

MICHELIN® X One® Tires

Proof That





Since 2000 MICHELIN® X One® Tires Have...

Accumulated Billions of Miles of real-world experience

In **Hundreds** of fleets

Experienced by **Thousands** of truck drivers

Saved 150 Million Gallons of fuel (and counting)

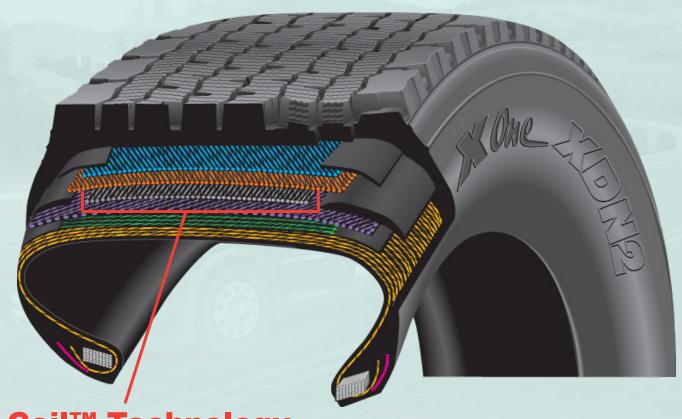
Provided for Several Million Tons of added freight

Eliminated the need for **Hundreds of Thousands** of pressure checks and rotations



Patented Infini-Coil™ Technology

The MICHELIN® X One® Casing Architecture introduced the first zero degree circumferential belt in a production truck tire: the Infini-Coil™ Technology

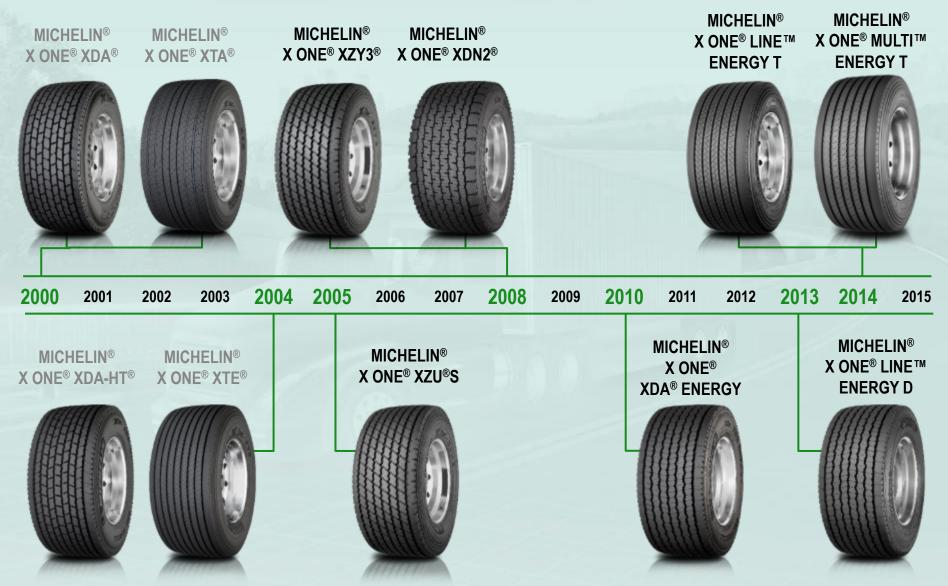


Infini-Coil™ Technology

1/4 mile of steel cable helps eliminate casing growth and maintain a consistent footprint for even wear

