

Tire Business Development



Bill Henderson
Toby Winkler



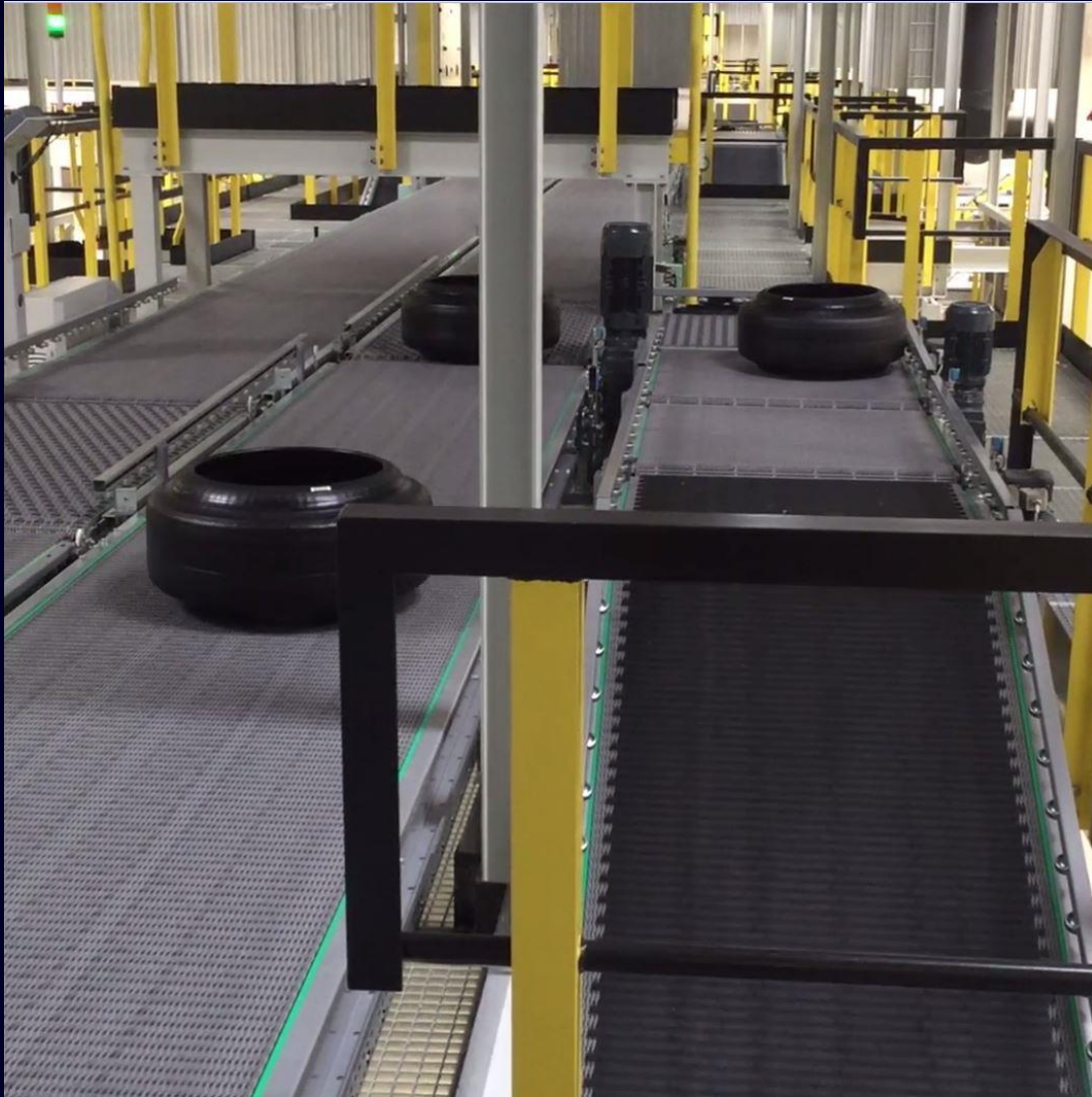
SAFETY MOMENT: Walking around a PLANT

- 1) If you are visiting a plant, please check with your contact for the plant to verify the Personal Protection Equipment (PPE) Requirements. Every plant is different.
- 2) Many plants require you to watch a safety video or complete a safety assessment or certification – Give yourself extra time if it is your first visit
- 3) Loose Clothing, Long neck jewelry, Ties should be avoided. Rings & watches may be prohibited too.
- 4) Be very careful with a backpack on your back – E-Stops, Machine Cabinets
- 5) Once in the plant, make sure that you watch everything – Fork Trucks, Buggies, Bicycles can be moving, and they may have the right of way
- 6) Be aware of the exits, if something happens KNOW where to go
- 7) When walking in aisles – stay in designated areas. If there are no lines or designated areas, be very cautious, walk in single file and stay close to railings and walkways. Avoid walking in pathways for fork trucks and other in-plant vehicles
- 8) Look for signs and know where the Material Safety Data Sheets are located. Many manufacturing plants including tire uses dangerous and DEADLY chemicals. Know before you go!

