

FLEET

Maintenance

Best Practices for Maintenance Management

Friendly Competition

What makes 1,785 Penske technicians compete to be the company's best?

Voltage Drops & Loose Leads
A New Assault on Corrosion
Managing a Bilingual Shop

Ready for Prime Time

What makes so many Penske Truck Leasing technicians vie for top honors in the company's annual Technical Challenge?

How do you get 40 percent or more of your technicians to sign up for a training program? Make the training program a national technician competition, offer company-wide recognition, cash awards and travel, and the chance to solve one of the company's most urgent maintenance issues, then stand back and watch the applications roll in.



That's been the experience of Penske Truck Leasing with their National Technical Challenge. The 2007 event, held this past June in Charlotte, NC, brought in 15 Penske technicians (three winners from each of five regional championships) to compete in two competitions: PM and Vehicle Diagnostics & Troubleshooting.

To make it to the national championships, those 15 competitors (out of a record-breaking field of 1,785 entrants) had to make it through both written and hands-on tests at the branch, district, area and regional levels. "Even the guys who weren't here today all still had to put quite a bit of effort in on their own learning it as they went through each level of the competition," says Bob Douglas, vice president of field maintenance for Penske's Northeast Region. "We had over 40 percent of our population of technicians enroll and sign up, so they competed at some level. That means that all of them put an extra effort in to training to try to get to that level."

"When we started this back in '95, it started as just an area competition," says Bill O'Leary, Penske's vice president of maintenance for the Southeast Region. "Then it gained momentum over the years just by people talking about it."

"It's huge," O'Leary continues. "It takes us four months of the year to get it done. Every technician and every CSR (customer service rep) is eligible to compete. CSRs typically are the guys doing the preventive maintenance, the PM com-

petition. Then we have Tech 3s, 2s and 1s that will participate in the diagnostics and repair."

"We'd like to see 100 percent involvement," Douglas says. "Each year we see an uptick in the enrollment. But some people just don't like tests. We may have some people who are very efficient at doing this, but don't like to get into a competition for whatever reason."

DRIVING FORCE

But for the technicians who aren't afraid of a little competition, the Tech Championship is an unparalleled opportunity for professional and personal development.

"The best thing about this for the technicians is it gives them a little friendly competition, gives them some incentive, gives them some recognition, shows them how important they are, as an integral part of what we do for our customers," says Douglas. "From the corporation's standpoint, it helps reinforce training—it puts a different twist on how you deliver training."

Douglas knows what he's talking about: The two technicians who won the Vehicle Diagnostics & Troubleshooting competition in 2006—Rob Anthony from Allentown-Hoover, PA, and Ed Glaessmann, Jr. from Easton, PA—have actually taken a week's vacation to prepare for this year's event.

"The two of them worked together, studying and going through all of the things that we were

going to cover on this competition," Douglas says with pride. "They took vacation time to work together last November, knowing that we were going to start the competition in the spring."

Not coincidentally, Anthony and Glaessmann won the Vehicle Diagnostics & Troubleshooting competition again this year.

TRAINING BONANZA

That extra effort is the key to the event's success. All across the country, in every Penske maintenance shop, technicians look ahead to the theme of this year's competition, and they start to study... This year, dozens of technicians and like Anthony and Glaessmann put in hours of their own time studying up on air conditioning diagnosis and troubleshooting, because they knew several months ahead of time that this year's test would be about A/C.

"What we're driving at on the diagnostic test is, we look at our costs and see where they're highest," O'Leary explains. "Air conditioning component code is a high cost for us. So, in order to get these 5,000 people out in the field to focus on where to go to get the information, we say, 'Where can we lower our air conditioning costs?'"

Once those 5,000 technicians start to hone their skills on air conditioning maintenance, the company starts to see a reduction in A/C maintenance costs. "This will lower our costs

overall," O'Leary says. "It may be half a point, 3/10ths of a point, but 3/10ths of a point on \$675 million, that's a lot of money."

"That gets everybody's level a little higher in their efficiency and better at making those repairs," says Douglas. "So, as a company, it continues year after year to drive those costs down, because we have fewer repeat repairs, because the guys are more efficient at diagnosing the problems."

And because of the diversity of Penske's fleet, the test topic can be different every year. This year the technicians are faced with International 8600s with bugged A/C system and Cummins ISM engines, but next year they may be dealing with transmission bugs on a Freightliner. "I think it gives you a whole different way to deliver training," says Douglas. "You're not just sitting in a classroom, listening to someone lecture you, then you go out and apply it. It makes the learning a lot more fun."

EVERYDAY CHALLENGES

Because specific high-cost maintenance areas are being addressed, the event must have practical value to the competitors. Even though the competition is, by definition, challenging, the managers who design the tests are careful to choose problems that the technicians are liable to run across on any normal day in the shop.

"What we try to present is a typical complaint coming from a driver," Douglas says. "We have a driver that does his DDIR, he writes it up, and that's the scenario we present to them when they compete: the driver brought this truck in, and this is his complaint. The complaint will say 'The A/C comes on, and then it's cool, then it gets hot or it doesn't work at all.' Through the competition we've done different things on the air conditioning piece, but we're also looking at electrical and engine problems as well, so they're going to look at those three things, which in most fleets I think you'll find that is where they're spending the majority of their diagnostic time."

