



SCALE-FREE
& POTABLE\*
WATER THROUGH
CATALYTIC TECHNOLOGY

# Leading manufacturers of water conditioners

Non-Chemical Water Treatment (NCWT) System







Fluid Dynamics (us)

Hard water solutions since 1973

**Treated Water Can Be Stored For Couple of Months** 



### ABOUT THE COMPANY...

We, 'Skymech Engineers Pvt. Ltd.' are the Sole & Exclusive Business Partner of Fluid Dynamics in India. Fluid Dynamics International Ltd. was founded in 1973 and its head quarter is in London, England (UK). Company is the world's oldest and largest manufacturer of Catalytic Technology based hard water treatment and scale prevention system. The company products and technology both are worldwide. Famous for quality and reliability.

With having 48 years experience in water treatment, company with its more than 60 countries has installed approx 8,00,000 systems all over the world.



Certified By.:-









#### **Certificate & Approvals**



Water Quality Association (WQA) "Gold Seal" Certificate - USA.



Water Regulations Advisory Scheme - U.K.



KIWA-UK



National Institute of
Public Health
Hygiene Certificate - (Poland)

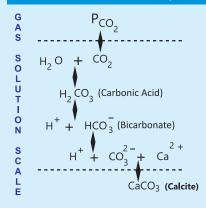


General Services Administration - USA



U.S. Green Building Council- USA

#### HARD WATER SCALING (CALCIUM CARBONATE - CALCITE)



The following equilibrium reaction describes the dissolving and formation of calcium carbonate. The reaction can go in either direction.

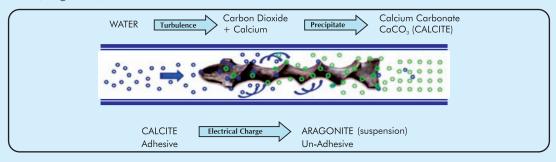
Under certain circumstances, water is forced to discharge Calcium Carbonate. The Calcium Carbonate discharged in this way is Calcite, a hard scale. Calcite will accumulate on the nearest receptive surface, typically metallic. In Pictures shown to the untreated form of calcium carbonate. This is the hard scale deposited by untreated water.



Bones, Joints, Teeth, Skin, Hair & Digestion Related Problems, Hard scaling and chocking in Pipe lines and Fittings, R.O./ Washing Machines Maintenance, Restricts the Plant growth and the crop yield, Falling of cement plaster/RCC.

#### HOW CATALYTIC TECHNOLOGY TREATS THE CaCo<sub>2</sub> (CALCITE TO ARAGONITE)

As the water flows through the core of Fluid Dynamic Product, it will create a turbulence, and this will force the carbon dioxide to come out of solution (Co<sub>3</sub>) and bind with calcium (Ca<sup>++</sup>) to form calcium carbonate right format (CaCo<sub>3</sub>) in the form of Calcite Crystals. This form of crystals will cause scaling. However, as the calcite crystal touches the core, a small electric current will be produced and this will convert the calcite to aragonite crystals and keep it suspended in the water. This form of calcium carbonate (aragonite) is unable to form scale.



#### **ARAGONITE:- Non Active form of CaCo<sub>3</sub>**

Aragonite is a form of Calcium Carbonate crystal that, unlike Calcite, prefers to stick to itself and grow attracting more Calcium. It remains suspended in water rather than depositing onto metal surfaces. In Picture is shown the treated form of calcium carbonate. Unlike calcite, aragonite stays in suspension and is carried through the system to the drain. As a result the system does not scale.



Decreases Problems of Bones, Joints, Teeth, Skin and Hairs, Easy digestible, Easy removable, Removes Existing Scaling, Prevents Pipe lines and Bathrooms Fittings from hard lime-scale.



## PROBLEMS CAUSED

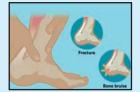
HEALTH

**DOMESTIC** 





Joints Problems



Brittle Bones



Less Foaming in Soap



Scaling on Tap



Yellow Teeth



Hair Fall



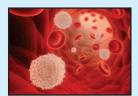
Element in Washing Machine



Scaling on Tap Filter



Digestive Disorder



**Blood Infection** 



Electric Kettel



Scaling on Honeycomb pad



Deformity of Bones



Skin Rashes



Scaling in Shower Head

## **BY HARD WATER**



COMMERCIAL

INDUSTRIAL





**Chocked Pipelines** 



**Swimming Pool** 



Chocking in PHE



Scaling in Chillers



Scaling outside the Pipe



Construction Problems



Scaling in Cooling Tower



Scaling in Condenser



Scaling in RO Membrane



Scaling on Metal Surface



Scaling in Boilers



Scaling in Boilers



Agriculture Difficulties



Scaling In Potable Supply Line



Scaling in Compressor



Scaling on Copper Tube



Scaling on RO Membrane

## HARD WATER SCALING

#### **Minitron**

Water Conditioner (For Small Application-R.O., Ice Machines, Coffee Machine)











#### Limetron

Water Conditioner (For Residential Houses)











#### **Scaletron**

Water Conditioner (For Commercial Utility, Construction, Landscape and Group Housing)











## **PROBLEMS & SOLUTIONS**

#### Colloid-A-Tron

Water Conditioner
(For Cooling Tower, Commercial utility
(Higher Flow), PHE, Coolers, Swimming Pool,
Fountains and Recycling application)











### **Pool-Tron**Specially Designed

for Swimming Pools











#### MagCat

Super Product Specially designed for all types of typical application.









