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Vol. 1 2016

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NASCAR® wanted a reliable partner to haul their gear from race to race, so they turned to Mack and our fleet of Pinnacle™ tractors to get the job done. Because only Mack has the durability, reliability and style to deliver the race to each track, with the same passion and intensity we build into each of our trucks.

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MACK® PINNACLE™ RAWHIDE® EDITION

Horsepower	505 HP
Displacement	13 L
Torque	1,860 lb.-ft.
Engine	Mack MP®8
Transmission	12-speed mDRIVE™
Telematics	GuardDog® Connect
Compression Ratio	16:1
Turbo	Variable geometry turbo (VGT)
Length	376 in.
Width	95 in. (118 including mirrors)
Height	158 in.
Wheelbase	290 in.
Sleeper	70-in. highrise

NASCAR SPRINT CUP SERIES™ CAR

Horsepower	725 HP
Displacement	5.86 L
Torque	530 lb.-ft.
Engine	V8
Transmission	4-speed manual with reverse
Telematics	RACEf/x™
Compression Ratio	12:1
Turbo	N/A
Length	198.25 in.
Width	77 in.
Height	54.25 in.
Wheelbase	110 in.
Sleeper	N/A

Mack Trucks rolls out Certified Uptime Center designations

Mack Certified Uptime Centers have passed a rigorous evaluation verifying the use of practices and tools that improve the accuracy of diagnoses and the speed of maintenance and repairs.

As part of efforts to continuously improve service experiences for customers, Mack Trucks has begun designating certain dealer locations as Mack® Certified Uptime Centers. Through a 28-element evaluation, Certified Uptime Centers demonstrate the use of streamlined workflow, as well as service bays optimized for rapid diagnoses and turnaround times.

“It’s important that our customers’ trucks are on the road working earning money for them,” says Stephen Roy, recently named senior vice president of Uptime for North America. “Through our Mack Certified Uptime Centers, we’ve completely rethought our approach to how trucks are diagnosed and repaired, enabling us to get trucks serviced and back to the customer as quickly as possible.”

In February, Mack announced the first four dealers to achieve the certification: Vision Truck Center of Mississauga, Ontario, Canada; Vanguard Truck Center of Phoenix; Nextran Truck Center of Birmingham, Alabama; and Westfall O’Dell Truck Sales of Kansas City, Missouri. With a focus on major markets, the company will continue rolling out certifications this year.

To qualify as a Certified Uptime Center, a Mack dealer must prove proficiency in new

procedures designed to simplify and accelerate the service process. For instance, trucks needing repairs that take less than four hours get immediate attention instead of taking a place in line as they do under the typical “first come, first served” practice.

“We, along with other dealer groups, worked closely with Mack to gather proven ideas that help improve the service process for customers.”

John Slotegraaf, dealer principal of Vision Truck Center.

Dealerships striving for Uptime Center certification also must redesign their service bays to take full advantage of Mack’s array of uptime tools and solutions, including Mack® GuardDog® Connect telematics and the Mack ASIST service management system.

“Not only have our Certified Uptime Centers

addressed the pace of the repair process, we’ve also taken steps to ensure our diagnoses are even more accurate,” says David Pardue, vice president of connected vehicle and contract services for Mack. “The combination of speed and accuracy has only been

made possible through Mack’s unparalleled collection of uptime tools.”

The certification process takes about eight weeks, and Mack dealer fixed operations managers conduct assessments. Many of the evaluation elements, which range from shop organization to diagnostic-tool implementation, sprang from industry best practices. “We, along with other dealer groups, worked

closely with Mack to gather proven ideas that help improve the service process for customers,” says John Slotegraaf, dealer principal of Vision Truck Center. “In fact, many of the 28 process steps required for certification are tried-and-true methods that have been tested every day at the dealer level.”

HEADLIGHTS



Mack Trucks custom built an all-wheel-drive Granite snowplow model to help Somerset Township, Pennsylvania, make its winding, hilly roads safe for traffic.

Pennsylvania township battles winter roads with help from Mack

When Somerset Township, Pennsylvania, had trouble finding a manufacturer to design a custom vehicle that could plow snow from its 123 miles of hilly, twisting roads, Mack Trucks came to the rescue.

While the township owns five trucks other manufacturers built to meet its unusual requirements, options had become limited. “When we began the process of ordering a new truck, it quickly became clear that we wouldn’t be able to do what we had in the past,” says Randy Beistel, supervisor of Somerset Township. “Mack stepped up to the plate. We worked closely with our local Mack dealer, Legacy Truck Center, and we built the truck we needed.”

Kent Lalley, sales associate at Legacy Truck

Centers in Somerset, located southeast of Pittsburgh, took the township’s desired specs and quickly developed a solution through Mack’s Customer Adaptation Center, which assembles custom Mack models.

In late 2015, Somerset Township took delivery of a Mack® Granite® snowplow model originally built as a 4-by-2, but equipped with a factory-installed, all-wheel-drive system and an 11-foot front snowplow, an aluminum dump body and a salt spreader. The truck is powered by a Mack MP®8 engine with 455 horsepower.

“Despite all of the unique features on this truck, it went together rather easily,” Lalley says. “The pre-build assistance and production turn-around time from Mack’s CAC was impressive.”

Curtis Dorwart, vocational products marketing manager for Mack, says the truck is the latest demonstration of Mack’s application excellence. “Application excellence describes how Mack works closely with our customers to engineer products that not only meet their needs, but also boost their productivity and performance,” Dorwart says. “It’s something we’ve been doing for over a century.”

The truck was put to use this winter, and Beistel says it is receiving rave reviews from Somerset Township employees. “The Granite’s sloped hood gives our drivers much better visibility compared to the competitor trucks,” he says. “The drivers also tell us the performance and power are awesome.”

Superior Carriers awards Mack Trucks its Supplier Excellence Award

Citing above-and-beyond sales advice, technical assistance, operational field support, strategy planning and social media collaboration, Superior Carriers has awarded Mack Trucks its President’s Supplier Excellence Award.

The bulk-transportation company recognizes just one supplier with its only annual external award.

“We are pleased to recognize Mack Trucks as a top vendor of choice, and we look forward to many more years ahead of our mutually beneficial relationship,” says Brian Nowak, president of Superior Carriers.

The company’s history with Mack Trucks goes back to Superior Carriers’ inception in 1940.

Based in Oak Brook, Ill., Superior Carriers, a division of Superior Bulk Logistics, provides hazardous and non-hazardous liquid and dry-bulk logistics management services to the NAFTA region and transports

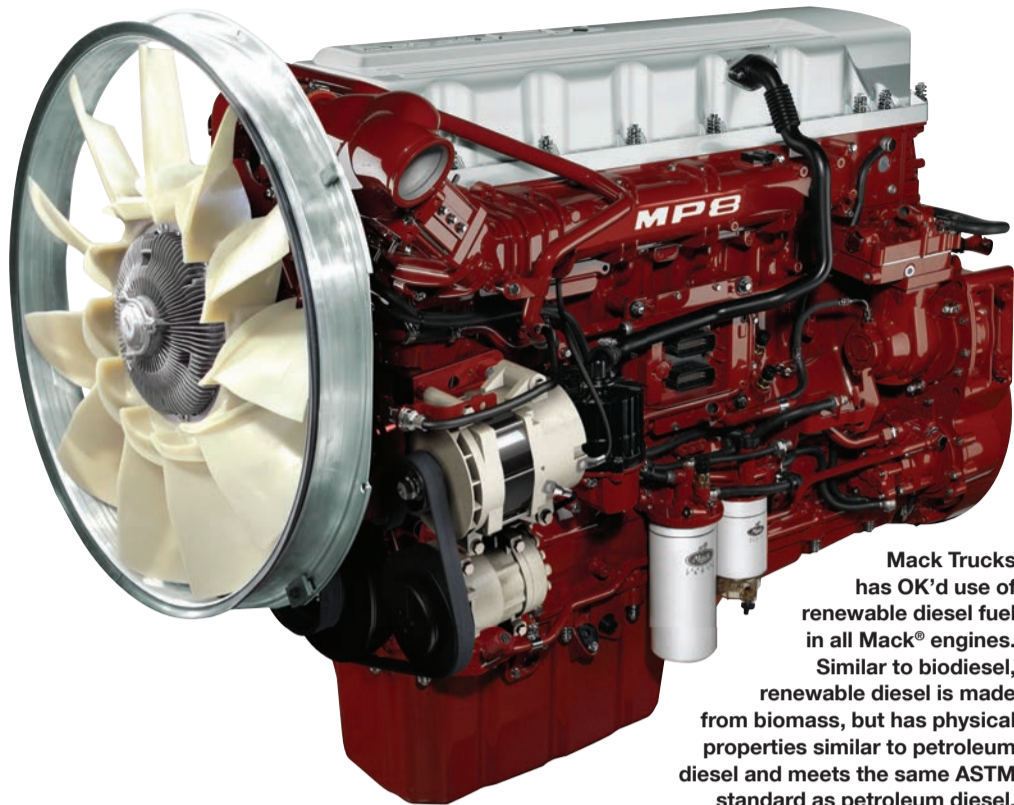


Superior Carriers’ relationship with Mack goes back to 1940, when Superior was founded.

products ranging from commodity chemicals to volatile missile propellants. It operates 700 tractors, including more than 200 Mack® Pinnacle™ sleeper models.

“Mack works hard to ensure that our customers know that we have their backs in terms of service and support, and we are willing to go the extra mile to ensure the success of their businesses,” says Dennis Slagle, president of Mack Trucks.

Nowak says the support of the Mack dealer network also is instrumental in the success of Superior Carriers’ fleet.