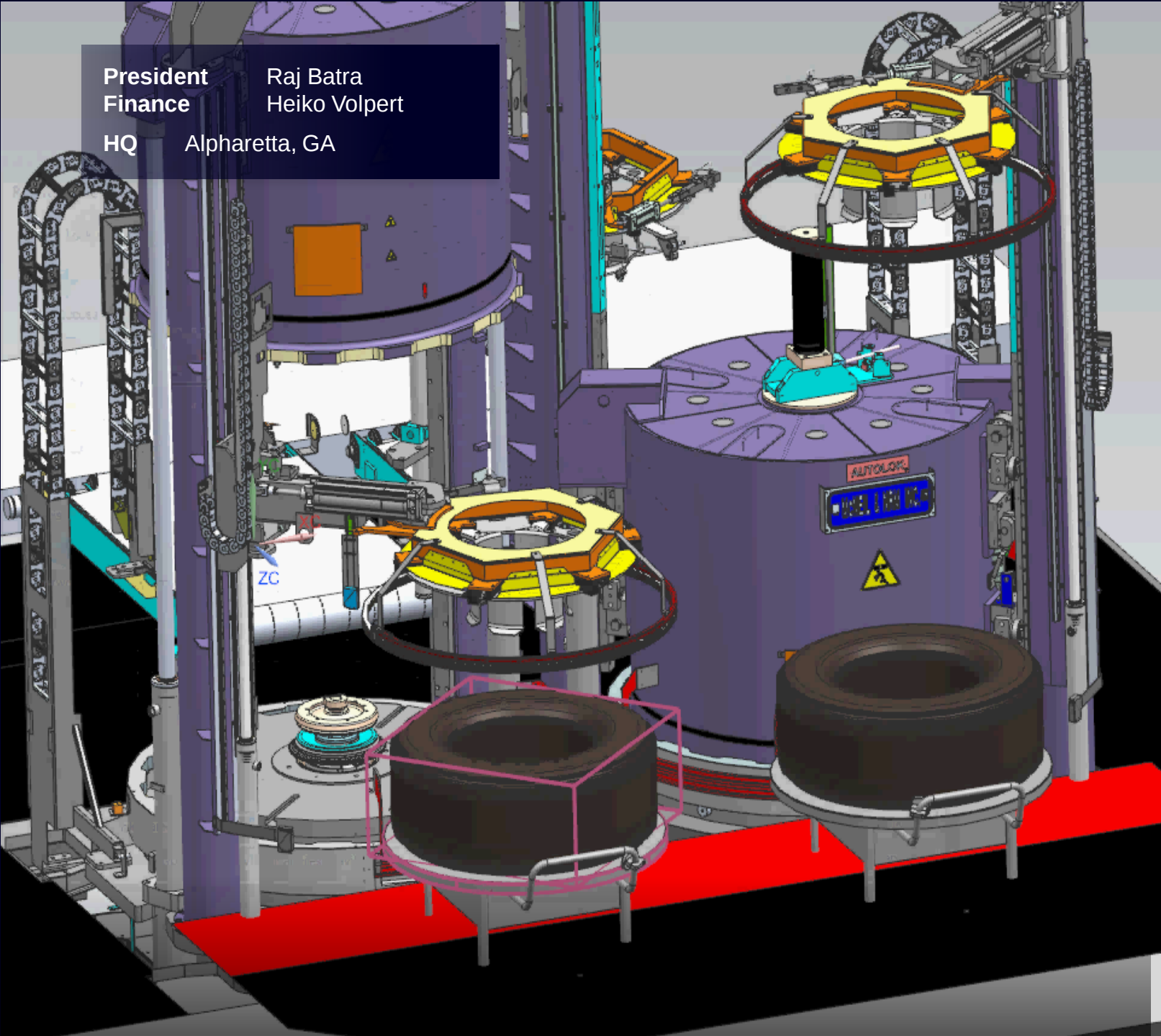


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AGENDA



- Division Overview
- Tire Team
- How a tire is made
- Market & Vertical Tire Strategy
- Key Customers
 - End Users – Tire Makers
 - OEM's – Tire Machinery Makers
- Market Approach
- Potential Use Cases & Open Discussion



President
Finance

Raj Batra
Heiko Volpert

HQ Alpharetta, GA



Digital Industries

#1 Most Admired Company¹

100% Corporate Equality Index

>24,000
employees¹

90%
Fortune 500
companies rely
on Siemens

>500 US Universities

15,000 Students in over 500 Locations

¹ According to Fortune Magazine

² According to Forebes

SIEMENS

The Tire Team



TIRE GROUP HEAD
Bill Henderson

Goodyear GAM

Drive the team and deliver on business expectations

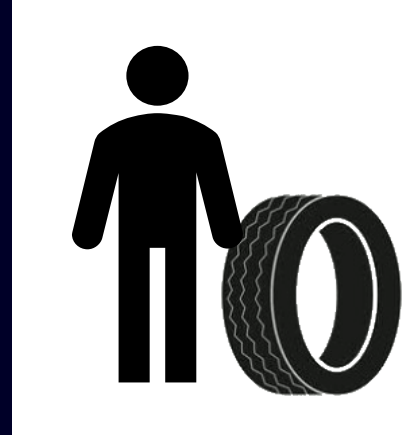
Globally Responsible for Goodyear



BUSINESS DEVELOPMENT
Troy Mount

Work with major tire customers in driving specification for SIEMENS products and solutions

Primary Focus on :
TITAN TIRE
BRIDGESTONE
CONTINENTAL



BUSINESS DEVELOPMENT
OPEN REQUISITION (NC,SC)

Work with major tire customers in driving specification for SIEMENS products and solutions

Primary Focus on :
GOODYEAR
MICHELIN
YOKOHAMA
GITI



APPLICATION ENGINEER
Mike Nelson

GOODYEAR FOCUS

Working with all key departments within Goodyear to deliver on any Siemens need. Covers every major product family in the DI basket that is being used or needed by Goodyear.

