

# SCANTIBODIES de Mexico



**The Agreement is signed with El Bajio Industrial Park**



**An Artistic Rendition of the Building which  
will be Completed May 2006**

PARQUE INDUSTRIAL  
**EL BAJIO**



*Announcing our Grand Opening May 20, 2006*



## **Scantibodies Laboratory's New Tecate, Mexico Facility**

**50,000 square feet** contract manufacturing available in beautiful El Bajio Industrial Park

- Producers of **First Response** and **Answer Pregnancy Test Kits (#1 in Industry)**
- Several Years Experience as OEM Manufacturer/Maquiladora in Mexico
- All Licenses and Certifications in place for Medical Devices (ISO, GMP Certification)
- Proven Management Team, Labor Force, and Technical Expertise
- Prime Location for Easy, Low-Cost Shipping (Versus Overseas Locations)
- Visit our website at [www.scantibodies.com](http://www.scantibodies.com) or call us at (619) 258-9300 ex 503

## **BREAKING NEWS FROM** **SCANTIBODIES Laboratory**

### **Expanded Contract Manufacturing Available!**

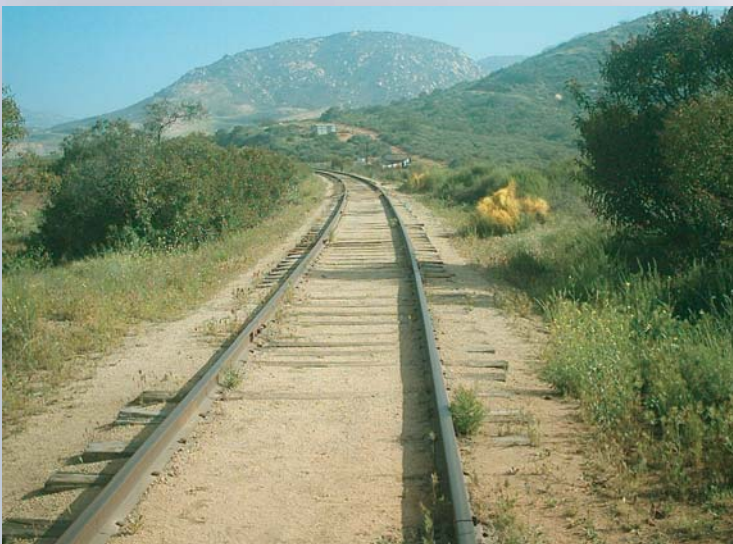
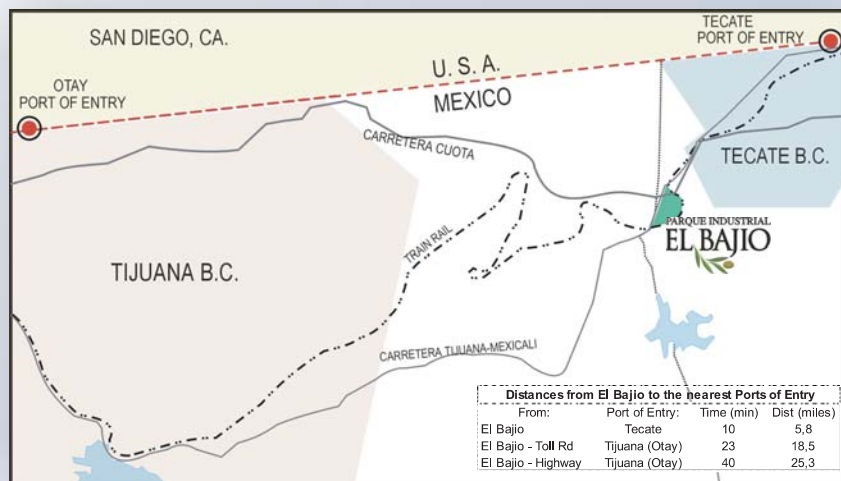
SCANTIBODIES Laboratory has expanded its Tecate, Mexico operations (45 minutes from East County, San Diego) with an FDA approved **125,000** square foot facility.