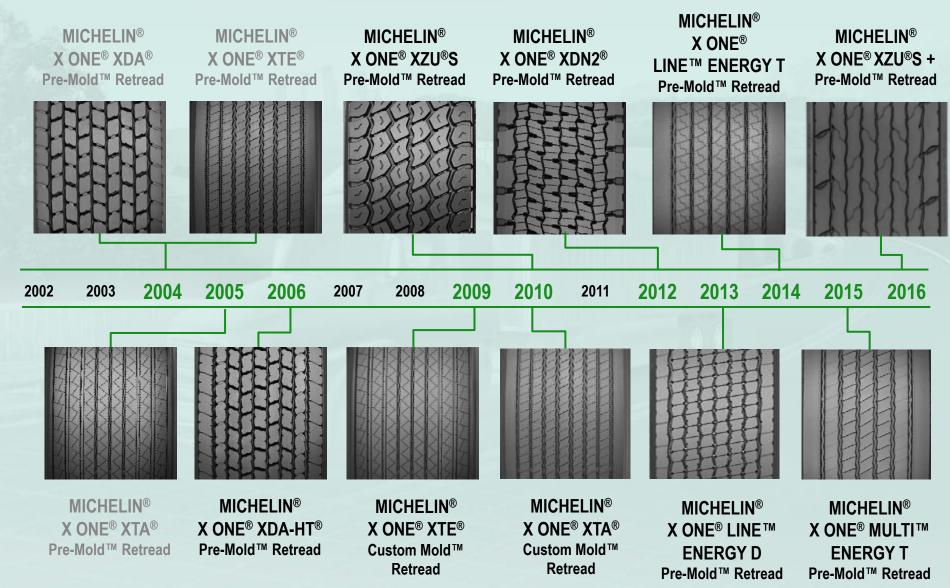


15 Years Of X One® Tire Innovation





13 Years Of X One® Retread Innovation





Wide Base Single Tires

Industry Leader

MICHELIN® X One® Tire
Recognized With Product
Line Award

FROST & SULLIVAN

2011 PRACTICES

BEST

NORTH AMERICAN WIDE-BASED TRUCK TIRES PRODUCT LINE STRATEGY AWARD





MICHELIN® X One® Tire

Easy to Make the Switch from Duals

Whether Low Pro or Standard 22.5"

or Low Pro 24.5"



Sized to replace a set of duals with **NO gearing change** required

Note: Conversions from 11R24.5 may require gearing change.



The MICHELIN® X One® Product Lineup



MICHELIN® X ONE LINE™ ENERGY D



MICHELIN® X ONE® XDN2®

MICHELIN® X ONE® LINE™ ENERGY T



Regional

MICHELIN® X ONE® XDN®2



MICHELIN® X ONE®

MULTI™ ENERGY T



On/Off Road



MICHELIN® X ONE® XZY®3



Urban



MICHELIN® X ONE® XZU®S



So, Why Should You Convert to a Ten-Wheeler?



GOOD REASONS

Top Ten Reasons To Convert to a Ten-Wheeler



Save Fuel



6

Every Application



*2

More Payload



*

Increase Productivity





Improve Stability





Meet Regulations





Maximize Uptime





Go "Green"





Great Retreadability





Satisfaction Guaranteed







Save Fuel



Up to 10% in Fuel Savings

MICHELIN® X One® Tires can help lower your fuel bill by Up to 10%*

Two Sidewalls instead of Four

- + Advanced Tread and Casing Technology
- = Up to 30% Rolling Resistance Reduction*



Where Does Your Fuel Go?

