

THE RETREADING PROCESS

1) INITIAL INSPECTION

The purpose of initial inspection is to verify that a casing is acceptable for retreading using a thorough inspection of each tyre, inside and outside. Identify casing injuries and determine if repairable. Reject or approve the casing for processing.

2) BUFFING

The primary objective of buffing is to prepare the worn tread surface of the tyre to receive a retread. The original tread design and some of the undertread is removed to provide the casing with the required dimensions and surface texture.

3) TREAD PREPARATION & BUILDING

Building is the process of applying a premoulded retread or new tread rubber to the buffed and prepared casing.

An uncured cushion gum that will develop the bonding between premoulded tread and casing is applied to the casing. Premoulded treads are cut to net length, applied and splice on the casing

In the mould cure process uncured tread compound is extruded or applied as a strip directly to the casing.

4) ENVELOPING

In the premould process the uncured cushion compound has to vulcanise while the premoulded tread has to be kept in position. Therefore the tyre is put into an envelope which presses through a vacuum system, the premoulded tread uniformly on the cushion and the casing

5) VULCANISING

The purpose of the curing is to apply specified heat and pressure over a period of time to unvulcanized rubber so that the rubber is cured to the point of best physical properties and maximum adhesion to the surrounding elements. In the premoulded process the enveloped tyre is put into an autoclave whereas in the moulded process the tyre is cured in proper tyre moulds

6) FINAL INSPECTION

To insure a quality retread each tyre passes a thorough inside and outside visual inspection. It is mandatory that the tyre meets all customer and government regulations. Some retreaders are also using instrumented inspection like Xray, Shearographie or High Pressure Tester. Unacceptable tyres are rejected and scrapped.

