

Santa Monica Cleaner Pleased With Carbon Dioxide Technology

Royal Cleaners has been located in Santa Monica, California since 1948. In 2003, the owner, Bobby Smerling, moved to a new location in the same area and installed a 60 pound carbon dioxide machine and a carbon dioxide storage tank. The carbon dioxide machine replaced a 55 pound perchloroethylene (PERC) machine which was used to clean 104,000 pounds of garments annually. At this stage, the shop has increased its cleaning volume substantially, to 155,000 pounds of garments per year.



"I made the right decision," says Mr. Smerling. Royal received a grant from the South Coast Air Quality Management District to purchase the new system. "The PERC phaseout in California no longer concerns me because I put in the best alternative." Mr. Smerling plans to open a second plant with a carbon dioxide and wet cleaning machine in the west Los Angeles area in the next year or so.

The carbon dioxide machine operates at 700 to 900 pounds per square inch pressure to keep the carbon dioxide liquified. "The cycle time of my machine is only 35 minutes which is less than the cycle time of the old PERC machine,"





says Mr. Smerling. "When we moved, we didn't have room for a large machine and I decided to purchase a Sailstar system," he says. "It took us only about two months to learn the new features and procedures. The finishing is about the same as it was with PERC but there is more spotting now. We can process delicate garments much more easily with carbon dioxide."

"My customers are upscale," says Mr. Smerling. "They are concerned about health and the environment. The carbon dioxide process has health and environmental benefits, and the costs of using the system are lower than they were with PERC even though I had to buy a new machine."

Annualized Cost Comparison for Royal Cleaners in Santa Monica

	PERC	Carbon Dioxide
Annualized Capital Cost	-	\$11,200
Solvent Cost	\$969	\$9,600
Detergent Cost	\$1,937	\$2,704
Electricity Cost	\$7,152	\$10,000
Gas Cost	\$3,279	-
Spotting Labor Cost	\$12,087	\$47,000
Finishing Labor Cost	\$145,043	\$97,344
Maintenance Labor Cost	\$1,007	-
Maintenance Equipment Cost	\$2,503	\$200
Compliance Cost	\$3,487	-
Waste Disposal Cost	\$3,278	\$150
Total Cost	\$180,742	\$178,198