

## Enhanced Energy Reduce at Cooper Tires



**Cooper Tire Tupelo Lighting Project** 













### Manufacturing Facilities

• \\ World Wide:

Cooper Tire and Rubber Company Findlay, OH Cooper Tire and Rubber Company Texarkana, AR Cooper Tire and Rubber Company Melksham, England Cooper Tire and Rubber Company El Salto, Mexico

Cooper Tire and Rubber Company Clarksdale, MS

Cooper Tire and Rubber Company Tupelo, MS

Cooper Tire and Rubber Company Krusevac, Serbia

Cooper Tire and Rubber Company Kunshan, China



### History Tupelo Plant

- Original manufacturing plant: Pennsylvania Tire
- Cooper Tire purchased in 1984
- Started production in 1985
- Passenger vehicle tire manufacture
- Presently employing : 1,800
- Current Sq.Ft. under roof: 1,718,206 sq.ft
- Currently adding for expansion(Auto-Compounding 14,000 sq.ft.)



## Energy Slogan

# Cooper asked its employees to submit ideas for an energy slogan.



### A panel selected the winner.





## Promoting Tire Safety



The Cooper Tire & Rubber Foundation, the philanthropic arm of Cooper Tire, has created a new program -"Tread Wisely" - to promote driver and tire safety among teens and young adults. Cooper is teaming up with the National Organizations for Youth Safety (NOYS) on this program.



## Sustainability



# RESPONSIBILITY THE COOPER WAY

2015 CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY REPORT

#### The most recent report showing Cooper's sustainability efforts can be found linked on the Cooper Tire website

http://coopertire.com/CooperTireCorporate2015/media/Media/sust ainability-report/CSR\_SustainabilityReport\_2015.pdf

5-Year achievements include:

- Energy intensity reduced by 17%
- GHG Emissions reduced by 16%
- Water use reduced by 6%
- Landfill use reduced by 30%
- Experimenting with alternate sources of rubber
- Developed a fuel efficient tire that improved efficiency by 5.5%
- Safety-TRIR improvement of 30%





PLANT PRODUCTION LIGHTING

# PLANT

### HUBBELL FIXTURES

 PREVIOUS PLANT LIGHTING WAS THE HUBBELL 400 WATT FIXTURE USING APPROXIMATELY 460 INPUT WATTS TO GET 60 FC ON THE WORKING SURFACE. COST PER YEAR TO RUN APPROX. \$236/YR PER FIXTURE





### ALSO USED WAS THE HOLOPHANE 320 WATTS FIXTURE APPROXIMATELY 380 WATTS INPUT TO THE FIXTURE. \$183 ANNUAL COST PER FIXTURE





### IMPROVE AND REDUCE





### SUSTAINIBILTY

#### SUSTAINIBILTY

Reducing your carbon footprint





Sustain a Green Environment





### Reduction of CO2

- Amount of CO2 reduced 802,065. pounds at a reduction of 270 watts, this is going from 460 watt fixture to a 190 fixture annually
- For this project there was a total of 375 on this project
- The plant total number of fixtures is 4265 fixture
- Total reduction of CO2 for the plant was 3,420,807,225 billion metric ton of CO2 reduced.