#### **What is SCANTIBODIES?**

- ✓ 118,000-mouse monoclonal antibody production
  - ✓ 1,500 animal polyclonal antibody production capability for goats, sheep and rabbits
  - ✓ Cell culture antibody and protein production
  - ✓ Immunochemical purification
  - ✓ Human and animal serum production
  - ✓ False positive blocker (passive and active) production
  - ✓ Controls and standards production for 200 analytes
  - ✓ Lyophilization (220 sq ft dryer)
  - ✓ Radioactive/chemiluminescent immunassay production
  - ✓ OTC consumer pregnancy/ovulation kit production
  - ✓ Clinical laboratory for Medicare/non Medicare patients
  - ✓ Antigen production
  - ✓ Sterile class 100 clean room production
  - ✓ Contained agent production in CDC approved BL-3 lab
  - ✓ Hormone and assay research
  - ✓ Scientific journal and patient publication writing
  - ✓ Clinical trials
  - ✓ Regulatory documentation
  - ✓ Check out our website at: [www.scantibodies.com](http://www.scantibodies.com)
  - ✓ Email us at [cs@scantibodies.com](mailto:cs@scantibodies.com) for more information
- or phone us at (619) 258-9300 x 503



# SCANTIBODIES de Mexico



**Scantibodies Tecate is  
positioned in a prime  
location for easy, low-cost  
shipping versus overseas**

**locations.**

PARQUE INDUSTRIAL  
**EL BAJIO**

# **S**CANTIBODIES de Mexico



**Grading and  
Leveling  
has begun**



**Laying Out  
Our New Facility**

PARQUE INDUSTRIAL  
**EL BAJIO**



# SCANTIBODIES de Mexico



**Steel Framing and  
Cement Walls added**



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**EL BAJIO**



# SCANTIBODIES de Mexico



**Exterior Walls  
completed and  
inside walls  
being built**

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**EL BAJIO**



# **SCANTIBODIES** de Mexico *Our Present Facility*

— Production Room 1



Production Room 2 —



— Lunch Room



Hallway



Reception

# **SCANTIBODIES** de Mexico

— **Product Assembly**



**Quality Control** —



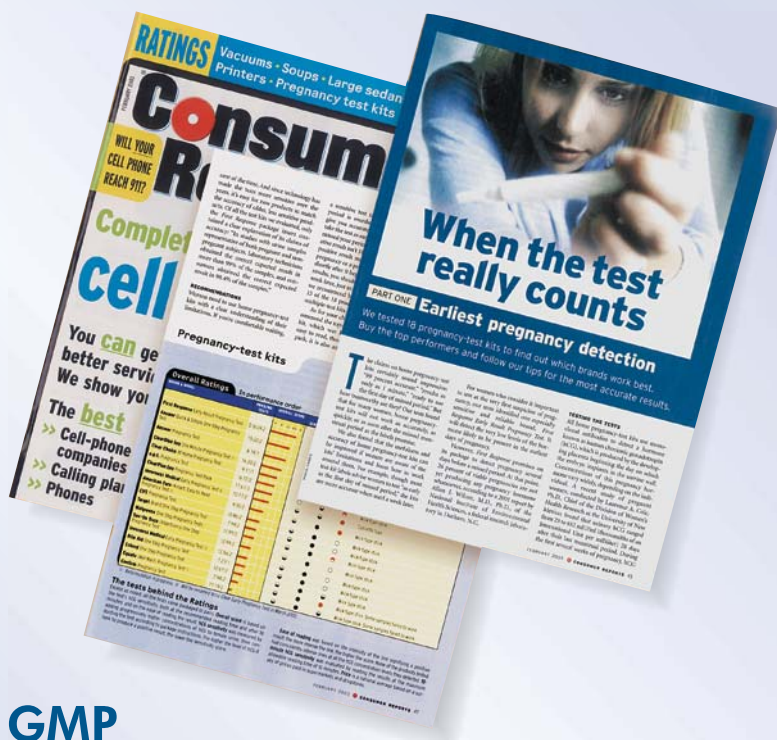
— **Pouching**



**Packaging** —



# SCANTIBODIES' OEM -- Rated # 1 since 1996

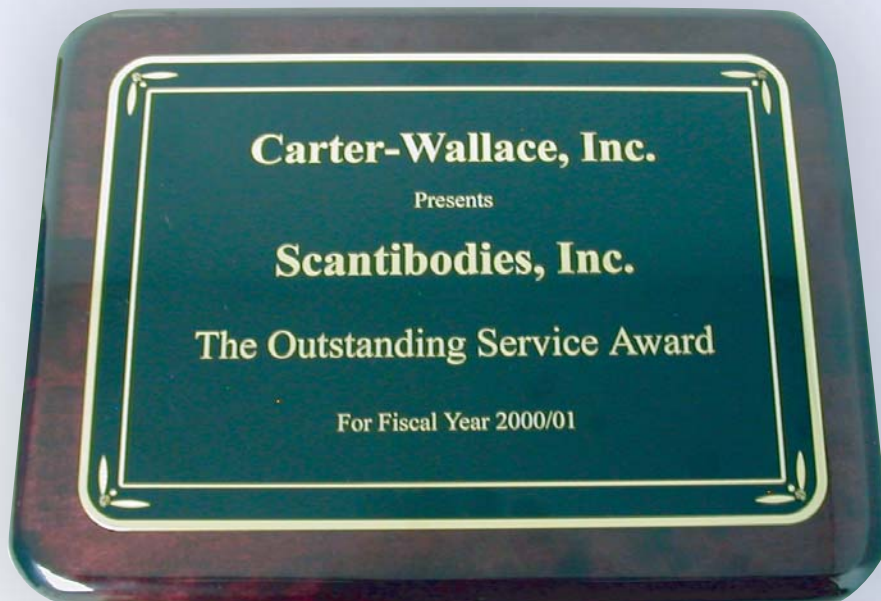


SLI is the OEM of First Response and Answer Pregnancy and Ovulation test kits. First Response is #1 in the industry and SLI is rated the #1 Supplier to Church and Dwight.