Mack Trucks has OK'd use of renewable diesel fuel in all Mack® engines. Similar to biodiesel, renewable diesel is made from biomass, but has physical properties similar to petroleum diesel and meets the same ASTM standard as petroleum diesel.

Mack Trucks green-lights renewable diesel fuel

Mack Trucks has given the OK for use of renewable diesel fuel in all its engines, signaling a win-win scenario for customers and the environment as the fuel decreases maintenance costs and reduces greenhouse-gas and particulate emissions. Mack made the announcement, after extensive truck and engine testing.

Like biodiesel, renewable diesel fuel is derived from biomass including oils or animal fats, but it is processed differently. Renewable diesel maintains physical properties and performance similar to petroleum diesel and meets the same ASTM D975 standard, while biodiesel has a separate ASTM standard.

“As the availability and customer requests for renewable diesel fuel increase, we worked to ensure its compatibility with our engines,” says Stu Russoli, marketing manager for Mack highway and powertrain products. “This approval gives Mack customers who seek to reduce their environmental footprint an additional choice when it comes to alternative fuels.”

Renewable diesel fuel — also called second-generation biodiesel — reduces greenhouse gases 15 to 80 percent, depending on the biomass source, according to a life-cycle analysis by the California Air Resources Board. Renewable diesel can reduce carbon monoxide and hydrocarbons, and its ultra-low sulfur content enables the use of advanced emission-control devices, the U.S. Department of Energy states.

Vehicle owners can save money as well by using renewable diesel fuel since it results in fewer maintenance costs compared to other alternative fuels.

The Energy Department attributes renewable diesel's high combustion quality with similar or better vehicle performance compared to conventional diesel. The fuel is compatible with petroleum diesel distribution infrastructure, according to the department, and does not require new pipelines, storage tanks, retail station pumps or extensive new production facilities.

Renewable diesel joins Mack's other alternative-fuel offerings, which include Mack Pinnacle™ DayCab models available with the Cummins-Westport ISX12 G natural-gas-powered engine, and the Mack LR and Mack TerraPro® cabover models available with a natural-gas Cummins-Westport ISL G engine.

“As the availability and customer requests for renewable diesel fuel increase, we worked to ensure its compatibility with our engines.”

Stu Russoli, marketing manager for Mack highway and powertrain products



Nextran Truck Centers of Orlando earned the title of Mack Trucks 2015 North American Dealer of the Year. Pictured are, from left, Dennis McDaniel, Mack Trucks regional vice president, Southeast; Jon Pritchett, president and CEO, Nextran Corporation; and Stephen Roy, president of Mack Trucks.

Mack honors dealers for exceptional performance in 2015

Nextran Truck Centers of Orlando, Florida, is Mack Trucks' 2015 North American Dealer of the Year.

The dealership exceeded its 2015 sales target by 58 percent and achieved the highest truck and parts sales volumes among Mack dealers in the Nextran Truck Centers group, which operates 14 full-service commercial truck centers across Florida, Georgia and Alabama.

“Nextran Truck Centers has done an outstanding job providing Mack customers with the right truck for the job and the aftermarket service they need for maximum uptime,” says Dennis Slagle, president of Mack Trucks. “We're proud to partner with them in serving customers across all segments of our market.”

Nextran is planning to expand and remodel the Orlando center, and its newest location is slated to open in Duluth, Georgia, later this year. The dealer group focuses on delivering the lowest-possible life-cycle costs for Mack customers.

Mack Trucks also recognized several other dealerships for outstanding performance in 2015.

Regional sales division winners are: Bergey's Truck Center of Souderton, Pennsylvania (Northeast); Nextran Truck Centers of Orlando (Southeast); M & K Quality Truck Sales of Summit, Illinois (Central region); Vanguard Truck Center of Houston (Southwest); Vanguard Truck Center of Phoenix (West); and MacKay's Truck Center of Truro, Nova Scotia (Canada region).

McMahon Truck Leasing in Charlotte, North Carolina, won the Mack Leasing North America Member of the Year award, and East Texas Mack Sales in Longview, Texas, earned the North America Remarketing Dealer of the Year award. The Customer Satisfaction Award went to Nextran Truck Centers of Jacksonville, Florida.

HEADLIGHTS



Ready for your close up?

Mack Calendar contest now open for Mack truck owner submissions



For the second straight year, six lucky Mack owners will have an entire month to themselves — in the 2017 Mack Trucks Calendar. The results of the initial calendar contest are on display in this year's calendar with hard-working, customer-owned Pinnacles™, Granites®, Titans and TerraPros™. These trucks look every bit as good as the truck show models that grace the other pages of the calendar, but with their owners' love present in every shot.

Mack's Facebook fans will select all winning trucks. Mack owners will submit photos of their trucks to Facebook.com/MackTrucks and Mack's fans will vote on them. The entry with the highest number of votes in each model category (Pinnacle Axle Forward and Axle Back, Granite, Titan by

Mack, TerraPro/LR and historical) will be named the winner.

The only major requirement is that these must be working trucks in regular service, earning revenue for their owners. Mack trucks are born to work hard and look good doing it.

Mack will arrange for each of the winning trucks to be professionally photographed at Mack's expense, with the photo to appear in the 2017 calendar. Several of last year's winners are shown with this article and on this issue's front and back covers.

The contest will run from March 1 through May 31. Full details and contest rules can be found on Facebook.com/MackTrucks under the Calendar Contest tab. Enter your truck today and be sure to vote for your favorites.



Jonathan Randall Named Head of Mack Sales for North America

Mack Trucks appointed **Jonathan M. Randall** senior vice president for North

American sales. He is responsible for all Mack new vehicle sales in North America and will report to Mack President Dennis Slagle. He has 23 years of experience in the heavy-duty

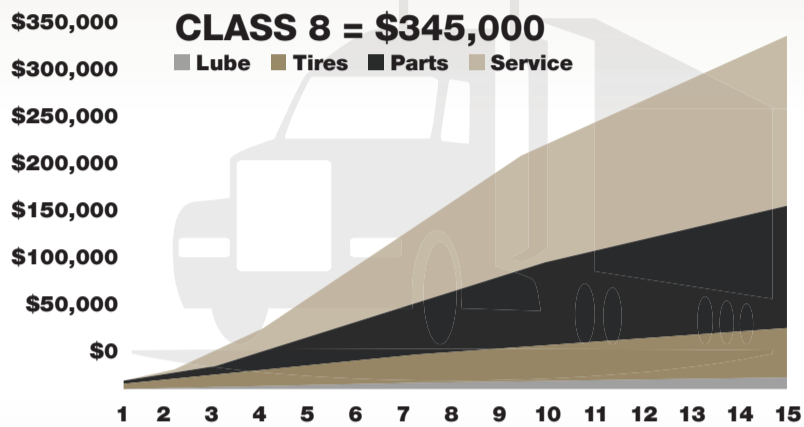
commercial vehicle business and holds a bachelor's degree from Colorado State University.

Stephen Roy, formerly president of North American sales & marketing has been appointed senior vice president – Uptime. In this role, Roy is responsible for all the functions and

programs related to driving customer uptime for Mack Trucks. This includes field service, Uptime Center operations, customer satisfaction, warranty, quality and reliability, connectivity/telematics, the new Certified Uptime Center concept, and parts availability.

\$400,000

15-year cumulative spend per truck



THAT'S THE ESTIMATED total cost to own a Class 8 truck over 15 years, according to MacKay & Co. Initial purchase price ranges from \$113,000 for a day cab to around \$125,000 for a sleeper, but as truck owners know, that's only the beginning. Expect to add another \$20,600 each year on average, which breaks down to \$7,200 in parts, \$2,900 in tires, \$600 in oil and lube and \$9,900 in service costs. And that's not counting fuel.

As the chart shows, costs for parts and service really start to accelerate around year five. Something to consider when you're determining your trade cycle.

Be sure to check with your Mack dealer about how Mack Trucks helps lower your total cost of ownership.

CONSTRUCTION

And they don't take coffee breaks

BY 2020, advances in technology, including robotics and artificial intelligence, are set to replace 5.1 million jobs, with 10 percent of those losses coming in construction and extraction, according to a report from the World Economic Forum.



The good news for construction workers? The report notes that "technological disruptions such as robotics and machine learning — rather than completely replacing existing occupations and job categories — are likely to substitute specific tasks previously carried out as part of these jobs, freeing workers up to focus on new tasks and leading to rapidly changing core skill sets in these occupations."

For construction that could mean operators transitioning from working inside the machine to a command center where they oversee the operation of multiple machines with the help of telematics, automation and drone monitoring.

Another bright spot: Such technological advances should generate an additional 339,000 new jobs in architecture and engineering.

COSTS

Health care, drivers a one-two punch



WHICH BUSINESS COSTS do fleets predict will show the biggest increases in 2016?