### HOLOPHANE PHUZION LED

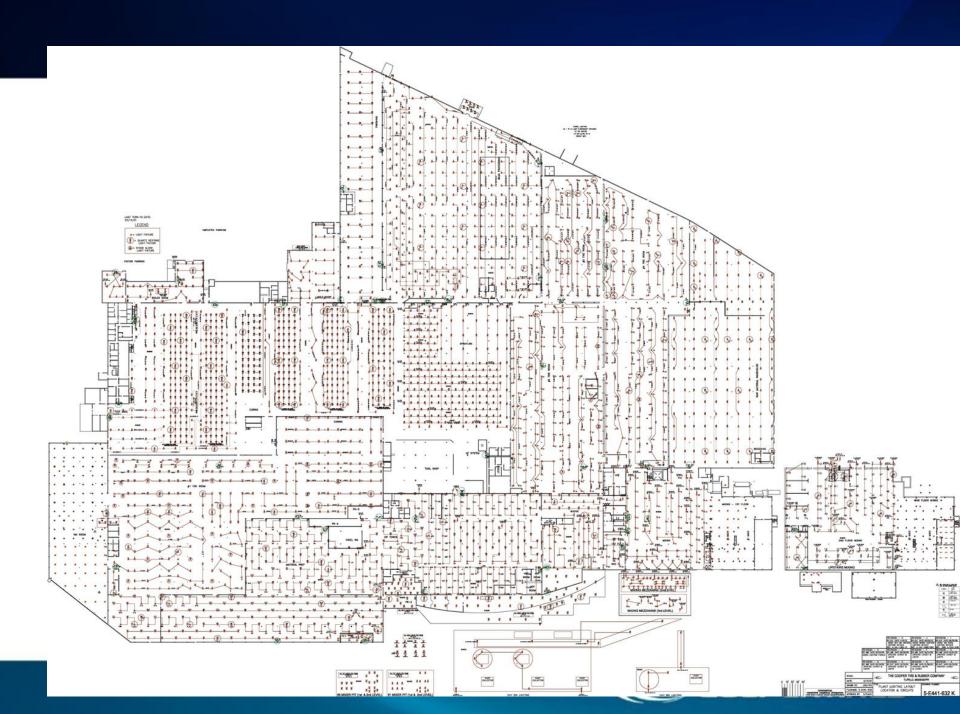
- THE NEW CORPORATE LIGHT IS THE HOLOPHANE PHUZION LED INPUT WATTS ARE 190 AND IT PRODUCES APPROXIMATELY 72 TO 84 FC ON THE WORKING SURFACE. THIS HELPS IN SAFETY, HOUSEKEEPING AND QUALITY WHILE REDUCING ENERGY COST BY 41% PER FIXTURE. COST TO RUN IS APPROX. \$97/YR. THIS A 59% SAVING OVER THE EXIST HUBBELL FIXTURES.
- THE PLANT BEGAN ITS LIGHTING IMPROVEMENTS IN THE CONDITIONED SPACES, THEN MOVED ON UNTIL THE ENTIRE PLANT WAS UPGRADED. THE STANDARD FOR THE CORPORATE LIGHTING WAS SET HERE AT TUPELO PLANT.
- SOME OF THE FIXTURES ARE EQUIPPED WITH A MOTION SENSOR TO HELP ACHIEVE EVEN GREATER SAVINGS, THESE ARELOCATED IN STORAGE AREAS WHERE THERE IS VERY LITTLE TRAFFIC OR MOVEMENT.