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- ISO & FDA Certifications in Place
- ISO 13485 Certification for Medical Devices
- Large Volume Assembler (2 million + per month)
- 3 years Maquiladora of Medical Devices in Tecate
- Familiar with Mexico's regulations
- Proven Labor Force - 2 or 3 shifts available
- Proven Management Team



# **SCANTIBODIES Laboratory Enjoys**



## **Outstanding Service Awards**



**as an OEM Manufacturer and...**

DADE BEHRING

DADE BEHRING INC.  
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March 23, 2005

Mr. David Cantor  
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Dear David:

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Your efforts on our behalf have been beneficial to our success in the past year. May we both look forward to another outstanding year.

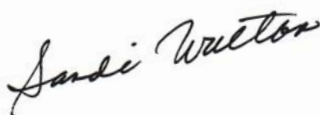
Sincerely,



Patricia A. Vincen  
Director, Global Reagents and  
Consumables Supplier Operations



Frank Southwell  
Materials Manager



Sandi Walton  
Purchasing Manager



Jean Albanese  
Buy-Planner

...as a Critical Raw Materials Supplier.

*A View of...*

## **CANTIBODIES Laboratory**

*Celebrating 30 years as a Manufacturer and OEM  
of Quality Diagnostic Products*



**Our 30 years experience and an award-winning track record  
ensures our partner OEM companies:**

- A trustworthy manufacturing company
- Product quality maintenance as #1
- Adequate production volumes will be maintained,  
*even during transfer*
- On time shipping on correct shipping dates
- Inspections and audits will *demonstrate proper  
compliance*
- On-going ability to fill all customer orders
- Experienced lead team and managers provide *good  
communication*

**Together we can achieve success in OEM Contract Manufacturing!**

***Rely on Scantibodies for all your OEM needs.***

# ***SHIFTING GEARS***

**MEXICO FIGHTS FOR POSITION IN GLOBAL RACE**



**By Harold D. Hunt**

The race to global economic integration picks up speed daily. For the last few years, however, Mexico has found itself in the economic slow lane while other developing countries like China and India roar ahead at autobahn speeds. A number of reasons are cited for Mexico's underperformance, not the least of which has been America's own sputtering economic engine.

