



ENVIRONEERS®

ENERGY GMBH

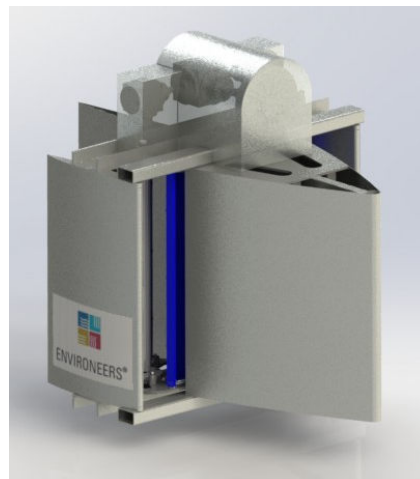


A NEW DIMENSION IN HYDROPOWER

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Have created and developed a very innovative new type of hydroelectric turbine, the **FLOWCONVERTER® FC500** which opens up new opportunities for mini- and micro-hydroelectricity installations. Thanks to the 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 traditional turbines which use falling water (with head).

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





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MAIN FEATURES OF THE FLOW CONVERTER® FC500

1. REVOLUTIONARY TURBINE + ADVANCED GENERATOR = HIGH EFFICIENCY

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

2. ADAPTABILITY = INCREASED POSSIBILITIES FOR VIABLE GENERATING SCHEMES

The FC 500 was designed to be adaptable to the most kinds of water-flows (with and without head) Rivers, canals, aqueducts, etc. This permitted a very large range of possibilities for installations.

3. VARIABLE DIMENSIONS AND MODULARITY = FLEXIBILITY OF INSTALLATION.

The standard model FC 500 is an unit 1,5m wide, 1,5m deep and 1,5m high. The height can be vary from 1,0m to 2,0m, depending of the depth of the water flow. For channels of greater dimensions, the FC500 can be installed in modules by simply adding them to each other.

4. FLOW ACCELERATION BY AIRFOILS = POWER INCREASE

The FC 500 is equipped with adjustable blades. The outer profiles can be adjusted to the maximize output. For use in large rivers the FC 500 can be mounted in a combination of two single **FLOW CONVERTER®** and three airfoils to build a **TRIMARAN**.

The **TRIMARAN** can increase the water flow up to 4.5 times:





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Seite: 3

Flow Converter FC-500 in a channel

Boosted Speed up to factor 3,5

2x Turbine

Pos. 1

FC 500-1000-2000

Flow Speed 2 m/s

Min. Water height = 2,00m

H = 1,50 m

B = 1,50 m

L = 2,00 m

Rated Power: 12 kW

Pos. 2

FC 500-1000-2000

Flow Speed 2,5 m/s

Min. Water height = 2,00m

H = 1,50 m

B = 1,50 m

L = 2,00 m

Rated Power: 24 kW

Pos. 3

FC 500-1000-2000

Flow Speed 3 m/s

Min. Water height = 2,00m

H = 1,50 m

B = 1,50 m

L = 2,00 m

Rated Power: 40 kW

Pos. 4

FC 500-1000-2000

Flow Speed 4 m/s

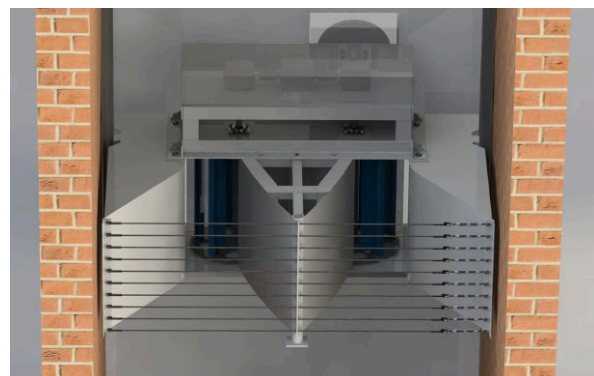
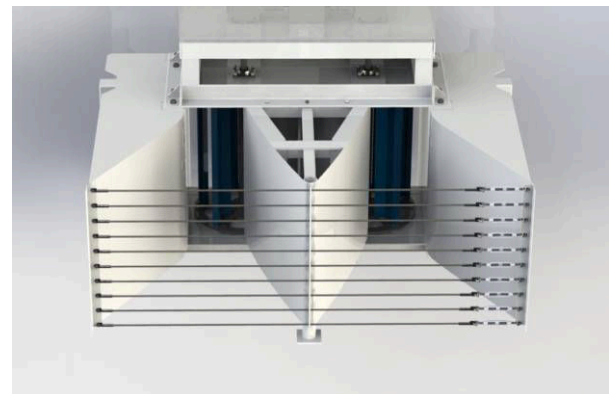
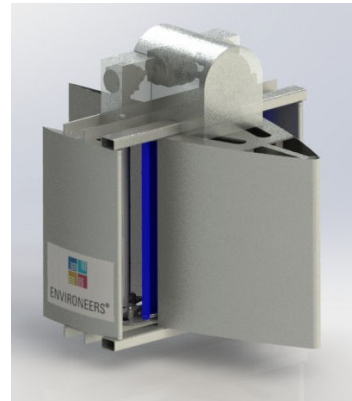
Min. Water height = 2,00m