Tires are 1/3 of vehicles fuel usage or approximately 2 mpg



Aerodynamic Drag

Mechanical Loses

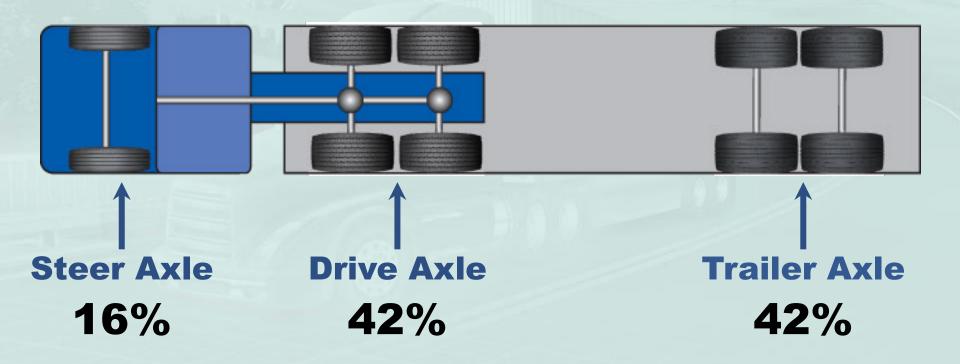
Rolling Resistance

At 65 mph, aerodynamic drag consumes approximately **40%** of the fuel

Mechanical loses consume approximately 25% of the fuel

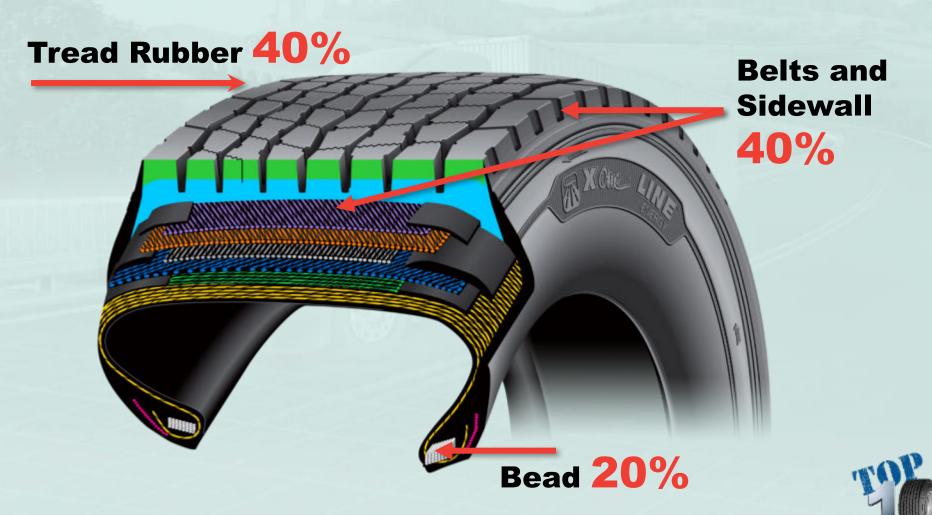
Rolling resistance accounts for approximately **35%** of the fuel consumed

Rolling Resistance Contribution by Axle





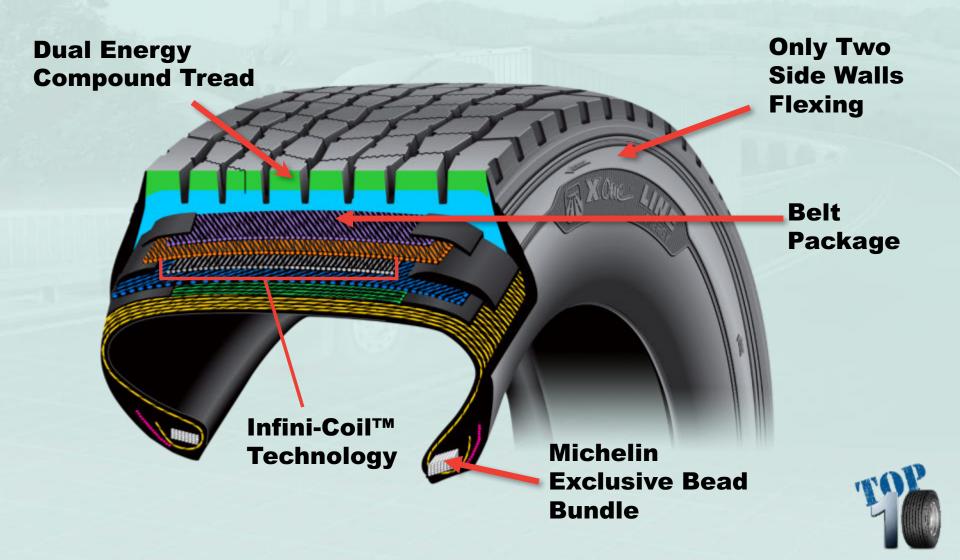
Rolling Resistance Contributions Vary within Different Parts of the Tire



Source: www.MichelinTruckTires.com

The MICHELIN® X One® Tire

Is Maximized in Every Way for Fuel Efficiency



4-Year Department of Energy Study



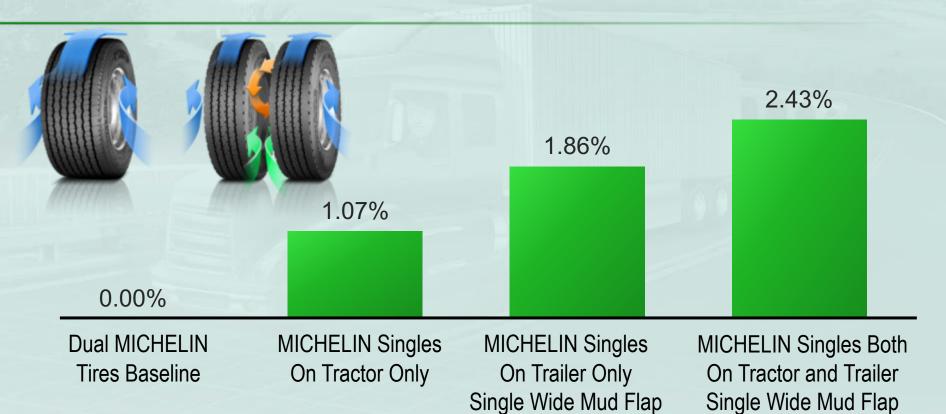
The More You Haul, The More You Save

The DOE verified that wide single tires, like The MICHELIN® X One® Tires, are more fuel-efficient than duals on heavy trucks, saving 6% overall and 10% with a fully loaded tractor trailer



