Q & A With Lee Morgan, President, Camfil Farr APC

This article first appeared in the November/December 2010 issue of *IMPO*.

Lee Morgan is president of Camfil Farr Air Pollution Control (APC). He holds a Bachelor of Science degree in mechanical engineering from South Dakota State University in Brookings and is the Research Subcommittee Chairman of ASHRAE TC 5.4, Industrial Process Air Cleaning.

Morgan joined Camfil Farr APC in 1997 and has nearly 20 years of experience in the dust collection industry encompassing virtually every aspect of applications, equipment design and development, marketing, sales, and customer service.

*Camfil Farr APC (*www.farrapc.com*) is a global manufacturer of dust and fume collection equipment and is part of Camfil Farr, the largest air filter manufacturer in the world. Camfil Farr APC won this year's* IMPO*vation Award for its Gold Series High Vacuum (GSHV) pneumatic receiver.*

***IMPO*: What customer and industry issues were you attempting to address with the design and manufacture of this product? How have customers responded to the Gold Series High Vacuum pneumatic receiver?**

Morgan: It hit me a while back: I run a dust collector company, and it’s a business of equipment that nobody wants to buy. I had to come to the realization that nobody wants to buy my product! It’s a dust collector; it doesn’t make any product for them. When a customer goes to buy a new laser cutter to cut product, they get excited about it. When it comes to buying a dust collector, they want the cheapest thing they can get their hands on… It’s been a battle we’ve had.

About ten years ago, I sat back and looked at our industry. An article written in *Powder Bulk Engineering* by a dust collector consultant really hit me: He estimated that at least 90 percent of people who owned a dust collector hated it. Well why is that? It comes back to that drive to buy the cheapest piece of junk you can get your hands on. They didn’t see the value in owning a better dust collector. So we decided to design a better dust collector. The Gold Series started out as “the ultimate dust collector project” and we went around and interviewed people about it. They said ‘I want the filters to be easier to change and they need to last longer. All my dust collectors are thin gauge wimpy things where the sides move in and out when it pulses. Can you make me something heavier duty?’ All these things came together and we made a modular dust collector, bolted together, and made it easier to change the filters. We made it all cam-lock action—no threads involved—the doors are easier to open and there are cam-lock bars to change the filters… we removed all the difficulty in changing the filters and then made it heavier steel and powder

coated it all.

Well, we came out with all of this wonderful stuff, but now it was more expensive, so we had to really go out to the market and tell them this was better: We put it on a trailer and took it to people… We had 50 GS4s (four cartridge units) around the country. Once they could touch it and feel it, they went 'oh—I see.' We were a $5 million dust collection company in 2000 and today we're a $30 million dust collection company—all because of the Gold Series, and finally giving the customer something better. Once they got one, they wanted another one. We don't lose a customer once they get one Gold Series. The maintenance people say 'This one actually works and we like it!'

So that's where we're at with the gold series. It's a square dust collector that we've had out for ten years. So then, the pneumatic feed and high vac customers asked if we could take the easy-to-change Gold Series Gold Cone Filters and put them in a high vacuum product. So our engineers went to work, and voila: we had the Gold Series High Vacuum. So it's all the fundamentals of our Gold Cone cartridge that give us long filter life, combined with the cam-lock action of changing the filters, to get them easier to slide out so you don't have to climb inside the dust collector and unbolt stuff. That's the market that the Gold Series High Vacuum is addressing: pneumatic conveying applications where they're conveying actual product (like out of rail car, sucking out sugar or flour or fume silica) into a pneumatic receiver, and that's very high pressures. Or it's for a central vac application where they're in a pharmaceutical facility, they'll have a Gold Series Low Vacuum for just general dust collection, and then a high vac round unit connected to a bunch of ports where they can have a vacuum wand sucking up a pile of dust that's spilled on the floor.

IMPO: How does Camfil Farr APC see innovation as a priority in the way it operates? How does R&D/product development factor into its overall business model?

