



Environment. Integrated.

ZERO B™
PURE WATER SOLUTIONS

 **ION EXCHANGE**
Refreshing the Planet

TOTAL ENVIRONMENT SOLUTIONS, CREATED BY HANDS THAT CARE FOR YOUR TOMMORROW
Asia's largest water solutions company is now Asia's largest environmental solutions provider

OUR VISION

**To be the leader in our business
which is so vital
to people's lives and the environment**

“WHY DO I NEED WATER SOFTENER ?”





Rough Texture
Dry Skin
Messy Hair



- ❖ ARE YOU EXPERIENCING HAIR LOSS, MESSY HAIR, DRY SKIN ?
- ❖ HAVE YOU NOTICED WHITE LIME SCALE SUBSTANCE ON TAPS, UTENSILS, SINKS AND SHOWERS ?
- ❖ IS YOUR TOWEL AND CLOTHES TURNING DRY AND ROUGH ?
- ❖ IS YOUR FOOD LOSING ITS FLAVOUR ?

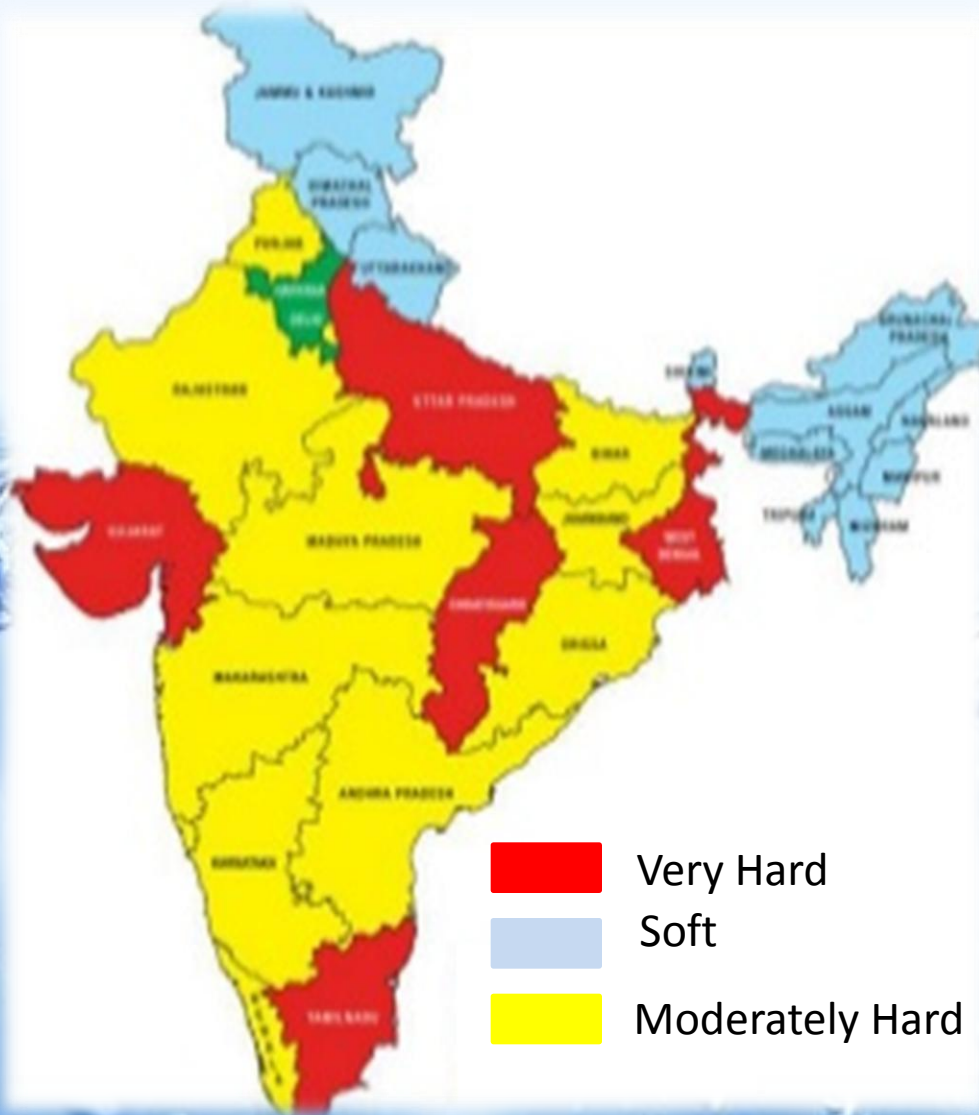
DO YOU KNOW WHAT IS CAUSING ALL THIS ?