MICHELIN® X One® Tires Also Impact Aerodynamics

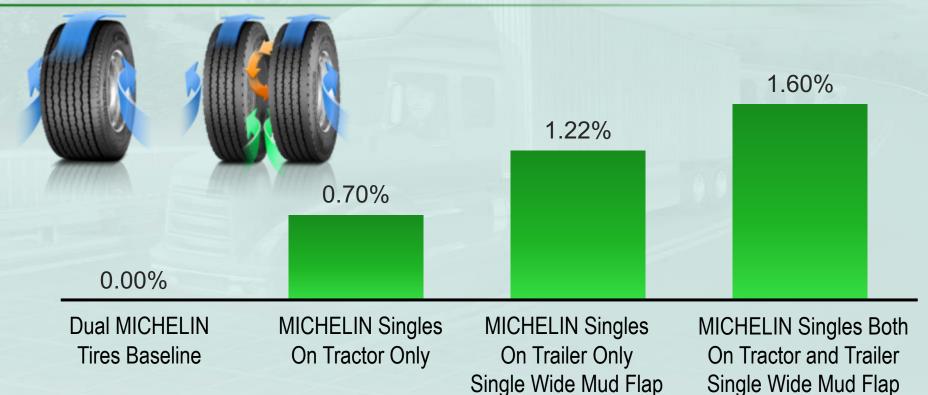
MICHELIN® X One® Aerodynamic Drag Reduction Effect



Laurens Proving Grounds T9 Test 7/19/2011 – 7/20/2011 Reduction in Aerodynamic Drag - %
Test performed by SmartTruck / BMI.

Aerodynamic Drag Reduction *Impacts Fuel Efficiency*

Increase in MPG due to MICHELIN® X One® Aerodynamic Drag Reduction Effect



Laurens Proving Grounds T9 Test 7/19/2011 – 7/20/2011 Increase in MPG due to Aerodynamic Drag Reduction – % Test performed by SmartTruck / BMI.

How Much Fuel Would You Save With MICHELIN® X One® Tires?

Visit Our
Fuel and
Mileage
Calculator!







More Payload



Tires Contribute to the Weight of a Vehicle

Heavier trucks require more fuel to accelerate and climb

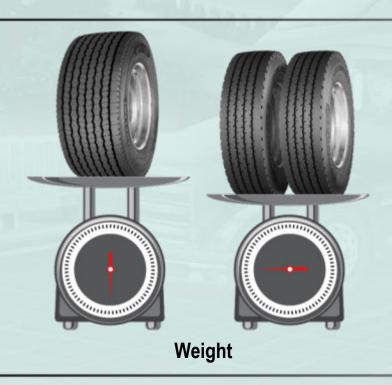
Any added weight reduces the amount of cargo that can be hauled

Every 10% drop in truck weight reduces fuel use between 5-10%*



Weight Savings with MICHELIN® X One® Tires

On the Drive and Trailer Axles, a Truck Can Carry a Range of 700 to 1,300 Pounds More*



Greater Payload
Greater Freight
Efficiency



^{*}Figures are approximations and are based on converting drive and trailer tires from duals to X One® tires

With MICHELIN® X One® Tires

How Much More Money Would You Make?

Example: Hauling Diesel Fuel

1 gallon of diesel 7.05 lbs.

Revenue to haul diesel \$0.09 per gallon*

MICHELIN® X One® weight savings 716.00 lbs. per truck

Potential extra load per trip 101.56 gallons

Additional revenue per trip 9.14

Trips per week 7

Additional revenue per week \$63.98

Weeks per year 52

Additional revenue per year \$3,327.11 per truck



*Estimated. Actual amount may vary. Please see next slide to input your actual figures.



With MICHELIN® X One® Tires How Much Could that Mean to Your Operation?

If you were hauling corn syrup at 11.82 lbs. per gallon, earning an average of \$.09 per gallon, you'd make almost \$2,000 more per truck per year

Hauling another commodity? Let's change the input values in the **blue cells** to estimate your additional revenue.

Pounds per Gallon	\$ 11.82	lbs.
Revenue per Gallon	\$ 0.09	Per Gallon
		37
X One Tire Total Weight Savings	716.00	lbs. per truck
Potential Extra Load Per Trip	60.58	Gallons
Additional Revenue per Trip	\$ 5.45	
Trips per Week	7	
Additional Revenue per Week	\$ 38.16	
Weeks per Year	52	
Additional Revenue per Year	\$ 1,984.45	per truck



Let's Be More Specific

Our Weight Savings Calculator Can Help!

WEIGHT SAVINGS CALCULATOR

SEE THE MICHELIN' X ONE DIFFERENCE

Want to see how much more payload you can haul by switching to MICHELIN® X One® tires? Use our weight savings calculator to calculate your potential weight savings and estimate additional revenue from hauling more payload.