Maintains the Siemens space inside the Goodyear Headquarters

US Tire Shipments



ORIGINAL EQUIPMENT Shipments

OEM	2023 Fcst	2022 Act	CY23 v CY22		2019 Act	CY22 v CY19
	42.6m	41.6m	 2.3%		46.3m	 -3.7%
	6.4m	6.3m	 1.3%		5.9m	 0.5%
	6.4m	6.5m	 -0.6%		6.5m	 -0.1%

REPLACEMENT Shipments

Replacement	2023 Fcst	2022 Act	CY23 v CY22		2019 Act	CY23 v CY19
	215.8m	213.7m	 1.0%		222.6m	 -3.0%
	37.9m	37.2m	 1.6%		32.5m	 16.3%
	25.2m	26.6m	 -5.5%		18.9m	 33.0%

Tire USA FY23

Grow by the successful acquisition & conversion of strategic TIRE accounts in the USA



Market situation

Key market drivers:

- Tire shipments are expected to stay flat into 2023
- North America is seeing challenges in the replacement market due to economic uncertainty which is inducing distributor destocking
- Global Inflation is creating a very challenging market for tires and driving plant optimization efforts and cost cutting measures
- The European Tire Market continues to be very weak with destocking and production decreases
- The warm winter weather also affected the winter tire market causing decreased production
- Raw materials costs moderated somewhat in the end of 2022 which is a positive in an otherwise challenging market
- Tire Logistics and Material Handling is throughout the manufacturing facility and represents 35% of the typical tire manufacturers capex regarding new installations. FASO competes with many providers in this area

Key challenges:

- To acquire specific accounts in the tire industry requires a team that has experience with tire related machinery to deliver true value to the manufacturers.
- Huge Installed Base of Rockwell Automation & Drives prohibit typical frontal approaches and require unbundled strategies
- Limited OEM community within the US Market space serving the tire industry, many have European buying entities
- Major competitors are heavily focused on this industry
- Siemens Solution Partners need to be a driving resource managing and supporting modernization of existing equipment

Customer Selection

- Focus on top 5 strategic PCR, LTR & AG End User Plants
 - ~20 Manufacturing Facilities in US – some over 100yrs old¹
- Focus on Siemens friendly OEM's & EU's – (Continental, MicroPoise, Titan, etc.)
- Focus on Goodyear with NAM Addition
- Utilize limited team to drive acceptance at major EU's
- Leverage external resources (AIC, DMC, Quad)
- Additional NAM's Required to target End User plants
 - Michelin (9 US Plants), Bridgestone (8 US Plants) (6 Facilities)



Actions

- Leverage Solution Partners to support modernization effort
- Extend Application Engineering service capabilities
- Training needs to be provided for resource team at End User
- National account managers required to eliminate regional boundaries
 - Bridgestone, Michelin – multiple plants across regions
- Leverage CMS, EDGE, DE and other differentiating technologies
- Prioritize and develop standardized applications
- Leverage standard part selection booklet for Tire in the USA
- Document and implement best practices for future pursuits
- Leverage PLM offerings to expand DI Footprint in the industry
- Leverage FASO to execute AS/RS solutions in the Tire industry
- Partner with key solution providers to target specific tire companies



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1. Source: Tire Business Journal – Bridgestone, Akron, OH 1910
2. Source: Tire Retread & Repair Information Bureau

Our DEGREE framework

Our Ambition Lines Up with Major Tire Manufacturers

		Baseline	Progress until end of FY22	Ambitions
Decarbonization	1. Net Zero operations with 55% reduction by 2025 and 90% reduction by 2030	FY19: 737 kt CO ₂ e	-46%	-55% by 2025 -90% by 2030
	2. Net zero supply chain by 2050, 20% emissions reduction by 2030	FY20: 8,098 kt CO ₂ e	+2.5%	-20% by 2030 -100% by 2050
Ethics	3. Striving to train 100% of our people on Siemens' Business Conduct Guidelines every three years	From FY20	99.9%	100% by 2022
Governance	4. ESG-secured supply chain based on supplier commitment to the Supplier Code of Conduct	--	Suppliers committed	--
	5. Long-term incentives based on ESG criteria ¹	--	ESG criteria anchored	--
Resource efficiency	6. Next-level robust Ecodesign for 100% of relevant Siemens product families by 2030	FY21: 26%	35%	100% by 2030
	7. Natural resource decoupling through increased purchase of secondary materials for metals and resins ²	--	34% metals <1% resins	--
	8. Circularity through waste-to-landfill reduction of 50% by 2025 and toward zero landfill waste by 2030	FY21: 0%	-12%	-50% by 2025 ~ -100% by 2030
Equity	9. 30% female share in top management by 2025	FY20: 22.7%	27.7%	30% by 2025
	10. Access to employee share plans: maintain high level and expand globally to 100% ³	FY21: 98%	99%	100%
	11. Global commitment to the New Normal Working Model ⁴	--	Roll-out continued	--
Employability	12. Increase digital learning hours to "25 by '25"	FY20: 7h	21h	25h by 2025
	13. Access to employee assistance program: maintain high level and expand globally to 100% by 2025	FY20: 82%	87%	100% by 2025
	14. 30% improvement in Siemens' globally aggregated LTIFR ⁵ by 2025	FY20: 0.31	-19%	-30% by 2025

¹ Assessment based on the Siemens internal ESG/sustainability index, based on customer satisfaction (Net Promoter Score), CO₂ reduction, training hours. ² Product specifications for the use of secondary plastics are in development. ³ Where legally possible and reasonable. ⁴ For employees with job profiles that make this possible and reasonable. ⁵ LTIFR: Lost Time Injury Frequency Rate (Siemens employees and temporary workers).