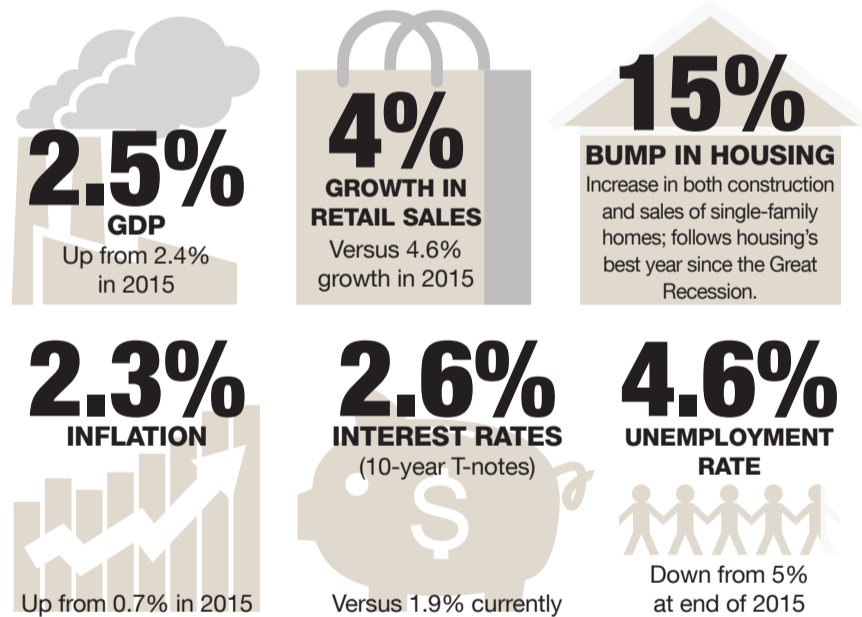
At 34 percent and 30 percent respectively, health care (including insurance) and driver pay and recruiting costs top the lists of fleets responding to CCJ's Annual Outlook Survey. Tied for a distant third are tractors and liability insurance at 8.6 percent.

"It will help that fuel has dropped, but health insurance will kill us," said one fleet respondent. "And good driver availability will require some skill and luck."

ECONOMY

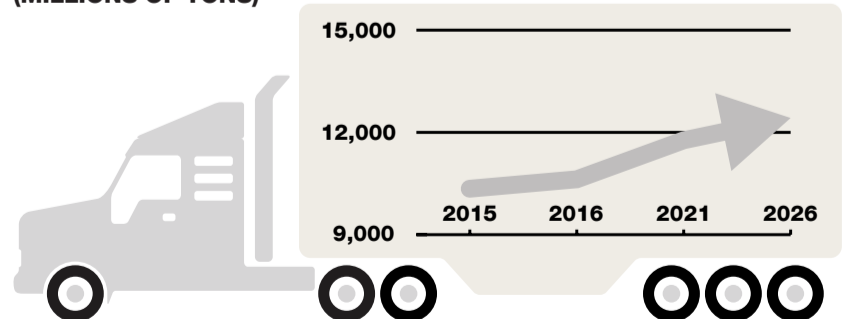
What to expect in 2016

ALL IN ALL, 2016 is shaping up to be a pretty good year with some major economic indicators, such as freight volume, housing and employment, showing positive signs.



Source: Kiplinger's

Steady growth in truck volume (MILLIONS OF TONS)



THE AMERICAN TRUCKING ASSOCIATIONS projects average annual growth rate in truck volume of for-hire and private motor carriers will climb by 2.65 percent in 2016, then level off to 2.1 percent for 2017-21 and 1.1 percent for 2022-26.

COVER STORY



Driving Sustainability



How your level of environmental stewardship affects your company and profits

By Denise Rondini

Sustainability. Energy efficiency. Environmental impact.

No matter what you call it, a growing number of fleet owners are concerned about their operations' effects on the environment — and how their customers perceive those impacts. While you may already spec for fuel economy, train drivers for fuel efficiency and have an overall appreciation for sustainability, it's possible to take your environmental stewardship to the next level. Every aspect of your operation, from company management and employee engagement to facilities and equipment, can be evaluated and improved. The benefits of these efforts include lower business costs, better employee recruitment and the ability to create an eco-friendly image of your fleet.

Why be green?

While the altruistic aspect of sustainability is important, customers may favor fleets with committed sustainability goals and may even award bids based on fleets' green reputation. John Jennings, CEO of Waste Pro USA, Longwood, Florida, which offers an array of waste-removal services, says the company sets itself apart through a commitment to the environment and investment in sustainability practices that impact communities. "We absolutely feel that we win waste-removal bids because of our known commitment to the environment, even when we are not the lowest bid," Jennings says.

Keith Severson, marketing services manager and director of community relations for construction-materials provider Graniterock Corporation, Watsonville, California, seconds that claim. "Reducing the carbon footprint is financially advantageous," he says. "You'll win more projects if you have good green thinking."

In addition to fostering positive community relations, eco-friendly policies can strengthen a company's internal relationships, improve employee attitudes and can help with recruitment.

Jennings, who often works alongside employees to clean up a nearby river in Florida, describes a culture of sustainability that runs the gamut from the physical operation to enthusiastic employee buy-in.

Severson, a LEED (Leadership in Energy and Environmental Design) accredited professional, says Graniterock and its employees pride themselves on adopting the basic tenets of green thinking: reduce, recycle and reuse. "A focus on these principles results in a company of good corporate citizens and good stewards of the planet's resources," he says. "We use locally sourced construction materials, recycle when possible and look for ways to reduce waste."

Making sustainability a core value gives a company an advantage in attracting younger workers, says Thomas Rowland, partner in Partners By Design, a corporate architecture firm. "Millennials look at the ethos of companies when deciding where they want to work," he says of this highly recruited demographic.

COVER STORY



Corporate leadership

Management buy-in toward a sustainability philosophy is crucial, says Grace Rink, president and CEO of Quercus Consultants, an environmental-consulting firm.

Andrew Lehrer, vice president of consulting-engineering firm ESD Global, says demonstrating a commitment to sustainability does not necessarily require tremendous changes. In the office, it can be as simple as putting a recycling receptacle next to the trash can in the employee break room or talking to employees about turning off computers when they leave for the day and turning off lights when they leave a room.

Ron Percora, chief marketing officer for Waste Pro, says the company has taken several concrete steps and made them known. "We walk the talk by using alternative fuels in our equipment, powering our recycling plants with solar energy and energizing our employees to volunteer for environmental projects," he says.

Engaging employees

It's one thing for management to embrace green philosophy, but for your policies to be effective, your entire organization has to be involved. "In addition to strong corporate leadership, I suggest identifying employee champions for your efforts," Rink says. "And those should be natural champions — people from each division who want to be champions. You do this so sustainability is a shared value across the enterprise. It is not just 'oh the environmental, health and safety people take care of that.'"

She says champions should meet on a regular basis to share best practices.

You also need to invest in tangible examples of eco-friendly efforts and encourage desired behaviors through rewards and recognition. Here are some ways to do that:

Work environment

Consider installing bike racks and lockers to motivate employees to cycle to work. You can offer premium parking for compact/hybrid cars or carpoolers and set out clearly designated recycling bins. Even small green spaces can be landscaped for water and soil conservation.

If you offer truck washing at your facility, create a collection system for capturing water that comes off vehicles. This is an especially good idea in areas of the country where ice, snow or remnants of roadway de-icing chemicals might be on trucks. Rainwater collected in cisterns also can be used to wash vehicles. Thompson suggests using a water reclamation system. "That way you are using the same water over as many times as you possibly can," he says.



Photo by Carmen K. Sisson

Resources:

Green Truck Association

<http://www.greentruckassociation.com/>

The Green Fleet Coalition

<http://www.greenfleetcoalition.com/>

US Green Building Council

<http://www.usgbc.org/>

Energy Star

<https://www.energystar.gov>

Natural Gas Vehicles for America

<http://www.ngvamerica.org/>

Trucking Efficiency

<http://truckingefficiency.org/>



Driver behavior

Skilled commercial vehicle operators can have a huge impact on your fleet's overall fuel efficiency, impacting both your eco-friendly goals and financial ones. With training, monitoring and recognition, drivers can improve how fuel efficiently they drive.

According to the American Trucking Associations' Technology and Maintenance Council, there is a 35-percent difference between the most and least efficient drivers. The most fuel-efficient ones have these best practices in common:

- Maintain a high, but not maximum, average speed.
- Operate a large percentage of the trip distance in top gear.
- Utilize cruise control when possible.
- Minimize time spent idling.
- Minimize the number of sudden decelerations (hard braking) and accelerations.

Fleets that offer driver training courses and

refresher courses for fuel-efficient driving see payoffs not only in fuel economy, but also in their safety records.

Training can be accomplished one on one with top trainers, through one-day group courses or by utilizing various simulator programs that teach drivers optimized-shifting techniques.

Fuel-bonus programs that incentivize fuel conservation typically use a points system to provide monetary rewards to drivers who exceed the fleet's goals. Some initiatives, including C.R. England's Harley Davidson program, offer big-ticket items such as motorcycles to drivers who meet requirements.

Dispatcher behavior

Dispatchers' skills in routing through weather, geographic obstacles and congestion have been shown to improve fuel economy between 5 and 20 percent. Consider offering

rewards and incentives to high-performing dispatchers as well.

Spec'ing for better fuel economy and lower emissions

While lower diesel prices have slowed the rush to alternative fuels, many fleets continue to use alternative fuels.

And switching to alternative fuel is not the only way to make trucks operate with better fuel economy. Mike Roeth, executive director of the North American Council for Freight Efficiency, says his organization has identified nearly 70 technologies or practices fleets can use to improve miles per gallon of diesel fuel used.

NACFE developed a website, truckingefficiency.org, that has broken the technology into nine key areas: idle reduction, chassis, tires and rolling resistance, powertrain, tractor aerodynamics, trailer aerodynamics and

operational practices. “In each of these areas we have identified specific technology solutions or practices that are commercially available that result in improved mpg,” Roeth says. “While no fleet can deploy all of them, every fleet can use some of them.”

Practices such as optimizing engine parameters for fuel efficiency can result in fuel economy improvements in the 5- to 8-percent range, Roeth says.

Mack Trucks’ century-plus commitment to integrated design and manufacturing takes this quest for truck efficiency to a higher level, according to Stu Russoli, Mack highway product marketing manager. When a customer sits down with a sales representative to spec out a Mack® truck, Mack’s truck ordering system helps to present the most efficient spec for an application.

