

When is it time to replace worn tires?

Tire wear is a function of application. Spinning of tires, sharp turns especially at high speed, heavy loads, running over rough surfaces or debris left on floor, contact with certain chemicals and/or impact with pallets, dock plates etc. will severely reduce tire life. These conditions will affect pneumatic and solid tires.

Pneumatic-Shaped Solid Tires

Pneumatic-shaped solid tires should be replaced when the thickness of the tire has worn to about three quarters of the original section height.

Example:

A 700 x 12 5.00 tire with an original outside diameter of 26.75" is considered worn out when the tire diameter is 22.4".

Press-On Tires

Rubber press-on tires should be replaced when 30% of the tire's original tread rubber has been worn off. Using a tire past 30% significantly increases shock transmission to the forklift resulting in forklift damage and potential operator injury. Once a tire has been worn past 30%, just a 10% increase in tread wear will increase shock transmission over 250%. Exposing your equipment and forklift operators to excessive shock could cost you thousands of dollars in repairs and lost work hours.

Example:

An 18" O.D. tire, the tire should be replaced when the diameter is 16.4" with a tread thickness of 1.8".

The following table shows more examples for other tire sizes.

Tire Size	Diameter (when tire is worn)	Thickness of Remaining Tread
18 x 7 x 12-1/8	16.4"	1.8"
18 x 8 x 12-1/8	16.4"	1.8"
22 x 8 x 16	20.4"	1.9"
22 x 9 x 16	20.4"	1.9"
22 x 12 x 16	20.4"	1.9"
28 x 12 x 22	26.4"	1.9"



Take into account the following factors when making a tire replacement decision.

1. Loss of load capacity associated with decreasing diameter, causing accelerated wear and overheating.
2. Slower speed due to the smaller diameter.
3. Reduced ride comfort for the operator.
4. Lower ground clearance and lifting height.
5. Increased degree of chunking on the tread and sidewall.

Please Note: Forklift trucks are used in a large variety of applications.

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