

ABOUT US

Since 2013, Mikrohes has been providing innovative solutions in the field of sustainable energy. Our mission is to contribute to the global energy transformation by developing energy projects that work in harmony with nature. Using advanced technologies such as Archimedes Screw Turbines (ASTs), we ensure efficient and clean energy production while minimizing environmental impact.

With ASTs, we can generate energy even in low-head sites (under 10 meters), achieving high efficiency (approximately 70-76%). This innovative technology enables us to unlock the hydropower potential of remote and hard-to-reach areas, offering sustainable energy solutions that are both economically and environmentally viable for small communities. In regions with high flow rates or drops, multiple Archimedes Screws can be installed in series or parallel to produce energy in megawatts (MW).

At Mikrohes, we prioritize protecting wildlife and maintaining the balance of ecosystems in our energy projects. Our systems can be installed within 6-8 months and are often adaptable to existing unpowered dams or weirs, adding new hydropower capacity with minimal environmental impact.

Driven by a commitment to innovation and a focus on environmentally friendly practices, we aim to spread sustainable energy solutions worldwide. Our goal is to increase energy efficiency, encourage eco-friendly approaches, and remain steadfast in our mission to leave a livable world for future generations.

Turbine Systems Application Fields



Flow

0.1-10 m³



Head Hm

1-10 m



Mikrohes
Archimedes Screw Turbine



DESIGN

Effective Design Approach



ENGINEERING

Innovative Solutions



ANALYSIS

Suitable Product Options



MANUFACTURING

Optimum Application



INSTALLATION

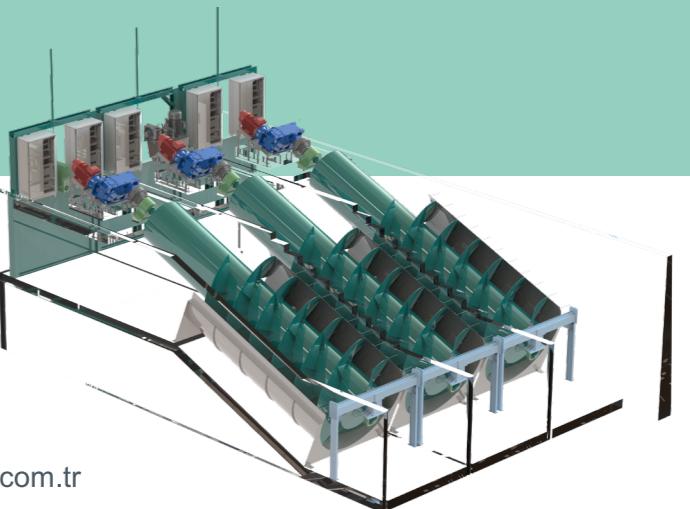
Functional Completion



MAINTENANCE

Protection Strategies

For A Better Future
ARCHIMEDES SCREW TURBINE



Member of



Head Office

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APPLICATION AREAS

- ✓ Low Head Hydropower Sites
- ✓ All Streams and Rivers with Sufficient Flow and Suitable Elevation Difference
- ✓ Tail Water and Environmental Flow Outlets of Hydroelectric Generation Facilities
- ✓ Inlet and Outlet Structures of Treatment Plants
- ✓ Locations of Abandoned Watermills
- ✓ Existing Dams
- ✓ Industrial Water Cooling System Outlets of Factories
- ✓ Inactive Hydroelectric Power Plants
- ✓ Fish Farms
- ✓ Agricultural Irrigation Canals
- ✓ Recreation Projects for Rivers Passing Through City Centers



ADVANTAGES

			
Fish friendly system	Ensure sustainability on the Planet	Less excavation	Less concrete
			
Touch protection	Preserved the Nature	Quiet operation	CO ₂ Neutral

Low Operation Costs

- ⇒ Efficient utilization of low heads (already from less than 10 m.)
- ⇒ High efficiency
- ⇒ Significant price reduction of the construction part of small water plant
- ⇒ Less wear due to slow rotation parts
- ⇒ Reliable structure, long service life, low maintenance expence
- ⇒ Flow rate regulation using variable turbine speed
- ⇒ Regulation according to the current flow rate maintains the level at the required value
- ⇒ Easy assembling and dissembling
- ⇒ Quick installation



TECHNOLOGY AND EXPERTISE



Archimedes Screw Turbine System

*Revolutionizing hydroelectric power generation, the Archimedes Screw Turbine System forms the basis of our projects.
*It enables environmentally friendly power production with its silent operation, fish-friendly design, and high efficiency.



Smart Energy Management

*By focusing on the principle of digitalization in our projects, we manage energy systems in a smart and effective way.
*We maximize energy efficiency with data analytics, continuous monitoring, and smart technologies.



YEO Technology Cooperation

*Our cooperation with YEO Technology for innovative solutions and strong technological infrastructure contributes to reinforcing our leadership in the sector.
*We work together on projects focusing on 3D principles.



Environmentally Friendly Innovation

*For our technological solutions, we adopt designs that minimize environmental impacts and respect nature.
*We offer solutions to the energy needs of the future by combining innovation with environmentally friendly energy solutions.