VIEW SAVED SCENARIOS

COMPANY NAME:

GET STARTED





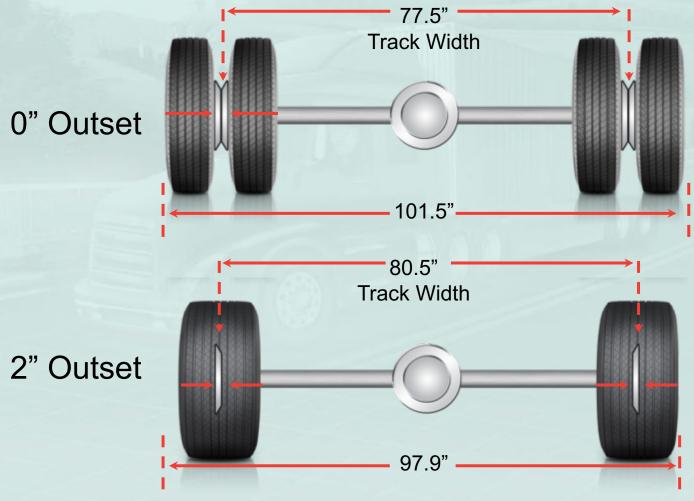


Improve Stability



Excellent Handling

With MICHELIN® X One® tires, the vehicle track width is extended, which helps **improve stability**



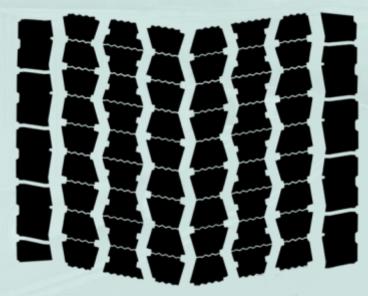


Note: Image of Trailer Tire Configuration.

Great Traction

Look At The MICHELIN X® One® Footprint

A big footprint means great traction & improved stability

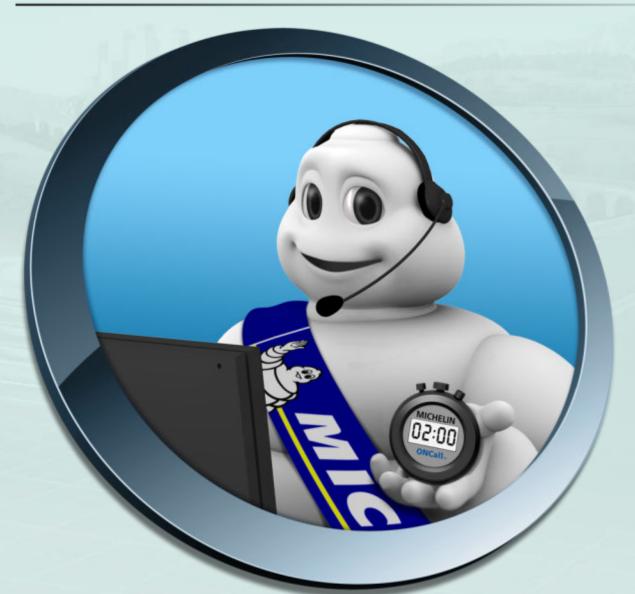


MICHELIN® X ONE™ XDA® ENERGY Footprint





Maximize Uptime





Easier Pressure Maintenance

Leads to Fewer Flats on the Road

Two Duals vs.

MICHELIN® X One® Tire







Operating a Tractor or Trailer on a Flat or Under Inflated Tire is LLEGAL Whether It's a Wide Base Single or Dual

All tire-related breakdowns need to be addressed with roadside service to respect existing laws and regulations

Otherwise, fleets run the risk of having a vehicle placed out of service, a fine and a poor CSA rating





MICHELIN[®] ONCall™ Emergency Road Service

Roll Time Target: Less than 2 hours

Free Dispatch Fee on MICHELIN® X One® Events Available in almost 2,000 Points of Sale Nationwide







MICHELIN® X One® ERS Events Have Comparable Roll Times to Duals

Average Downtime in Minutes



Difference is Less than 15 Minutes





Get Great Retreadability





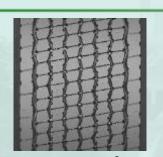
MICHELIN® X One® Tire Most Retreaded Wide Single Tire