The U.S. economy has begun to improve, putting Mexico at a critical juncture in the competition for economic success. Will it merge into the fast lane or be forced into the pit?

Texans are more than just observers at the race. Mexico's future position in the global economy will have important consequences for Texas real estate markets.

## **Mexico Versus China**

The speed and frequency of jobs being shuffled around the globe has become mind-numbing. Few countries, and even fewer jobs (if the press is to be believed) are immune from the onslaught of outsourcing. A survey of 180 U.S. companies conducted in March 2004 revealed that 86 percent expected to



**COMPETITION** for North American markets is fierce. Mexico has an edge over China if transportation cost is a major factor. But low manufacturing labor costs — about one-fourth those in Mexico — make China the winner in that arena.

send more technology-related jobs overseas within the next year. This compares to only 32 percent two years ago.

The most popular outsourcing destination appears to be China, with its irresistibly cheap labor. Mexico, like the United States and a host of other countries, will continue to lose manufacturing jobs to China. It is inevitable. But after the smoke clears, will the end result be bad for Mexico or Texas? The answer is "it depends."

Mexico's economic fate is largely in the hands of its politicians. The disappearance of the one-party political system that once gave Mexican presidents total control is forcing the current executive branch to work with a fractured legislature to implement reforms necessary for global competitiveness.

Needed reforms are well defined, and the list is long. It includes creation of a more equitable and predictable tax system to increase financial certainty for investors. A government policy needs to be implemented to help all businesses, not just a select few, become globally competitive. The energy and electricity sectors need to be privatized to increase their efficiency through competition. And there needs to be a genuine commitment to crafting a 21<sup>st</sup> century workforce through better education.

**P**assing the needed reforms will not be easy. Experts are divided on whether the politicians will take any action. They know that any reform of the system will threaten entrenched vested interests. Some argue that the legislature, dominated by the PRI party, will delay the reform process until 2006 to deny the president's party, the PAN, any political victory before the next election. Others argue that rapid globalization has made both the PRI and the PAN realize that reforms must be carried out now.



**O**ther factors affecting Mexico's economic future, such as the wage differential, are largely out of its control. The average hourly compensation for Mexican manufacturing labor is about one-eighth that of workers in the United States. However, the average hourly compensation for Chinese manufacturing labor is about one-fourth that of Mexico's.

If it were simply a matter of cheaper wages, all manufacturing would have left for China long ago. Logistical considerations, managerial talent, productivity per worker and protection of intellectual property rights also affect a company's location decisions. Mexico currently has an advantage over China in all of these areas.

According to Erwan Quintin of the Dallas Federal Reserve Board, "Mexico continues to offer unbeatable access to North American markets and a workforce more qualified than China's. However, there is little doubt that in sectors where transportation costs, skill requirements and added value are low, China's expanding capacity will erode Mexico's market share in North America."

"The transition of jobs from Mexico to China has primarily occurred in textiles, certain electronics and other products

requiring low-tech, high-labor assembly," says John Adams, executive director and CEO of the Laredo Development Foundation. Mexican plant managers, having come to the realization that they cannot compete with China's labor costs, are now attempting to move into more complex manufacturing processes that have historically been reserved for U.S. manufacturing operations.

The electronics and automotive sectors have already begun to implement more skilled labor and advanced technology in their Mexican manufacturing facilities. The electronics industry generally carries out research and development (R&D) activities in the United States while often choosing to manufacture components that need frequent retooling or quick delivery in Mexico.

**M**aterials for the components are generally shipped to Mexico from the United States duty-free under NAFTA. The finished components are then distributed throughout the world or shipped back duty-free to the United States. However, manufacturing of commodities such as VCRs is usually shifted to countries with cheaper labor, such as China.

China and Mexico want to increase the number of foreign-owned R&D facilities located there, but U.S. companies are hesitant to outsource their core R&D functions. Delphi currently employs about 2,200 engineers in its Juarez R&D facility, according to Eduardo Solis, chief of the Office for International Trade and Investment Promotion in Mexico. Solis says this is the largest number of engineers in one location outside the United States.