H = 1,50 m

B = 1,50 m

L = 2,00 m

Rated Power: 100 kW





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Flow Converter FC-500 in a channel

Boosted Speed up to factor 3,5

4x Turbine

Pos. 1

FC 500-1000-3000

Flow Speed 2 m/s

Min. Water height = 2,00m

H = 1,50 m

B = 1,50 m

L = 3,00 m

Rated Power: 24 kW

Pos. 2

FC 500-1000-3000

Flow Speed 2,5 m/s

Min. Water height = 2,00m

H = 1,50 m

B = 1,50 m

L = 3,00 m

Rated Power: 48 kW

Pos. 3

FC 500-1000-3000

Flow Speed 3 m/s

Min. Water height = 2,00m

H = 1,50 m

B = 1,50 m

L = 3,00 m

Rated Power: 80 kW

Pos. 4

FC 500-1000-3000

Flow Speed 4 m/s

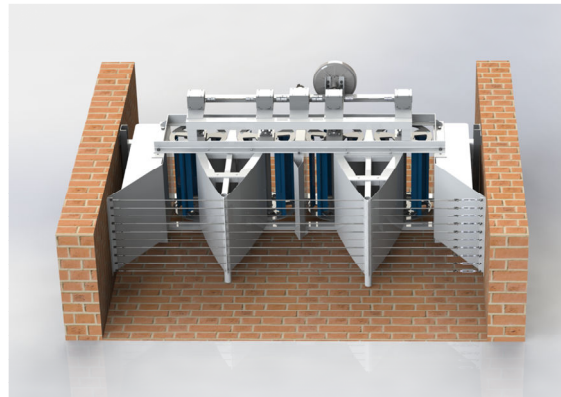
Min. Water height = 2,00m

H = 1,50 m

B = 1,50 m

L = 3,00 m

Rated Power: 200 kW





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Flow Converter FC-500 in a channel