Note: the DEGREE framework and its targets apply to Siemens excluding SHS

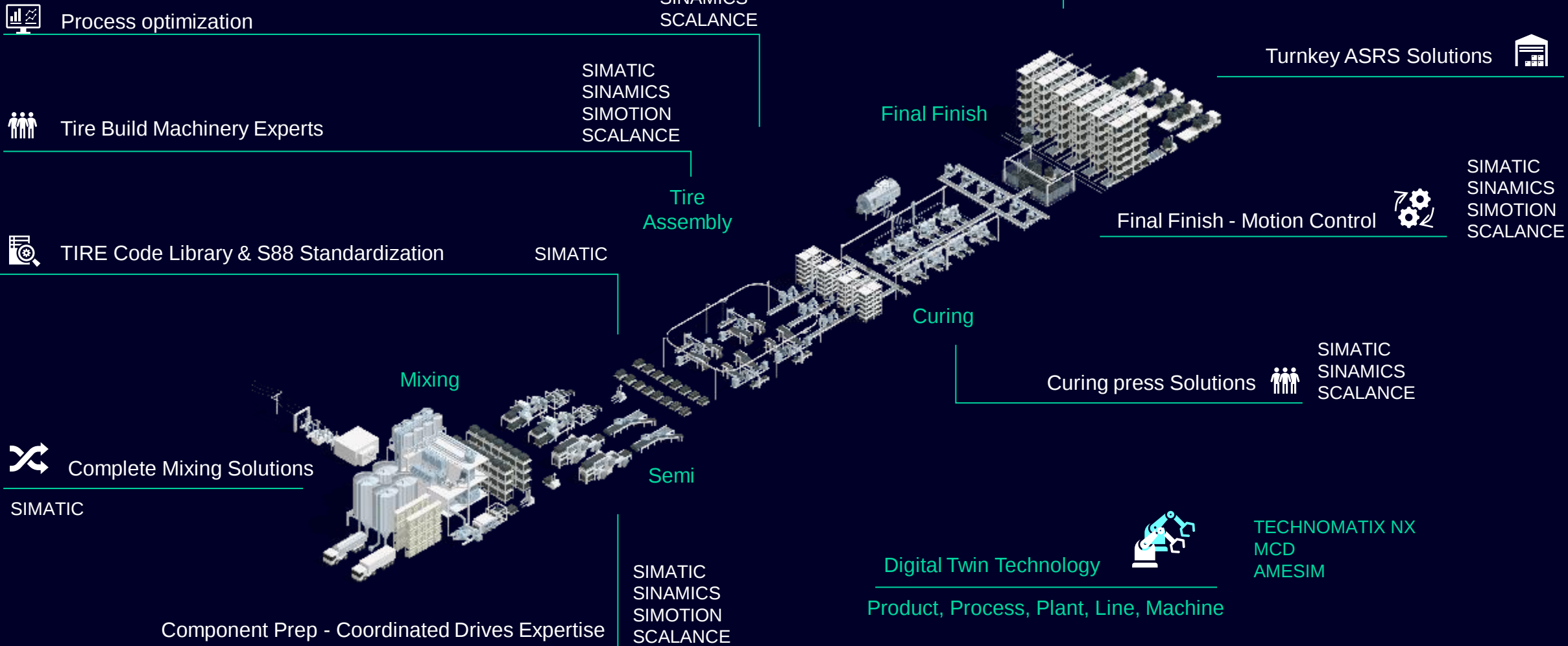
INDUSTRY EXPERTISE – WORLD CLASS PRODUCTS

With our industry expertise we generate clear values for OEMs & end-users



Siemens Focus on Tire Manufacturing

Products & Solutions



FY23 CUSTOMER FOCUS



Specific Focus

Manufacturing Machinery Upgrades & Modernization
Networking Infrastructure Targeting
Sustainability – Energy Management - Global Deployment



Maintain, Support & Grow

Machinery Upgrades for Sumter & Mt Vernon
Engineering Support – Sumter, Mt Vernon
Accelerate Relationship Build & Expand
Simulation with extrusion & Konstrukta



Penetrate & Expand

Expand key relationships – Trey Shirley & Henri Burrow
Leverage PLC & HMI Specification
Expand training offering



