



BE ALL YOU CAN BE

(UNLESS YOU ARE USING HARD WATER - THEN YOU ARE ONLY RUNNING AT 80%)

Soft water will give the professional cleaner some important advantages:

1. Protect your equipment.
2. Save on chemical usage.
3. Allow you to do a better, professional cleaning job.

Here are some questions asked by professional carpet cleaners:

What is hard water and how do I know if I need a Water Softener?

Hard water is any water that contains minerals such as Calcium, Magnesium, and Iron. These minerals "tie up" detergent molecules and make them less effective for cleaning. More detergent (surfactant, alkaline builders, etc) is needed when cleaning with hard water. These minerals also precipitate out and attach to the interiors of heaters and pressure lines on your equipment. This will cause inefficiency for heating the water both with heat exchangers and fuel fired systems. It will also cause premature wear and damage to the equipment.

A major manufacturer of truck mount carpet cleaning machines makes the use of water softeners mandatory to protect the warranty. They state: "Our increased use of exhaust gas heat exchangers requires us to reiterate our position concerning water softeners and the subsequent invalidation of machine warranty claims due to hard water and/or chemical deposits. Any damages resulting from hard water or chemical deposits are considered abuse and/or neglect and will not be covered." The enclosed map will indicate what the water hardness may be in your area. Any area with 3.5 grains per gallon or harder should strongly consider using a water softener. A telephone call to your local water company will usually give you the hardness level of water in your area.

How do water softeners work?

Most water softening equipment built today works on the ion exchange principle in the removal of hardness minerals and certain other contaminants from raw water. The equipment contains a bed of softening resin

material through which the raw, untreated water flows. As the water passes through this material, the hardness minerals such as Calcium and Magnesium, attach themselves to the resin. At the same time sodium previously affixed to the softening resin is released into the water. This ion exchange process, as chemists call it, occurs literally billions of times during the softening process. Eventually so much hardness collects on the resin material that temporarily the unit can no longer soften water. At this point it is considered "exhausted." Water passing through a unit in this "exhausted" condition would remain hard. Regeneration or recharging is now necessary. To recharge the softening material, it must be rinsed with a rich brine (salt) solution. This washes out the hardness and replaces it with sodium and once again the renewed softening resin is ready to remove hardness from water.

Most professional cleaners place the softeners in a permanent position in the van. The water is passed through the softener before going into the machine or water tanks. Most softeners can be regenerated without removal from the van.

How often do I have to regenerate?

This will depend on the degree of water hardness in your area and the amount of water you normally use. The average carpet cleaner, running a truck mount full time with one wand will use approximately 5,000 gallons a month. If the water hardness is 7 grains per gallon and the softener capacity at 40,000 grains then regeneration once a month is sufficient.

HYDRO-SOFT WATER SOFTENER RATED AT 40,000 GRAINS

Hardness of water in grains per gal.	Gallons of soft water between regenerations
5	8,000
10	4,000
15	2,666
20	2,000
25	1,600
50	800

Bottom line - Do I really need a softener when I can just turn up my "soap" and get all the cleaning I need?

Here are the facts, you decide

1. Save money - This is accomplished in several ways.

A. Chemicals - Depending on your water hardness level, you will be able to cut chemical usage by 10 to 50% while improving your quality of cleaning. The cost of regenerations is just pennies a month in salt costs.

B. Equipment - Whether you have direct fuel source or heat your water with exhaust heat exchangers, soft water will eliminate scale in the hoses, pipes and coils, giving more efficient heat transfer and a savings on fuel. Mineral and chemical scale are harmful to pumps and other moving parts of your cleaning systems. Soft water will help you avoid costly down time and expensive repairs.

C. Time - Soft water helps the chemicals and equipment do a better job, making your job easier and faster. That's money in your pocket.

2. Clean Better - It now becomes obvious that with our cleaning chemicals now being free to work on the soil in the carpet rather than the "soil" in the water, we have more power to "Be the best we can be."

All professional cleaners who are educated realize that hot water cleans best. The less scale there is in your equipment, the hotter the water will be at the cleaning wand.