It identifies the most fuel efficient rear axle ratio, engine performance strategy and transmission for the engine chosen. The tool also identifies EPA SmartWay™ certified components such as bumpers, mirrors, aerodynamic aids and low rolling resistance tires to make it as easy as possible to spec for fuel economy.

“The Mack Pinnacle™ is one of the most

fuel efficient tractors out on the road today,” says Russoli. “Mack’s integrated powertrain is by design a highly efficient system and it has enabled even greater fuel economy improvements as we move into our upcoming GHG17 (greenhouse gas) engine updates.”

Trailer skirts, automated manual transmissions, tire-pressure-monitoring systems and APUs to reduce idling are some of the technologies in which fleets are investing. Another popular option is telematics to monitor fuel consumption and focus on driver training for maximized fuel economy. Mack’s GuardDog Connect telematics platform enables a number of fleet management technologies to support this option.

Fleets that participated in NACFE’s Fleet Fuel Study showed average fuel economy of 7 mpg in 2014 compared with the national average of 6.1 mpg. They did this by adopting a variety of technologies, and the result was a fuel savings of \$9,000 per truck per year.

Tim Dzojko, fleet engineering specialist at Air Products and Chemicals Inc., says, “Through our fleet efficiency programs, which include replacement of pre-emission engines,

increasing the amount of product loaded in each trailer, and improving miles per gallon through driver behavioral programs such as reduced idling, we have significantly reduced our emissions of CO₂, NO_x and particulate matter per loaded mile since 2009.”

“We have similar environmental goals for our fixed facilities, including improving energy efficiency, reducing greenhouse-gas emissions, decreasing water consumption and others,” Dzojko says. “We’ve met most of these goals through productivity improvements and starting up new, more efficient facilities.”

Promote your efforts

ESD Global’s Lehrer says consistency of messaging is important when presenting your commitment to environmental responsibility. You have to send the message that as a company you are dedicated to the environment, he says, and make it part of your corporate brand.

“Once that consistency of messaging gets out, most people really want to buy into it,” he adds. ■

Greening your facility

A well-constructed, well-insulated building can have a big impact on your energy usage. Here are ways to evaluate and improve existing energy-efficient features.

Insulation

Control the building’s envelope with the right insulation, heating and cooling features. For new construction, position the building for maximum daylight.

Lighting matters

Lighting is really an energy-intensive aspect of operating a building, and it’s best to start by using as much natural lighting as possible.

For other types of lighting, there are two current trends: a move to LEDs and the use of intelligent, motion-sensor lighting systems.

Zoned HVAC and air quality

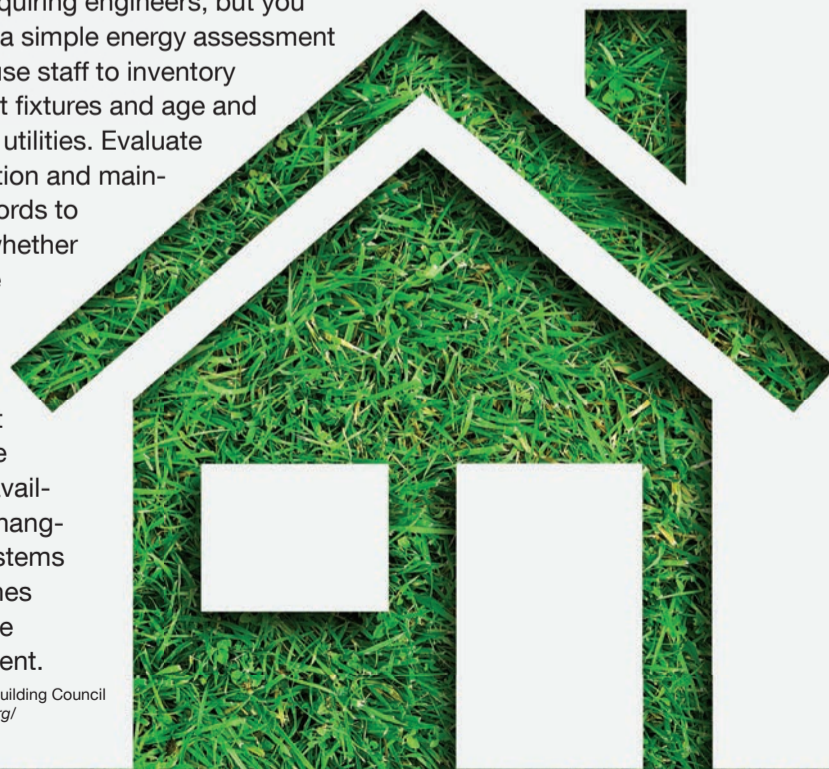
Not all space is created equal when it comes to heating, ventilation and air conditioning needs.

Zoning your heating and air conditioning allows you to manage the air quality of various areas of your operation. If you’re operating a shop, you’ll want to think about measuring the amount of outdoor air and exhaust air.

Energy assessment

An energy audit can be an extensive endeavor requiring engineers, but you can also do a simple energy assessment using in-house staff to inventory types of light fixtures and age and condition of utilities. Evaluate this information and maintenance records to determine whether any of those systems are candidates for replacement and possible tax credits available for exchanging older systems for newer ones that are more energy efficient.

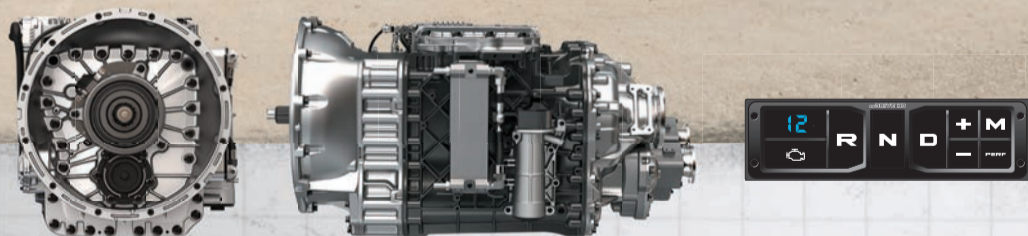
Source: US Green Building Council
<http://www.usgbc.org/>





NEW **mDRIVE™ HD**

Geared up for any job.



Mack's *mDRIVE*® HD heavy-duty automated manual transmission is now available with an extended range of gears—including 12, 13 or 14 speeds, as well as multi-speed reverse gears—allowing you to slow it down for jobs that require extra precision or speed it up to take on your roughest work. Its durable, lightweight design improves productivity while keeping you prepared to do the heavy lifting. No matter what jobs you face, you've got the flexibility to dominate them.

MackTrucks.com/mDRIVEHD

BORN READY.

AT WORK



M is for Massengill, Mississippi and Mack

Spotlight on Big M Transportation

Story and Photos by Carmen K. Sisson



At Big M Transportation, everyone from the leadership team to the drivers is smiling lately. The family-owned business is growing rapidly, and they appear to be on track for another profitable year thanks to key investments in new equipment and top-notch personnel.

President Michael Massengill founded the company in Blue Mountain, Mississippi, in 2000, building on a family history of more than half a century in the trucking industry. His father, Lawrence Massengill, started Massengill Trucking in the 1960s and sold the company in 1997. For Lawrence's business-minded son, one ending marked a new beginning. With just a handful of trucks, Michael Massengill began Big M, and they are still going strong today.

AT WORK



Big M specializes in intermodal and over-the-road heavy hauls, transporting everything from tires to paper and aluminum products. Routes average 500 miles, with drivers operating 300 trucks and 800 trailers across 48 states.

Eight years ago, Massengill switched the fleet to mostly Mack® trucks, and it was a good decision, he says. Before that, they had been running used equipment purchased during the Great Recession, and it proved to be an expensive mistake.

“They really cost us a lot of money,” Massengill says. “We had cheap payments, but the trucks stayed broken down and the maintenance costs were unreal.”

These days, the predominantly Mack fleet is running strong providing good service. But Massengill knew they could save even more money, so when he had the opportunity to upgrade from 10-speed manual transmissions to the new Mack *mDRIVE*™ automated transmission, he seized it, ordering 50 mid-roof 2015 Mack Pinnacle™ tractors. The fleet is comprised of nearly 50 percent mid-rise and 50 percent high-rise tractors, with a few day cabs.

The *mDRIVE* has been a positive move in

every way, Massengill says, especially in fuel savings. His 2016 Pinnacle models average 7.6 mpg vs. 6.7 mpg for 2012 tractors with manual transmission, for a savings of almost 8,500 gallons of diesel over the four-year ownership of the truck.

The most important things when choosing a brand are fuel economy — that’s very important — driver comfort, dependability, dealer relationship and the relationship we have with Mack itself.

Michael Massengill, president of Big M Transportation

“Every tenth we can improve equals a lot of dollars,” Massengill says. “That’s a lot of money. It adds up and we like that about Macks.”

He also likes the reliability, combined with the ease of mind provided by Mack GuardDog® Connect, which monitors the engine and rapidly detects problems, sending the diagnostic code to Mack’s 24/7 team of

support staff and technicians. Drivers are then told where to take the truck for repairs while Mack’s OneCall customer center forwards to technicians the necessary information, including parts needed, service instructions and diagnostic information, using the ASIST case management system.

The reduction in downtime can save as much as \$2,000 a day — but it is priceless when it comes to on-time delivery and customer relations.

“Our maintenance costs on these Macks are running approximately 3.8 cents per mile,” Massengill says. “Downtime is virtually zero with them. Downtime is very important and Mack has helped alleviate that.”

The new trucks also serve as an effective recruitment tool. Mack has worked closely with Big M to provide the trucks they need, whether that means improving fuel economy by another tenth of a mile, adding new features to improve driver comfort or simply adding a bit of brightwork to make the trucks flashier and more appealing to drivers.