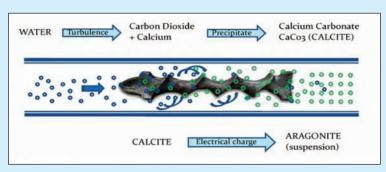


### **Diagrammatic Representation of Catalytic Water Treatment**

#### **CALCITE**



calcium carbonate in its calcite state after depositing and bonding with oxidised iron .



#### **ARAGONITE**



calcium carbonate in its aragonite form. Pure white showing its inability to bond with other compounds

ES	Parameter	Catalytic Technology (Fluid Dynamics)	Magnetic/ Electro-Magnetic	Ion Exchange Process (Salt Softener)
פֿו		/		
	No Use of Chemical/Salt	✓	✓	X
2	No Electricity Consumption	<b>√</b>	X	$\checkmark$
TECHNOLOGIES	Zero Wastage of Water	✓	<b>√</b>	X
	Treated Water can be stored	<b>√</b>	X	$\checkmark$
CATALYTIC V/S OTHER	No Maintenance Required	✓	X	X
0 S	Working in Hot Water (90°-95° C)	✓	X	X
<b> </b>	Elimination Existing Scale	✓	✓	X
Ĕ	Money Back Guarantee/ Replacement	<b>√</b> (1 Yr.)	X	X
AL)	Hardness Limits	No Limit	Limit (950ppm)	Limit (1750 ppm)
N S	Warranty	10 Years	1 Year	1 Year
	Durability (Life Span)	15 - 25 Years	5 - 10 Years	5 - 10 Years

#### HARD WATER SCALING - PROBLEMS & SOLUTIONS

### Fluid Dynamics International Ltd., UK के Water Conditioner से Hard Water और Scaling से होने वाली समस्याओं से छुटकारा पायें

#### **PROBLEMS CAUSED BY HARD WATER**

- नल, शॉवर का चॉक हो जाना
- साबुन का काम नहीं करना

- पाईपों व फिटिंग का चॉक हो जाना
- प्लास्टर व सीमेंट काँक्रीट का झडना बालों का झडना एवं त्वचा का रूखापन
  - खेती नहीं होना ⁄धरती बंजर हो जाना
- R.O. & Washing Machine बार बार सर्विस होना
- Bones, Teeth, Joints, Digestion सम्बन्धी समस्याएं
- PHE, Heat Exchanger, Boiler, Chiller, Cooling Tower में Scale जमा हो जाना

#### FEATURE OF TECHNOLOGY (Eco Friendly-Supports Green Environment)

- ☑ बिना किसी Softener
- 🗹 बिना किसी Chemical/salt
- बिना किसी Magnetic System 🗹 बिना किसी Electro-Magnetic System
- 🔽 <mark>बिना किसी Mainte</mark>nance 🔻 🗹 और पानी की एक बूँद की भी बर्बादी नहीं
- ☑ Zero Liquid Discharge (ZLD)

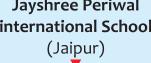
विश्व की एक मात्र टेक्नोलोजी जिस के ट्रीटेड वाटर को स्टोर करें कई महिनों तक।

- Millions Satisfied Customers in Europe, Asia, America, Africa, USA, Canada, China and India
- Overseas Trade Centers in more than 60 Countries.
- 48 years experience in export.



### **APPLICATION & INSTALLATION**

**Jayshree Periwal** international School (Jaipur)













**Eisha Zeinth Apartment** (Pune)

**JK Lakshmipat University** (Jaipur)









**Kamla Enclave** (Bhilwara)

**LK Singhania Education Centre** (Gotan)









Mahatma Gandhi Hospital (Jaipur)

**Mahima Panorma** (Jaipur)









### **APPLICATION & INSTALLATION**



Royal Ensign Apartment (Jaipur)

Pinegrove School (Himachal Pradesh)









NAZAMAT TAMIRAT (Qadian, Gurdaspur)

**Construction Site Mahima Sansar** (Jaipur)









**Shree Shyam Baba Dharamshala** (Ahmedabad Group) Khatu Shyam Ji

J.K. White Cement (Gotan)









Rajasthali Resorts (Jaipur)

St. Xavier's
College
(Nevta, Jaipur)

Harshal Polymer (Sitapura Ind. Area, Jaipur)

Steelbird Helmets (Baddi, H.P.)









#### **JUDGE OUR PRODUCTS BY OUR CUSTOMERS**



























































#### ...AND THOUSANDS MORE!

All trademarks are acknowledged

Local Contact

★ If the Water is Potable as per WHO/BIS 10500 : 2012 Standards for Drinking water.

#### Sole & Exclusive Business Partner in India

#### SKYMECH ENGINEERS PVT. LTD.

(An ISO 9001:2015 Certified Company)

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