Specific Focus

Headquarter Expansion with Engineering
Utilize new team member for Drives at Wilson Plant
Work closely with TIA Sales to gain access



Expand & Push

Des Moines, IA – Expand with upper management
Bryan, Ohio – Expand – New Plant
AUGMENT Strategy

Other Tire Companies that use Siemens



Final Finish – New Machine

Special MicroPoise Machine with Siemens
Astec & Akrodyne Combined



HMI Comfort Panels

Leverage Relationship on site
Affordable and open communications



Medium Voltage Drives

Some Medium Voltage usage in Mixing
Need to establish beach head for Siemens presence
Key Long Term Development Target for VMM Tire



Building Technologies

No relationship – pursued new sales team and new distributor
Investigating Distributor potential



Medium Voltage Drives

Some Medium Voltage usage in Mixers 1 & 2
Mixer 3 being commissioned as we speak now



NEW PLANT

Potential 2024 Greenfield plant – PURSUE at SPS



Curing Area

Visit October 2023 – Discuss Potential for Siemens Support
Trelleborg – Relationship in Greenville with Glenn



Initial Relationship Building

Talk to Sales & Local Distribution
When possible, investigate on site overview & tour

FY23 Top US OEM companies



Service New Projects

- Understand Distributor Issues as best as possible
- Engage more proactively
- Promote Siemens Based Testing Machinery



Maintain & Expand

- Offer additional technical support to customer
- Work with Mesabi (Control Arm) for other values



Engage with Sales

- Explore relationship with Sales Head – Mike Hovey
- Discuss engineering workshop
- Talk to Engineering about training & options



Digitalization Approach

- Visit and discuss delivery issues on specific parts
- Discuss technical support needs with customer
- Develop stronger relationship with President of CTI



Rolling Roads

- Maintain contact and visit quarterly
- Help with customer depending upon needs
- Introduce new team member on next opportunity

Dedicated OEM Partners



Machine Builders with
SIEMENS Digital Twins



Plant Information and Manufacturing Execution System

Mixing Room Automation	Line Mgmt. System	Line Mgmt. System	Line Mgmt. System	Line Mgmt. System
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Raw Material Storage
To
Mixing

Component Preparation

Tire Building

Green Tire Storage
To
Curing

Final Finish Area

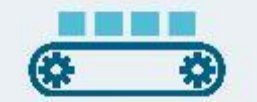
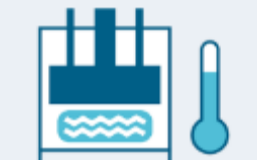


Siemens Automation based machines cover the complete tire production value chain

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G2M: Focus on Specific Business Areas



Segment	Opportunity Areas	Target Products & Machines	Potential Partners
 Mixing & Extrusion	- Extrusion Area - Calendar Lines & Ply Cutters - New Mixers and Mixer Upgrades	- Extruder Upgrade Identification - Condition Monitoring & Analytics - Entire Component Prep Area	
 Logistics	- Logistics Solutions - Final Finish Gantry Systems - Conveyor Upgrades - RTLS	- Goodyear – Logistics Partners - Bridgestone – Drives Feedback - Leverage Mindsphere Success - RTLS Focus on total trackability - Distributed GMC Solutions	
 Curing	- Modernization Planning - Plant Expansions - Control System Upgrades	- Edge Devices for Monitoring - Leverage Senseye for PdM - Target add on to Rockwell Control - HMI, Drives, I/O MPC - Digital Twin – End User Use Cases	

G2M: Account Approach Plan Overviews



Augment

Condition Monitoring Solutions – SenseEye
EDGE Connect devices to Fog and On Premise
Cloud Solutions with add on products
RTLS / RFID – Tracking and Access Controls



Add to existing EIP

Drive Products – Continue Attack Rockwell Drive Failures
Leverage new resource Drives & Integration experience
Scalance, RFID – Tags in Tires – Siemens provides the Readers
Energy Management – On Premises and Cloud Solutions



Unbundled

HMI & WinCC Scada On Top – EIP or OPC
I/O Products – leverage ET200SP MP & IP67
Networking – Leverage infrastructure needs



Learn

Investigate resources at the plant – Department Lead Meetings
Address the plants needs until we learn the individuals
Map out the manufacturing and engineering teams