“As all truckers know, there is a driver shortage, and driver happiness is the key to retention,” Massengill says. “That’s what we try to do — take driver input in all of our purchases and purchase trucks that are as nice as they can be.”

But the main thing drivers rave about is the

ease of driving and increased pulling power, he says. Recently a driver called and asked to be swapped from another brand to one of the new, more powerful Macks. His request was quickly granted.

Big M prides itself on its family-oriented philosophy, a style that meshes well with the Mack corporate philosophy. That, too, keeps Massengill returning year after year to Mack.

“The experience buying from Mack has been great,” he says. “We have a great relationship. The most important things when choosing a brand are fuel economy — that’s very important — driver comfort, dependability, dealer relationship and the relationship we have with Mack itself. I have met everyone all the way up to the CEO of Mack Trucks, and that means a lot.” ■



Fit for the road

An effective health and wellness program can keep drivers behind the wheel and improve a company's bottom line

For fleets experiencing labor shortages and an aging work force, losing valued drivers because of health issues is a bitter pill to swallow. As the driver shortage becomes more critical, companies are taking another look at health and wellness programs.

According to the Workplace Wellness Programs Study, sponsored by the U.S. Department of Labor and the U.S. Department of Health and Human Services and published in 2013, wellness program participants experience significant and meaningful improvements in exercise frequency, smoking behavior and weight control compared to nonparticipants. Those followed in the study sustained improvements over an observation period of four years.

What can it mean for fleets?

These programs could bring critical health improvements to the trucking industry, where obstacles include drivers with irregular schedules, long stretches of inactivity and isolation and sporadic access to health care. The average age of drivers is climbing, and 88 percent of them report having at least one chronic-disease risk factor — hypertension, smoking or obesity — compared to 54 percent of U.S. workers overall, according to a 2014 study by the Federal Motor Carrier Safety Administration.

“We are aggressively looking at health and wellness methods to reduce exposure and cost,” Chris Cooper, president of Boyd Bros. Transportation, a flatbed carrier based in Clayton, Ala., told *CCJ* magazine. “But we are mainly doing it to extend peoples’ lives.”

While there is no universally accepted definition of workplace health and wellness programs, the Wellness Programs Study noted four commonly used strategies: screening activities to identify health risks; primary interventions to prevent the onset of chronic disease; secondary interventions to improve control of chronic conditions; and health-promotion activities to encourage healthy lifestyles. Program components can be administered by employers directly, through vendors or group health-insurance plans or using a combination of sources.

Monte Vanover, director of fleet maintenance for Carroll Fulmer Logistics, based in Groveland, Fla., says programs that show employees their company values their health and well-being positively impact retention and recruitment metrics.

Carroll Fulmer Logistics established a corporate “Biggest Loser” program (inspired by the popular TV show) in 2009, and Vanover is a previous winner. “I can tell you it has been a great success,” Vanover says. “We take the challenge very seriously. It is a lot of fun and creates an atmosphere of ‘being healthy’ to our day-to-day activities.”

5 Reasons you should offer a health and wellness program



To build a strong trucking-industry workforce

Health issues are worsening the labor shortage caused by an aging workforce. Since 1994, there has been a sharp decline in younger drivers, and now more than half of truck operators in the United States are 45 or older. While health risks are a concern for all employees, the risks increase with age.

Sixty-nine percent of drivers are obese and 54 percent smoke, according to the 2014 FMCSA study. Sleep apnea, high blood pressure, diabetes and depression are among other health problems plaguing drivers.

Health conditions could keep many drivers off the road in the future. With the advent of FMCSA’s Compliance, Safety, Accountability program, some analysts predict more stringent driver qualifications and increased emphasis on driver wellness.



How to get started

Workplace wellness programs are often as unique as the companies offering them.

Here are some tactics that have proven successful for transportation companies:

- **Let employees shape the program.** As with most company policies, when employees provide input, compliance improves. Reach out to all employees to find out what options they think will work best for them.
- **Work with your fleet’s health-insurance company and local health-care providers to conduct employee health-risk assessments.**
- **Use your health-insurance provider and wellness vendors to follow up these assessments with personalized management tools.** Many health-insurance companies offer health and wellness programs and/or resources they will tailor to your company and employees.
- **Supply personal health coaches for drivers** (can be administered by



To lengthen and improve employees' lives and lower health-care costs

Numerous studies have confirmed the effectiveness of employer-sponsored health and wellness programs. Authors of the 2013 Workplace Wellness Programs Study, one of the most comprehensive analyses, concluded: "Wellness programs can help contain the current epidemic of lifestyle-related diseases, the main driver of premature morbidity and mortality as well as health-care cost in the United States."

Employers surveyed as part of the study said workplace wellness programs reduce medical costs, absenteeism and health-related productivity losses.



health-insurance provider or other a third party).

- **Send nutrition boxes to drivers to encourage better eating habits on the road.**
- **Use technology to heighten awareness, provide training and engage workers.** Online platforms such as Stay Metrics' Wellness Training Module for motor carriers offer educational videos and incorporate gaming, animation, rewards, feedback and learning assessment.
- **Provide wearable devices.** Choices such as Fitbit monitor progress toward eating and exercise goals and allow people to compete in health competitions with friends, family and co-workers.
- **Facilitate employee communication.** "Wingman" programs pair employees for advice and encouragement, and you can develop a system for drivers to share helpful information such as which truck stops offer the best walking areas and food options.
- **Provide facts on the effects of smoking and reward drivers for quitting.**

To improve your company's safety record and lower insurance and workers' compensation costs



According to the Centers for Disease Control and Prevention, workplace health programs lower insurance and workers' compensation costs across industries. They can be particularly beneficial for transportation companies.

An employee suffering a heart attack or stroke while sitting behind a desk is one thing; an employee experiencing an incapacitating health event while sitting behind the wheel of a loaded 18-wheeler traveling down a public roadway is something else entirely.

For even greater benefits in the areas of safety, insurance and workers' compensation costs, consider adding an injury and illness prevention component to your health and wellness program. For guidance, see osha.gov/dsg/topics/safetyhealth.

Because employees need and want your help

Drivers face daunting obstacles to staying fit. Most are aware of chronic diseases such as sleep apnea, diabetes and hypertension because they undergo a physical exam every two years to maintain their CDLs. What they and other employees often lack is the support and education needed to help them choose and maintain healthier lifestyles.

Carroll Fulmer Logistics invited Pete Thomas, a winner of "The Biggest Loser," to its campus as part of the company's wellness program. "He was a great inspiration on how to make being healthy fun and easy by his hands-on approach to eating right and exercising," Vanover says.

"To date, our company has lost several hundred pounds. We have had participation from office staff, shop employees and drivers."



Better retention and recruitment

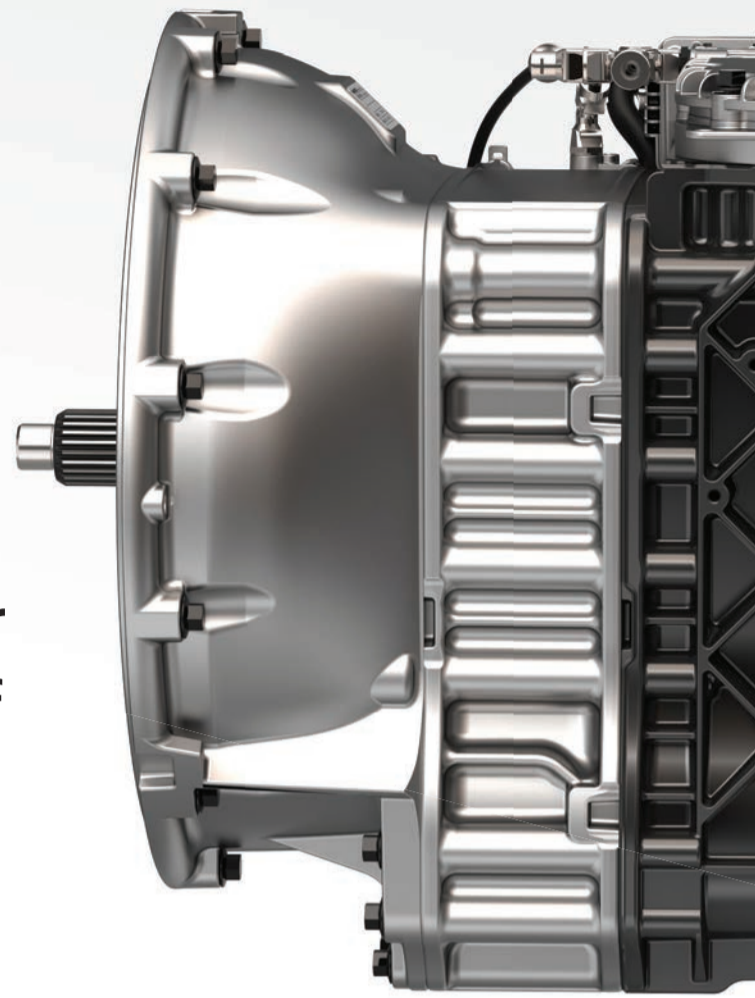
Thirty percent of drivers think their career is taking a toll on their health, per survey data collected by Stay Metrics. By dedicating company time and resources to improving employees' health, you send a clear and sincere message that you understand their concerns and care about their wellbeing.

And that's a clean bill of health for both the company and the driver.



Expanded options

Mack Trucks increases customer options with two new versions of the *mDRIVE*[™] HD transmission and a single-unit exhaust aftertreatment system.



In a continuation of efforts to offer solutions for an expansive range of customer applications, Mack Trucks announced in March two additional versions of the *mDRIVE*[™] HD automated manual transmission and a new single-unit exhaust aftertreatment system called ClearTech[™] One.

