



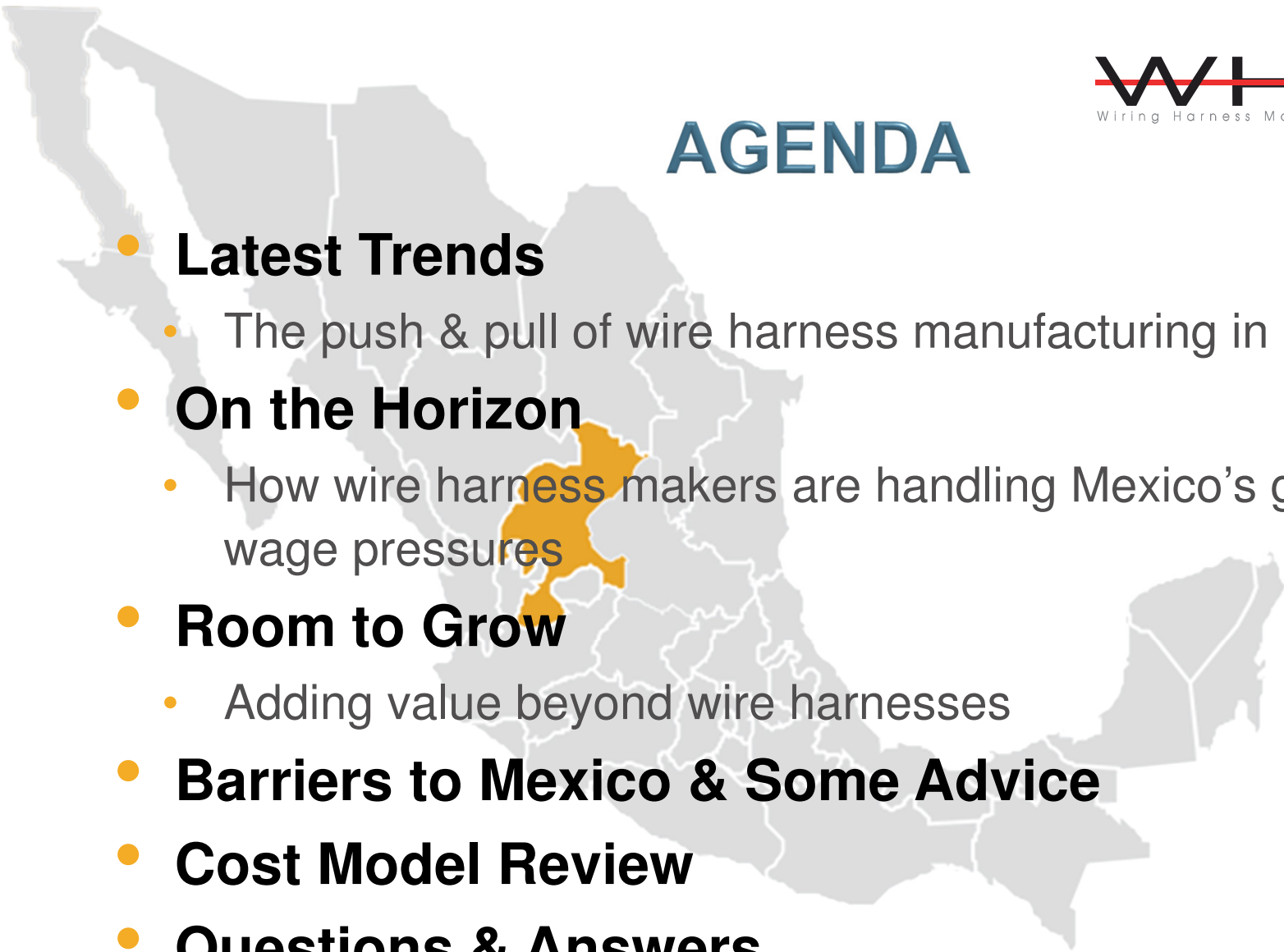
THE STATE OF WIRE HARNESS MANUFACTURING IN MEXICO – WHAT OUR CLIENTS ARE EXPERIENCING