Facilities like Delphi's are still a rarity in Mexico. China has started to offer incentives to companies willing to bring R&D programs there. However, fear of intellectual property theft is one of the top reasons firms cite for bringing their manufacturing operations back to Mexico from China.

Automotive manufacturing of both parts and finished vehicles continues to expand in Mexico. Connections between U.S. and Mexican automotive operations are strong, and the movement toward manufacturing and assembly in Mexico probably would have been faster if not for U.S. labor union contracts.

**O**ne weakness in the past has been lack of local suppliers for auto companies assembling in Mexico. According to Nick Criss, industrial director for Cushman & Wakefield, "In the long run, we'll see more manufacturing and less assembly in Mexico. The number of suppliers will increase during the next five years, and they will start to supply multiple original equipment manufacturers (OEMs) instead of just one."

One OEM, Toyota, has chosen to locate its two newest assembly plants in Tijuana, Mexico, and San Antonio, concluding that it is cheaper to build cars here than to assemble them in Asia and ship the finished vehicles to the United States. According to Atsushi Niimi, president and chief executive of Toyota Motor Manufacturing North America, Inc., "You can't

always be chasing around to areas with cheaper wages. Eventually, China's wages will go up. We are always striving to reduce costs, and the key is to use technology and innovation."

## Worst Case Scenario

**I**f none of the necessary reforms are carried out and Mexico does everything wrong, some companies will still find it beneficial to locate in Mexico strictly for its locational advantage and its cheaper wages relative to the United States.

Goods from Mexico can be shipped anywhere in the United States in four days or less, while shipping from China typically takes four to six weeks by ship. If problems or defects are discovered in a product in the supply chain, one to four days worth of defective inventory is much more manageable than four to six weeks worth.

Furthermore, inventory control technology continues to improve. More and more companies are attracted to a "pull" system, in which goods are not manufactured or assembled until the plant indicates they are needed. A short, predictable delivery time is critical for a pull system to work effectively.

Even under the worst-case scenario, the demand for industrial distribution space in Texas is not going to disappear. This is especially true for space along the border. Homeland security considerations have now guaranteed that international border

crossings will be required stopping points for all transported goods well into the foreseeable future. Historically, commerce has developed well around areas where transported goods must stop for whatever reasons.

Nevertheless, any decline in the economic viability of Mexico will have a negative impact on Texas. A preliminary report by Dr. Michael Patrick, director of the Texas Center for Border Economic and Enterprise Development at Texas A&M International University in

Laredo, estimated that nearly four of every ten border workers are employed in trade and commerce-related activities with Mexico. Statewide, the number drops to about one in ten. Patrick's study also estimates that a 1 percent permanent annual decline in Texas exports, about \$417 million, would decrease annual gross state product by \$1.2 billion and Texas employment by 8,300.

If Mexico's standard of living does not improve, Texas service jobs and retail establishments that depend on visiting Mexicans could suffer over the long term as well. Patrick calculates a mere 1 percent permanent decline in cross-border shoppers would cause a \$4.6 million loss in annual state sales tax collections.

Cross-border shoppers from Mexico to the Texas border regions (defined as arriving on foot or in a vehicle) accounted for \$8.8 billion in sales in 2002, the most recent numbers available. The average total sales per cross-border shopper per visit was \$151.

## Best Case Scenario

If all of the necessary reforms are implemented and Mexico transitions into more high-value, capital-intensive manufacturing, wages per employee should rise, but the number of

*Mexican plant managers, realizing that they cannot compete with China's labor costs, are attempting to move into more complex manufacturing processes.*

manufacturing jobs will decline. The United States has faced this situation for years. As technology increases productivity in the workplace, machines begin to replace people who must then retrain for other jobs in the economy or face a lower living standard. This is part of the "creative destruction" required for dynamic economies to adapt and expand over time.

With higher wages, the remaining manufacturing workers should have a higher standard of living, increasing the demand for better homes, better cars and a myriad of services and conveniences. Assuming Mexicans will be allowed to easily enter and exit the United States, many of these services will be purchased in Texas.

Under this scenario, commerce between Texas and Mexico should increase dramatically. As a result, the demand for all types of Texas real estate should continue to increase as well. A more affluent Mexican population will consume more goods and services in both Mexico and Texas.