Mack launched both the transmissions and EATS at The Work Truck Show in Indianapolis, and both will be available for order in August. Customers can spec the low-speed reduction gear transmissions with Mack's MP[®] series engines in Pinnacle[™], Granite[®] and Titan by Mack trucks, while ClearTech One will be available in Pinnacle and Granite models.

The new transmissions are the *mDRIVE* HD 13-speed and the *mDRIVE* HD 14-speed. The 13-speed option, available in direct or over-drive configurations, offers a low-speed reduction gear ratio designed for easier starting on steep grades and under heavy load, while the 14-speed option, offered in an over-drive configuration, adds an ultra-low-speed

reduction gear aimed at paving operations and low-speed, heavy-haul maneuvering. Both models provide three low-speed and one fast-speed reverse gear ratios.

The new *mDRIVE* HD models share architecture and gear ratios for 12 forward speeds with the standard *mDRIVE* HD, which Mack unveiled in February 2015.

"We launched the original *mDRIVE* HD in response to customers looking for an AMT capable of withstanding tough vocational applications," says John Walsh, vice president of marketing for Mack. "Now, with the *mDRIVE* HD 13- and 14-speeds, we're taking the next step and combining low-speed capabilities with the performance and productivity benefits of our ground-breaking AMT."

The new gears improve not only performance in off-road and construction applications, but also on-road fuel economy through a faster rear-axle ratio, says Stu Russoli, highway and powertrain products marketing manager for Mack.

"Now I can work in the pit and still have my faster rear-axle ratio, where I can get to my highway speeds ... and get really good fuel economy, but still be able to do the work in my off-road situations."

Stu Russoli, highway and powertrain products marketing manager for Mack.

"What we found was when people go into a pit or on a jobsite they were actually gearing their rear-axle ratio a little bit lower so they could do the work at the jobsite," Russoli says. "That's where the 13-speed comes in. Now we've added a 17:1 bottom gear, so after you hit first gear you go down to a creeper gear. Now I can work in the pit and still have my faster rear-axle ratio, where I can get to my highway speeds ... and get really good fuel economy, but still be able to do the work in my off-road situations."

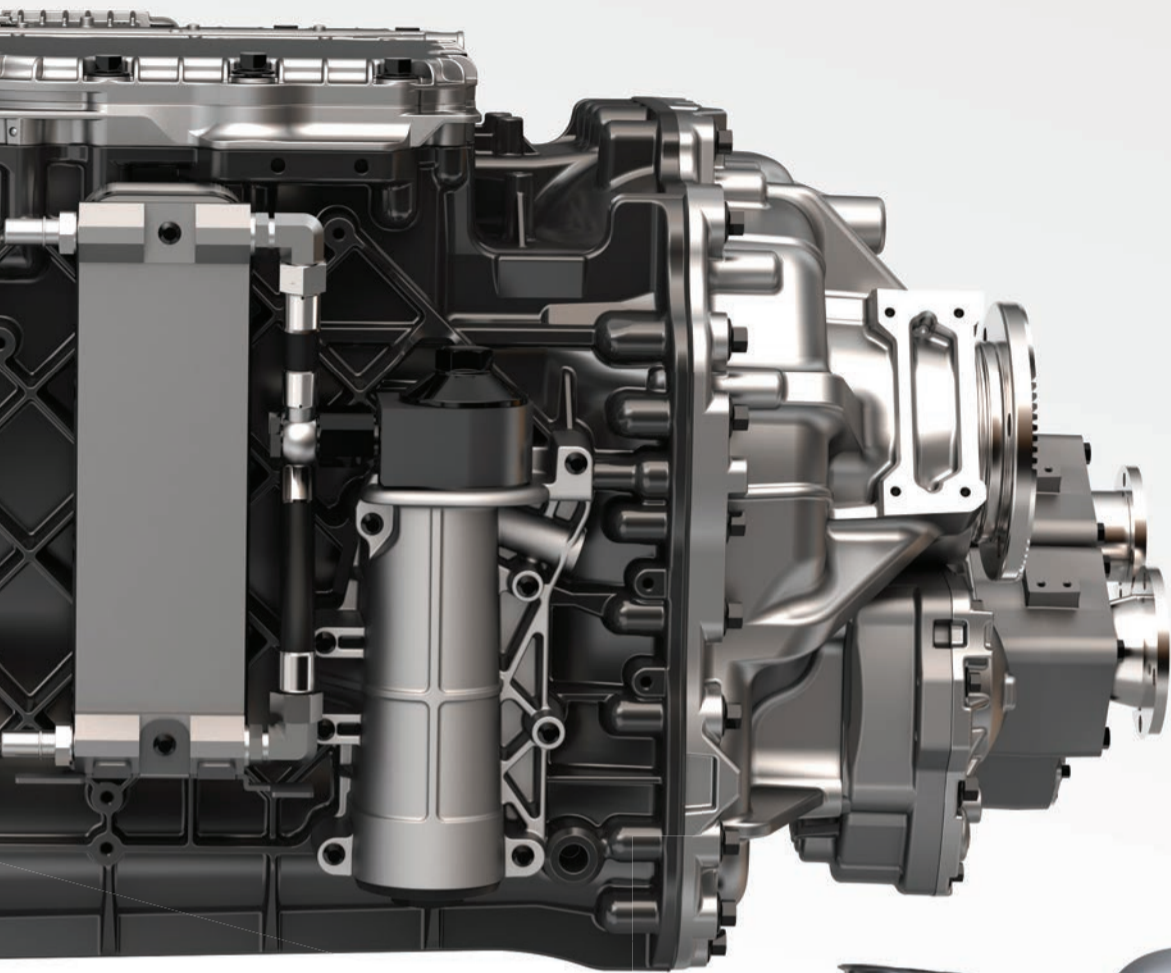
The 14-speed option adds two lower gears, allowing the operator to shift down to a creeper two and creeper one.

"That brings you into your curb-pouring applications or your paving applications where you need to go at a walking speed, that half mile an hour or in that range," Russoli says. Without the 14-speed option, he says operators have to press on the brake all the time, which can lead to overheating the clutch.

"The *mDRIVE* HD is just as at home on the highway as it is on the jobsite," Russoli says. "Highway customers with challenging loads will appreciate the extra flexibility provided by the low reduction gear ratios."

An extension on the transmission between the bell housing and the main case makes the additional gears possible. The new versions of the transmission are less than five inches longer and only 90 pounds heavier than the standard *mDRIVE* HD, giving them a weight advantage of nearly 150 pounds compared with automatic transmissions.

Mack also announced all *mDRIVE* transmissions, including the standard *mDRIVE* and



“Mack ClearTech One offers our customers a functional design, as well as another EATS option, enabling more packaging space for equipment needs while also increasing maneuverability of the vehicle,”

John Walsh, vice president of marketing for Mack

To meet the needs of an even wider range of customer applications, Mack Trucks has introduced two new versions of its mDRIVE™ HD automated manual transmission.

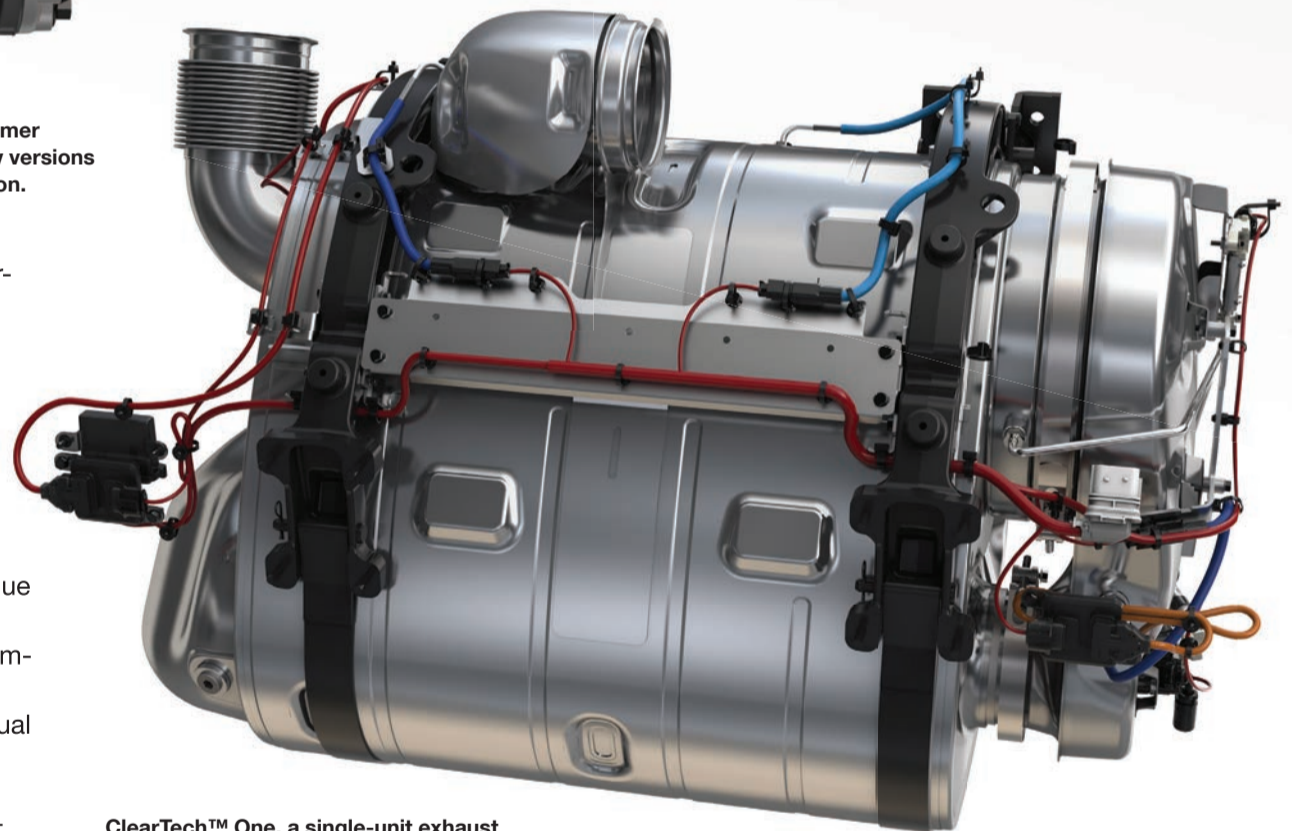
mDRIVE HD, are receiving the following performance and durability updates: a redesigned gearbox control unit, a new clutch with a larger torsional damper to help reduce vibration, the addition of component-wear monitors to enable predictive maintenance; and improvements to power take-off controls including new main cab harnesses, a reinforced range housing to handle higher PTO bending torque and an all-new, cab-mounted Body Builder Module with user-configured software parameters to control engine speed and block reverse gears when the PTO is engaged. Dual PTOs are now supported as well.

