



# BAUER Energy Design

*Changing the way we use Energy, by Design!*

## HOW TURBU-FLOW WORKS



Turbu-Flow is comprised of a specially engineered and founded alloy element. The alloy is made of a number of metals selected from two groupings (cathode and anode) of opposite electro negativity. The alloy element is designed with a number of discs and apertures. The flow of the water through the discs and apertures is such that the unit maximises turbulent flow over the surface of the element.

### The Bottom Line On Alloy Based Water Conditioners

Turbu-Flow of Australia is an alloy based water conditioner that works as a static mixer.

Bauer Energy Design Inc. has reviewed several alloy based water conditioners including magnetic water conditioners.

In all cases the effect on the water is subtle if not negligible.

With Turbu-Flow the effect on the water and the minerals is very subtle and almost not noticeable.

In fact it has no effect on either the water or the mineral content thereof but has an effect on mineral crystal morphology.

Morphology of minerals is often governed by the strength of the ionic charge of the minerals and this is measured as a Zeta Potential.

All alloy based water conditioners can affect this charge by either increasing it or decreasing it to varying degrees.

This phenomenon has been scientifically researched by Bauer Energy Design Inc.

Bauer Energy Design Inc. sees merit in pursuing its research further into the effects of alloy conditioners however it will not support any claims by any manufacturer of absolute anti scaling at this point since there is absolutely no evidence of alteration in mineral content to the water itself.

What Bauer Energy Design Inc. has learned is that it is possible to control the type of scaling by altering the morphology of minerals using alloy based water conditioners such as Turbu-Flow of Australia. Turbu-Flow has demonstrated complete elimination of scaling in certain water conditions in boilers, piping, valves and water tank reservoirs.

It has used this proprietary knowledge to design water filtration and conditioning systems that have been filed as provisional patents.

Using any alloy based water conditioner without the professional knowledge of the subtle changes in the water can lead to disappointing results and we will not sell any Turbu-Flow without first consulting the customer on the application and installation.

We do this through licensed filtration systems, water treatment systems and professional engineering companies.

Yours truly,

*Walter J. Bauer*



**Turbu-Flow**  
**Australia Patent No. 580474**

## TYPICAL APPLICATIONS

**Bauer Energy Design Inc. Turbu-Flow**

**Residential:**  
Filtration and water conditioning including performance enhancement of water softeners.

**Buildings:**  
Filtration and water conditioning including performance enhancement of water softeners.

**Industrial:**  
Filtration and Process Water Control.

**Marine:**  
Filtration and Corrosion Control.

**Agricultural:**  
Filtration and water conditioning.



Cooling Towers



Agriculture



Boilers

[www.bauerenergydesign.com](http://www.bauerenergydesign.com)

Phone or Email Us Today: [wbauer@bauerenergydesign.com](mailto:wbauer@bauerenergydesign.com)

Walter Bauer - (416) 722-9175