

VOLKSWAGEN DEALERSHIP FLAUNTS WASTE-OIL-FIRED RADIANT HEATING SYSTEM

Remember Volkswagen's "Fahrvergnügen" ad campaign? Translated, it means "driving with zeal." Today, the automaker insists that the same sense of excitement happen in the showroom, and has invested with zeal to make it happen.

"We want our new showrooms to be gems, a thrill for buyers and places of exquisite comfort," said Frank Maguire, vice president of sales and marketing for Volkswagen of America.

One Volkswagen dealership in York, Pa., when planning construction of its new dealership, took the "exquisite comfort" directive seriously. A vast radiant heat system provides comfort for buyers and employees alike, even (and especially) in the auto maintenance bays. The system extends outdoors, as well, so that sidewalks and entryways remain free of snow and ice all winter long. And for the ultimate in fuel

efficiency, even better than a VW Passat, they get the heat at no cost by burning used motor oils and hydraulic fluid.

York VW's new facility is one of the newest "Marketplace" dealerships subsidized by substantial investment from Volkswagen. Today, more than 200 Marketplaces have opened nationwide, with an expected 200 more to be operational by mid-2005.

In keeping with its hip image, Volkswagen designed the Marketplace dealerships to provide customers with a uniquely European setting, upscale showrooms, Internet access stations and colorful play areas for kids. The newly constructed, 20,000-square-foot York VW facility, designed by Volkswagen's architectural firm, is purely cool. It's an innovative and wide-open retail environment boldly accentuated by glass and metal and volumes of natural light.

SHOWROOM COMFORT

"But it's in the winter that we see the greatest transformation," said Chris Bernlohr, general manager of York Volkswagen, Inc. "Customers are immediately aware of the unusual comfort they have in a facility with whole walls of glass, just the opposite of what you'd expect."

York VW's commitment to comfort extends beyond the public areas and offices and into the extensive, 24-bay service area, a place of work for mechanics that's now as comfortable as the showroom.

"The York VW facility was one of several new VW Marketplace dealerships we've done in the region recently with waste-oil heating systems," said Jeff Dale, president of Willow Grove, Pabased A.D. Supplies, a supply and installation firm specializing in automotive

and industrial wash-water recycling, compressed air and lubrication systems, hydraulic lifts and waste-oil-fired hydronic and forced-air heating equipment.

A.D. Supplies will typically do 15 to 20 dealership facility installations a year, with 75 percent of those requesting elevated waste-oil furnaces and the remaining systems going to hydronic, with some water-to-air heat exchangers and some radiant.

"We've been involved in the waste-oil heater business for 23 years," said Bill Shapcott, Dale's partner in the business. "We specialize in fleet garage, truck and auto dealer facility installations within the Pennsylvania, New Jersey, Maryland and Delaware region."

York VW managers took several additional steps on their own to insure the comfort of employees and cus-

tomers, and to reap the rewards of an investment in a "heat-for-free" concept that performed remarkably well during its first winter season in 2003-04. Clean Burn waste-oil boilers are coupled with an extensive layout of Watts Radiant Onix EPDM tubing to provide heat in the most needed space of all, a state-of-the-art service area where mechanics are greeted on any subzero day with a heat-ed concrete floor. The fuel they burn is a random mix of used motor oils, crank case oil, transmission oil and hydraulic fluid that would otherwise cost them substantially to get rid of.

"This is typical of our Clean Burn installations," said Dale. "York VW's use of radiant heat maximizes their level of comfort and efficiency."

As an indication of how successful their recipe is, A.D. Supplies sells and installs more than 20 miles of Watts Radiant Onix tubing, and about 200 Clean Burn boilers and furnaces each year.

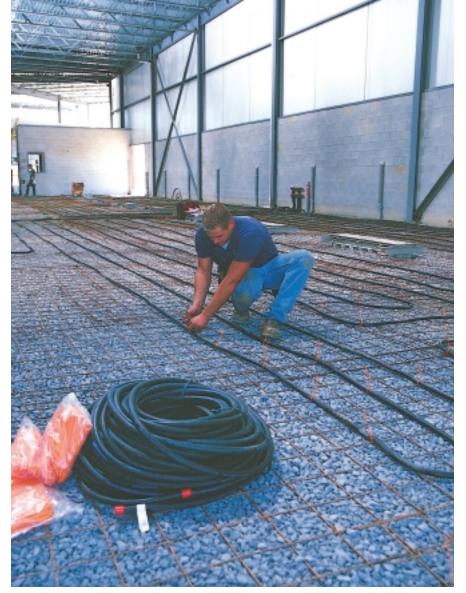
"We prefer Onix tubing for most of our radiant heat work because of its flexibility and durability on the job site, and resistance to ultraviolet light when exposed," said Dale. "It's the only tubing we use in garage areas because of its elongation characteristics. Not only does it take job-site abuse, but it stands up to concrete cracking and shifting slabs like no other tubing. It has ten times greater elongation than PEX tubing."

