

## PRESS RELEASE

Over 30 per cent of spare truck tires are retreads

### **How retreads are manufactured**

Currently 34, 7% of spare truck tires in Italy are retreads. The equivalent U.S. percentage is even higher, around 50%. Choosing retreads means saving money without neglecting road safety. This is all the more so now, since retreads, in Italy and Europe, are exclusively manufactured in compliance with UNECE Regulations 108 and 109, which introduce similar standards of safety and quality control for retreads as for new tires. On the other hand, when it comes to retreads and safety, one thing needs to be said to settle the matter once and for all: they are also widely employed in the aircraft industry. It might then be interesting to know what the retread process consists of. Airp (the Italian Tyre Retreaders Association) hereby discloses the techniques involved in retread manufacturing.

The retread process can be divided into six steps. Step one is the primary inspection, whereby worn tires are inspected before they are accepted for retreading. Ultrasound machines or hi-tech tools are used to inspect casings, and they can spot even the smallest defects. Step two is buffing, namely removing the worn tread from the tire casing, buffing the surface to the correct shape and size, and roughening the texture to allow receiving a new tread. In the following phase, a layer of cushion gum is applied onto the buffed casing to protect the surface and prepare it for the new tread rubber. Step four is application of the new tread. The following step is curing (or "vulcanization"), which can be accomplished by using two different systems: the mold cure system or the precure system.

In the mold cure system, the tread rubber - made of a mixture of rubber having the same chemical-physical properties as the rubber used for new tires - is applied to the buffed casing and is then vulcanized in a rigid mold containing the tread design in the tread area. In the precure system, the tread rubber, that has already been vulcanized with the new tread design, is applied on the buffed casing. The tire is then placed into a heated chamber where it gets vulcanized. The last step is the final inspection. This operation is not performed by sample, but on each single tire.

The retreading process – highlights Airp – is accomplished through sophisticated machinery and each step is supervised by qualified specialists. The result is a product that is subjected to the same controls as for new tires, and it is used on commercial and military jets, on city buses, on trucks and by many other users that choose it because it is safe and cost-effective. Besides, retreading is environmentally friendly, for it allows doubling a tire's life and therefore reducing environment-polluting tire disposal procedures.

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