Goodyear Strategy: Aggressively Target Growth



✓ 1. Execute Sales Mgr change to Harmonize Goodyear / Cooper Strategy in USA

⌚ 2. Establish National Pricing Agreement for Primary product families

⌚ 3. Execute quotation for Energy Management Solution – Sustainability Focus

Tony White – Introduced into
LAWTON, FAYETTEVILLE

Engaged in Akron

⌚ 4. Support Brazil team to capitalize on Americana Opportunities in Brazil

⌚ 5. Support EMEA team to uncover additional Opportunities in European Plants

⌚ 6. Leverage successes in SLP Mexico Plant and promote to other plants

Expanding Reach: TR, FR - Fulda next

RFID Access – Fayetteville

Goal: Breakthrough Opportunity EMEA

⌚ 7. DEDS Engagement with Energy Management Solution – RFP Released

⌚ 8. DCP Engagement with Cyber Security Appliances – TESTING in LAWTON

⌚ 9. Pursue Value Added Co-Creation of Technology Solutions using AI & ML

Drive New Value Add Technologies
Meeting Global Reliability Team

Goal: Technology Deployment in US

Market Approach Concept

Cloud Solutions

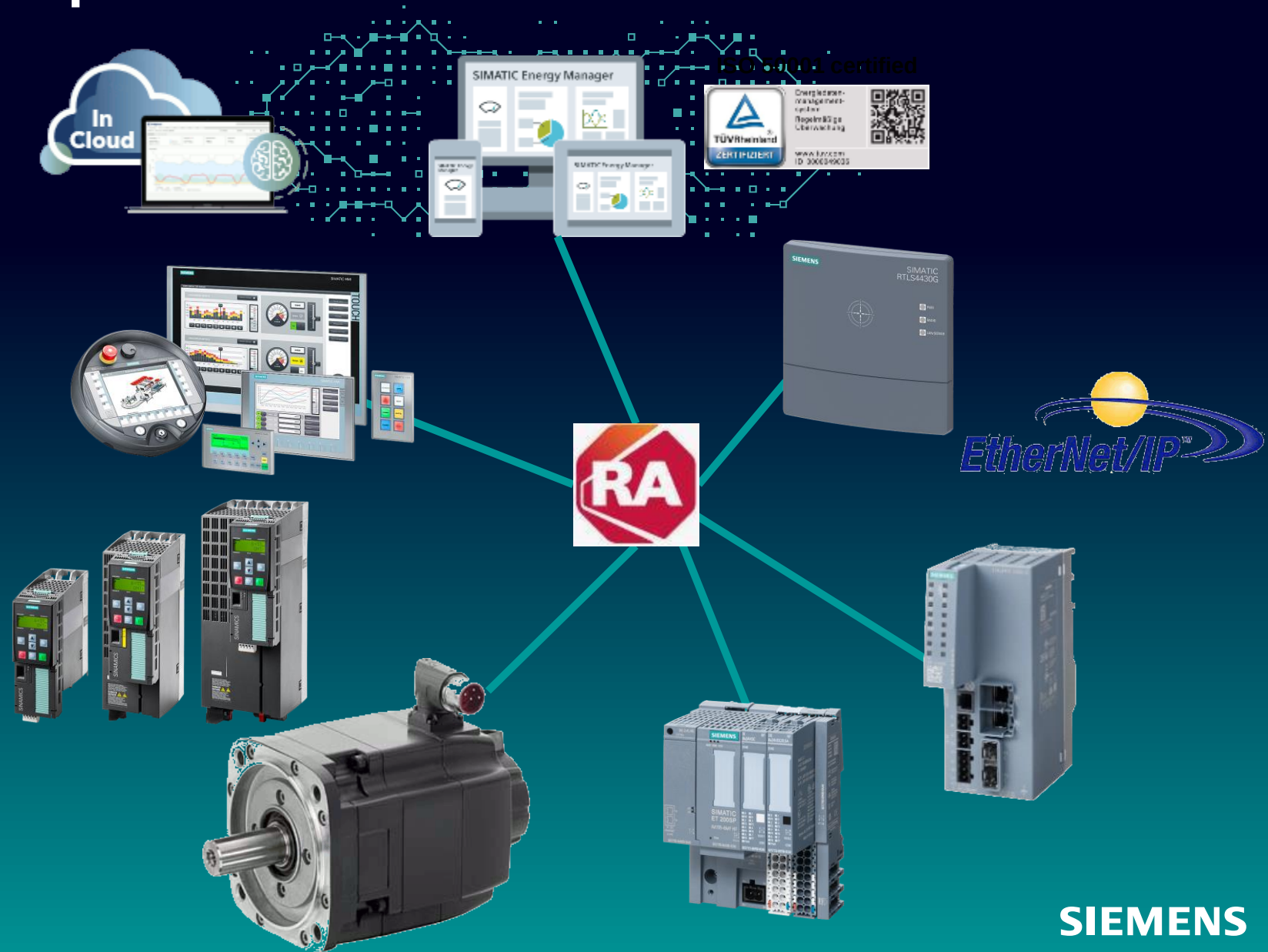
Scada & HMI

Automation I/O & HMI

Networking / Security

Location Services

Drives



Market Approach Concept

Cloud Solutions

Scada &

Automat

Network

Location

Drives

DISCUSSED WITH GOODYEAR

Engineering Team in IZMIT

- Presented FA, MC, PA technologies that can connect to Ethernet IP including Power Supplies and PA PI Devices

Engineering Team in AMIENS

- Presented to Purchasing, Engineering and Project team, Full Portfolio of EIP devices PA PP, PI products were also discussed

Engineering Team Fayetteville

- Delivered Demo gear : RFID Access Control

Engineering Team GE Networking

- Purchased Scalance SC632 testing with SINEC NMS



Potential Use Cases

Extended Terms & Conditions

CAPEX to OPEX Financing

Equipment Upgrade
Synthetic Leases?

NEW Equipment Financing

Equipment Upgrade Financing