HARD WATER

HARD WATER AFFECTING INDIA



➤ **Fact : About 62% of India suffers due to more than 100ppm Of magnesium and calcium the primary cause of hard water.**

THE HARDNESS IN YOUR WATER

WHAT IS HARD WATER ?

- When there is excessive calcium and magnesium salts present in water it causes hard water

WATER SOFTENERS ELIMINATE THE EFFECTS OF HARD WATER

- They “soften” the water by removing the calcium and magnesium



Problems due to Hard Water



**HARD
WATER
PROBLEMS**



- Bad smell
- Unpleasant Taste



- Stiff & messy hair
- Unmanageable hair



- Dry, itchy skin and scalp
- Soap residue on the skin that can be irritating

Problems due to Hard Water



**HARD
WATER
PROBLEMS**

DAMAGED FABRIC :

- Hard water reacts adversely with detergents turning clothes, towels and fabrics rough and dry
- Reduces fabric life
- Stiff Dingy Laundry
- Discolored and damaged clothing

INCREASED EXPENDITURE :

- Increases detergent usage and expenditure

FADING COLORS :

- Deteriorates and fades color of fabric by 15%



Problems due to Hard Water



**HARD
WATER
PROBLEMS**



SPOIL FLAVOUR :

- Spoils taste of tea , coffee and other beverages



INCREASE EXPENDITURE :

- Cooking gas consumption increases by 30%



POTS & STAINS :

- Leaves spots on your expensive crystal and silverware
- Mineral deposits on dishes and glassware

Problems due to Hard Water



STAIN :

- Scale build up in sinks, tubs, faucets & appliances
- Scale deposits on metallic surfaces
- Staining of porcelain surfaces



- Scale build up in sinks, tubs, faucets & appliances
- High energy costs, possibly due to scale build-up in pipes and on appliances
- White scale on electrical appliances, pipes and taps
- Plumbing problems
- Clogged plumbing
- Damaged appliances



- Soaps and detergents do not lather well.

Is hard water getting hard on your daily life?

