

Are consumers concerned ?

What percent of drivers would prefer clean air inside their vehicles, air that is free of pollutants, contaminants and odors ? What percentage of passengers ?

Everyone who spends time in a vehicle would prefer the cleanest cabin air possible — right? And yet, interestingly enough, although the technology exists to offer pollution- and odorfree vehicle interiors, only about 40 percent of North American vehicles contain cabin air filtration systems. **Even more interesting are the results of a recent survey that reveals consumers are willing to pay extra for it.**

The survey, conducted by [The Dohring Co.](#), one of North America's largest providers of market research to the retail automotive community, found that **95 percent of respondents are concerned about air pollutants within their vehicle.** (The Dohring Co. conducted this consumer study online among a randomly selected sample of 1,000 Americans from its national member base. The margin of error for the sample is +/- three percent.) Other results of the study include:

- 91 percent of respondents would like to see cabin air filters offered as a standard feature by vehicle manufacturers;
- 83 percent of respondents said they must have or would prefer that their next vehicle comes equipped with a cabin air filter;
- 85 percent of respondents are concerned about the health effects of exhaust gases and vapors while driving; and almost half of the **respondents are concerned about pollens, allergens, germs, dust particles, odors and smog**
- 82 percent of the respondents said they would be willing to pay extra for the added value of having a cabin air filter.

“People are taking this issue seriously because it is serious,” says Peter Adam, vice president and general manager, Freudenberg Nonwovens, North American Filtration Division, the company that sponsored the survey.

All-in-all, there are about six to ten suppliers currently offering some type of cabin air filtration system to the automotive market. Today's cabin air filters clean the air entering the passenger cabin of a vehicle through the air conditioning system, reducing certain particulate contaminants that are associated with health concerns such as asthma, shortness of breath, lung tissue damage, cancer, bronchitis, emphysema and influenza.

North America Lags Behind Europe

Saab was the first OEM to introduce a cabin air filter (targeting primarily the removal of pollen and dust) in its 1979 Saab 900 model. BMW, Mazda and Ford Europe incorporated cabin air filtration in the late 1980s, while Volvo debuted cabin air filtration in 1993 (see sidebar). Today, cabin air filtration in Europe is practically standard; about nine out of ten vehicles manufactured in Europe are introduced with some type of cabin air filtration. In North America, it's about four out of ten. In Asia, it depends on the country: cabin air filtration is huge in Japan and Korea (about eight out of ten vehicles) in Japan, all new Toyotas contain cabin air filtration while it's just getting started in lesser developed countries like China and Indonesia.

There are a couple of logical reasons that the U.S. lags behind Europe in air filtration market penetration. “European suppliers and OEMs started in the cabin air filtration business about six or seven years earlier than the U.S.,” explains Willie Yung, general manager, micronAir filtration for Freudenberg Nonwovens. “In addition, the last three to four years has seen dramatic cost pressures from North American OEMs, so not too many new vehicle programs were introduced with cabin air filters because OEMs were trying to contain costs.”

Another reason cabin air filtration hasn’t taken off in North America as much as in Europe, Japan and Korea is a lack of consumer awareness. “In the Dohring survey, only about 26 percent of respondents said they knew or thought they knew there was a filter in their vehicle,” says Barry Brewer, product manager, micronAir filtration for Freudenberg Nonwovens. “Awareness is much greater in Europe and developed Asian countries, partly because everyone goes back to the dealer for service. The dealer alerts them to the air filtration system and the need to change the filter. In North America, car buyers often don’t go back to the original dealership for service, so they aren’t always prompted to change their filter. In fact, many car buyers aren’t aware they have a filter, because no one told them when they bought the car.”

In North America, with the recent exception of Lexus and Honda, Brewer and Yung say very few OEMs tout the benefits of cabin air filtration in their advertising. “European and Japanese OEMs are a little more aggressive about promoting their cabin air filtration,” says Yung. “In fact, in Europe there are some significant consumer health standards that specify cabin air filtration in vehicles. These standards in the U.S. are a little bit looser.”

Brewer says North American OEMs are just beginning to consider the opportunity to support vehicle model image differentiation by promoting cabin air health and comfort benefits offered by filters. Dealerships also have the opportunity to increase brand loyalty by pulling car buyers back into the dealerships for annual cabin air filter changes. Air filter installation and regular replacements are also “easy money” for dealerships and quick-lube service companies. Average retail price for a particle filter is \$25-\$35, while combination filters that remove particles as well as gaseous contaminants range from \$50-\$70.

For example, Brewer has a Subaru and a Nissan. In both cases, the cabin air filter was a dealer option. “The hole was already there for the filter, and they charged me about \$50 to put the filter in,” he says. “In Europe, cabin air filters usually come standard.” He cites another example in the Ford Focus, a world platform vehicle for Ford. “The Ford Focus in Europe comes with the filter already in there,” Brewer points out. “Buy a Ford Focus in the U.S., and you have to ask them to put it in there and you pay extra for it.”

“In the Japanese aftermarket, the replacement rate of air filters has been rapidly increasing for the last three years due to car manufacturers’ and suppliers’ educational activities,” says DENSO’s Harada.

“Overall, the cabin air filtration concept is not a difficult one to sell because of the benefits to the consumer,” says Freudenberg’s Yung. “Air filtration also helps to protect many of the vehicle’s components. The only real barrier in North America is for OEMs to realize that the benefits far outweigh the cost and that most consumers are willing to pay extra for it anyway.”

“In every metropolis around the globe, public attention is becoming more and more focused on air quality and the health dangers connected with respirable fine particles,” says Riedel. “That’s one of the reasons we expect the trend to increase toward better air filtration systems in cars.”

“We suppliers also have to continue working on consumer awareness,” Brewer agrees. He says Freudenberg is working on informative articles to post on websites that target people with allergies or respiratory difficulties. “That’s the easy market for this product,” he says. “It is estimated that 50 million people in this country have some type of respiratory problem. If they knew about cabin air filtration technologies, it would be a great selling point. That’s 50-million people buying a lot of specialty products to make their lives a little easier, and this one is an easy choice if they just knew it was there.”

by Carla Kalogeridis, Filter Manufacturers Council