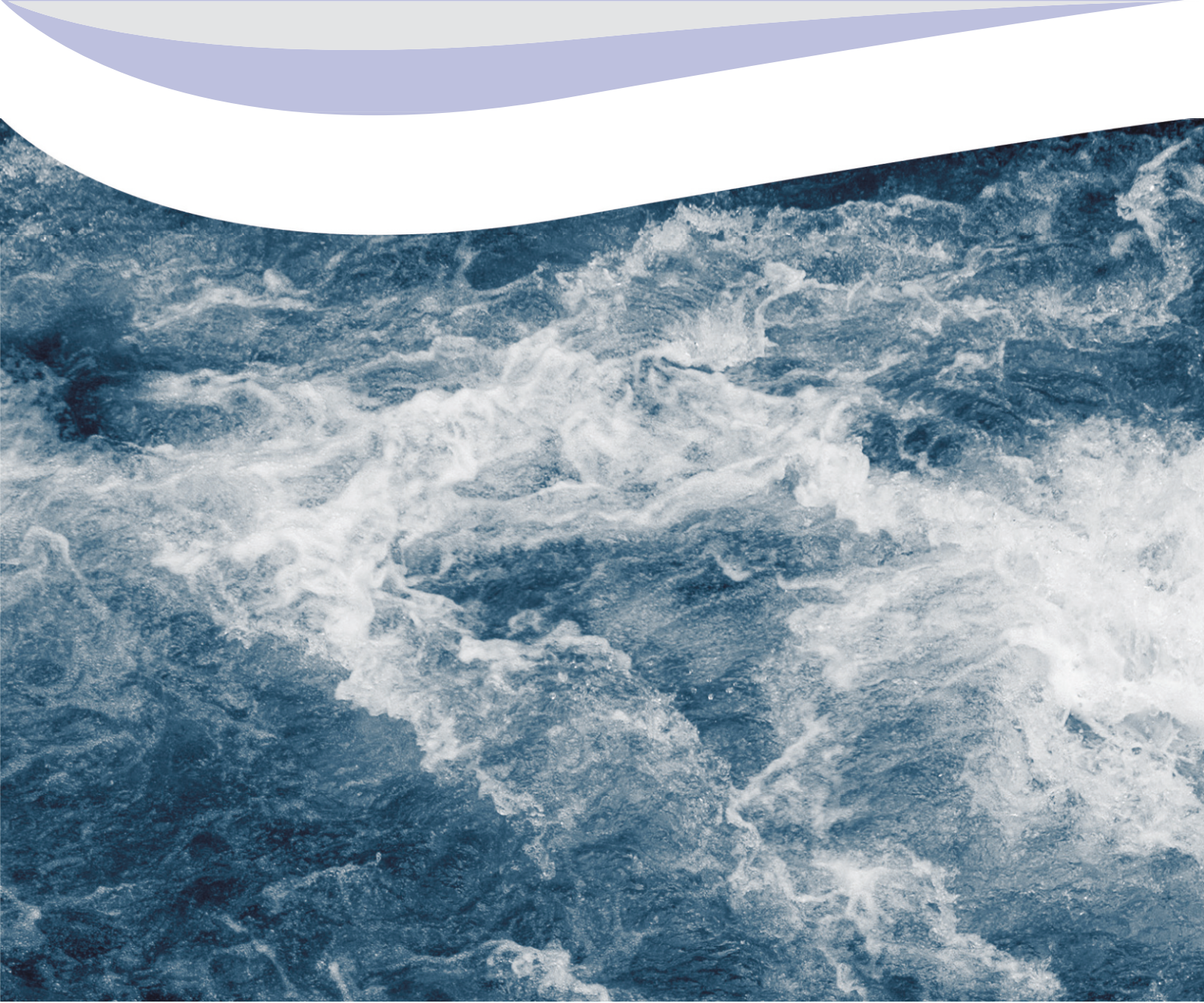




ENVIRONEERS®



A NEW DIMENSION IN HYDRO POWER



FLOWCONVERTER™



ENVIRONEERS®

have created and developed a very innovative new type of hydroelectric turbine, the **FLOWCONVERTER 500**, which opens up new opportunities for mini- and micro-hydroelectricity installations. Thanks to its unique features, the **FLOWCONVERTER** can be used at sites that have previously been excluded from traditional turbine applications. Most significantly, the **FLOWCONVERTER** can be used in flowing water (with no head), as opposed to falling water (with head).