Switch to Zero B Water Softeners, SIMPLIFY LIFE

Soft Hair

Soft Skin

Soft Fabric



Retains color/Texture of
fabrics



Retains shine on Utensils



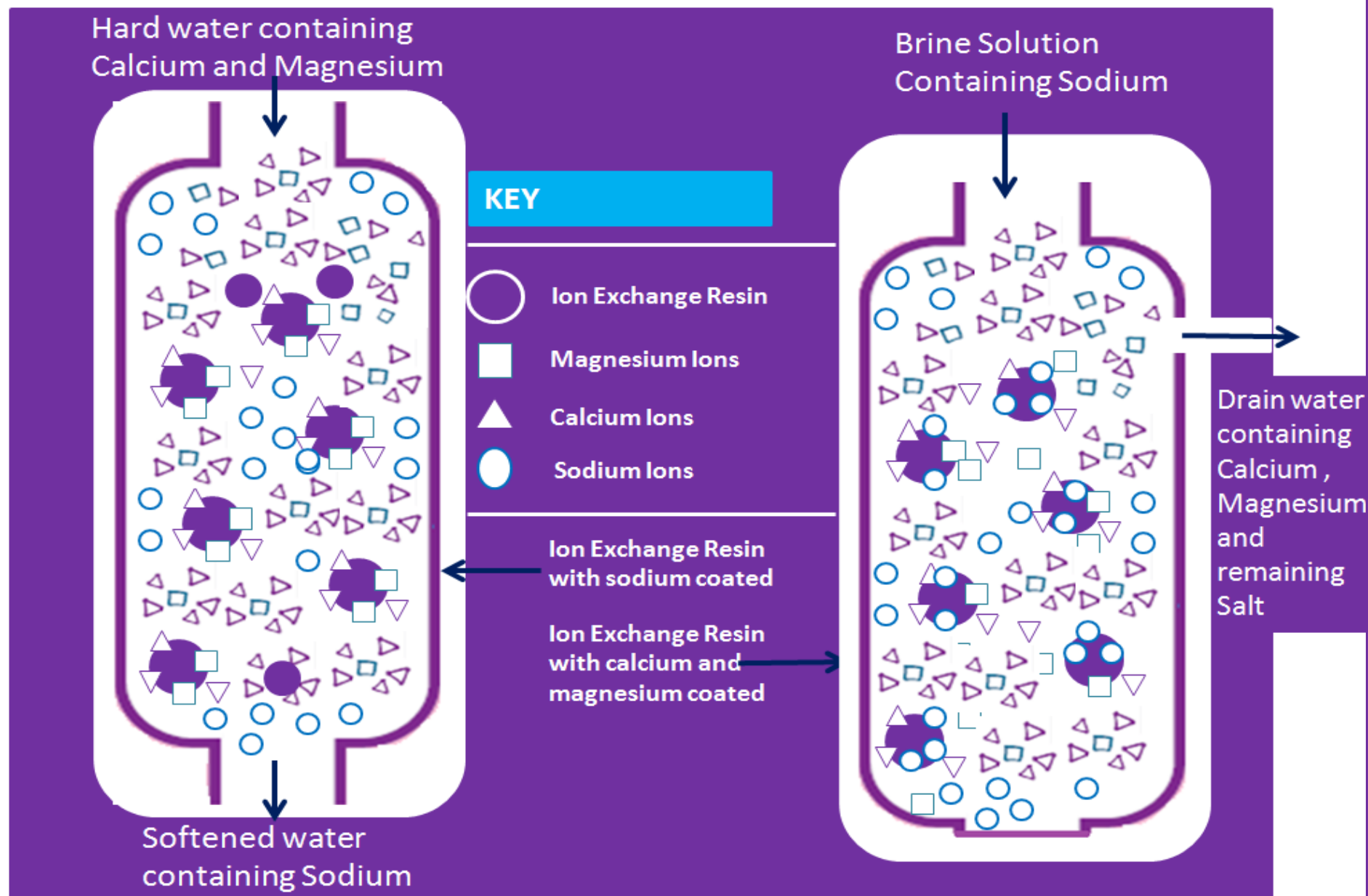
Keeps your skin & glowing

Water conditioners to take complete care of your hard water problems

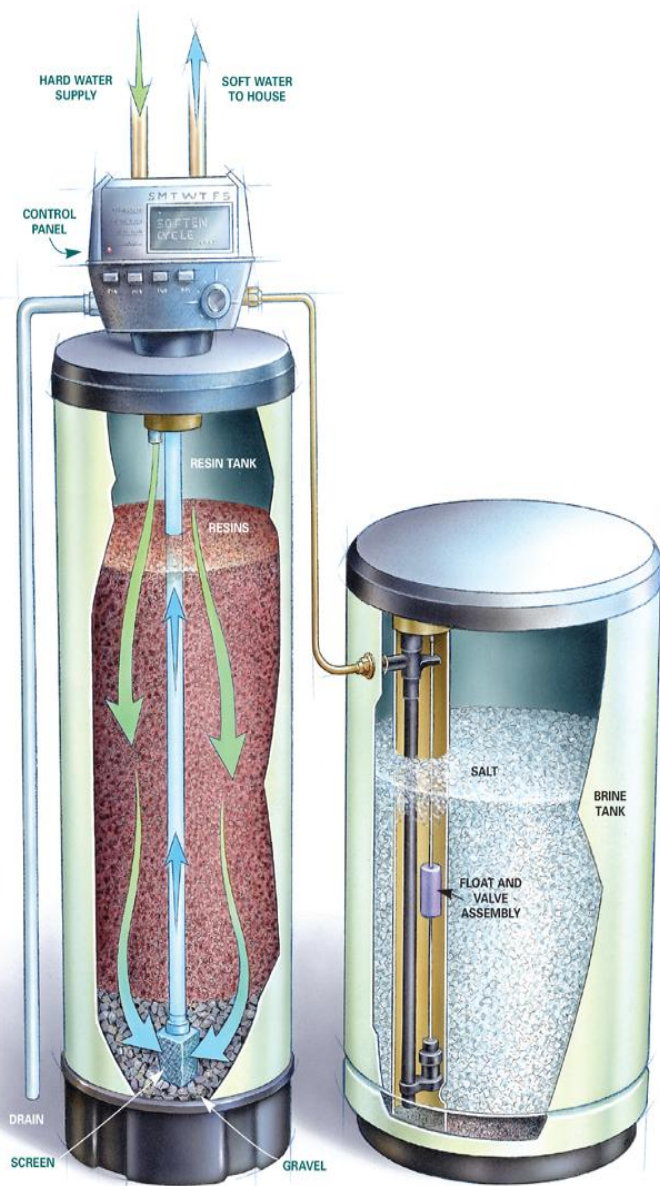
- Prevents unsightly chalky stains on basins, bathtubs and sanitary ware
- Prevents discoloration of tiles and expensive flooring
- Prevents blockage in shower heads
- Prevents limescale deposits in pipelines
- Descales existing limescale deposits in pipelines
- Enables faster heating of hot water system
- Enables dishwashers, washing machines, kettles etc. to work efficiently
- Increase lifespan of filters/membranes
- Saves energy by reducing electricity consumptions by water fed appliances
- Considerably reduces the scum produced by soaps and detergents
- Enables the clothes to retain softness and color
- Prevents skin problems caused due to hard water usage



"HOW DOES A WATER SOFTENER WORK ?"