13 years retreading

AII

MRT shops retread MICHELIN® X One® Casings



MICHELIN®
X ONE® LINE™
ENERGY D
Pre-Mold™ Retread



MICHELIN® X ONE® XDN2® Pre-Mold™ Retread



MICHELIN®
X ONE® XDA-HT®
Pre-Mold™ Retread



MICHELIN® X ONE® XTA® Custom-Mold™ Retread



MICHELIN®

X ONE® LINE™

ENERGY T

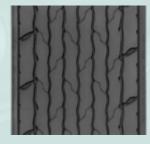
Pre-Mold™ Retread



MICHELIN®
X ONE® XTE®
Custom-Mold™ Retread



MICHELIN[®]
X ONE[®] XZU[®]S
Pre-Mold™ Retread



MICHELIN® X ONE® XZU S+ Pre-Mold™ Retread



MICHELIN®
X ONE® MULTI™
ENERGY T
Pre-Mold™ Retread



Retreadability of MICHELIN[®] X One[®] Casing

Infini-Coil Technology™ Ensures
Zero Casing Growth and Better
Crown Endurance

Extended Casing Warranty

Warranted at 100% for 70 weeks when retread via the Michelin Retread Technologies franchise network.

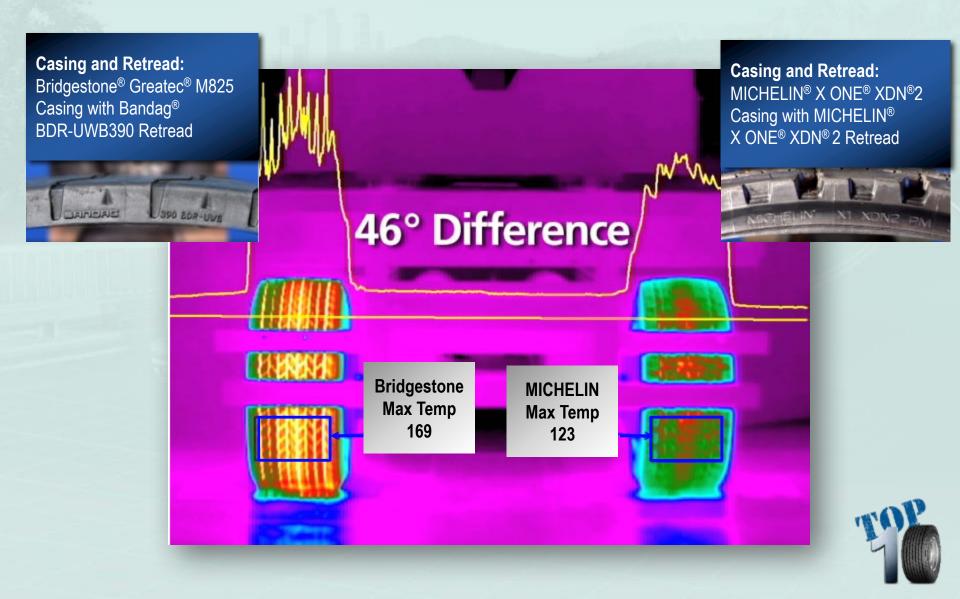


Michelin Retread Technologies, Inc.
National Limited Warranty
and Enhanced MICHELIN® X One® Casing Warranty

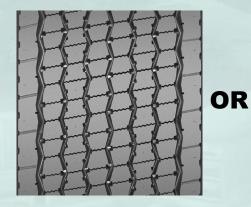


MICHELIN® X One® is a Cooler Tread

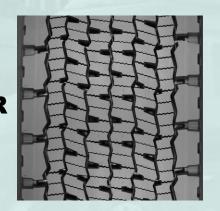
Thermal Camera Demonstration



Casing Guarantee



MICHELIN® X ONE® LINE™ **ENERGY D** Pre-Mold™ Retread



MICHELIN® X ONE® XDN®2 Pre-Mold™ Retread



MICHELIN® X ONE® XTA® Pre-Mold™ Retread



MICHELIN® X ONE® XTE® Pre-Mold™ Retread

Any MICHELIN® X ONE® XDN®2 Pre-Mold™ Retread or MICHELIN® X ONE® LINE™ ENERGY D Pre-Mold™

Retread cured on any MICHELIN® X ONE® original(2) casing by an authorized Michelin Retread Technologies Dealer is guaranteed for a second retread within 3 years of original (1st) Retread DOT Date. The MICHELIN® ON MICHELIN® second retread guarantee is limited to a MICHELIN® X ONE® XTA® or a MICHELIN® X ONE® XTE® retread for a trailer application. A \$100.00 casing credit will be issued if the casing is not retreadable a 2nd time due to workmanship and materials⁽³⁾ per above specifications. The MICHELIN® ON MICHELIN® X ONE® XDN®2 Pre-Mold™ or MICHELIN® X ONE® LINE™ ENERGY D Retread Casing Guarantee is limited to 7 years from

the casing's date of manufacture.

