

With Echelon Paving, GingerMan Raceway Gets the Green Flag

Superior Asphalt completes its first-ever racetrack paving job with the help of a pavement reinforcement system

by Lisa Cleaver, Editor



Located in the lakeshore town of South Haven, MI, GingerMan Raceway was established in 1995 by racing enthusiast Daniel Schnitta. Designed to feel like a state park, the racetrack rests on more than 300 acres of land that includes sprawling

areas of a shaded wood, plenty of pad-dock space and a pond stocked with fish.

GingerMan Raceway is dedicated to the safety of the driver. The course layout was designed to minimize damage to both drivers and their vehicles and is considered among the safest tracks in the nation.

In January 2014, Schnitta contacted Superior Asphalt, headquartered in Grand Rapids, to evaluate the track. Originally paved in 1995, the track pavement was intact, but there were 1 ½-inch cracks that had been filled with rubber crack seal.

"When we decided

it was time to repave our 20-year-old race track, we went looking for a west Michigan asphalt contractor not only willing to take on the magnitude of our project but who would be willing to work with us," says Mary Phelps, managing director of GingerMan Raceway. "There is no guidebook on how to build the best and fastest racetrack. Every track is unique."

After the initial meeting with one of Superior's estimators, Dave Van Putton, Phelps says they knew they had found the right contractor.

"Dave brought in the entire team – Superintendent Rick Browley Sr., his

TRACK DENSITY IN REAL TIME.



Volvo Intelligent Compaction (IC) with Density Direct.

Volvo has changed the game. Density Direct provides actual density calculations in real time — eliminating guesswork and reducing core sampling. Improve mat quality, do it in less time, get your bonus, and win more contracts with Volvo Density Direct.

Learn more at volvoce.com/DensityDirect.

SMART WORKS.™

Volvo Construction Equipment





A GlasGrid mesh was also used over the cracks for additional reinforcement.



The 20-year-old track pavement was intact, but there were 1 ½-inch cracks that had been filled with rubber crack seal.



son and Lead Crew Chief Rick Browley Jr., and Lab/Quality Control Supervisor Nate Voruganti – to collaborate with us,” she explains. “We spent months researching and analyzing the best materials and approach to successfully complete the racetrack within the confines of time and our budget.”

Echelon paving to minimize cracking

It was decided that echelon paving would be the best method to minimize future cracking issues. Before paving began, Superior prepared the track by milling ½ to ¾ inches of the surface and patching the cracks with a 1 ½-inch overlay transverse to roadway.

“This was done to make sure the rubberized crack fill would not cause any problems in the future,” says Rick Browley Jr., lead crew chief.

GingerMan is considered the safest track in the region as well as the nation - perfectly suited for both novice and advanced drivers who want to push the threshold.

Before paving began, Superior prepared the track by milling ½ to ¾ inches of the surface and patching the cracks with a 1 ½-inch overlay transverse to roadway.

A GlasGrid mesh was also used over the cracks for additional reinforcement. These reinforcement grids are designed to retard reflective cracking by turning crack stresses horizontally to dissipate the stress. A tack coat was also applied prior to paving.

With the racetrack’s long history of cracking issues and uneven seams, echelon paving was used to eliminate any joints.

“The echelon paving process helps alleviate problems with seams,” says Dave Van Putton, lead estimator. “It provides better longitudinal joints and a smoother transition between lanes.

50 YEARS OF INNOVATION. THAT'S A HECK OF A RÉSUMÉ.



VECTOR CONTROL



With over five decades of experience fueling it, the Equinox™ burner delivers unrivaled productivity while achieving the lowest NOx emissions of any burner on the market. Combine it with the Vector Control for unbelievable fuel savings and the advantage is clear.

5201 N. Orange Blossom Trail · Orlando, FL 32810 · 407.290.6000 · GeneralCombustion.com

Search: 10073093





It was decided that echelon paving - with its ability to alleviate problems with seams - would be the best method to minimize future cracking issues.

Better compaction also minimizes future cracking."

Superior installed 1 ¾ inches of asphalt over the 1.7-mile track using Volvo pavers from Alta Equipment installed with Topcon full automation systems. Screeds used were a Carlson EZV front-mount unit (Volvo 7110 paver) and an Carlson EZIV1019 front-mount screed (Volvo 4410 paver).

The mix was specifically formulated for this racetrack, says Nate Voruganti, lab/quality control supervisor. It

consisted of a 19mm nominal maximum aggregate, 60% limestone (+1/4-inch upsize) and 40% manufactured sand specialized for a racetrack. The liquid binder was PG70-28PW/SBS polymer 3-5%; the polymer was used for added strength.

"Limestone was used as an extra grip to help keep the tires on track and reduce the wear of the tires," Voruganti says.

The limestone was purchased from Port Inland Limestone in Michigan.

One 2-inch lift of asphalt was placed on the racetrack. Compaction was completed with three rollers: two Ingersoll Rand and one Volvo compactor.

In the end, the project was completed in three days: day one for milling, day two for tack and crack patch, and day three for paving the entire track.

Challenges

The greatest challenge for Superior Asphalt was the fact that this was the company's first-ever racetrack paving job.

"There isn't a lot of consistent data available on how racetracks have been constructed and maintained in the past," Browley Jr. says. "We were in unknown territory and spent months on research and development. We worked continuously with the GingerMan staff to ensure that they would get the track that they were looking for within their timeframe and budgetary requirements."