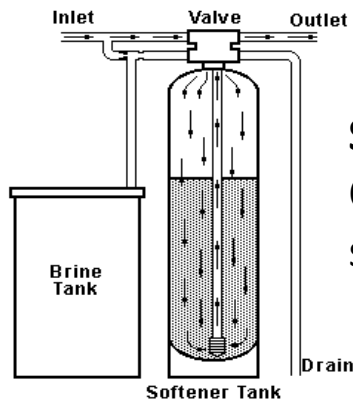


PRINCIPLE OF WORKING OF WATER SOFTENER



- The softener converts the hard water into soft water using an Ion exchange process
- In the Softening cycle the softener resin media exchanges the hard ions of Calcium and magnesium for Sodium ions
- When the softener resin is exhausted the auto valve recharges the resin media (The output given by your softener depends on the hardness of the raw water and your softener model)
- In the Recharge cycle , salt water (brine) is prepared and sent (injected) to the media for recharging
- In the Recharge process the hard ions are released in exchange for sodium ions from the brine
- The charged softener resin again deliver soft water

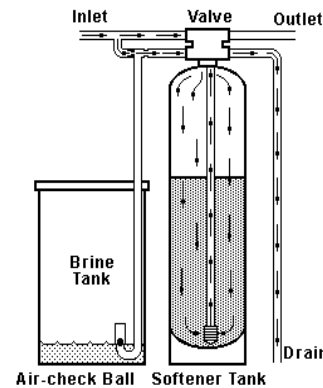
PROCESS CYCLE



1

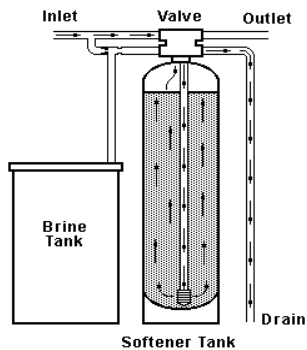
SERVICE CYCLE –

Converts hard water to soft water



4

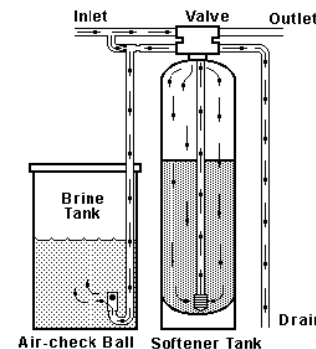
A SLOW RINSE –
ensures efficient
charging of softening
media



2

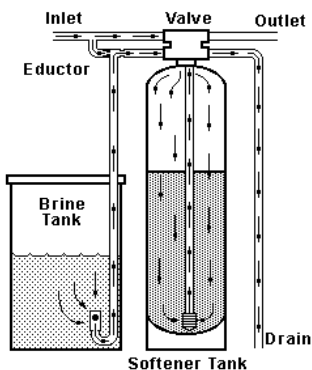
BACKWASH CYCLE –

Cleans the softener
media completely of
mud and debris that
comes from inlet water
during service



