KWKS Hydro power screw
A New Eco-friendly type of Energy Generation

Use hydroelectric power and protect the environment
It has only been 10 years since this technology was converted to be used as a power generator which was originally used in the sewage and water transportation fields. The original intent of this Archimedeian design was to lift water. Now it’s been transformed into a power generating device called the Hydro power screw.

Advantages of this proven design include its low manufacturing costs, efficiency, and the overall simplicity of the entire system; as well as allowing migrating fish to pass safely downwards.

The efficiency of the KUHN — Hydro power screw KWKS is roughly 85 percent.

Some outstanding features of the KUHN — Hydro power screw include its minimal impact on the environment and its long lifespan.

The high quality of all components and the main KUHN — Hydro power screw ensures a competitive economical use and secures your long lasting investment.

Sustainable working environments
- Implementation as a residual water turbine
- Former irrigation channels
- Replacements for
  - Small Hydroelectric stations
  - Defective water wheels
- Use of sewage plant clean water discharges

The main problem for small hydroelectric plants is their high maintenance due to cleaning of their downstream debris filters. This is not a problem for the Hydro power screw because debris can easily be transported downstream and the use and installation of fine filters is therefore eliminated.

The Hydro power screw is limited to an elevation change of 8 meters and a water flow rate of 10 m³/s.

Advantages of the Hydro power screw
- Low initial investment
- Low maintenance cost
- High operation reliability
- High efficiency, even at low capacity
- No fine filters necessary
- Fish friendly
- Refined and proven design
- Long lifespan
- Optional with heat exchangers to recover water heat
- Applicable in remote areas of the world where fossil fuels are scarce and expensive

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<table>
<thead>
<tr>
<th>Hydro power screw diameter [mm]</th>
<th>Amount of water [m³/s]</th>
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<tbody>
<tr>
<td>1000</td>
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<tr>
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<td>6</td>
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</tbody>
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- **Building / Bothy**
- **Coupling, Bearing unit**
- **Brake unit**
- **Bar screen** manual or automatic against driftwood etc.
- **Rapid-active valve** against power failure
- **Synchron- or Asynchrogenerator**
- **Screw frame** length and diameter adapted to the application