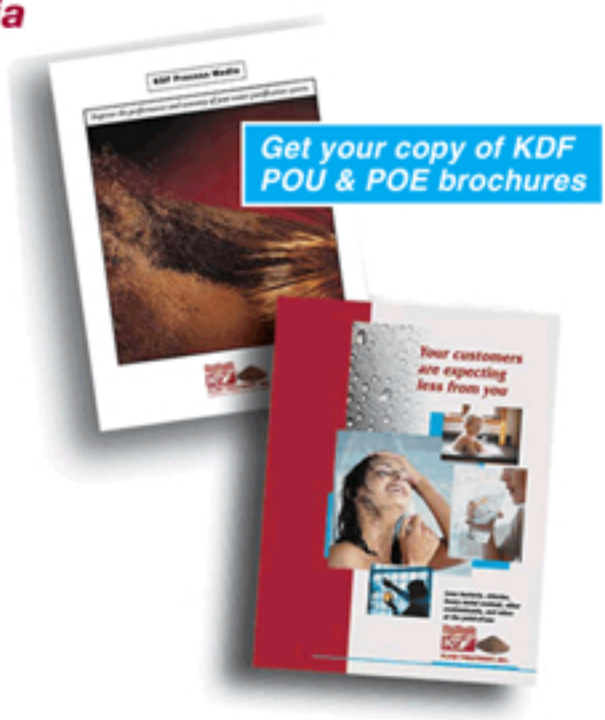
Only patented KDF® Process Media deliver all of these benefits:

- Remove chlorine, iron, hydrogen sulfide and heavy metals from water
- Control scale, bacteria and algae
- Extend the life and improve the performance of GAC, RO and IX filtration systems
- Eliminate the need for expensive silver impregnated carbon and pesticide registration hassles
- Reduced material requirements result in more compact and more economical water treatment systems
- KDF Process Media contain no chemicals and are 100% recyclable



For more information
visit our website: www.kdfft.com
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KDF®

FLUID TREATMENT, INC.
Solutions for economical clean water™

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NSF

Water Quality Association
MEMBER

What are KDF® Process Media and how do they work?

KDF® Process Media are high-purity, granulated copper and zinc-based alloys that treat water through a process based upon the principle of **redox** (Oxidation-Reduction). Originally, KDF was shorthand for Kinetic Degradation Fluxion.

We can explain redox like this: KDF Fluid Treatment's unique combination of copper and zinc creates an electro-chemical reaction. During this reaction, electrons are transferred between molecules, and new elements are created. Some harmful contaminants are changed into harmless components. Free chlorine, for instance, is changed into benign, water-soluble chloride, which is then carried harmlessly through the water supply. Similarly, some heavy metals such as copper, lead, mercury and others, react to plate out onto the medium's surface, thus being effectively removed from the water supply.

KDF Process Media help control microorganisms by creating an environment that's deadly to some microorganisms and that interferes with the ability of many other microorganisms to function. Either way, the use of KDF Process Media results in the total elimination of some contaminants and a great reduction of a wide variety of others.

Benefits of KDF Process Media

- Significantly extend the life of granular activated carbon
- Are recyclable
- Effectively remove chlorine and heavy metals and control microorganisms
- Are available in four granular styles, each designed for a specific need
- Outperform silver-impregnated carbons
- Require no EPA registration, thus less red tape

KDF Process Media vs. Silver-Impregnated Carbon		
	KDF Media	**Silver-Impregnated Carbon †**
Life	More than 6 years*	Only 6 to 12 months
Bacteria and Algae	Controls Both	Permits Growth
Disposal	Recyclable	Hazardous Waste
Mechanism	Oxidation/Reduction	Adsorption
Heavy Metals	Yes	No
pH	6.5 to 8.5	Sensitive
Use	POU/POE, Industrial, Commercial	Home Water Filter Products
US EPA Registration	Not Required	Required

Solutions for economical clean water™

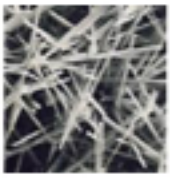
CALCIUM CONTROL

How the Media Works "KDF media is a combination of copper and zinc. The zinc is given off over time and is the key to the system. It modifies the scale, and a very thin coating of it ends up on the pipe walls (plastic or metal), which serves as a corrosion inhibitor. It also raises the pH level of the water system to one that is not conducive to corrosion. It actually gives off a low-voltage current because of the reaction of the copper, zinc, and water and develops an electrical field that kills algae. KDF's filter media can't be washed and reused, because it changes shape and eventually wears out, but lasts for a long time...and it's environmentally recyclable. After its use, it can be sold for its scrap metal value. It eliminates virtually all chemical treatments. Most of the other systems out there do part of the job, but not all of it."

Instead of exchanging the calcium and magnesium bicarbonate for sodium or potassium (ion exchange) like a water softener, the ***ValuSmart*** **Water System** concentrates on the bicarbonate crystals of the minerals. In their bicarbonate form, these minerals form on one another causing buildup in plumbing and premature failure of water using appliances.

Calcium and magnesium **bicarbonate** crystals are insoluble, but can be changed by temperature (energy) into the soluble form of carbonate crystals.

Calcite is a type of calcium carbonate crystal that is soluble and has a rhombohedral (dog-tooth like) shape. These crystals are small, very adherent and still create deposits in plumbing and fixtures. Typically, boiling water will convert bicarbonate crystals to this form of carbonate crystal.



Aragonite is a type of calcium carbonate that is soluble and has an acicular (needle like) shape. These crystals are a very small powdery compound. The refuses to adhere to metallic, plastic or ceramic surfaces.