



A QUICK START

When Hillin started thinking about hanging up his racing helmet in late 2000, he already knew a little about the burgeoning industry through a hydroexcavating firm that considered sponsoring his race team. The sponsorship fell through, but Hillin kept the company's promotional materials, including a videotape showing how hydroexcavation trucks use a powerful stream of water to cut knife-like through soil. At the same time, a powerful blower sucks the excavated material through a hose and into a large debris tank.

The more he learned, the more excited he became about hydroexcavation. "I told my wife, 'There's something to this,' " he recalls. "I told the company I wanted to get involved ... but nothing came of it. So we moved to Houston and started T-Rex. By the time we'd

T-Rex owner Bobby Hillin Jr., (right), with company president Tim Carmichael.

TEXAS

acquired three trucks, I didn't have time to work on a truck anymore unless we got into a bind. It kind of built up from there."

Today, the multi-million dollar company owns 16 combination hydroexcavating trucks: 13 from GapVax; one manufactured by Tornado Hydrovacs (a division of Empire Industries Ltd.); and two Prodigy models from Vactor Manufacturing. The company also owns an air-excavation truck made by VAC-MASTERS.

It's important for the company to offer both hydroexcavation and air excavation, because both technologies are effective and each has its strengths, says Tim Carmichael, who serves as the president of T-Rex.

"The Prodigy is cool because it can use both air and water for excavating," Carmichael says. "Some customers specifically request air excavation ... there's a perception that water is really messy, plus with water you can't use the excavated material as backfill because it's the consistency of a milkshake. So air excavation eliminates the need to have extra backfill on site.

"One of the benefits is that you can switch from air to water," he continues. "So if a customer wants to use straight air for digging, but the job isn't going as fast as they want, we can switch to water. In some processes, like with soft and sandy ground, air is more beneficial. But in general, water is much faster than air. If you're paying by the hour, air is going to take a lot more time."

Constant investments in new equipment have been key to the company's success. Clean, modern trucks project a professional image, which affects potential clients' hiring decisions, and also greatly enhances productivity, says Carmichael, a longtime friend of Hillin's who worked on his race team. Carmichael later joined the Joe Gibbs Racing team and spent 13 years there before jumping over to T-Rex in January 2010.

"Everyone knows there's downtime no matter how new your equipment is, but it grows exponentially the older your equipment is," Carmichael explains. "Plus, you'll get more productivity out of newer equipment. We spend a lot of money on equipment ... then you've got the upkeep and maintenance. With the constant water and mud. there's a lot



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NASCAR and hydroexcavating: They're closer than you think

At first glance, similarities between NASCAR racing and hydroexcavating seem about as likely as finding Bobby Hillin Jr. content to finish second in a race. But the former NASCAR driver, now the owner of Texas ReExcavation LC in Houston, Texas, says the two industries have more in common than people might think.

"First of all, both industries are in the safety business," he says. "Whether you're racing a car or hydroexcavating, you always have to consider the safety aspects. It's something I constantly preach to my team ... how to mitigate the unsafe aspects of a particular task."

In addition, both worlds require preparation and readiness. "When you race, you have to be ready and your car has to be ready," Hillin says. "The same thing is true with clients. You can't just get there when you want to get there. If a client wants you on the job at 7 a.m., you've got to be there at 7 a.m., ready to go.

The two industries also require teamwork and communication to succeed. "When our guys are driving to a jobsite, they have to talk about the job, Hillin says. "When they get out of the truck, they must have a good understanding of who's going to do what. It's loud, too, so they have to understand hand signals (just like in car racing).

Hillin, who in 1988 became the youngest NASCAR driver to earn \$1 million and the youngest driver to qualify a stock car at more than 200 mph, admits he had trouble adjusting to driving a mammoth hydroexcavating truck.

"I've logged plenty of time both working and driving these trucks," he says. "I can remember trying to drive one for the first time and trying to figure out how to shift the gears. I felt like a fool because I was a racecar driver, yet I couldn't figure out how to shift gears. I'll say for the record I never became an expert at it. But I could get around, let's put it that way."

Hillin still occasionally races, most recently competing in a NASCAR Nationwide Series race in 2009 at the Texas Motor Speedway in Fort Worth and another Nationwide race in 2008 at the Kansas Speedway in Kansas City, Kan.

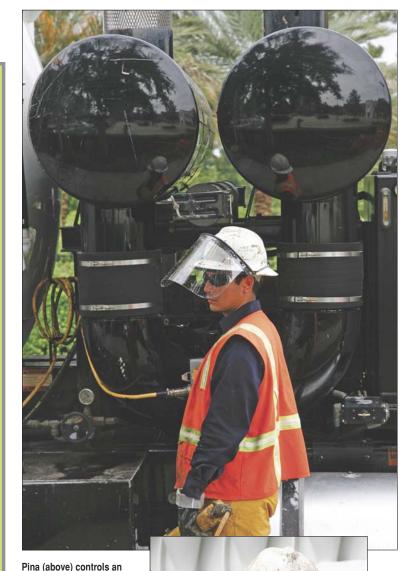
"I mostly did these NASCAR races for two reasons: To promote T-Rex, and to see if I could run the car hard enough to be semi-competitive relative to the equipment I was driving — to see if I could hold it wide open going into the corner at 190 mph," Hillin says.

more expensive (than traditional mechanical excavating). The biggest thing is getting them to understand what's most effective for them, monetarily and safety-wise — what's the best application."