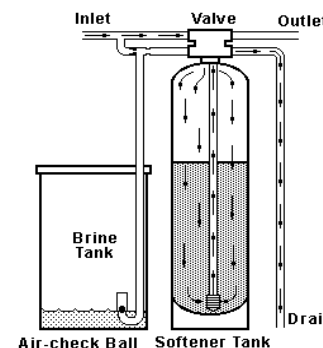
5

FILL CYCLE – fills water
in brine tank to prepare
brine for next recharge



3

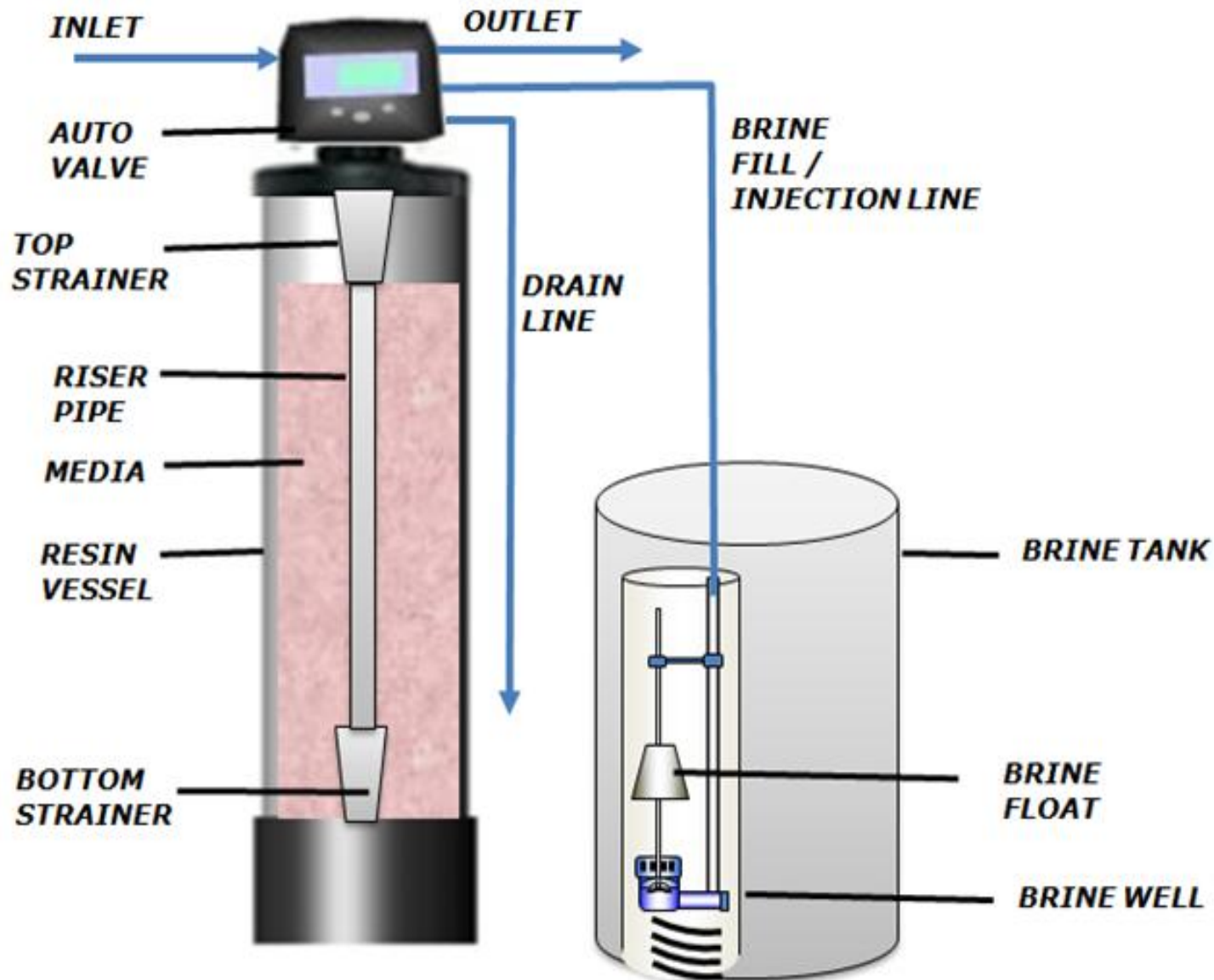
In the **BRINE INJECTION
CYCEL** the softener will
be recharged with
common salt



6

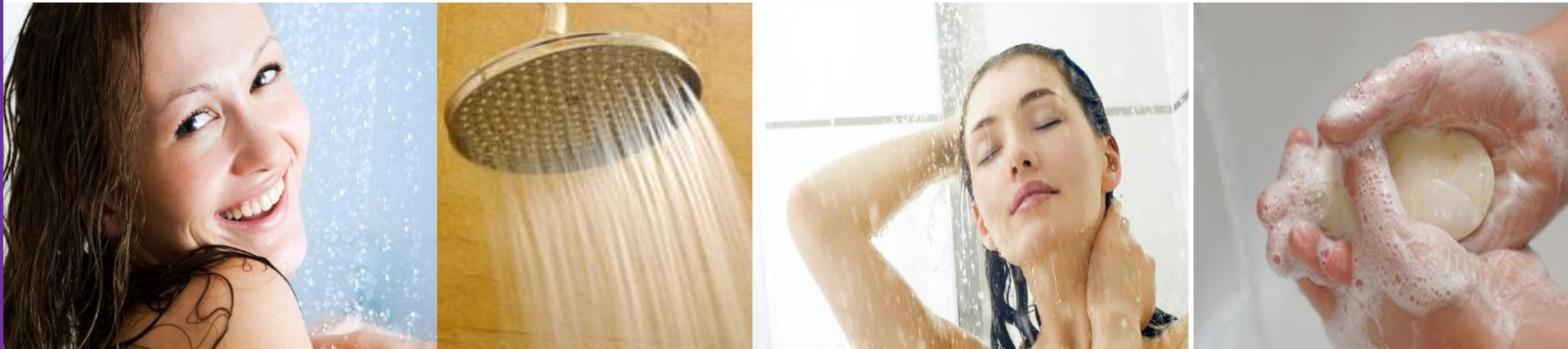
FAST RINSE – cycle
ensures that the
softener is cleared of all
salts and set for
softening once again