- (1) Michelin reserves the right to modify or discontinue this program at any time for any reason without prior notice.
- (2) Casing has not been through a retread process before.
- (3) See Michelin Retread Technologies, Inc. National Limited Warranty for details.

Mileage Guarantee





MICHELIN® ON MICHELIN® X ONE® XDN®2 Pre-Mold™ Retread Guarantee

*Terms and Conditions:

Valid only for MICHELIN® X ONE® XDN®2 Pre-Mold™ Retreads on MICHELIN® X ONE® Casings purchased before December 31, 2012. Applicable to a maximum of 20 retreads per ship-to location/customer. Valid for line haul applications only. Trucks must travel a minimum of 100,000 miles a year. You must assign a minimum of two similar trucks, operating in similar environments to the mileage challenge. Guarantee based on comparison between the wide base competitor baseline retread and the MICHELIN® X ONE® XDN®2 Pre-Mold™ Retread; proof of purchase with date and purchase price necessary for both the competitor baseline retread and the MICHELIN® X ONE® XDN®2 Pre-Mold™ Retread; claim must sufficiently document Removal Mileage (Off Mileage – On Mileage) and tread depth of the wide base competitor baseline retread and the MICHELIN® X ONE® XDN®2 Pre-Mold™ Retread. Guarantee will pay in the form of a credit for twice the difference of the purchase price between the wide base competitor baseline retread and the MICHELIN® X ONE® XDN®2 Pre-Mold™ Retread. Credit will be issued and all documentation must be validated by a Michelin Sales Representative. All MICHELIN® Limited Warranty exclusions still apply. See warranty for details. Michelin reserves the right to modify or discontinue this program at any time for any reason without prior notice. All claims must be made by December 31, 2015. See your local Michelin Retread Technologies dealer, or your sales representative for more details.





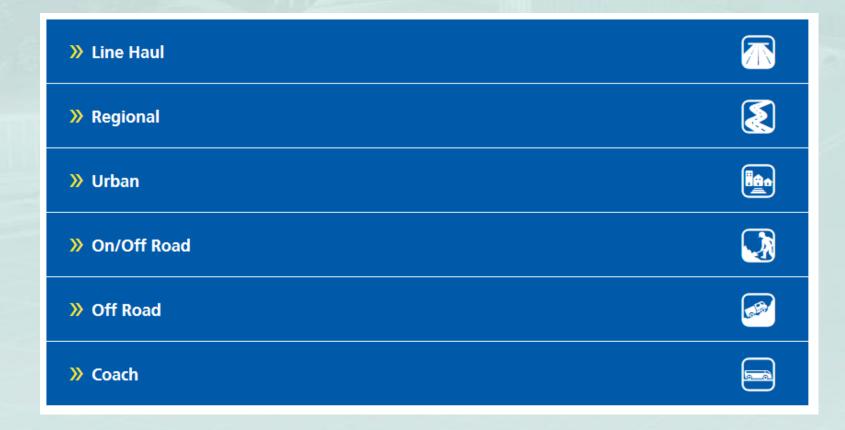
Tires and Retreads for Every Application





Every Application

Michelin is the only tire manufacturer to offer wide base single tires and retreads for **every application**







Increased Productivity





How The MICHELIN® X One® Tires

Save Time

Easier and Quicker Tire Mounting





Easier and Quicker Pressure Maintenance



Longer Brake Life

Due to the 1 or 2 inch outset of the wheel that goes with MICHELIN® X One® tires, more brake drum is exposed, which provides greater flow around the drum

Allows the brakes to run cooler

Fleets have reported longer brake life



Long Brake Life Adds to the Savings with MICHELIN® X One® Tires!



"We have been running the X-Ones since 2007. Since that time we have seen a 6% savings in fuel for the Roll Offs with the X Ones and a 3-4% savings in fuel for the Commercial division. **Brake lining life** for the X-One Roll Offs has **increased 32%** which equates to a **savings of \$1,540.00** per year per truck and the **Commercial trucks** have **increased** the **life 20%** which **saves \$1,475.00** per truck per year."

