



How Volvo helped to build one of the finest drag racing facilities in the world.

“CHARLOTTE IS PROBABLY BEST KNOWN AS A MAJOR CENTER OF THE US MOTOR RACING INDUSTRY AND ITS ASSOCIATED TECHNOLOGIES.”



CHARLOTTE, NORTH CAROLINA, IS A HAPPENING PLACE AND IT'S HAPPENING FAST. THE POPULATION HAS DOUBLED IN A GENERATION AND ITS SKYLINE HAS BEEN CHANGING BY THE YEAR. IT'S NOT DIFFICULT TO SEE WHY THIS PLACE IS ONE OF THE QUICKEST GROWING CITIES IN THE UNITED STATES. THE LIFESTYLE IS COSMOPOLITAN, THE NATURAL SURROUNDINGS ARE BEAUTIFUL AND BUSINESS HAS BEEN AS GOOD AS ANYWHERE IN THE COUNTRY. AND IF YOU HAPPEN TO BE A STOCK CAR AND DRAG RACING FAN, CHARLOTTE IS A GREAT PLACE TO LIVE.

Only the so-called 'Sun Belt' cities of Forth Worth, Austin and San Antonio, all in Texas, and Phoenix, across the border in Arizona, have outgrown Charlotte, which has recently become the largest city on the east coast between Philadelphia and Jacksonville. Almost a quarter of a million people have set up home there in the last 10 years alone.

Part of Charlotte's appeal lies in its mid-Atlantic location. Over 150 million people, more than half the US population, live within a two-hour flight of a city that has become the country's second biggest financial center after New York, based on assets. The once sleepy staging post on the Great Wagon Road traveled by settlers heading into the Deep South is now a major player in the commercial world. The Bank of America has its headquarters in Charlotte.

Charlotte also boasts a fairly moderate climate that doesn't suffer the extreme heat and humidity problems of its southern neighbors. Nor does it suffer the plunging winter temperatures and snowstorms of the north, while still just a two-hour drive west to dozens of ski resorts in the Great Smoky Mountains.



“VOLVO MACHINES PLAYED A KEY ROLE IN A CONSTRUCTION PROJECT THAT REQUIRED 400 WORKERS ON SITE EVERY DAY.”

THE FINEST DRAG RACING FACILITY IN THE WORLD

To the world beyond, Charlotte is probably best known as a major center of the US motor racing industry and its associated technologies. NASCAR (National Association for Stock Car Auto Racing) has four of its five main offices based in and around the city. It is also the home of Speedway Motorsports Inc. (SMI). In 2008, SMI launched its newest drag racing facility zMAX Dragway @ Concord, the first four-lane, all-concrete track in the US.

The National Hot Rod Association (NHRA) circuit has hailed zMAX Dragway as the finest drag racing facility in the world, helping to lift the multibillion dollar sport, which is followed by 75 million fans worldwide, to new heights of

popularity. Perhaps the most remarkable feature of the drag strip is the speed with which it was built. Work began in January 2008 and on September 11, 2008, it held its first event.

Volvo Construction Equipment (CE) machines played a key role in a construction project that required 400 workers on site every day at different stages of the project. Over 1,000,000 cubic yards (765,000m³) of earth were moved during construction, placing 65,000 tons of aggregate stone base and paving 50,000 tons of asphalt. The two grandstands, one on each side of the quarter-mile race strip, have a seating capacity of 30,000 with the ability to expand to 60,000. Hoopaugh Grading Company won the bid for the grading and site preparation work and most of the work was carried out using a dozen Volvo A30D and A40D articulated haulers, a Volvo EC210 crawler excavator and a Volvo L110E wheel loader.

FUEL EFFICIENT

The surge in oil prices in 2008 made fuel costs a major factor with the price of a gallon (3.7liter) increasing by a dollar by the end of the project. The fact that his Volvo fleet is the most fuel-efficient equipment he owns was some consolation for owner Larry Hoopaugh.



Hoopough also used a Volvo EC700 excavator for the first three months to do the heavy earthmoving. “Much of the ground out here was very hard and dense,” he adds. “The Volvo EC700 was instrumental in getting us ahead with such an aggressive schedule.”

Granite Contracting won the bid for the asphalt paving. The race lanes are one-quarter mile (0.4km) of concrete; then shut down lanes of another half mile (0.8km), are paved with asphalt. In all, the drag strip is 4,000ft (1.2km) long. President Steve Cospers says it was the most demanding job his company had ever undertaken.

“Hands down, this was the most challenging paving project we’ve done,” says Cospers. “In the paving industry the high watermark for tight tolerances are airports, and these specifications were even tighter.”

THE FASTEST MACHINES ON EARTH

Capable of covering a quarter of a mile (0.4km) from a standing start in less than five seconds at over 330 mph (483km/hr), 7,000-horsepower, nitromethane-burning dragsters are the quickest-accelerating machines on earth. The slightest differential on the race surface could lead to disaster. The paving structure called for 4¾ inches (120mm) of hot mix asphalt with a mere 1/8 inch (0.3cm) tolerance. It was crucial to use a paver with the precision to lay a perfectly smooth mat.

“We have used Blaw-Knox pavers for years, and I was pleased that Volvo bought the line,” said Cospers. “It was a good time for us and for Volvo to demonstrate this new class of asphalt paver on an actual paving operation.”

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Dave Reger, asphalt industry manager for Volvo Construction Equipment, brought in a new Volvo PF6110 tracked paver and Omni 318 vibratory power extendible screed for the job. “The PF6110 performed very well,” says Reger. “It was critical that the machine stayed level. Granite could not risk a chance of leaving marks in the asphalt race lanes.”

Cospers agrees. “The pull-off was critical. Many times when a machine first pulls off, the screed will rise or fall. This paver and screed were very consistent in behavior, and it held the grade very well.”

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