COMPONENT IDENTIFICATION



BENEFITS

- Softens your Skin and hair.
- Get the purest form of soft water, reduce hair loss and stop skin ailments.
- Reduce plumbing problems with scale deposition on bathroom fittings
- Reduces Soap and Shampoo consumption, as soft water produces more lather



BENEFITS

- Reduces the washing time and effort.
- Reduces the life of clothing (by almost 1/3rd) and wears out linen at twice the normal rate
- Increase the life span of expensive bathroom appliances
- No stained on clothes making them last longer
- Prevents Fabrics from loosing their natural look and feel



BENEFITS

- Reduces the washing time and effort.
- Retains shine on utensils for longer
- Avoid corrosion / stain forming on utensils
- Resistance to corrosion
- Reduce gas consumption
- Gives good taste to food & beverages



Now Introducing.....



**Getting soft water
now gets more easier with.....**



Automatic Softeners – 3AS & 6AS



Model 3AS
Model 6AS

- In-built digital monitoring system
- Fully Automatic
- Dependable
- Efficient Water Softening System
- Powerful
- Reliable User-Friendly
- Electronic Monitor for water treatment functions
- Ease for life



SPECIAL FEATURES



- Prevents hard water in output line during recharging
- Automatically adjusts the recharging time to suit your changing water usage
- 12-volt safe voltage operation
- Corrosion-resistant and low maintenance control valve body
- Corrosion-proof tanks for longer life ; all internal components are lead-free
- Pre-fill the salt tank with softened water only for better output
- Double backwash option for optimizing recharging and cleaning
- Permanent memory backup of all programmed settings

FEATURES



The Wholesome Zero B Auto Softener that **THINKS** and **WORKS** for you

- Zero B Auto Soft incorporate the proven technique of counter flow regeneration pioneered by Ion Exchange (India) Ltd.
- This technique is ideally suited to treat water with high hardness. The flow of water and the flow of brine (Salt Solution), which is used for regeneration, are opposite to each other during operation
- Ion Exchange new food grade Purple Soft Resin in sodium form is used to exchange sodium ions for hardness forming calcium & magnesium and thus produce soft water
- This wonder technology has the ability to **Thinks** and **Work** for you
- The all new Zero B Auto Soft - An automatic water conditioners
- Unlike manual water softeners, Zero B Auto Soft is most time saving, Zero human intervention, more economic, make your life easy

FEATURES



- Now Experience enhanced performance, user friendliness and assured soft water quality
- A robust and reliable automatic valve and a proprietary tamper proof Softening media delivers soft and safe conditioned water
- Food Grade purple soft Resin to prevent entry of spurious and harmful replacement media after its life cycle
- Auto Soft water softener is an ideal equipment for whole household's requirement for soft water at economy rates and is highly profitable
- Softer healthier skin and hair, brighter , cleaner, longer lasting clothes
- Use up to 75% less soap, shampoo, detergent and other cleaning product
- Dramatically reduce your home energy consumption and save up to 48% on your water heating bills
- Enjoy spotless, scale-free dishes, tile, sinks, faucets, bathtubs, showers and appliances.

THINKS

- Monitors water usage and adjusts to your changing needs
- Stops the softening cycle when there is no inlet water
- Stops hard water to your usage tank during recharging
- Communicates and prioritizes wash cycles with adjacent filter