"There's also a labor aspect to it," said Shapcott. "Two of our guys can put down 2,000 to 3,000 lineal feet of Onix tubing in a day because of its incredible flexibility. That includes laying the pipe, strapping it down and making it fully ready for a concrete pour."

A. D. Supplies installed 30,000 lineal feet of tubing at the York VW facility.

According to Dale, the combination of Onix and Clean Burn makes a big difference in defining "who A.D. Supplies is" when selling against competitors. And, he added, it's rare that they find themselves in tightly competitive situations.

"Our relationship with R. D. Bitzer, manufacturer's rep firm for Watts Radiant and Bell & Gossett, has been a huge asset, too," said Dale. "For more





than 10 years, they've helped us with system designs and trouble-shooting, and training and education for new products, technology and installation techniques."

R. D. Bitzer, based in Bensalem, Pa., has 24 professionals who, said Dale, "know the meaning of value-added."

A DIFFERENT BEAST

Garage bays present many unique challenges, many of which are uniquely suited to radiant heat. Consider this pointcounterpoint:

- Long hours on a cold cement slab aren't the best for employee morale. Statistics show that on a warm workshop slab, winter sick days dip substantially and productivity is improved.
- Garage doors open and, in the dead of winter, can flush-out warm air in a hurry, especially if doors at opposite ends open simultaneously. With radiant heat, recovery time is almost immediate
- Ice and snow cause a variety of problems for garages: maintenance, snow removal and customer safety. With snow-melted walkways and garage entry areas, comfort, safety and efficiency are enhanced.

- In a garage, a cold floor emulsifies oils, making it tougher and more expensive to recycle wash water. A dry, warm floor permits easy removal of oils, washed quickly into wash-water recycling systems.
- Heating the air is inefficient and uncomfortable. Heating the floor puts the warmth where you want it and costs less to operate. And, with York VW's waste-oil heat system, fuel costs are negligible.
- In service bays, waste oil happens. And it's the facility's responsibility to contain it and pay for its removal. Used for fuel, however, there are no disposal fees and no fuel costs.

"Let's look at a realistic, hypothetical scenario," said Shapcott. "Someone needs to build a 20,000-square-foot dealership facility here in the Northeast. They'd be lucky, with today's fuel oil cost in the \$1 to \$1.25 per gallon range, to heat the place for \$20,000 to \$25,000 year. With a waste-oil-fired system, the owner saves at least \$20,000 off the top, his employees and customers are a lot happier, its better for the environment. The savings quickly pay for the higher front-end cost of installing a waste-oil system with radiant."

ONE-STOP SHOP

"We're unique in the way we approach business," said Dale. "In the auto and truck aftermarket repair business there are very few suppliers who can provide for all the equipment needs of the business and install and service all of it. Our one-stop shop approach is fundamental to our entire operations."

According to Dale, a key change in the repair shop industry happened in the 1980s when the government mandated more environmentally friendly repair shops. Employee comfort and ergonomics, safety procedures and environmental considerations were scrutinized.

"Suddenly, there was intense attention to used oils, dirty wash water, shop and paint solvents, auto and truck exhaust gases and in-ground storage tanks," said Shapcott. "At the time, expertise in these fields was essentially non existent. We began to fill the gap

early in the curve, focusing on used-oil heating systems, wash-water recycling, car wash technology and shop exhaust systems.

"It's no surprise that the percentage of spaces heated with radiant floor technology is much higher in countries with significantly higher energy costs than our own. It's a huge incentive for shop owners who can produce enough used oil to completely heat work areas using floor radiant heating which uses far fewer BTUs, and a whole lot more comfort."

According to Dale, the auto and truck industry is working hard to change the image and reality of the shop environment.

"Our relationship with R. D. Bitzer has helped us to stake out a leadership position in our service area," he said. "Our reputation for solid, long-term relationships, excellent service and reliability, and our focus in this niche position us uniquely." | FON