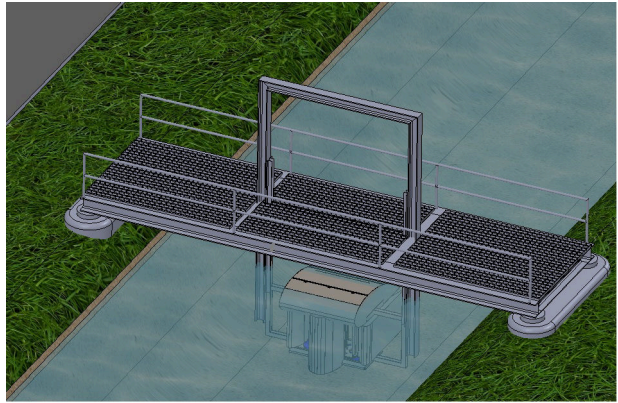
Boosted Speed up to factor 3,5

2x Turbine

Pos. 1
1x Flow Converter
1x Bridge

FC 500-1000-2500
Flow speed 2,5 m/s
Min. Water height = 2,00m

H = 1,50 m
B = 1,50 m
L = 2,50 m
Rated Power: 24 kW

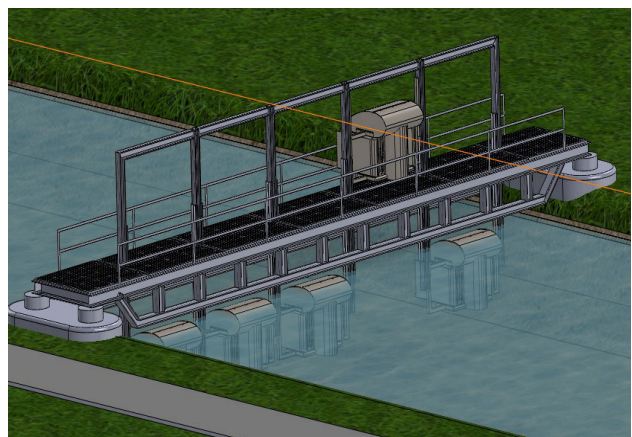


10x Turbine

Pos. 2
5x Flow Converter
1x Bridge

FC 500-1000-2500
Flow speed 2,5 m/s
Min. Water height = 2,00m

H = 1,50 m
B = 1,50 m
L = 2,50 m
Rated Power: 80 kW





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Seite: 6

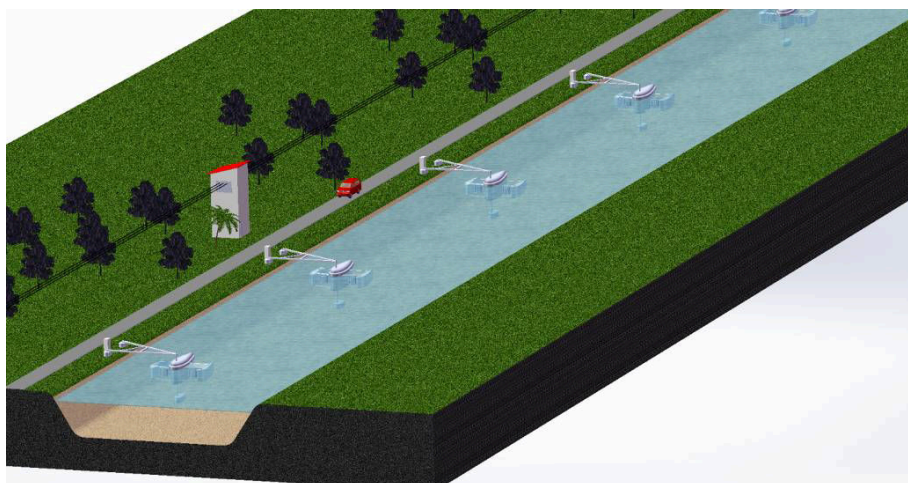
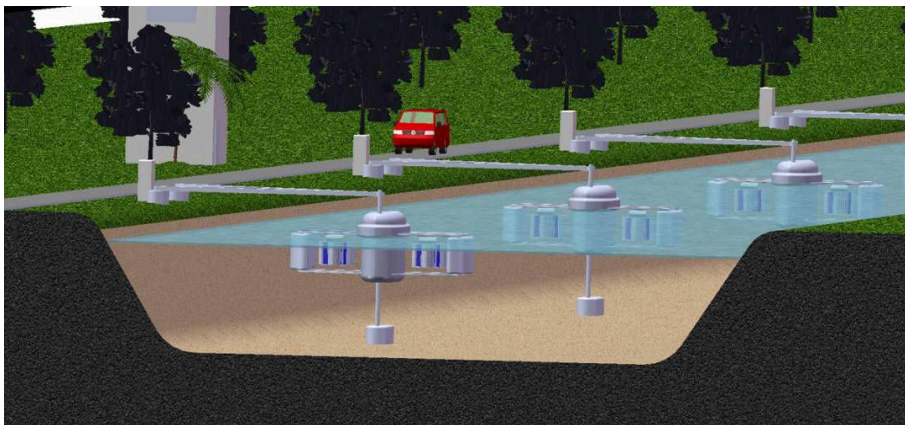
Trimaran Flow Converter FC-500 in a river

Boosted Speed up to factor 4,5

A Trimaran unit consists of four Flow Converter FC 500 Turbines, located between the three flow elements.