## Holophane Phuzion Fixture





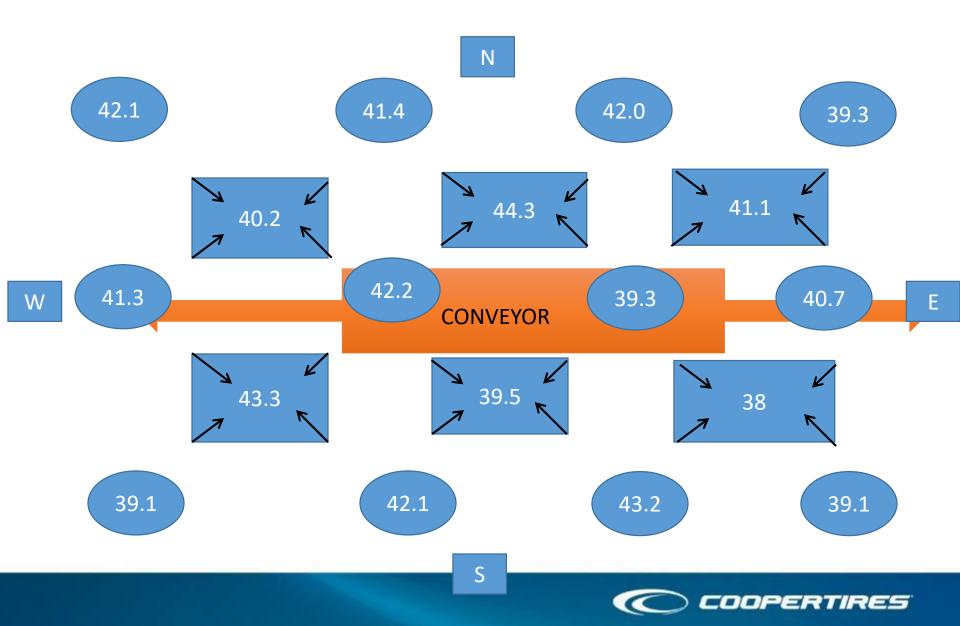




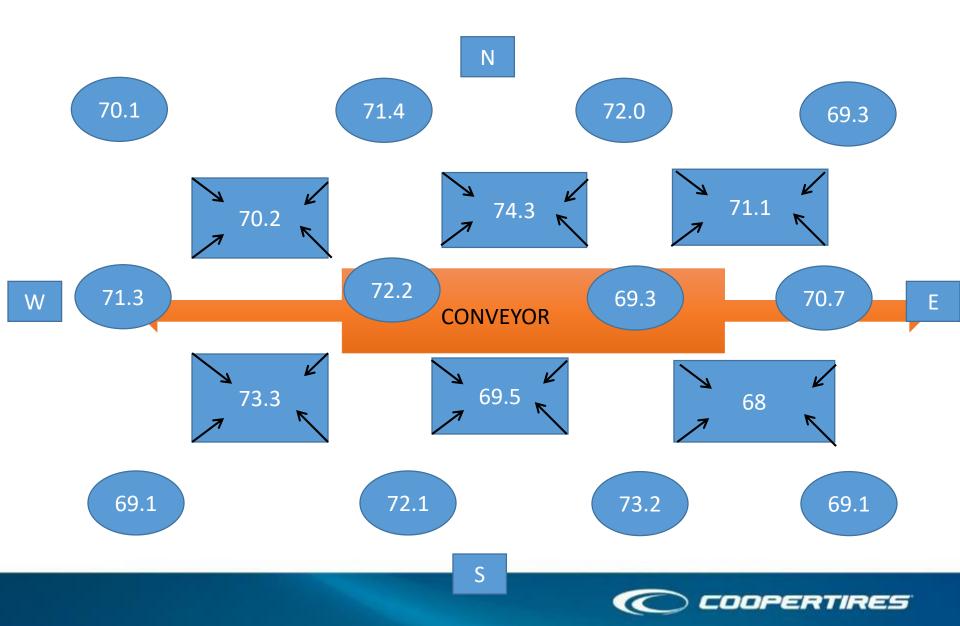
# VMI MAXX ROOM LIGHTING



### VMI MAXX ROOM(before)

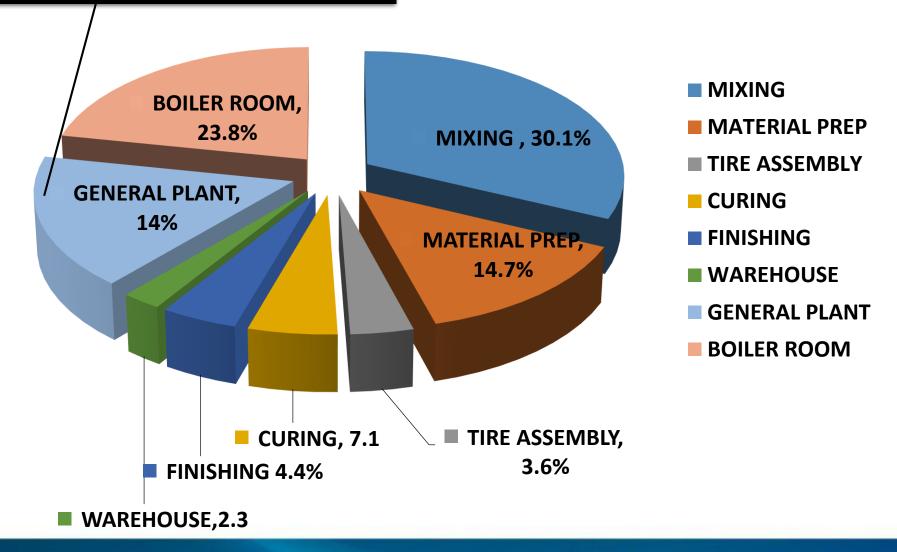


### VMI MAXX ROOM(after)



## PLANT ELECTRICAL

Plant lighting ,(over a megawatt of energy)





### **Incentive Program**



#### **Cooper Tire Warehouse**

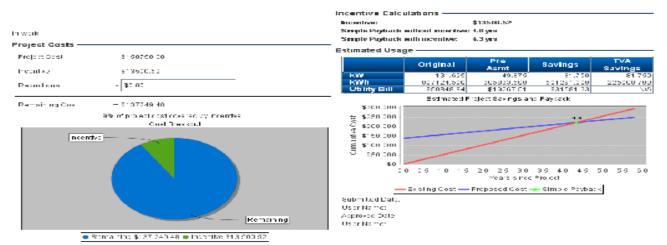
Submission #: -

Project #: -

Preliminary Assessment - In-work

#### Summary

Incentive: \$13500.52	Number of Rooms: 1
TVA Incentived Savings: 225008.700 kWh	Number of Measures: 1
	Number of Existing Fixtures: 375
	Number of Proposed Fixtures: 375
Project Cost: \$150750.00	Project Rate: \$0.00/kW \$0.063/kWh
Incentive: \$13500.52	Annual kWh Savings: 501291.000
Reductions: \$0.00	Annual Utility Bill Savings: \$31581.33
Remaining Cost: \$137249.48	Simple Payback without Incentive: 4.8 yrs
	Simple Payback with Incentives: 4.3 yrs





### Famous Quote

#### "THERE ARE ENDLESS OPPORTUNITIES, WE SET UP OUR OWN BOUNDARIES, WHICH SHOULD BE ENDLESS"



PRESIDENT RONALD REAGAN



### Energy Thought





