

# MICHELIN® SMARTWAY® VERIFIED LOW-ROLLING RESISTANCE TIRES



Michelin is constantly looking for ways to further reduce the environmental impact of our activities and products. MICHELIN® fuel efficient<sup>(1)</sup> tires can help your fleet save money and reduce fuel consumption, all while reducing greenhouse gas and air pollutant emissions. The fuel saving and emission reducing benefits of our low rolling resistance tires have been verified by the Environmental Protection Agency's (EPA) SmartWay® program.<sup>(2)</sup>

MICHELIN® fuel efficient tires are approved for use on EPA SmartWay® certified equipment and meet California's CARB requirements.

More information about the SmartWay program as well as verified low rolling resistance tires and retreads can be found at [epa.gov/smartway](http://epa.gov/smartway).

SmartWay®  
Verified

## ALL POSITION/STEER TIRES<sup>(2)</sup>



### MICHELIN® X® LINE ENERGY Z

- Industry Leading Mileage Guarantee: 20% more mileage guaranteed vs. leading competitor line haul steer tires.\*
- Dual Compound Tread: Delivers more mileage without compromising ultra-fuel-efficiency and retreadability.
- 7/7/3 manufacturer's limited casing guarantee<sup>(4)</sup>

\* Please see [MichelinTruck.com](http://MichelinTruck.com) > Reference Materials > Warranties/Guarantees for details.



### MICHELIN® X® MULTI ENERGY Z

- The Energy Casing delivers a cool running bead and sidewall for lower rolling resistance and improved fuel efficiency
- No compromise fuel efficiency and tread life comes from use of Dual Compound Tread technology, featuring a top mileage layer above a bottom fuel and durability layer
- Engineered to deliver excellent mileage in emerging super regional application



### MICHELIN® X® MULTI Z 19.5"

- An all position radial tire optimized for a wide spectrum of regional applications.
- Designed for increased fuel efficiency with new tread compound help to lowers rolling resistance
- Reduced irregular wear - directional tread design helps to reduce irregular wear.
- Enhanced casing life - groove bottom protectors and stone ejectors help to reduce stone drilling to extend casing life.



### MICHELIN® XZA2® ENERGY

- Optimized channel design allows for long tread life and minimized irregular wear
- Low rolling resistance compounds for fuel economy<sup>(3)</sup> in highway service
- Optimized for steer axle service

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## TRAILER TIRES<sup>(2)</sup>



### MICHELIN® X ONE® LINE ENERGY T2

Our most fuel-efficient trailer tire\*, the MICHELIN® X ONE® LINE ENERGY T2 tire is designed for improved tread wear, fuel and weight savings to lower your total cost of ownership.

- Matrix and micro sipes help improve wear.

\* Based on internal rolling resistance tests using ISO 28580 test method using comparable line haul trailer tires in tire size 275/80R22.5 LRG for the MICHELIN® X® Line Energy T and 445/50R22.5 LRL for the MICHELIN® X® One Line Energy T2 tire.



### MICHELIN® X ONE® LINE ENERGY T

- Breakthrough Advanced Casing Technology delivers up to 15% improvement in removal mileage\* by significantly reducing irregular wear
- Casing life is extended using Michelin's rectangular bead bundle and full width protector ply to help prevent punctures

\* Based on current pull point vs MICHELIN® X ONE® XTA® tire in field testing and observation.



### MICHELIN® X ONE® MULTI ENERGY T

- Directional spies and solid shoulders help reduce irregular wear\*
- Leading SmartWay® fuel economy<sup>(3)</sup> comes from use of Advanced Technology Compounds that deliver low rolling resistance
- Trailer tire designed to replace duals in high scrub regional applications

\* Based on current pull points vs MICHELIN® X ONE® XTE® tire in field testing and observations.



### MICHELIN® X® LINE ENERGY T

- No compromise fuel efficiency<sup>(3)</sup> and mileage
- Advanced Technology tread compound delivers 10% less rolling resistance than the MICHELIN® XT-1® tire
- Solid tread sculpture optimizes the contact patch for excellent wear resistance



**MICHELIN<sup>®</sup> X ONE<sup>®</sup>  
LINE ENERGY D**

- Michelin's fuel efficient<sup>(3)</sup> drive tire for North American line haul trucks
- No compromise fuel efficiency and mileage delivered by the Dual Energy Compound Tread, with a precisely balanced Fuel and Mileage layer on top of a cool running Fuel and Durability layer
- Guaranteed 15% more miles than MICHELIN<sup>®</sup> X ONE<sup>®</sup> XDA<sup>®</sup> Energy tire
- Excellent handling due to optimized traction and stability from full depth Matrix Sipes



**MICHELIN<sup>®</sup>  
X ONE<sup>®</sup> LINE GRIP D**

- Michelin's next generation X ONE drive tire for long haul and regional applications with grip that weathers the elements.
- Infini-Coil<sup>®</sup> incorporates 1/4 mile of steel cable
- Interlocking sipes with zig zag walls provide thousands of biting edges for traction.
- Weight savings of approximately 389 lbs. more payload\*

\* Based on replacing eight MICHELIN<sup>®</sup> XDN<sup>®</sup>2 dual tires with Alcoa<sup>®</sup> Ultra ONE<sup>®</sup> wheels with four MICHELIN<sup>®</sup> X ONE<sup>®</sup> LINE GRIP D tires with Alcoa<sup>®</sup> Ultra ONE<sup>®</sup> Wheels.