“PTOs are a critical component for many vocational customers,” says Curtis Dorwart, vocational products marketing manager for Mack. “With the added functionality delivered by the new Body Builder Module and other improvements, we’re giving customers the tools they need to be successful in nearly any application.”

ClearTech One

The addition of the ClearTech One exhaust aftertreatment system also offers customers increased options depending on their applications.

ClearTech One combines the diesel particulate filter, selective catalytic reduction technology and diesel exhaust fluid dosing system into one unit, providing increased



ClearTech™ One, a single-unit exhaust aftertreatment system, will be available for order in Pinnacle™ and Granite® models beginning in August.

room for chassis-mounted equipment, which is often needed on work trucks and short-wheelbase tractors. Customers also will be able to choose larger fuel tanks without lengthening wheelbase.

“Mack ClearTech One offers our customers a functional design, as well as another EATS option, enabling more packaging space for equipment needs while also increasing maneuverability of the vehicle,” Walsh says.

The smaller system allows for a shorter wheelbase, improving maneuverability, and is about 15 pounds lighter than the two-unit EATS.

ClearTech One is optimized for passive regeneration and SCR performance. The SCR catalyst is mounted downstream of the DPF, preventing hydrocarbon, ash or soot from entering the system. There is no need for a second diesel oxidation catalyst before the SCR system.

Mack will continue offering the two-unit ClearTech EATS for specific applications, including tandem steering. “Mack customers now have the opportunity to specify the design of the EATS, which better enables them to adapt the chassis to their application’s unique needs,” Dorwart says. ■

AT WORK

Rock steady!



Mack[®] trucks power Graniterock fleet through tough emissions standards

Story and Photos by Brian Moore



In 2010 Denny Mahler, operations manager for Graniterock Company's Transportation Division, had a problem. The California Air Resources Board (CARB) had announced the implementation of new and tighter emissions regulations, and Mahler knew his aging fleet couldn't pass the new tests.

Adding to Mahler's concerns was the country's then-struggling economy, which experienced a recession and industry slowdown. It was an inopportune time to be making a big investment so Mahler wanted to be sure to invest in the best equipment while doing what made sense economically for his company.

A Mack rolls into town

It may have been small consolation to Mahler at the time, but his dilemma was just the latest of many challenges Graniterock had faced in its 100-plus years in business.

Nevertheless, the pressure was on, and Denny Mahler started doing his homework.

"Because of the new CARB rules all the engines changed. Basically we had to start over," he said. The big question on Mahler's mind was a simple one: Who has the best product out there? "Based on everything I had read, studied and heard, I felt like the Mack® engine was the best platform for what we needed."

Just about the time that Denny was coming to this conclusion a Mack® Pinnacle™ truck rolled in through the company's gates.

Adam VanderBee is the new truck sales manager for TEC Equipment in Oakland, some 90 miles or so to the north of Graniterock's Aromas, California, facility.

"Graniterock is a renowned road builder," VanderBee says. "Anyone in the industry knows its size and scope." TEC also knew about Graniterock's considerable transportation business, hauling aggregate materials, such as rock, sand and gravel, as well as bulk cement and hot asphalt oil throughout the central coast and San Francisco Bay areas. TEC wanted that business.

"We felt that with the Mack we had a good story to tell them," VanderBee says. So they drove a Mack demo truck south to Aromas and offered Denny Mahler a test drive.

The test drive clinched it for Denny. Graniterock bought its first Mack in 2012, and Mack became Graniterock's truck of choice. Since then, the company has purchased 17 more. The current fleet of 18 includes a variety of Pinnacle models, and Graniterock plans to add four more Macks in the future.

Thanks to Mahler's research and TEC's timely visit, Graniterock met the CARB emissions on deadline, and Denny had solved his problem.

Yet the emissions issue, though important, was just one factor contributing to Mahler's

decision. "Safety Before All Else" is the company's mantra and it is proudly declared, clear and bright, on the forest green livery of every truck in the fleet. It undoubtedly informed Mahler's decision making.

He points out that for safety reasons he preferred Mack's use of steel rather than aluminum as used by some competitors. He also spec'd proximity sensing and anti-roll technology to better safeguard his drivers on the road.

The virtues of the *mDRIVE*™ automated transmission factored in too, and its impact was immediate. "We had a guy doing our oil pickup run to Bakersfield," Mahler said.

"Bakersfield's a pretty long haul for us, and he was in an older truck. He'd get back exhausted with all the clutching and shifting. So we put him in an *mDRIVE* and the first time he got back from his run in that truck he was smiling from ear to ear and looked so refreshed I knew I had made a good decision."



"Based on everything I had read, studied and heard, I felt like the Mack® engine was the best platform for what we needed."

Denny Mahler, operations manager for Graniterock Company's Transportation Division

Most of their Pinnacles have *mDRIVE*s.

Mahler says the Macks on the Bakersfield run perform very well. Fuel economy from that section of the fleet averages a little over 7 mpg, while the combined fleet average is 6.11 mpg. "That's excellent for what we do, and much better than what we were getting before."

The connection between TEC Oakland and Graniterock has grown strong since that day TEC rolled into Aromas in a Mack. VanderBee says they are great customers with high expectations.

AT WORK

“That’s a very fair assessment,” Mahler says. “We do have high expectations. Maybe it’s because our customers have high expectations of us and we rise to the level our customers expect. We expect our vendors to do the same for us, and TEC does. They’re a very supportive dealership and we have an excellent relationship.”

All in the family

Graniterock is still owned by the descendants of founder AR Wilson, and it prides itself on its relationship with its workforce, Mahler says.

“It’s a company that invests in its people. They’ll help you further your education, encourage you and let you take risks.”

“The people who go to work at Graniterock typically stay at Graniterock for a long time,” he says, “because once you’ve gone to work for Graniterock, you really don’t want to go anywhere else.”

It goes back to the owners, said Mahler. They’ve always been very big on investing in their people.

The investment has paid off. Many of the company’s employees have worked at Graniterock for decades and in some instances they are the second or third generation in their family to work for the company. Denny Mahler is a case in point. His grandfather and father both worked for Graniterock, as did his two older brothers. Denny has worked with the company, as a contracted owner operator or as an employee, for over 40 years. ■



A 115-year-old quarry enters the computer age

Graniterock’s first quarry, located near the town of Aromas on the Central Coast of California, is still going strong after 115 years.

Considering its age, you might think the technology on the site is closer to 19th Century design than 21st. Not so. The AR Wilson Quarry, named for one of the company’s founders, is today fully automated, providing computerized, self-activated loading access to customers 24 hours a day, 7 days a week.

The computerized loading system is called GraniteXpress. Customers are provided a kind of debit card that they use to initiate billing. They pull their trucks into the loading area and activate the system. An accurately weighed load is dumped into the truck quickly and automatically.

Graniterock claims that loading times are reduced by some 70 percent over traditional systems. According to the company’s website, “there is nothing else like it in the world.”

A brief history of Graniterock

Arthur Roberts Wilson and Warren Reynolds Porter founded the “Granite Rock Company,” in 1900. They had purchased a little quarry near the town of Aromas on the Central Coast of California. The quarry held deep deposits of granite and sat astride that big crack in California’s earth, the San Andreas Fault.

Being atop the fault was serendipity. The seismic activity in the region pre-fractured the granite, making quarrying the rock a little easier than normal. This was an important



consideration at a time when sledgehammers and muscle were the principal means of breaking rock into usable chunks.

The company’s prosperity has always closely paralleled the fortunes of the Central Coast, so when adversity came to the region, Graniterock also suffered. The great San Francisco earthquake struck in 1906, causing damage that closed the company for a while. But with misfortune came opportunity: San Francisco needed to rebuild, and Granite Rock quickly got back in business to help supply the raw materials.

As the automobile grew more prominent, so too did the need for paved roads. Graniterock was well positioned to supply road-building materials.

The Wall Street crash of 1929 and the Great Depression that followed made for lean times, and the company was forced to sell off some of its holdings. But toward the end of the 1930’s construction in the region rebounded again, thanks in part to tensions in Europe and the impending war, which prompted the

building of military bases in the region such as Fort Ord. Again Graniterock was there to provide construction materials.

After the war and through the end of the 20th century, Graniterock continued to grow and modernize its facilities as construction boomed in the nearby San Francisco and Monterey Bay areas.