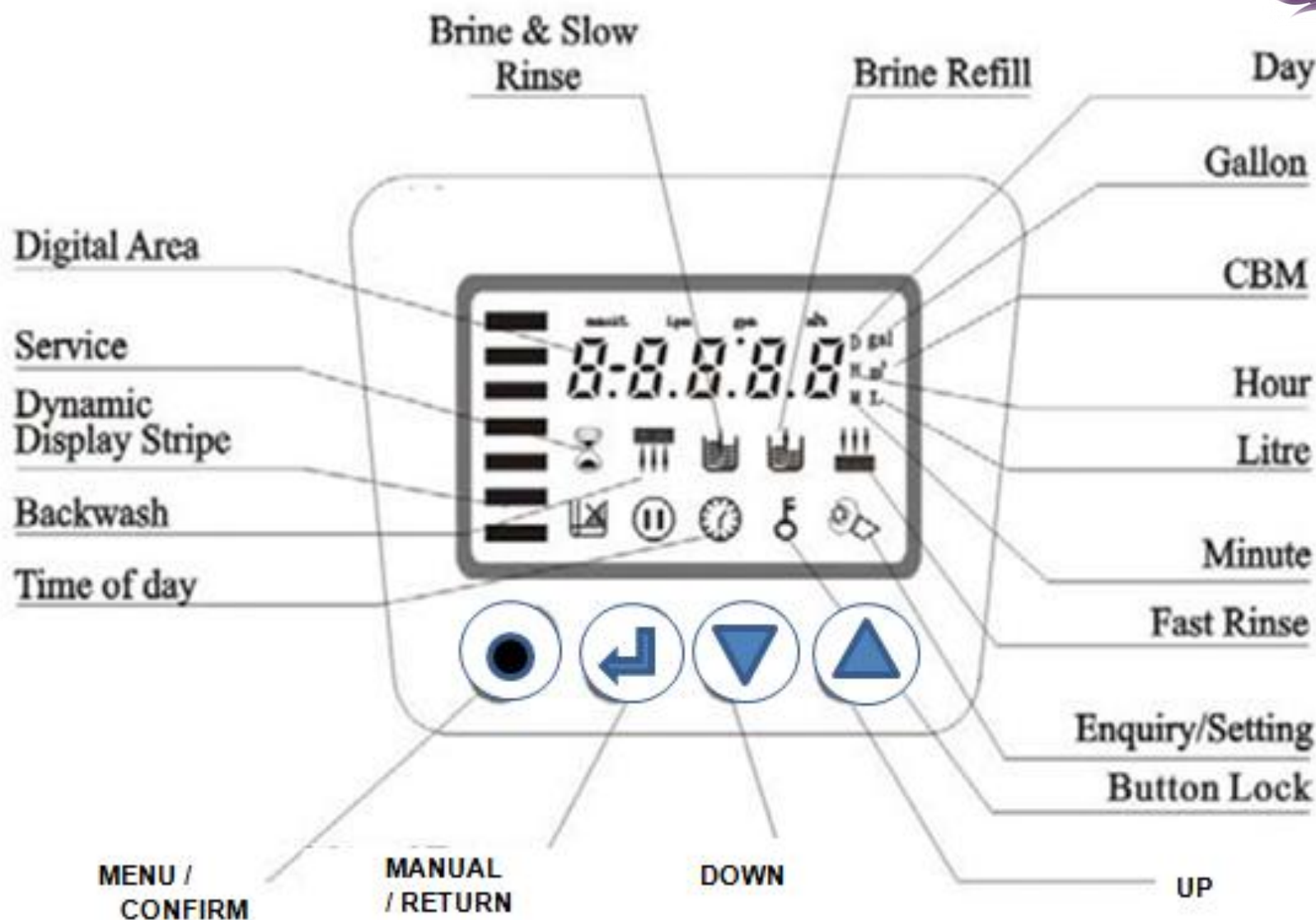
WORKS

- Works through its powerful cycles to consistently deliver soft water
- Recharge the softener automatically or at your will
- Displays remaining soft water, flow rate, process cycle and regeneration set time

PROCESS CYCLE

- Softening cycle converts hard water to soft water
- Backwash cycle cleans the softener media completely of mud and other debris that comes from inlet water
- Regeneration recharges the softener with common salt
- Slow rinse ensures efficient charging
- Fill cycle fills only soft water in brine tank for next recharge
- Fast rinse ensures that the softener is all set for softening once again





The Unique Display Screen



8.-8,88,8

Digital display – this will show the set programs; After some time the valve will display the following in sequence

- Remaining output of the softener
- Flow rate of treated water
- Real time
- Set Regeneration time

The unique display screen communicates the status of the Zero B Auto Soft



Service – Blue light will be ON till the service process



Back Wash – Red color indication will glow



Brine Tank Suction / Slow Rinse



Brine Refill



Fast Rinse



Green Bar graph will be activate during service cycle, & it indicates that the auto valve is in service mode or softening mode



Blue watch indicated the actual time - IST



Green color key lock indicates the all the button are lock, to unlock press up & down key for 3 sec at a time



