

# Cleaning Evaporator with Greenex R&S F1

Dec, 2014



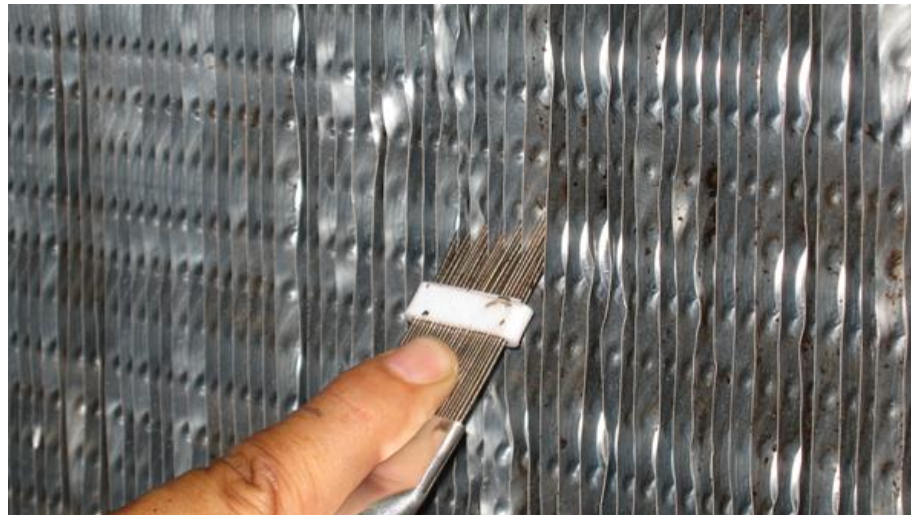
# Clean Step 1.

- The Evaporator is out side factory and lot of dirt and dust stuck on fin surface of evaporator; follow this step
- 1.use Greenex R & S F 1 diluted with water 10 % spray on fin coil with high pressure water jet (as attach )



## Step 2.

Pattern of water from spray nozzle must be wide and near the area around 2 inch and use angle 45 degree (as photo)



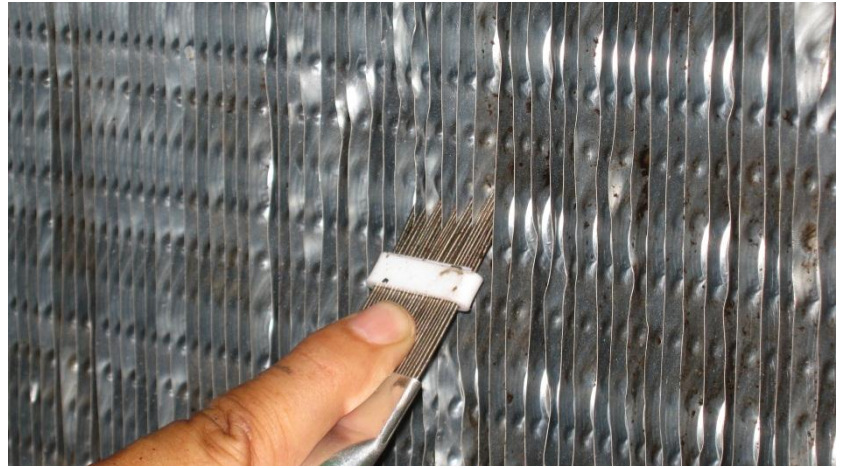
## Step 3-4

- 3. spray solution all over the fin coil start from top to down and top to down do slowly( leave the product penetrate dust , dirt layer )until thoroughly all the area
- 4. used fin coil comb to manage fin fold down and clean ( as photo)



## Step 5-7

- 5. Back to start point wash of with water by the same spray machine do slowly from top to down and top to down by sequence thoroughly the area
- 6. used fin coil comb to manage fin fold down
- 7. let the evaporator air dry



# Greenex R&S F1



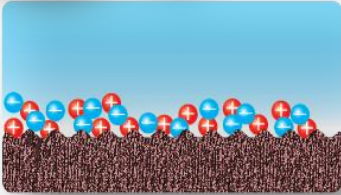
- High performance to take out scale from tube
- Made from Herb
- RoSH approve
- Biodegradable

- No Corrosive on copper, steel and seal.
- Safe for operators
- Safe for Copper and Steel Tube
- Longer Life of chiller
- Environmental Friendly
- Save Operation Cost

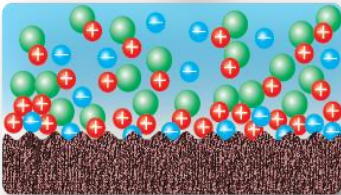


## PRINCIPLES OF SCALE FORMATION & SOLVING WITH GREENEX™ CSD

Scale is a natural phenomenon caused by the crystallization of ionized mineral dissolved in water, which may be classified into 2 groups according to their polar nature:



Cation particles which are positively charged including:  
Calcium ( $\text{Ca}^{2+}$ )  
Magnesium ( $\text{Mg}^{2+}$ )



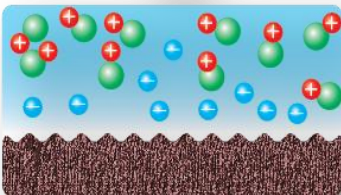
Anion particles which are negatively charged including:  
Chloride ( $\text{Cl}^-$ )  
Sulfate ( $\text{SO}_4^{2-}$ )  
Carbonate ( $\text{CO}_3^{2-}$ )  
Bicarbonate ( $\text{HCO}_3^-$ )



These dissolved mineral particles as they contain different charges, have a tendency to attract each other, for example:

- Calcium/Magnesium Carbonate
- Calcium/Magnesium Bicarbonate
- Calcium/ Magnesium Sulfate
- Calcium/ Magnesium Chloride

These dissolved minerals are a major and difficult problem in cooling systems. They may form hard scale on the walls within the system, especially where temperature changes may occur, such as the heat exchanging units.



### Solving Scale Problem with Greenex™ CSD

The principles in solving the problem of scale formation by using Greenex products are based on controlling the scale formation by keeping the dissolved mineral suspended in solution. By binding with the cation particles, the 2 ionic particles are kept in separation and dissolved. As the result, scaling will less likely occur. Also the products have the ability to dissolve old scale by utilizing organic acids, scale that had already formed within the system will soften and may be cleaned or flushed off easily.