"So," he says, "they have to listen to what the complaint was, and they get a copy of that and they know, 'Okay, that's no different than what I do every day.' Now, I've got to find out what's causing this to happen, make the repair, clear the fault codes and complete the competition."

52 MILLION

Ken Coots, senior vice president of Maintenance Services, explains that every maintenance episode on every truck that has ever been in the Penske fleet is stored in a massive database. As of today, that database has 52 million data points in it, representing every oil change, every engine overhaul, every tire change that's ever been performed in the company.

"Every one of our vehicles is a profit center, and we have 216,000 vehicles," Coots says. "Out of those 216,000 vehicles, plus the ones we've had before, every one of them has a data point as a repair. All of those repairs are in the system, so we can go back and look at a vehicle that we had 15 years ago, and we can tell you what the oil sample looked like on that vehicle at 30,000 miles, 60,000 miles, whatever. We can track that for viscosity, we can track it for metal wear; we can tell you the dollars that we spent on switches, on air conditioning parts,

everything that we spent on that vehicle from 15 years ago, as well as every truck we own now."

Those 52 million data points determine the topic of the Diagnostics & Troubleshooting competition for the year.

"We'll look at our past history over the past year, and we'll gear the competition to those problem areas," he says.

NEW TWISTS

"The competition as a whole was much harder this year," says Glaessmann, one half of the championship diagnostics team. "Going in you know exactly how many problems you're going to have and exactly how much time you're going to have to solve those problems, but you really don't know what they're going to throw at you, so you have to be prepared for everything, and hope you covered all your bases."

"Pretty much like a typical day in the shop," he adds.

"There's so much you learn throughout the competition," adds Anthony, his teammate. "It amazes me—I didn't think there was that much to know about the things I'm working on. And you can take all that back and share it with the guys you work with. A lot of guys come to me when they have problems, and I'm sure Ed has the same scenario."

Glaessmann appreciates the team aspect of the competition, explaining that "Everybody approaches a job a little differently. So it's good to talk amongst ourselves and see how we would both approach it, and put our ideas together to form one route to go."

PM SMARTS

Across the Charlotte shop, five more Penske technicians compete in the hands-on PM test, searching out and fixing 26 bugs that range from over-filled fluids to loose bolts, from burnt-out lightbulbs to a fast food bag left behind a seat.

Unlike the Diagnostics & Troubleshooting test, in which technicians operate in pairs, the PM competition is a solo affair. This year's winner, Chad Ray of Weyers Cave, VA, was a third-time entrant. After failing to advance beyond the regional level for the past two years, Ray rose to the top in 2007.

"It feels great to finally do it and to get to this level," Ray says. "I'm very detail-oriented, and I owe my success to hard work and practice."

"Preventive maintenance is the core of our business," says Douglas, "so he has his PM sheet and we have put certain defects in that vehicle that we hope he's going to find as he's doing the hands-on. And again, he's done the written assessment prior to coming here today. So we're going to look at the written test of things that they should know pertaining to what they'll be doing in the hands-on."

OPEN BOOK TEST

Although the questions on the written tests and the bugs in the trucks in the hands-on test

are kept secret until the start of the competition, the answers are always in plain sight.

Because Penske technicians are expected to be able to locate and use the service information that is available to them in the shop, the competitors are evaluated on how well they use those information resources.

"They can take their time, they can go look up their answers if they want to," O'Leary says. "Really, one of the tools you want them to walk away from the Tech Challenge with is the ability to use all the things that we have available to us: the power of the Internet, all the diagnostic troubleshooting trees that we have out there posted in our shops, diagnostic computers—it's pretty powerful stuff, you don't have to remember anything anymore. It'll take you right to the answer if you just know how to get there."

As O'Leary explains, this approach is the only way for the company to handle the complexity of its maintenance challenges. Penske prides itself on getting any piece of equipment that its customers need, and so they have virtually every make and model of truck and trailer imaginable in their fleet.

"We've got anything that anyone ever wants," he says, "so, these guys have to be up-to-date on all that stuff."

THE RIGHT STUFF

One of the most unique aspects of the Penske National Technical Challenge is the way the technicians are teamed up for the Diagnostics & Troubleshooting portion of the competition.

According to Penske's senior vice president of field maintenance, Ken McKibben, the team approach allows more technicians to compete and win.

It also brings together technicians with strong hands-on skills with those with strong analytical skills, he explains. "So you get the guys that really know how to use the computer, and he'll go in there and say 'Here's what it says—what do you think?' Now, because they're a team, the other guy will physically check it out."

Back in the "real world," those technicians will be more likely to seek out the help of others when they get stuck on a maintenance problem, McKibben says. Once again, the practical benefits of the competition contribute directly to more cost-effective operations for the fleet.

FINAL RESULTS

As the competition comes to a close, everyone seems to be a winner.

"The key here is that we are recognizing individuals," Douglas concludes. "Yes, it's great for employee morale, great for retention, great for recruiting, but at the end of the day, did we show that there's a payback for the company for the investment in time and dollars? In my mind, that means we're able to service the customer better, we're able to go out and reduce that downtime for our customer so he can get on with his business." 

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