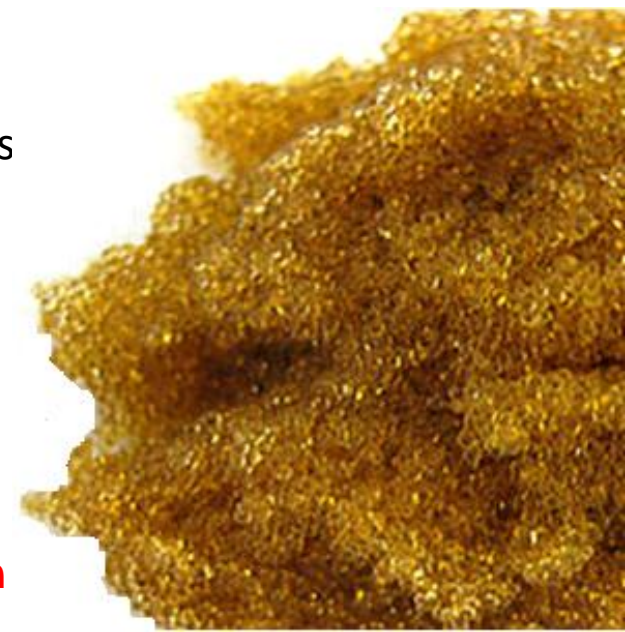
The green color spanner gets activates during setting up program

Resin Media Used In Softener



- Softening Ion exchange resins are widely used in the industrial, commercial as well as in residential hard water softening applications
- These Softening resins, an Ion exchange based softening process are well accepted as the true softening process for removal of hardness causing elements in water
- But the dark side of this popularity is that there is a notorious parallel industry that sells re-processed resins that are either contaminated, broken/powder media and only partially effective resin.
- The lower cost of this resin becomes a quick attraction for replacements by Users, Dealers and freelance service operators
- Visually it is difficult to identify the adulteration levels also all softener resin appear as a yellow brown colored media.

Commonly used softener Resin



Exceptional Purple Resin



- The Resin media is specifically purple colored to classify it as a genuine food grade resin
- Purple coloured softener resin will not be available for recycling
- The ZR NaF resin is a softener resin meant for drinking water application as it does not leach out harmful elements in water

ZR Naf (Purple Soft Resin)	Industrial resin (Yellow / Brown colour)
This new branded packaging in a white HDPE polybag differs from the normal PP (Polypropylene) gunny bag or PP woven sacks	Users can identify this branded resin against a conventional Industrial softener resin bag
The resin media is specifically purple coloured to classify it as a genuine food grade resin	The normal industrial grade resin is yellow brown coloured.
Purple coloured softener resin will not be available for recycling	Industrial resin can be recycled and resold as new resin bag
The ZR NaF resin is a softener resin meant for drinking water application as it does not leach out harmful elements in water	Industrial grade and spuriously re-cycled resins release harmful chemicals that are not removable by an ordinary water purifier when processed for drinking.



TECHNICAL SPECIFICATION



Model	3AS	6AS
Flow Rates Upto	3.0 m3/hours	6.0 m3/1.5hours
Output / Regeneration (m3) Based on Feed Water Hardness 200PPM CaCO3	11 @< 50ppm Hardness	22 @< 50ppm Hardness
Purple Resin Quantity (liters) ZR NaF	45	90
Coarse Silex (kg)	30	40
Cabinet Salt Capacity in kgs	100	100
Salt Per Recharge in kgs	7	14
Process Valve	Fully Automatic Programmable	Fully Automatic Programmable
Softener Vessels	Composite filament wound Resin vessel & HDPE brine tank	Composite filament wound Resin vessel & HDPE brine tank
Vessel Size	13" dia. * 54" Height, 2.5" Top Opening	14" dia. * 65" Height, 4" Top Opening
Regeneration Pump	Self priming pump (with inbuilt NRV)	Self priming pump (with inbuilt NRV)
Installation Footprint	4 x 5 sq. ft.	4 x 5 sq. ft.
Electric Supply Requirements	230VAC, 6Amp = 2 Points Electric	230VAC, 6Amp = 2 Points Electric

Comparison between Manual Softener and Auto Softener



- It required operators and attention to recharge
- Softener may recharge by operator before its full output, hence waste of capacity and salt
- Late recharge will result in hard water output and gradual loss of resin capacity



- Not required any operator as all functions are automatic
- Because of automatic function it shows the time of regeneration which saves capacity and use of salts
- Due to timely recharge resin remains fresh and charged