I Thank You...

Thank you for your time...

Bill Henderson
Head, USA Tire Industry

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billhenderson@siemens.com

END USER SALES RELATIONSHIPS



Mt Vernon, IL Steve Fogle



Sumter, SC Doug Riley



Clinton, MS Lynn Mitchell



Greenville, SC Doug Riley
Lexington, SC
Sandy Springs, SC
Spartanburg, SC
Covington, GA
Woodburn, IN



Dayton, TN Paulo Gonzales



Bryan OH, Quincy IL, others
Adam Sharrett



Topeka, KS, Steve Fogle



Findlay OH & others
Tony White



Graniteville, SC Doug Riley
Aiken, SC



OEM SALES RELATIONSHIPS

	Akron, OH	Tony White		 Robogistics Robotic Automation Logistics	Port Arthur, TX	Bryan Barrington	
	Streetsboro, OH	Rick Ludlow			Maryland Hts, MO,	Derek Eastep	
	Akron, OH	Rick Ludlow					
							
	Eastlake, OH	Rick Ludlow			Eden Prairie, MN	Adam Shively	
	Valley City, OH	Rick Ludlow			Columbus, GA	Stewart Terhorst	
					Baltimore, MC	Brian Iannucci	

PARTNER MANAGEMENT SALES RELATIONSHIPS

	Texarcana, AR	Clem Gentene		Beaumont, TX	Trish Viviano
				Fayetteville, MC	LJ Elrod
	Akron, OH	Clem Gentene		Rome, GA	Vince Touhey
	Akron,	Clem Gentene			
	Des Moines, IA	Junior Baca		Steeleville, IL	Junior Baca
	Wilson, NC	LJ Elrod			
	Oxford, NC				
	Nashville, TN	Will Starling		Rome, NY	Mike Pezzimenti
	La Vergne, TN				
	Clarksville, TN				
	Graniteville, SC	Doug Riley			
	Aiken, SC				

Additional OEM's that work in the Tire Industry



Final Finish Tire Machines
Quality Testing Machines
Large Truck Testing Machines



Tire Delivery Systems
Sumter – Curing Press Presentation
Competes with FASO



Green Tire Spray Systems
Robotic Applicators – EV Tires



Tire Delivery Systems
Sumter – Curing Press Presentation
Competes with FASO



Investigate with Sales Team
TBM Assistance Machines



Tire Focus – Material Handling
Some limited business
Competes with FASO



Good R&D OEM in China
Limited Akron connection