A Trimaran unit can be placed in continuous basis in the river and work in series. The collected electricity is converted with central inverters in three-phase 50 Hz power and feeds it into the private power grid or into the public power grid.

The Trimaran unit is attached by an arm on the banks of the river and anchored in the river bed.



ENVIRONEERS
Energy GmbH
Alfred-Delp-Str. 4
88094 Oberteuringen
Germany

Fon: +49 (0) 7546 3010040
Fax: +49 (0) 7546 3010041
info@environeers.eu
www.environeers.eu

Commerzbank Hamburg
BLZ: 200 400 00
Konto: 641797600
IBAN: DE41200400000641797600
BIC: COBADEFXXX

Amtsgericht Ulm
HRB 725786
St.Nr.: 61021/14874
USt. IdNr.: DE 264918161

Geschäftsführer
Angelika Stemmer



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Seite: 7

Trimaran Flow Converter FC-500 in a river

Boosted Speed up to factor 4,5

A Trimaran unit consists of four Flow Converter FC 500 Turbines, located between the three flow elements.

Pos. 1

FC 500-1000-6500

Flow Speed 2 m/s

Min. Water height = 3,00m

H = 2,00 m

B = 6,50 m

L = 8,00 m

Rated Power: 50 kW

Pos. 2

FC 500-1000-6500

Flow Speed 2,5 m/s

Min. Water height = 3,00m

H = 2,00 m

B = 6,50 m

L = 8,00 m

Rated Power: 100 kW

Pos. 3

FC 500-1000-6500

Flow Speed 3 m/s

Min. Water height = 3,00m

H = 2,00 m

B = 6,50 m

L = 8,00 m

Rated Power: 180 kW

Pos. 4

FC 500-1000-6500

Flow Speed 4 m/s

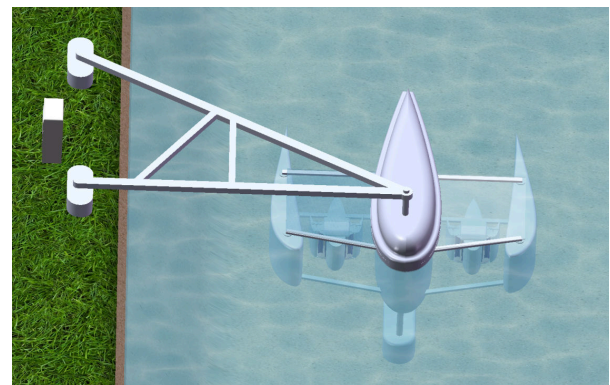
Min. Water height = 3,00m

H = 2,00 m

B = 6,50 m

L = 8,00 m

Rated Power: 400 kW



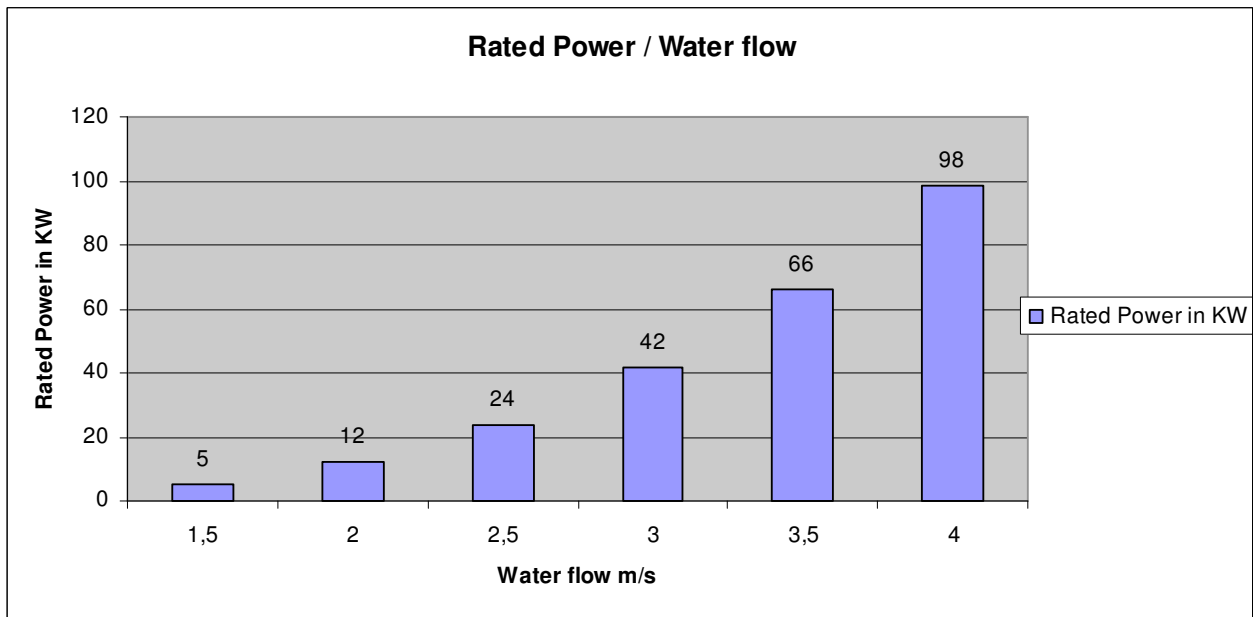
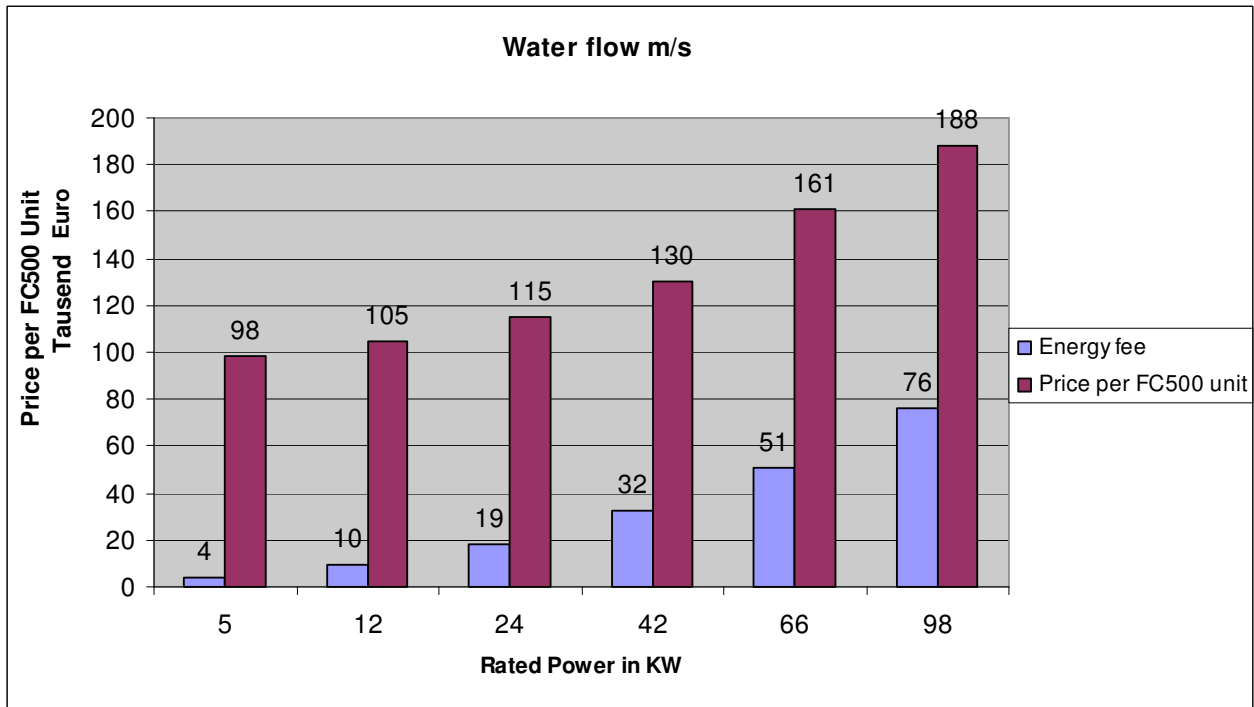


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Flow Converter FC500

Price per FC500 unit / Rated Power / Water flow





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Flow Converter FC500

Return of Invest / Water flow