Jamie M. Woodard Division Maintenance Manager, AAA Recycle and Trash Republic Services





Meet Regulations





How MICHELIN[®] X One[®] Tires Affect CO₂/Ton-Mile

Energy Efficiency Without Compromise

MICHELIN® X One® tires offer superior fuel efficiency without compromising other tire performances

They have been verified by the Environmental Protection Agency's (EPA) SmartWay® program and meet California's CARB requirements



Energy Efficiency Examples

EXAMPLE: Raised Roof Sleeper w/Trailer

Figures are for illustration only



2012 Baseline = 100 gCO₂/ton-mile

Below are the **ONLY** inputs to meet Standards:

Aerodynamic (features with lower Cd)

Low RR tires (lower drive and steer Crr)

Idle Reduction Timer (shuts down after 5 min)

Reduced Weight (wide single tires)

Speed Limiter

7 gCO₂/ton-mile

4 gCO₂/ton-mile

5 gCO₂/ton-mile

1 gCO₂/ton-mile

3 gCO₂/ton-mile

New 2014 standard target = 90 gCO₂/ton-mile

Source: Volvo Mack 2010 ATA Panel



SmartWay® Verification CARB Compliance



The fuel saving and emission reducing benefits of our MICHELIN® X One® low rolling resistance tires have been **verified by** the Environmental Protection Agency's **(EPA)** SmartWay® program and meet California's CARB requirements

Energy Efficiency Without Compromise



MICHELIN® X ONE® LINE™ ENERGY D



MICHELIN® X ONE® XDN2®



MICHELIN®
X ONE® MULTI™
ENERGY T



MICHELIN® X ONE® LINE™ ENERGY T





Go "Green"



Emission Reduction Potential

Fitting MICHELIN® X One® Tires on 1,000 Tractor/Trailers Can Lead to Annual Savings



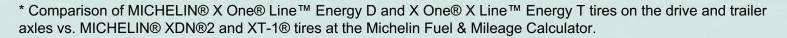
1.7 Million
Gallons of Fuel
per Year*





17,000 Metric Tons of CO₂ per Year*

The Equivalent of Removing 3,400 Cars from the Road





Oil Savings in Tire Production with MICHELIN® X One® Tires

Average savings of 7 gallons* per wheel end or

1.3 barrels of oil per tractor trailer







^{*}Oil content will vary from tire to tire depending on the materials used, tread depth, tire weight, etc.



We continue to explore how MICHELIN® X One® tires fit with new "green" technologies...





Alignment with Natural Gas

MICHELIN® X One® Tires Align Well with Natural Gas Vehicles

Cost Efficiency

Low Rolling Resistance Leadership

Lowest Total Cost of Ownership

Positive Residual Value Impact of MICHELIN® Brand

Sustainability

Emission Reduction

Longevity

Retreadability, Multiple Tire Lives





Satisfaction Guaranteed





Guarantees and Warranty



Tires and Retreads Food Savings Guarantee on each Tractor offered by Michelin representative.
 Limit 5 tractors per feet.
 Hest period is for six receipts. Reet provides current MPG per Tractor (i.e. 5.0 MPG). Fleet provides bimonthly updates for six months.
 End of test period – fleet provides final MPG per Tractor (i.e. 6.34 MPG). Ne Examinate: Next with: USK milestyee; averaging 6.0 MPG and paying \$4.00 gallon for diseat; should average about \$88,000 year in fuel crees. MICHELIN' ON MICHELIN' X ONE XDN'2 Pre-Mold' Retread and X ONE LINE" ENERGY D Pre-Mold" Retread Casing Guarantee MICHELIN' ON MICHELIN' = 1+1 OR Are MICHELIP X ONE: XDN'2 Pre-Mold" Retread or MICHELIN: X ONE: LINE" ENERGY D Pre-Mold." Retread cured on any MICHELIN' X ONE" original?" casing by an authorized Michelin Retread Technologies Dealer is guaranteed for a second retread within 3 years of original (14) Retread DOT Date. The MICHELIN' ON MICHELIN' second retread guarantee is limited to a MICHELIN' X ONE' XTA' or a MICHEUR* X DNE* XTE* retroad for a trailer application. A \$100.00 casing credit will be issued if ing is not retreadable a 2" time due to workmanship and materials" per above specifications. DREUM ON MICHEUM X DME XDMS Pre-MoleS or MICHEUM X DME UNES ENERGY D Casing Guarantee is limited to 7 years from the casing's date of manufacture. nor has high to make or discontinue the array of a partition for any major or they be not seen.

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Referrable to reducing to the Archard Continue Surveying a reals.

The MICHELIN' X ONE' Line Haul Fuel Guarantee

Peace of Mind - No Risk

MICHELIN



MICHELIN

Ready to convert to a Ten-Wheeler?



Which Other Technology Brings
Benefits Straight To Your Bottom Line?

Helping Both...

Reduce Your Costs

Save Fuel

Save Maintenance

Save Time





And Increase Your Revenue

Save Weight



Try MICHELIN® X One® Tires Today

Let us track how MICHELIN® One tires can add value to your business