Morgan: We think it's highly important. The dust collection industry had been highly stagnant, with not a lot of innovation, due to this history of people buying the cheapest thing they could get their hands on. We felt that adding innovation, along with long life, high efficiency, and easy-to-change filters, would make it something that people would want to buy. So that's what we've done. We're constantly trying to update and upgrade. We've got a full R&D lab here with guys constantly playing with new medias, and what we call 'pleat spacing.' The biggest innovation we've come out with in the last few years is a thing called 'Hemi pleat' where there is a bead separator so the pleats don't touch. Efficiencies have gone up in our whole industry. That's been a good thing to see. Better filtration medias have come out—where we can get virtually zero emissions out of these dust collectors these days.

IMPO: How do you encourage potential customers to view this as an investment rather than an expenditure?

Morgan: Basically, if they do dust collection right, they won't know it exists. When the management is hearing about the dust collector after it's installed, it's always

because there is a problem. If the dust collector is put in and doing it's job, it's in the back corner or a maintenance room, and everybody forgets about it. If it does it's job, the air is clean, it's sucking away the dust, and it's pulsing the dust off the filters, down into a collection system. The only time anyone is talking about the dust collector is when it's not sucking, dust is in the air, it's blowing away the dust—something is going wrong. We like it when everything is working right and nobody is complaining. That's our goal. Then, when it is time to change filters, it is a nice easy process where the maintenance people aren't complaining about how awful it is. The goal should be no confined space entry—where you don't ever have to enter the dust collector to change the filters. We have that and some of our competitors do, but the big giant old bag houses that are still sold today: you still have to go in with all of the confined space entry permits and monitoring for gas—and there are systems today where you don't have to do that. That's where we'd like to see the whole industry.

IMPO: So how do you get at those customers who are still using those really old school bag house operations?

Morgan: Some of it is price-driven. There are still markets which are still going to buy the cheapest thing; a small grain elevator doesn't have a lot of money. But many customers do it right. They think more in terms of maintaining the plant, and not having their employees doing something they shouldn't be. They'll spend the money on high efficiency, proper dust collection. A lot of it has to do with the size of the dust. The more it's a smoke—or a difficult particle—the more you're going to have to buy high efficiency filtration. Some things like wood and agricultural dust, they don't need as high end of filters to stop it and meet codes. So some of them are switching to high efficiency filtration just to save energy. The difference is they want to recirculate the air back in the building, so they buy something nicer because there's a payback. There has to be ROI on energy savings, or if they see that cost of maintaining is expensive. Or, downtime: some bigger factories can't afford a minute of downtime. We do a lot of work in mining, and to shut a mine down can cost a million bucks a day, or more, so it has to work. 25 years ago the cartridge filter and pleated high efficiency filtration didn't exist. It was just coming out and everything was bag houses and shakers. Today I'd say 70 percent of the market is high efficiency filtration, with 30 percent of the market being what I'd call low efficiency filtration. I think it's going to keep growing in the high efficiency direction, especially as regulations tighten on emissions and more people want to re-circulate the air to save energy. Another big driving factor for a heavier duty box for the dust collector is explosion concerns. The box has to have the structural integrity to suppress or force the explosion out the explosion vent. The whole point is to save lives.

IMPO: What do you think your company does better than anybody else?

Morgan: One thing that nobody can touch is: we will ship dust collectors in one week, while giving the customer what they want; nobody else can do that. We can custom design a dust collector, the way you want it, and still ship it in one week. We are the most maintenance-friendly dust collector company in the business—so the users actually like owning it. We're also the most customer-friendly company out

there… the fact that we have the ability to ship in a week gets a lot of customers out of a jam. It's amazing how often people will get a piece of process machinery—a grinder or a laser table or something—and turn it on, and smoke starts coming out of it. And then they remember—'Oh my gosh, we never bought the dust collector that goes with this thing!' And we can take care of them right away, and we never charge a premium for it. I think we do the best job for the customer. We're in a business where it's pretty under the radar. People don't wake up in the morning thinking 'I need to buy a dust collector today.' But we try to make sure that when they do get it, they're going to be happy with it.