Good fortune has undoubtedly contributed to Graniterock’s survival. Yet the many awards and accolades the company has received over the years suggest that quality of materials and workmanship have been the main catalyst for success. Such recognition reached a milestone in 1992 when President George H. W. Bush presented Graniterock with the prestigious Malcolm Baldrige National Quality Award, the highest honor a company can achieve for quality.

Success has brought expansion. The company now has several facilities in the region and provides road building and transportation of construction materials throughout California’s Central Coast.

Born Ready

Readers submit stories to #MackBornReady

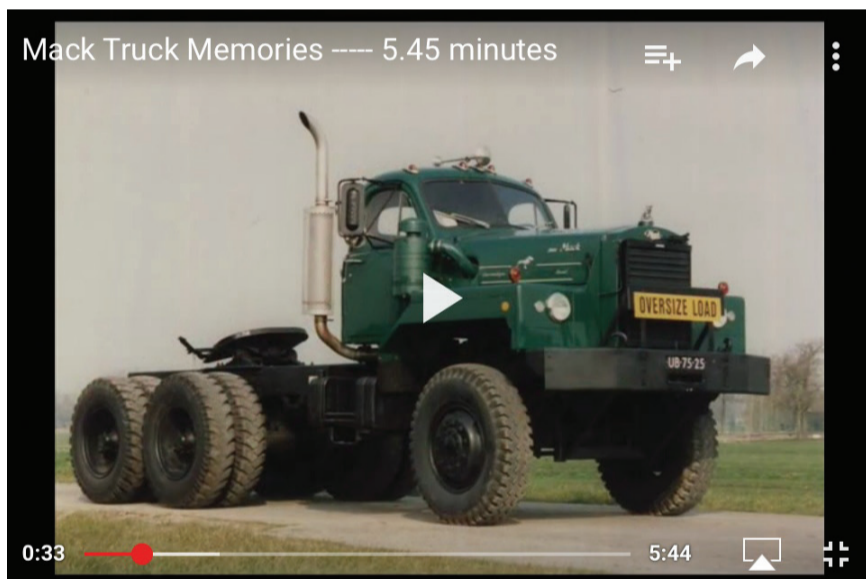


My Mack story begins long before I started working for the company in 2009. It started with my maternal grandfather who proudly drove a Mack Truck. Some of my favorite family stories are tales of my Nana, mom, and aunts riding along with Granddaddy around town, and all over the state. He even taught them to how to drive, and without an *mDRIVE!* Shifting wasn't as easy in those days!

Of all the stories, the one I think of most is how when Granddaddy would come home from a long run, he would park his Mack in the driveway and my mom and aunts would camp out in his sleeper. I can only imagine all of the laughter and fun they had!

I never got to meet him or ride along with him, but his story will live on through his children, grandchildren, and great grandchildren. I am proud to keep Mack Trucks in the family.

Megan White



People pay no mind to all the places that I go. I travel through all the hills and hollows in the mud the rain and snow. Steady in my place where I go next, I never know. When my master calls on me, I never ask, I just go. If you're wondering who I am it'll come as no surprise, I'm the bulldog on the hood of your truck looking out for all you guys!

I have driven Mack's for years I still love em!

Alex Carney

1978 All electric Mack Truck

My dad worked for Mack Trucks based in Springfield, Missouri, in 1964. He owned a B69 and started his own company from 1964 until today. We lost dad five years ago, but being the oldest and a girl, didn't stop me from being daddy's little girl.

My brother got the family business, so, I opened my own, 100 percent electric cars!! (www.Greenshedconversions.com) This is the only female owned and operated

conversion company in the U.S. and we did our first 18 wheeler, a Mack Truck!

I started Green Shed at the worst possible time, in 2008, when the world died. But my husband and I have managed to make a go of it and make a living. I am so proud of the Mack Truck conversion. It was for a customer who had no knowledge and bought all the wrong parts before coming to us. But, we did it and are so proud of it My dad, would have been so proud of me. This will be one vehicle



at a time, merging the best of the past with the best of the future.

Audrey (Peeso) Clunn

Do you have a story to share?

We'd love to hear about it. Visit <http://respond.macktrucks.com/BornReady> to upload your story or use #MackBornReady on Facebook, Twitter, Instagram, YouTube or LinkedIn.

Sprint to the finish!



Mack Trucks is Born Ready to serve as the official hauler of NASCAR®

By Jim McNamara

Not many things are so absolutely “American” as a Mack® truck. It is, after all, The American Truck You Can Count On. But a NASCAR stock car also screams American. So it makes perfect sense that Mack Trucks is now the Official Hauler of NASCAR®. The multiyear partnership was announced during NASCAR’s Daytona 500 media day event.

Since the Daytona 500 in February, 10 Mack Pinnacle™ sleepers have been hauling

the sport’s mobile offices, plus the tons of equipment and supplies needed to hold the 36 races that make up its calendar each year. It’s an incredibly demanding and high-profile job, but Mack is a perfect fit with our dedication to durability, reliability, driver comfort and support.

The high-rise Pinnacle sleepers with the Rawhide trim package also look sharp — darn sharp. No dull trucks need apply for this gig. Plus, with their 505 hp Mack MP®8

engines and *mDRIVE*™ automated transmission, they get the job done on the highway with no hesitation.

“The Mack Trucks brand has been a part of American culture for more than a century and is globally recognized for manufacturing a best-in-class product,” said Steve Phelps, NASCAR executive vice president and chief marketing officer. “The custom-designed Pinnacle models are masterfully engineered, and we are proud that they will lead the NASCAR convoy to the track each race weekend.”

NASCAR fans are a perfect fit for Mack, too, as Phelps told NBC Sports when the partnership was announced. “There are certain categories of the sport that fit well with other industries,” Phelps says. “Trucks

“Mack went above and beyond in designing the best work trucks for our team, and we get compliments in the garage every week.”

Buster Auton, NASCAR senior director, transportation



Getty Images

certainly are one of them. The big rigs are in a sweet spot. You look at the number of truck drivers on the road who are NASCAR fans calling into SiriusXM, and it's a very good marriage between both a brand standpoint and category standpoint with NASCAR.”

John Walsh, vice president of marketing for Mack, agreed.

“Simply put, making Mack Trucks a partner of NASCAR is a great way to reach truck drivers who are passionate about being professional drivers and about their lifestyle,” Walsh says. “This partnership puts Mack, our trucks and our technology in front of millions of NASCAR fans, including the large number of fans who are part of the transportation industry. We couldn't be more excited to join forces and serve as the Official Hauler of NASCAR.”



The new Pinnacle axle forward and axle back models are proving to be popular with an important group of professional drivers — those who drive them for NASCAR to each race venue, hopscotching the country on a weekly basis, on tight schedules and no room for down time.

“Our transportation team has been impressed with the performance and comfort of our Mack Pinnacle models,” according to Buster Auton, NASCAR senior director, transportation. “Not only are the trucks riding and driving well, but our drivers are proud to pilot them. Mack went above and beyond in designing the best work trucks for our team, and we get compliments in the garage every week.”

The fleet is also armed with Mack

GuardDog® Connect, a telematics system that brings the right blend of technology and people together to maximize uptime. Acting as an onboard pit crew, GuardDog Connect proactively monitors critical fault codes that could shut a truck down.

When a potential issue is detected, GuardDog Connect automatically notifies Mack OneCall™ agents at the 24/7 Mack Uptime Center, as well as the driver and designated fleet contact. An action plan for repairs, a check for available parts at the nearest service center and detailed repair instructions are also completed, all while the truck is still on the road.

“We knew going in that these are high-profile, high-visibility tractors and this is NASCAR — so of course they would expect performance and, naturally, uptime,” said Stu Russoli, Mack highway marketing manager. “These trucks go out to a race every week and as soon as they get back they're getting ready to leave for the next race. So right away I knew they needed the MP8-505C+ 505 hp engines, *m*DRIVE transmissions and GuardDog Connect's live fault code monitoring.”

Support for the fleet of Pinnacle models will be led by Transource Truck & Trailer Center, a Mack dealer with seven locations across North Carolina. Mack partnered with Transource in providing the trucks.

TAILLIGHTS

Farewell to Old Man Winter

Mack Trucks help dig out of the snow



Utah DOT employees Jack Mason and Roger Frantz take a break in front of their Mack® Granite® snowplows. These are big-time highway plows with primary responsibility for the Parley Canyon section of I-80. They're equipped with 505 hp MP®8 engines and Mack *mDRIVE™* HD automated manual transmissions running front, left- and right-hand wing plows through a REPTO. These two units were part of a 25 truck order from the state and Utah operates more than 100 Mack trucks. Six more Granite models with *mDRIVE* HD are being added to the fleet. Notice how free of snow the pavement is!



In early February, Trans American Trucking Services, South Plainfield, NJ, used a Titan by Mack to move several huge electrical transformers, also known as shunt reactors, from a terminal in Philadelphia to a Pennsylvania Power & Light substation in Lower Macungie, Pennsylvania (coincidentally, just down the road from Mack Trucks Lehigh Valley Assembly Operations). Each transformer weighed 133,600 pounds and required a 13-axle perimeter frame lowboy. The Titan was unfazed by the conditions created by a big snowstorm followed by rain a few days earlier, and handled the muddy destination with aplomb.



Hunterdon County, New Jersey took delivery of a fleet of Mack Granite MHD trucks prior to last winter to help keep its roads and highways clear, which was a good call considering the nearly 30 inches parts of the county received in January's blizzard.



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*Bridgestone R283A Ecopia in size 295/75R22.5 load range G, compared to the equivalent size and load range of Bridgestone R283 Ecopia. Rolling resistance results obtained from third-party ISO 28580 testing. Wear results based on field testing in long haul fleet applications in the US and Canada. Actual results will vary depending on several factors such as tire size, operating conditions, maintenance, road conditions, and driving style.

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