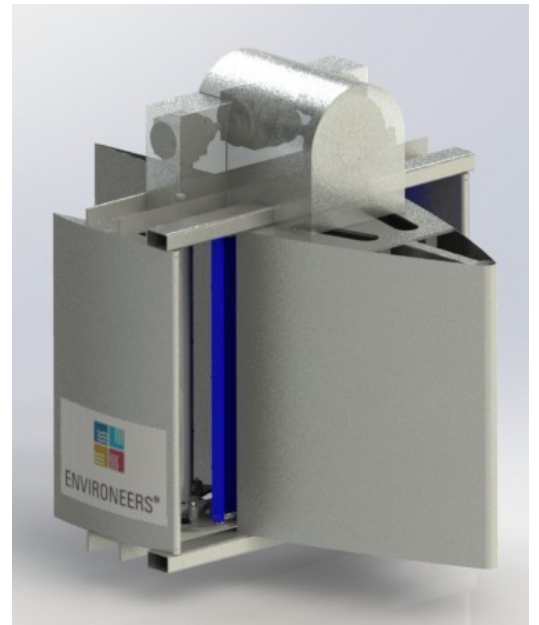
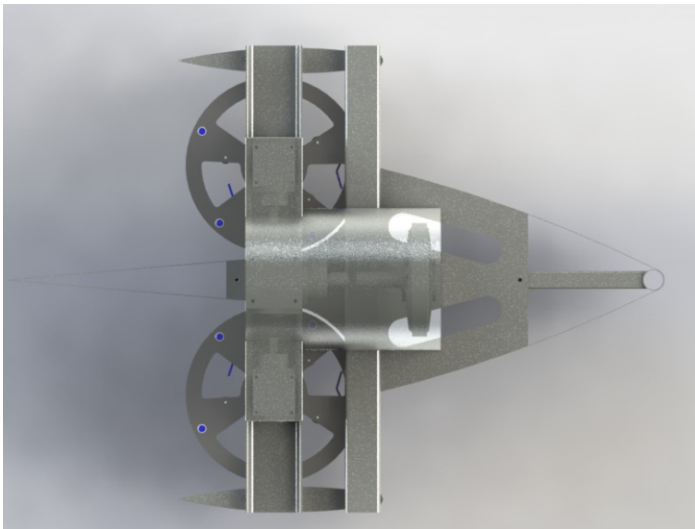
Given that opportunities for further large hydro plants in the United Kingdom and Ireland are limited, the **FLOWCONVERTER** thus significantly extends possibilities for the growth in the use of the hydroelectric potential of the countries by enabling previously marginal locations to be profitably exploited.

ENVIRONEERS UK, a subsidiary company of ENVIRONEERS Germany, is looking for canals, rivers, and other watercourses all over the countries for concessions to install these new hydro generation plants, in suitable water flows.

We offer partnerships with interested parties that start with simple concessions for running plants in consented water flows, up to industrial joint ventures. We wish to provide solutions guaranteeing a far-reaching geographical presence and service capability that will permit the widespread exploitation of the mini- and micro-hydroelectric potential of the country, whilst also contributing to local economic development.