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AGENDA

- 
- **Latest Trends**
 - The push & pull of wire harness manufacturing in Mexico
 - **On the Horizon**
 - How wire harness makers are handling Mexico's growth & wage pressures
 - **Room to Grow**
 - Adding value beyond wire harnesses
 - **Barriers to Mexico & Some Advice**
 - **Cost Model Review**
 - **Questions & Answers**

IN THEIR OWN WORDS



- **Nick Coulter**, Operations Manager
Electrex



- **John White**, EVP, Operations of Industrial Solutions Group
Telamon



- **Dave Ritland**, President
The Sentral Group

THE LATEST TRENDS



THE LATEST TRENDS

Pressure on Cost is Only Intensifying

The Push

- OEMs and Tier Ones are demanding lower costs every day, while expecting more value-add
- Constantly being asked to provide quotes for projects
- The need for a low-cost country (LCC) in order to retain existing business



THE LATEST TRENDS

Pressure on Cost is Only Intensifying

The Pull

- Losing out on projects to competitors with Mexico operations
- The potential for growth in Mexico – 44 Free Trade Agreements with global partners





SPEAKING: NICK COULTER
Electrex

THE LATEST TRENDS

“Mexican-izing” of Operations

- Management becomes more Mexican
- Mexican Operations becoming more automated
- Further integration of production within Mexico





SPEAKING: NICK COULTER
Electrex

THE LATEST TRENDS

Supply Chain Needs to be Local Cuts Inventory & Border Costs

- Wire harness, component makers and capital machinery will move to Mexico **for direct sales**
- OR**
- Distribution centers need to be set up in Mexico and pricing structures need to be established that are **the same or cheaper** than in US
- OR**
- In conjunction with our clients, Entrada is exploring **setting up “stores”** with our clients’ suppliers where they can hold inventory and only bill once materials are pulled



ON THE HORIZON

How Wire Harness Makers are Handling Mexico's
Growth & Wage Pressures





SPEAKING: JOHN WHITE
Telamon

ON THE HORIZON

Hourly Wages

Year		Entry	6 Months
2016	Pesos Cost per Hr. @ 17.85	\$103.00 \$1.52	\$114.20 \$1.67
2015	Pesos Cost per Hr. @ 16.57	\$86.00 \$1.52	\$96.00 \$1.69
2014	Pesos Cost per Hr. @ 13.29	\$78.00 \$1.55	\$88.64 \$1.73
2013	Pesos Cost per Hr. @ 12.45	\$75.00 \$1.65	\$86.00 \$1.86
2010	Pesos Cost per Hr. @ 12.21	\$63.31 \$1.36	\$78.00 \$1.68

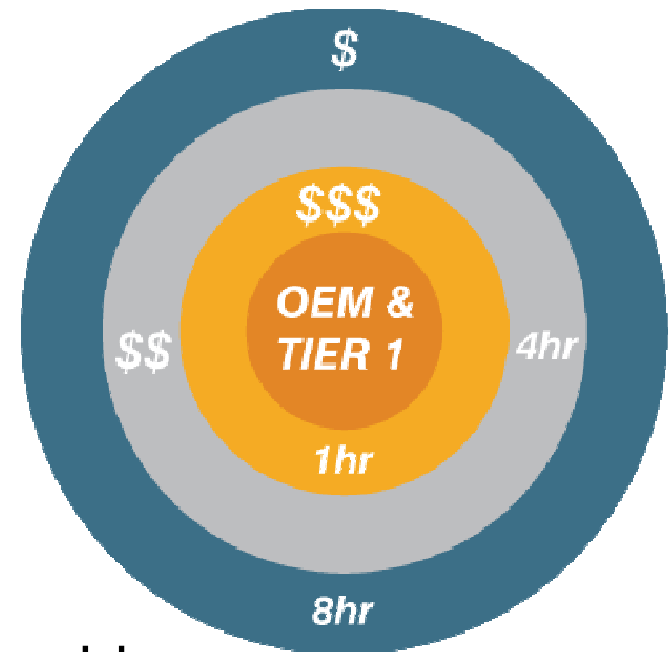


SPEAKING: JOHN WHITE
Telamon

ON THE HORIZON

The Balance of Location & Position

- OEMs & Tier Ones coming to town affects wages
 - They want you close but you want to be far away to protect your cost structure



Another question to consider:

Does the local/state government want you there in the first place?