The rubberized sealant that had been used in the past presented a challenge as well. "Often if paved over without proper prep, cracks will resurface and create bumps," he says. "This is why we patched with fine grade asphalt and used the GlassGrid."

Other challenges of the project included having trucks backing in around the racetrack and maintaining a constant paving speed of 10 to 12 feet per minute to minimize handwork.

"Constant monitoring of depth was a must too," Browley Jr adds. "The track had to be sloped perfectly to alleviate any standing water.

"The goal was the smoothest and safest ride possible for the drivers," he

The mix was specifically formulated for this racetrack and consisted of a 19mm nominal maximum aggregate, 60% limestone (+1/4" upsize) and 40% manufactured sand. The liquid binder was PG70-28PW/SBS polymer 3-5%, which was used for added strength.



POWERFEEDER - MATERIAL TRANSFER VEHICLE



Close to
our customers



WIRTGEN MT 3000-2i

The Voegle MT 3000-2i offset PowerFeeder combines practical innovation with versatility and productivity. The art of continuous, non-stop paving is made easier with innovations from Voegle.

- Operator platform with excellent all-around visibility and intuitive controls.
- Continuous rubber tracks for precise maneuverability and excellent flotation.
- Lightweight design allowing easy transport and the ability to work on bridges.
- Optimal material flow and reworking throughout the transfer process.
- Low ownership cost with the fewest number of wearing parts.

Productivity and Operational Benefits that are second to none!



ROAD AND MINERAL TECHNOLOGIES

WIRTGEN AMERICA • 6030 Dana Way • Antioch, TN 37013
Tel.: (615) 501-0600 • www.wirtgenamerica.com

continues. "We accomplished this by using Topcon full automation."

Labor of love

With its first racetrack paving project completed, Superior Asphalt has heard nothing but positive feedback for their efforts.

"The track has been well received," says Phelps with GingerMan Raceway. "Our drivers have been setting records and doing so safely. They are excited to drive on the new asphalt. The motorcycle riders are especially thrilled with the new surface."

The project was also a collaborative effort on a personal level. Rick Browley Sr., superintendent of operations, and his son, Rick Browley Jr., worked together as paving crew chiefs on GingerMan Raceway. Browley Jr. credits his father's expertise for such a strong result on Superior Asphalt's first racetrack.

"To work next to him on this kind of project is one of the best accomplishments I've ever had," he says. "It's a job full of pride and joy."

Another positive aspect of the project – the long-lasting relationship that has been formed between GingerMan Raceway and Superior Asphalt.

"The Superior team is still working



with us perfecting and maintaining the track," Phelps says. "We are in constant contact regarding the track's performance and what improvements should be made.

"We truly feel as if we are partners with Superior Asphalt on this project, and we're looking forward to working with them on other projects," she continues.

Browley Jr. agrees, adding, "Through the process we all became friends, and the project became a labor of love for

From left to right: JR Marchand (Track Coach-Gingerman), Daniel Schnitta (Track Owner-Gingerman), Mary Phelps (Managing Director-Gingerman) and Rick Browley Sr. (Superintendent of Operations-Superior Asphalt).

all involved. We are two companies passionate about our trades, and failure was never an option. It doesn't get any better than that." **AC**



RLS Parts & Equipment - Repair & Replacement

Give us a call, send us an email and watch your savings grow.



Manufacturer of Asphalt Plants & Components



Dryer Shells in process

PLANTS

ACS
ASTECC
BARBER GREENE
CMI-SIMPLICITY
CEDAR RAPIDS
CUMMER
CUSTOM BUILT
ESTEE
FAB SPEC
H&B
KENCO
LITTLEFORD
MADSEN
MCCARTER
STAN STEEL



RLS Batch Plant RAP System

- Precise control of RAP & Pre-weighing outside of the weigh hopper speeds up process
- Gradual feed directly into mixer controls steam release
- Increased RAP percentage

EQUIPMENT

Tips
Shanks
Liners
Shafts
Collars
Gears
Dryers
Flights
Tires
Trunnions
Cold Feed System
Baghouses
Recycle Systems
Elevators
Buckets
Chain
Plate Washers
Hardware
Sprockets
Bearings
Motors
Speed Reducers
Temperature Controllers
Bin Level Indicators
Air Cylinders
Dodge Parts
Drag Conveyor Components

RLS PARTS AND EQUIPMENT

33595 Bainbridge Rd. Suite #204 · Solon, OH 44139
PHONE: 440-498-1843 · FAX: 440-498-1921
EMAIL: rlspartsandequipment@gmail.com
www.rlspartsandequipment.com



LISTEN TO OUR CUSTOMERS NOT OUR COMPETITORS

For 40 years and counting, ADM has been committed to producing quality, high-production asphalt plants. On top of that, we take great pride in delivering an unmatched level of service before, during and after the sale.

At the end of the day, our plants speak for themselves. But we certainly appreciate that our customers have so many good things to say. They're the ones we listen to, and we think you should, too.



BE KILACQUA ASPHALT EX SERIES PLANT

Model: 400 Construction: 2012 Production: 2012-2014

"I had an ADM plant in my former business and had tremendous success with it. I really saw no reason to look elsewhere. That's why we went with the new EX plant. We knew we could depend on ADM's engineering expertise to help make our project a success."

- Dave Devlaquez
President/Owner
Devlaquez Asphalt

Don't miss out
on all the benefits
of ADM's
expertise.



VISIT WWW.ADMASPHALTPLANTS.COM