FLOWCONVERTER 500 BASIS TYPE

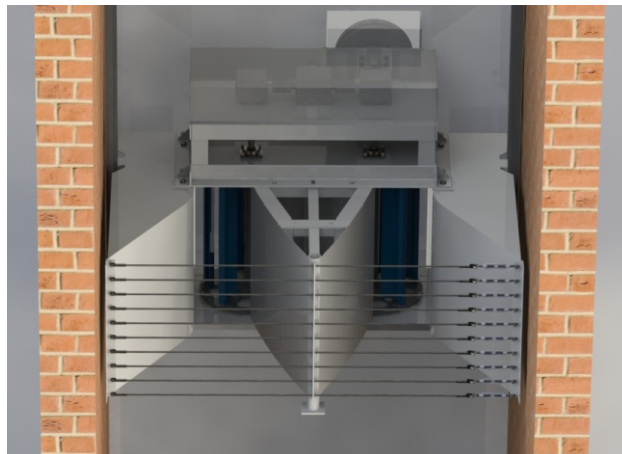
FC 500	WIDTH	125	CM
FC 500	HEIGHT	150	CM
FC 500	DEPTH	150	CM



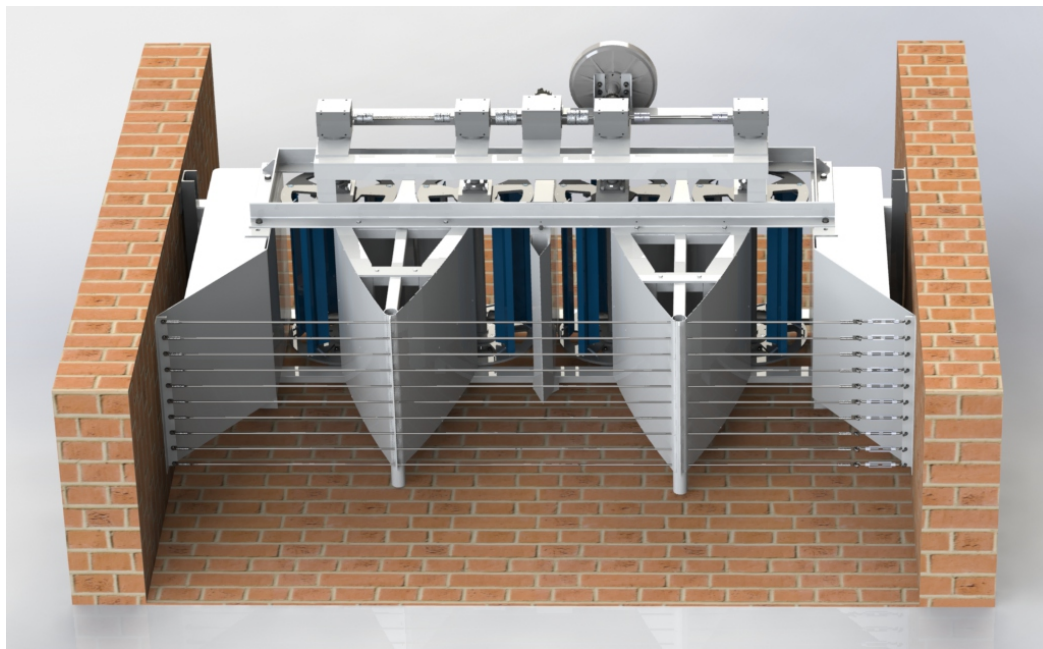
FLOWCONVERTER 500 IN A CHANNEL

Variabel in width

FC 500	WIDTH	150	CM
FC 500	HEIGHT	150	CM
FC 500	DEPTH	150	CM



FC 500	WIDTH	300	CM
FC 500	HEIGHT	150	CM
FC 500	DEPTH	150	CM





THE MAIN FEATURES OF THE FLOWCONVERTER 500

1. A REVOLUTIONARY TURBINE + AN ADVANCED GENERATOR = HIGH EFFICIENCY.

The **FC 500** is of a patented double-axis vertical turbine construction that optimises energy extraction from flowing water. Combined with this is the innovative ring generator, which gives additional electricity production efficiency.