ON THE HORIZON

Income Tax

- Changes to IMMEX laws
- Mexican Government wants to be able to **tax a fair share of the value** created in Mexico
- Predominantly affects companies **operating without a permanent establishment** in Mexico
- 4 years after initial contract, companies **will be expected to pay income tax** to the Mexican Government – either directly or through a partner

ON THE HORIZON

The Nicaraguan Threat



The Pros:

- Two large global players (Japan's Yazaki & Germany's Dräxlmaier) employ 15,000 people
- Low-cost labor
- Integrating into global economy

ON THE HORIZON

Hourly Wages – Nicaragua



\$1.03

Minimum hourly wage rates in USD for direct operators, wire harness

Note: Wages are “fully loaded” (social security, holidays, vacations, severance, 13th month check, etc.)

ON THE HORIZON

The Nicaraguan Threat



The Cons:

- Freight of finished goods to North America
- Management talent
- Political: Daniel Ortega
- Supply base

ROOM TO GROW





SPEAKING: JOHN WHITE
Telamon

ROOM TO GROW

- Suppliers seeking opportunities to grow and add value beyond wire harnesses
- Transitioning to high-mix, low-volume products
- Mexico footprint enabling new client growth





SPEAKING: DAVE RITLAND
The Sentral Group

BARRIERS TO MEXICO

(...and some advice)



BARRIERS TO MEXICO

- Putting the right management in place
- Customer acceptance of quality
- Identifying the right partner to facilitate Mexico operations and bureaucracy





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The Sentral Group

THE IMPORTANCE OF NEEC

- Access to fast track lanes at the U.S./Mexico border.
- Exclusive faster-clearance lanes (e.g. red light inspections).
- Inspection of goods through non-intrusive methods (gamma and x rays).
- Faster inspections in cases of “red” (from 3 hours to 1).
- Minimal of “red” inspections (EG has less than 3% – vs. 10% avg).
- Access to customs process for correction of errors, without embargo of merchandise.
- No use of express lanes for import/export.
- No exclusive lanes – unpredictable wait times.
- Time consuming manual inspection – removing boxes off trucks, opening each box, reloading on truck.
- Inspections last a minimum of 3 hours.
- A minimum of 10% “red” inspections – based on customs declarations.
- No correction of errors, with the embargo of merchandise possible.

THE IMPORTANCE OF NEEC (Cont'd)

- hours customs operations Extended (open on holidays).
- Able to return raw materials & products in 3 yrs, including goods received by virtual import.
- No need to ask for extension of the Maquiladora (IMMEX) permit to import components essential to your manufacturing process.
- Ability to utilize V5 transfers – Manufacturers' shipments to Mexican company for sales in Mexico, without goods passing through Mexican customs.
- No ability to utilize V5 transfers.
- No extended hours for customs operations.
- Must return goods in 18 months or 6 months for virtual import.
- Must request for program extension when importing components essential to your manufacturing process.
- Requirement of additional process for approval of Maquila services.
- Automatic authorization for Maquila services – transfer of raw materials to another IMMEX company.



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Telamon

Client Cost Analysis

Automotive Client				
Quarterly Operational Costs				
	M ²	Ft ²		
Surface Area	5.574,182	60.000		
Headcount (average)	238			
	February 2011	March 2011	April 2011	Q Total
	\$	\$	\$	\$
Reimbursable Expenses				
Payroll Reimbursable Expenses	1.258.490,08	1.737.906,66	1.335.121,63	4.331.518,37
Facility Fee Expenses	276.785,44	302.354,06	295.254,89	874.394,39
Border Crossing & Freight Costs	200.003,91	264.780,34	118.233,12	583.017,37
General Reimbursable & Administrative Expenses	224.306,97	240.006,58	225.530,07	689.843,61
Total Expenses (MX Pesos)	1.959.586,40	2.545.047,64	1.974.139,71	6.478.773,74
Total Expenses (US Dlls - ex rate MX\$11.50 / \$1 US)	170.398,82	221.308,49	171.664,32	563.371,63
Hours Worked per Month	42.082,38	56.354,75	43.194,29	141.631,42
Price per Hour	4,05	3,93	3,97	3,98