For example, it's much more cost-effective to dig mechanically in a wide-open field, Carmichael says. "Lots of times, we tell customers this (hydroexcavation) isn't what you need ... we try to do what's best for customers because we want to build long-term relationships."

T-Rex keeps expanding by finding new market niches for its hydroexcavating services. Market segments include "daylighting," or exposing pipelines for mechanical excavation; oil and gas fields; utilities; industrial and commercial excavating; and subsurface utility engineering.

"It seems like every week we're finding new uses for our equipment," Carmichael says. "That's how we've been able to grow a bit while the economy struggles. We also add services, such as utility line location, so we can become more of a single-source vendor, as opposed to just digging holes."



excavation for light poles.
At the right, Rios is outfitted with the appropriate safety gear to work on the project.

of work. We have three employees dedicated to maintenance and repairs."

CUTS LIKE A KNIFE

Hydroexcavation is appealing, Carmichael notes, because it doesn't damage things such as pipes and fiber-optic lines, and it allows excavation in places where mechanical digging isn't viable. Crews often can't pinpoint the exact location of pipelines, especially in congested urban areas, so a process that uses water to uncover and locate lines greatly minimizes the potential for damage compared to, say, a backhoe.

"When people hear about it or see it, they're fascinated," he says. "But they're usually shocked at the cost because it's much "IT SEEMS LIKE EVERY WEEK WE'RE FINDING NEW USES FOR OUR EQUIPMENT. THAT'S HOW WE'VE BEEN ABLE TO GROW A BIT WHILE THE ECONOMY STRUGGLES. WE ALSO ADD SERVICES, SUCH AS UTILITY LINE LOCATION, SO WE CAN BECOME MORE OF A SINGLE-SOURCE VENDOR, AS OPPOSED TO JUST DIGGING HOLES."

Tim Carmichael



Water is jetted into each light pole hole, while mud is conveyed to the combination truck tank. At right, Rios and Pina monitor the hydroexcavation work.

DIVERSITY PAYS DIVIDENDS

Emergency services also come into play. For example, in the aftermath of Hurricane Ike, which hit the Texas Gulf Coast in 2008, T-Rex crews spent two months excavating utility pole holes in residential back yards. That allowed utility crews to replace poles in the right-of-ways where sewer and gas lines run without disrupting service from those lines.

"We can dig remotely up to 300 feet away from a truck, which is great if there's a telephone pole in someone's back yard that we can't get to," Carmichael says. "The only drawback is the farther you go, you lose vacuum power along the line, so it slows down how fast you can dig."

A diverse client base is another key component of the company's strategy, Carmichael says. "If all your eggs are in the oil-and-gas basket, and oil prices fall, they're not going to do a lot of new work until the price goes up. And if all your work is in the construction industry and the economy takes a nosedive, you're in trouble. You want to be diverse and grow each sector.

"Our goal is slow and steady growth," he continues. "We don't want to get so diverse that we're operating in areas where we aren't experts. We want to take what we're good at and find as many different outlets as possible.

Bobby's mantra is customer service and doing the absolute best job ... that's the key to the entire deal."

Although Carmichael estimates only 5 percent of the company's annual gross sales come from industrial cleaning, he says it's definitely a growth sector. "Six months ago, we weren't doing any industrial loading," he notes. "But now we've used our trucks on five or six industrial-vacuum jobs in the last six months."

FINDING QUALIFIED TECHNICIANS

Difficulty in finding skilled workers makes expansion more challenging. Because hydroexcavating is relatively new, there isn't a large pool of employees to draw from. As a result, T-Rex provides comprehensive inhouse training, Carmichael says.

"When I worked for Joe Gibbs's NASCAR team, he always said you don't win with equipment, you win with people," he explains. "This is a totally different industry, but it's still true. At the end of the day, people do business with people they like and with people who do a great job."

Learning how to operate equipment productively goes hand-in-hand with extensive safety training. "There's a lot involved before you're let loose on the job," Carmichael says.

"You can't get back that one mistake. At a lot of plants where we work, you can't even get work if your **GapVax Inc.** 888/442-7829 www.gapvax.com

Tornado Hydrovacs 877/340-8141 www.tornadotrucks.com

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Vactor Manufacturing 815/672-3171 www.vactor.com

safety ratio (technically known as the Experience Modification Rate, a safety rating determined by the National Council on Compensation Insurance) isn't below a one (which means a company is better than the national average). That's especially true in the oil and gas industries."

To attract and retain top employees, Carmichael says T-Rex pays top industry scale and offers competitive benefits. The company also awards annual bonuses tied to performance and based on profits. Sometimes, employees who go above and beyond the call of duty also receive bonuses, he says.

As for the future, Carmichael envisions continued growth, with goals of \$20 million a year in sales, and 40 to 50 trucks working in eight or 10 geographic markets.

"We want to keep expanding," he says. "As this industry grows, we want to be an industry leader. When people think of hydroexcavating, we want T-Rex to be the name they think of."