

**MD.25.**

**Title**

**Mini-hydroelectric power plant**

**Authors**

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**Description**  
**EN**

The mini-hydroelectric power plant is intended for the production of electricity by transforming the flow (kinetic) energy of water into electricity with increasing conversion efficiency.

The micro-hydropower plant includes a platform, connected to the shore. A vertical axis rotor is installed on the platform with the blades installed asymmetrically on the axles and self-adjusting to the water currents by means of weather vanes. When the water currents flow on the surface of the blade, a hydraulic force is unevenly distributed on the two sides of the blade due to the offset installation of the axle. This technical solution allows to increase the efficiency of converting the kinetic energy of water into mechanical energy by reducing power losses when reorienting the blades.

**Class no.**

**2. Energy and sustainable development**