Overview

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Tire Specifications

445/50R22.5 tire Michelin XDN2
- Diameter: 40.4in/1026mm
- Width: 17.1in/435mm
- Max Load: 10200lbs@120psi / 4625kg@830 kPa

275/80R22.5 tire Michelin XDN2
- Diameter: 40.6in/1030mm
- Width: 11.0in/279mm
- Max Load: 6175lbs@110psi / 2800kg@760 kPa

455/55R22.5 tire Michelin XDN2
- Diameter: 42.3in/1076mm
- Width: 17.6in/446mm
- Max Load: 11000lbs@120psi / 5000kg@830 kPa

11R22.5 tire Michelin XDN2
- Diameter: 41.7in/1060mm
- Width: 11.2in/284mm
- Max Load: 6175lbs@105psi / 2800kg@720 kPa
USA

- No permits required for loads of 17,000 Lbs (7,700 kg)/axle. Load distribution must follow the National Highway Network regulation of 80,000 Lbs maximum gross vehicle weight (12,000/34,000/34,000).
Red means limitations on loads, which cannot exceed 6000 kg (13,228 lbs) per axle for single tires.

Green allow US loads 17,000 lbs/Axle. Parity with Dual Canadian loads allowed with a permit in some case.

Yellow allow US loads 17,000 lbs/Axle with either permit or may have road restrictions in some cases.

Québec

No permits required for US loads of 17,000 lbs (7,700 kg)/axle. In order to run parity to Canadian Dual loads of 19,840 lbs (9,000 kg)/axle, a $10.00 permit is required per vehicle.
Ontario

Parity to Canadian Dual loads 19,840 lbs (9,000 kg)/axle is allowed, no permit is required.

Maritimes

P.E.I.

Permits are issued for a fee of $25 per fleet to cover weights of single axle up to 7,700 kg, tandem axle up to 15,400 kg and tridem axle up to 23,100 kg. Drivers are made aware upon entry at both scale facilities at Borden and Wood Islands.
Maritimes

Nova Scotia

Maximum load is 7,700 kg, in the case of an axle equipped with 2 tires, other than a steering axle, that has tire widths of 445 mm or greater and is installed on a vehicle that is operated on a Maximum Weight Road. 15,400 kg maximum load for a tandem axle and up to 23,100 kg for a tridem axle. No permit required.

Maritimes

New Brunswick

Permit costing 50$ is required to use single tires for the whole fleet. Single axle maximum load is 7,700 kg, 15,400 kg for a tandem and 23,100 kg for a tridem.
Western Canada

Manitoba
Load limits will vary according to route type:

- RATC Routes: 7,700 kg for single axle and 15,400 kg for a tandem. Class A1 highways have 7,280 kg for single axle and 12,800 kg for a tandem. Finally, Class B1 highways have 6,560 kg for single axle and 12,000 kg for a tandem.

Western Canada

Saskatchewan
Maximum load is 7,700 kg for single axle and 15,400 kg for a tandem. No permit is required.
Western Canada

Alberta

Maximum load is 7,700 kg for single axle and 15,400 kg for a tandem. A special permit is required which cost $15 for the whole fleet.

Western Canada

British Columbia

Maximum load is 7,700 kg for single axle and 15,400 kg for a tandem. No permit is required.
Benefits

Fuel economy:

- 445/50 vs 275/80 3.98%*
- 455/55 vs 11R22.5 5.09%*

*Energotest results spring 2009

- Lower tire cost
- Lower rim cost
- Reduced weight by up to 80 kg/180 lbs per axle
- Reduced tire inventory
- Reduction of waste rubber
Conclusion

- We must recognize the importance of adjusting the current regulations with respect to the new environmental requirements.
- New sources of energy will benefit from the use of single tires.
- Many years of use throughout Europe.
- A common regulation across Canada will facilitate the introduction of new technologies.
Questions

Merci !
Thank You !