**MICHELIN<sup>®</sup>  
X<sup>®</sup> LINE ENERGY D**

- Excellent fuel efficiency<sup>(3)</sup> with leading tread life and traction
- 20% longer tread life\* thanks to top layer of Dual Energy Compound, a wide footprint and solid shoulder
- Excellent handling due to optimized traction and stability from Matrix Siping technology
- 7/7/3 manufacturer's limited casing guarantee<sup>(4)</sup>

\* Compared to MICHELIN<sup>®</sup> XDA<sup>®</sup> ENERGY tire



**MICHELIN<sup>®</sup>  
X<sup>®</sup> LINE ENERGY D+**

- Fuel efficient<sup>(3)</sup> dual drive tire designed to deliver for improved rolling resistance and fuel savings while providing exceptional traction.
- Interlocking siping and regenerating features provide biting edges throughout tread life.
  - Durable casing with high tensile strength steel belts supports repeated retreading.
  - 7/7/3 manufacturer's limited casing warranty<sup>(4)</sup>



**MICHELIN<sup>®</sup>  
XDA<sup>®</sup> ENERGY +**

- Michelin's most fuel-efficient<sup>(3)</sup>, line haul, dual drive tire.
- Fuel Savings Limited Guarantee\*
- Innovative FuelSaver tread compound provides ultra-low rolling resistance
- Tread design optimized to help provide long even wear
- 7/7/3 manufacturer's limited casing guarantee<sup>(4)</sup>

\* See your Michelin Representative or [michelintruck.com/reference-materials/manuals-bulletins-and-warranties/](http://michelintruck.com/reference-materials/manuals-bulletins-and-warranties/) for details.



**MICHELIN<sup>®</sup>  
X<sup>®</sup> MULTI ENERGY D**

- Fuel efficient<sup>(3)</sup> drive tire designed with optimized traction and treadlife
- Dual Energy Compound Tread delivers exceptional fuel efficiency<sup>(3)</sup> while optimizing traction and wear
- Longer tread life\* due to an optimized footprint

\* When compared to MICHELIN<sup>®</sup> XDA<sup>®</sup> ENERGY tire



**MICHELIN<sup>®</sup>  
X<sup>®</sup> MULTI D 19.5**

- An open shoulder drive axle radial tire designed for regional applications
- Advanced Technology Compound Results in 13% lower rolling resistance for improved fuel efficiency\*<sup>(3)</sup>
- Aggressive tread design with semi-open shoulder
- Provides exceptional traction and driver confidence

\* Versus MICHELIN<sup>®</sup> XDE<sup>®</sup>2+ tire.

(1) For more information on SmartWay<sup>®</sup> verified technologies, go to [www.epa.gov/smartway](http://www.epa.gov/smartway)

(2) MICHELIN<sup>®</sup> XZA2<sup>®</sup> ENERGY, XZA2<sup>®</sup>, XZA3<sup>®</sup>, XZA-1+, X<sup>®</sup> COACH XZ, XZA3<sup>®</sup>+ EVERTREAD<sup>®</sup>, X ONE<sup>®</sup> XDN2<sup>®</sup>, X ONE<sup>®</sup> XDA<sup>®</sup>, X ONE<sup>®</sup> XDA<sup>®</sup> ENERGY, X ONE<sup>®</sup> XTA<sup>®</sup>, X ONE<sup>®</sup> XTE<sup>®</sup>, XDA<sup>®</sup>3, XDA<sup>®</sup> ENERGY, XTA<sup>®</sup> ENERGY, and XT-1<sup>®</sup> tires are on the SmartWay<sup>®</sup> verified, low rolling resistance tire list, but are discontinued.

(3) Based on industry standard rolling resistance testing of comparable tires and retreads. Actual results may vary, and may be impacted by many factors, to include road conditions, weather and environment, driver performance, etc.

(4) 7/7/3 Manufacturer's Limited Casing Guarantee: 7 year or 700,000 mile or 3-Retread Limited Guarantee for certain Michelin tires when retreaded by an authorized Michelin Retread Technologies (MRT) Dealer only. See limited warranty for details.

(5) "No bus shall be operated with regrooved, recapped or retreaded tires on the front wheels." US Code of Federal Regulations: Title 49, Transportation; Part 393.75.

NOTE:

- The MICHELIN<sup>®</sup> XZE2, XZE<sup>®</sup>, XDE<sup>®</sup>2+, XDN<sup>®</sup>2, XDA2+<sup>®</sup> ENERGY, XDE<sup>®</sup> M/S and XTE<sup>®</sup> tires prior to DOT date 1011 will still be considered as "verified" for the purposes of the SmartWay<sup>®</sup> program and for any state or local regulations that use this list as the reference.
- CARB will apply an exemption for open shoulder drive tires that will include the MICHELIN<sup>®</sup> XDN<sup>®</sup>2 and the XDE2+ tires until Jan. 1, 2013 (based on tire DOT date).