When should you replace worn tires?

Most rubber press on tires have between 2.25” and 2.75” of rubber thickness when they are new.

Example
- $21 \times 7 \times 15 = 21”$ O.D. minus the $15”$ I.D. = $6”$
- $6”$ divided by the two halves of the tire = $3”$
- Minus the thickness of the baseband $5/16 \times 2$
- This leaves $2.3/8’$ of rubber

When half of the rubber is worn off or $1.25”$ to $1.50”$ is left on the baseband, almost 100% of the shock is transmitted through the tire to the machine and the operator. You should replace the tires at this time.

At this point the tire has lost approximately 35% of its original carrying capacity and it is unable to carry the load it was originally designed for. The tire will start to split or “radial crack” on the sidewall. This is due to the remaining rubber, under load cannot deflect anymore and as a result will split.

Also at this point of tire wear the following factors come into play.
- The loss of load carrying capacity will cause accelerated wear and heat build up inside the tire.
- Slower speeds
- Reduced ride comfort for the operator
- Increased maintenance costs
- Lower ground clearance and lifting height

There are two methods of measuring a tire to determine whether or not it is worn out.
- Actually measuring it with a tape measure.
- All Continental Industrial Tires have our name molded into the sidewall of the tire. As a general rule of thumb when the tire wears down to the top of the nameplate it should be changed.