs
- **HORIZON-CL5-2022-D6-02-06:** Smart and efficient ways to construct, maintain and decommission with zero emissions from transport infrastructure
- **HORIZON-CL6-2021-ZEROPOLLUTION-01-06:** Increasing the environmental performance of industrial processes in bio-based sectors: construction, woodworking, textiles, pulp and paper and bio-chemicals

ACADEMIC STUDIES

1. Gündüz S, Sarı YS ve Çaktı K, "Effect of Polybutadiene Composition on the Glass Transition Temperature of SBS Block Copolymers", Eskişehir Technical University Journal of Science and Technology A - Applied Sciences and Engineering, 2021.
2. Çaktı K, Gündüz S, Acar N ve Büyük ŞB, "Thermal And Rheological Characterization Of Microencapsulated Phase Change Materials", the 9th International Scientific Research Congress, Ankara, 2020.
3. Çaktı K, Gündüz S ve Büyük ŞB, "Investigation of the Effects of Microencapsulated Phase Change Substances and Fillers on Bitumen Structure", the 9th International Scientific Research Congress, Ankara, 2020.
4. Gündüz S, Sarı YS ve Çaktı K, "Characterization of Linear and Radial SBS Block Copolymers", 3rd International Scientific Studies Congress, Antalya, 2019
5. Değer TT, "Use of Geosynthetic to Increase Compaction Level of Embankment Fills Over Soft Ground", 17th African Regional Conference on Soil Mechanics and Geotechnical Engineering, 2019.
6. Değer TT, Sarı H, "Design of Geosynthetic Reinforced Earth Walls with Complex Geometrics", 8th International Geotechnical Symposium, İstanbul, 2019.
7. Halaç B, Sarı H, Sarı S, Değer TT, "A Case Study of Geosynthetic Reinforced Soil Bridge Abutments", 4. Symposium on Bridges and Viaducts, Ankara, 2019.
8. Sarı H, Değer TT, 'Basal Reinforced Column Supported Embankment', 17th National Conference of Soil Mechanics and Geotechnical Engineering, İstanbul, 2018



The Development of Anti-Stripping Agents for Asphalt Concrete (No: 3120758) project was supported by the contract signed on 06.06.2013 and the project was successfully completed towards the targets.

Project Outputs: TeraGrip PH, TeraGrip ANG and TeraGrip AN

These commercialized products have provided 2 million Euros income and the import dependency on these products have been minimized.

 **TeraGrip®**
Anti Stripping Agents

ONGOING NATIONAL PROJECTS



"Development of Microencapsulated Phase-Changing Materials Added Bitumen to Prevent Cracks Occurring Due to Daily Temperature Changes in Highways" project, which started in January 2020, continues and is aimed to be completed in July 2021.



Within the scope of TEYDEB 1501 support program, the **"Investigation of Polymer Modified Bitumen Properties and Effects on Asphalt Design of SBS in Different Molecular Weights and Different Branches"** project, which started in February 2020, is planned to be completed in September 2021.



"Development of microencapsulated phase-changing material-added bitumen that prevents the deterioration of asphalt roads in hot weather" started in July 2020, is ongoing and is aimed to be completed in November 2021.

THANK YOU



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