2. ADAPTABILITY = GREATLY INCREASED POSSIBILITIES FOR VIABLE GENERATING SCHEMES.

The **FC 500** was designed to be adaptable to most kinds of water flows (with or without head): rivers, canals, aqueducts, etc, permitting a very large range of possibilities for installations.

3. VARIABLE DIMENSIONS AND MODULARITY = FLEXIBILITY AND SIMPLICITY OF INSTALLATION.

The standard model **FC 500** is a unit 125cm wide, 150cm deep and 150cm high. The height can be varied from 50cm to 200cm, depending on the depth of the flow. For channels of greater dimensions, the **FC 500** can be installed in modules by simply adding them to each other:

- in width, e.g by putting 5 units of 60cm, next to each other, for a 3 meter wide channel
- in height, e.g by putting 2 x 1.5m units one above the other, for a 3 meter deep channel
- in length, by putting **FC 500** in series one after another for the whole length of a channel

This feature has also the advantage of permitting a progressive installation and construction of the generating plant.





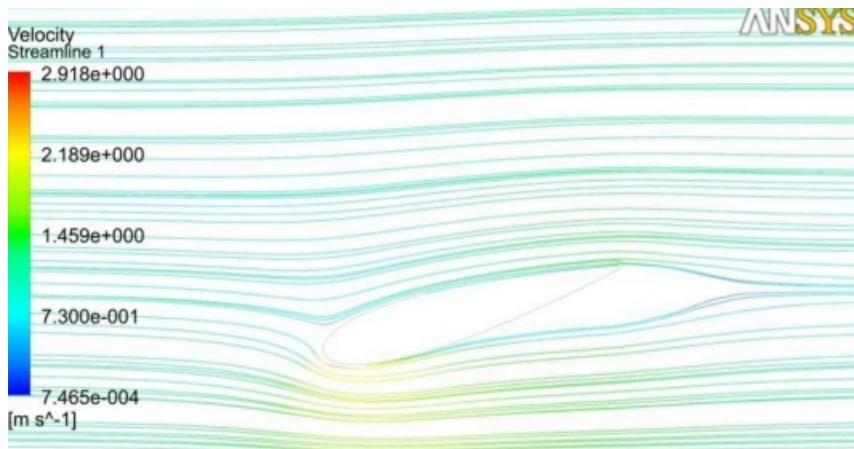
4. SMALL SCALE AND SUBMURGIBILITY = LOW ENVIRONMENTAL IMPACT

The FC 500 has been developed to be able to work completely submerged underwater. This makes it almost completely invisible, and very silent, so minimising its environmental impact.

5 ACCELERATION OF WATER

With the use of hydropower is basically noteworthy that the performance with increasing Flow velocity increases exponentially (third power). In comparison with the air (wind energy) high water density (1030 kg/m^3) is the determining and convincing factor in the technical use of hydropower.

This means: For doubling the flow rate, the output of the FLOW CONVERTER 500 increased eightfold. With tests and simulations optimal profiles were determined which increase the velocity of the water.





IN CONCLUSION

FLOWCONVERTER hydro-plants give new possibilities for hydro-electric energy exploitation in cases where traditional plants:

- exist but don't use all the flow potential
- couldn't be installed because of:
 - the inadequacy of the flow (too little head, too little flow)
 - technical problems such as dimensions, planning constraints, etc...
 - too high infrastructure costs
 - unacceptable environmental costs





ENVIRONEERS®

CONTACT

ENVIRONEERS ENERGY GMBH
ALFRED-DELP-STRASSE 4
D-88094 OBERTEURINGEN
GERMANY

PHONE: +49 7546 301 004 - 0
FAX: +49 7546 301 004 - 1
MAIL: OFFICE@FLOWCONVERTER.EU
URL: WWW.FLOWCONVERTER.EU