Retread
Plant Tour
Goodyear CT&SC Uses Goodyear’s “Authorized Retreading” Process

✓ Exclusive Goodyear Authorized Tread Designs and Compounds - New tire technology and performance in a retread!

✓ Exclusive Goodyear CT&SC Retread Production Control & Performance Reporting System - Tracks retreads from pick-up to delivery using unique barcode labeling, and, provides meaningful use and cost reports to our trucking customers, including out-of-service tire reports!

✓ Goodyear CT&SC’s “Fleetwise” internet-based reporting system - Provides the Goodyear CT&SC customer via discrete customer security access codes with new, retread and service purchase information and trends, and, current retread processing data including production, inventory and scrap reports.

✓ Goodyear Approved Retreading Process - Unicircle & Precure Methods - Goodyear manufacturing quality assurance standards & process auditing assured uniform and high standards of finished retreading!
   ▪ Goodyear’s retread training programs for production associations
   ▪ Goodyear’s Retread Process Manual Standards and for Quality Assurance Audits of Goodyear CT&SC retread plant for conformance to standards
   ▪ The Goodyear retreading process - production steps and parameters for:
     ➢ Casing Inspection
     ➢ Casing Repair
     ➢ Casing Buffing and Building procedures
     ➢ Retread Curing and Finishing Procedures

■ State-of-the-Art Retreading Equipment for Retreading Consistency - Precision retreading equipment capable of highest level of efficiency and accuracy!
   ▪ Hawkinson NDT-II Electro-mechanical casing inspection
   ▪ Matteuzzi RAS-98E Buffers and/or RAS-90
   ▪ AZ Cushion Strip Extruder
   ▪ UNICIRCLE Type 2 or Type 1 Tread Applicator
   ▪ Matteuzzi RAS 502 Precure Tread Builders
   ▪ 25-Tire Curing Chambers
   ▪ Matteuzzi G100 3-stage Air Pressure Final Inspector

■ Nationwide Goodyear Authorized Retreader Retreading Warranty & Extended Goodyear Casing Warranty for G300 series casings! And Goodyear’s warranty for all other Goodyear Brand, Dunlop Brand, and Kelly Brand all-steel radial tires and casings.
Goodyear CT&SC’s Computerized Reporting and Control Systems

- Worn Tire (“Casing”) is identified with a barcode label when picked up.
- Same barcode is used on the production work order.
- The barcode is the link for controlling the casing in production & reporting all data to the customer on Fleetwise.
- Barcoding eliminates manual keyboard errors.
- Each retreading step has the customer’s building spec’s and instructions at the work station terminal.
- Customer spec’s are controlled by:
  - Casing DOT# for age allowed for retreading.
  - Customer tread design preferences by type of casing or intended service.
  - Special nail hole repair or section repair instructions.
- Fleetwise Internet reporting available by:
  - Purchases by category.
  - Inventory levels.
  - Work-in progress reports.
  - Scrapped Tire and “RAR” tire reports.

Retread Plant Entry Station with Barcode Reader

All casings brought into retread production system are tagged – the tag is affixed to tire, to Plant Work order, and is part of finished tire label.
Goodyear CT&SC's Internet Reporting Capabilities - "Casing Reject," "Purchase" & Other Reports

Reports prepared online by *casing brand or* type of out of service condition, in either "table" or "Graph-Chart" style.
The Goodyear CT&SC Plant Layout

25-Tire Curing Chamber

Process monorail throughout Plant

G100 Matteuzzi Final Casing Inspection

In-line Final Inspection & Finishing Station

Matteuzzi Automatic Buffers

Start

Hawkinson NDT-II Initial Inspection

Repair Area Tires Repaired Before Buffing

AZ Cushion Extruder

Precure Tread builders

GOODYEAR
COMMERCIAL TIRE & SERVICE CENTERS
Goodyear CT&SC’s Retread Processing Systems

NDT-II CASING INSPECTION SYSTEM
- Casing is electrically charged in crown area & sidewalls
- Punctures are revealed when electrical charge is grounded to metal roller
- Capacity for all LT/MCT truck sizes
- Total visual inspection as casing is rotated
- High degree of reliability & accuracy
- Radial and bias-ply casing inspection capability Detects flaws from holes through the casing
- Detects hole through liner to casing body
- Detects flaws from penetration to the belts

DOUBLE POSITION REPAIR STATION
- Motorized forward/reverse rotation control
- Built-in worktable and ready-tool storage
- 3 foot-valves enable full operator concentration on repairs

MATEUZZI COMPUTER ASSISTED BUFFING MACHINE
- 1,000 casing buffered specifications pre-programmed to control buffered casing profile accuracy
- Computer controlled complete top shoulder finished buffing for new tire appearance
- A steel belt detector is programmable for underbase thickness for each tire
- Automatic sidewall brush for shoulder texture
- Rasp water spray system to prolong blade life and maintain texture
- Narrow convex rasp for higher speed capacity
- Tire inflation pressures vary from 21PSI to 36PSI - depending upon optimum buff requirements by tire size
Goodyear CT&SC’s Retread Processing Systems

PRECURE TREAD BUILDING MACHINE
- PLC – controlled semi-automatic builder
- Works with or without cushion gum
- Automatic build cycle
- Tread lift to load tread rubber
- Enclosed area for poly collection
- Adjustable cutting cycle for small treads
- Totally automatic stitching to do all tires and tread with or without wing

MONORAIL – ALL TIRES MOVED BETWEEN WORK STATIONS USING MONRAIL - prevents tire contamination from excessive handing and allows improved work flow between the work stations
Goodyear CT&SC’s Retread Processing Systems

23-TIRE CURING CHAMBERS

• Uniform vulcanizing
• Equipped with Envelope Pressurization System (EPS) to improve vulcanizing of highly detailed modern tread designs by increasing curing pressure)
• Surelock Sealing Ring System used to clamp envelope to bead - System permits uniform, effective temperatures for each casing
• Extended length vacuum and curing tube hoses to improve efficiency of moving tires in and out of chamber
• Crown-seal door lock to permit safe operation
• High volume, overhead ducted air flow over finned - tubes steam lines for temperature consistency
• Fully vulcanizes tread and all repairs to casing with equal or improved strength compared to the new tire
Goodyear CT&SC’s Retread Processing Systems

G-100 MATTEUZZI HIGH PRESSURE CASING INSPECTION

• Final step in retread inspection process
• Enclosed system provides operator with safe, visual inspection of finished retread at three stages of inflation
  ➢ 30 PSI
  ➢ 60 PSI
  ➢ 120 PSI
• The inspection process helps locate undiscovered nail holes, deformations in the casing, and out-of-spec repairs
• The inspection process has the capability of successfully identifying tires with potential for weakened steel cords failure in radial tires (the result of a prior impact injury)