Lawn & Garden, Marine Client				
Quarterly Operational Costs				
	M ²	Ft ²		
Surface Area	4.180,636	45.000		
Headcount (average)	418			
	February 2011	March 2011	April 2011	Q Total
	\$	\$	\$	\$
Reimbursable Expenses				
Payroll Reimbursable Expenses	2.104.899,63	2.777.913,23	2.300.006,42	7.182.819,28
Facility Fee Expenses	196.818,66	195.595,01	445.552,28	837.965,95
Border Crossing & Freight Costs	401.744,29	386.740,36	396.682,79	1.185.167,44
General Reimbursable & Administrative Expenses	479.920,04	646.903,08	505.707,18	1.632.530,30
Total Expenses (MX Pesos)	3.183.382,62	4.007.151,68	3.647.948,67	10.838.482,97
Total Expenses (US Dlls - ex rate MX\$11.50 / \$1 US)	276.815,88	348.447,97	317.212,93	942.476,78
Hours Worked per Month	81.409,34	107.927,19	82.913,19	272.249,72
Price per Hour	3,31	3,16	3,74	3,38

Automotive, Heavy Truck & Marine Client				
Quarterly Operational Costs				
	M ²	Ft ²		
Surface Area	3.158,703	34.000		
Headcount (average)	209			
	February 2011	March 2011	April 2011	Q Total
	\$	\$	\$	\$
Reimbursable Expenses				
Payroll Reimbursable Expenses	1.204.825,02	1.435.125,06	1.187.192,16	3.827.142,24
Facility Fee Expenses	201.495,43	199.501,11	196.938,88	597.935,42
Border Crossing & Freight Costs	304.748,94	315.605,17	246.046,04	866.400,15
General Reimbursable & Administrative Expenses	224.537,94	230.371,80	220.646,04	675.555,78
Total Expenses (MX Pesos)	1.935.607,33	2.180.603,14	1.850.823,12	5.967.033,59
Total Expenses (US Dlls - ex rate MX\$11.50 / \$1 US)	168.313,68	189.617,66	160.941,14	518.872,49
Hours Worked per Month	40.423,10	45.726,61	36.885,01	123.034,72
Price per Hour	4,16	4,15	4,36	4,22

Construction Equipment & Off Road Client				
Quarterly Operational Costs				
	M ²	Ft ²		
Surface Area	3.251,606	35.000		
Headcount (average)	58			
	February 2011	March 2011	April 2011	Q Total
	\$	\$	\$	\$
Reimbursable Expenses				
Payroll Reimbursable Expenses	326.954,62	441.023,40	373.160,53	1.141.138,55
Facility Fee Expenses	114.603,25	113.468,95	111.235,50	339.307,70
Border Crossing & Freight Costs	38.207,33	53.205,41	45.667,12	91.412,74
General Reimbursable & Administrative Expenses	81.101,13	85.380,28	82.649,91	249.131,32
Total Expenses (MX Pesos)	560.866,33	693.078,04	567.045,94	1.820.990,31
Total Expenses (US Dlls - ex rate MX\$11.50 / \$1 US)	48.770,99	60.267,66	49.308,34	158.346,98
Hours Worked per Month	10.252,24	14.142,37	11.660,22	36.054,83
Price per Hour	4,76	4,26	4,23	4,39

ENTRADA'S TURNKEY SYSTEM TO LONG-TERM GROWTH

More than two decades of experience in central Mexico, helping companies establish and run their own local production.





ANY QUESTIONS?

EntradaGroup.com



THANK YOU

Contact Us

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