Whether Mexico can compete with China and the rest of the world in the race for a significant share of global outsourcing has yet to be decided. A strong finish by Mexico, however, would likely prove an excellent outcome for Texas real estate markets as well. ♦

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*Dr. Hunt (hhunt@recenter.tamu.edu) is an associate research scientist with the Real Estate Center at Texas A&M University.*

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Articles - Publication Date 6.1.2004

## The Mexican Connection

Although China – with its cheap labor – may be a very attractive plant location for U.S. manufacturers, when all the costs of an extended pipeline are calculated, Mexico may still be the better option.

By [Traci Purdum](#)



An American business executive was asked if he'd ever been out of the country. "Sure," he replied, "I've been to Mexico."

His inquisitor tartly stated, "That doesn't count; it's connected."

Indeed, Mexico is. And if your business demands globalization, why not remain connected? Since Jan. 1, 1994, when NAFTA took effect, and North American trade barriers fell further, Mexico has been particularly attractive, enabling U.S. manufacturers to move parts of their production to the south where the Mexican workforce has provided a cost-effective alternative that's benefited the bottom line.

But Mexico is experiencing its own China challenge. The average wage of a semi-skilled employee in China is US\$0.50 an hour, according to a March

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2004 study by Frost & Sullivan of the electronics manufacturing services markets in China and Mexico. For Mexican workers, wages range from \$2 to \$2.50. "With declining profit margins, many electronics manufacturing service (EMS) providers operating from Mexico are finding it increasingly difficult to compete with electronics companies that have manufacturing facilities in relatively inexpensive regions such as Asia and Eastern Europe," says Keith Robinson, a Frost & Sullivan industry manager.

So why would a U.S. manufacturer stay with Mexico? Aware that China's minuscule labor costs are beating them up, Mexican manufacturers are trying to fight back. They're touting location, quick turnarounds, a stable political relationship with the United States and a better-trained workforce that is capable of not only manufacturing highly technical products, but also of protecting the intellectual properties of those products.

### Across The Border

Mexico has been manufacturing on a global scale for 30 years, its political system is more transparent than China's and it has dozens of free-trade agreements, stresses Steven A. Colantuoni, director of market research and communications at The Offshore Group, a Tucson, Ariz.-based provider of outsourced manufacturing support services in Mexico.

"Mexico has more free-trade agreements than any other country on the planet," claims Colantuoni. "They just finished negotiating a free-trade agreement with Japan, and they negotiated a similar treaty to the NAFTA with the European Union. So if you're an American country, and you have a global marketplace, ship from Mexico duty free into more places than any other place in the world."

In addition to Mexico's global presence, the country caters to just-in-time demands. Having products closer to the point-of-consumption makes economic sense. It also reduces shipping costs. "Labor costs aren't the only things people ought to take into account when looking at [China and Mexico]," insists Colantuoni. The cost of additional inventory over goods in transit over long distances also needs to be considered. "You've got things floating on a boat," stresses Colantuoni. "Number one, you're paying the transportation. And number two, even though it's floating, it's inventory, and you own it, and there's a cost associated with that."

Then there's the issue of China and intellectual property protection, a particular concern of U.S. manufacturers who contend they are regularly ripped-off in the PRC. At the April 21 meeting of the U.S.-China Joint Commission on Commerce and Trade, China promised by yearend to add to the range of intellectual property rights violations subject to criminal sanctions and to get tougher on piracy and counterfeiting. Manufacturers, among others, say they appreciate the promises but want to see results.

"Intellectual property is better protected in Mexico," judges Colantuoni. "In China, let's say the intellectual property issue is not as solidified as it is in Mexico."

### Going To Guaymas

Reacting to the requests of key customers for lower prices, nearly 20-year-old Smith West Inc., a Tempe, Ariz.-based manufacturer of precision components and assembler of electromechanical devices for the aerospace and semiconductor industries, five years ago expanded its operations to Guaymas in Mexico's Sonora state despite concerns the quality of work would not be at the level of its 100-employee Arizona plant, 400 miles to the north.

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The company, however, was pleasantly surprised at the ability of "very unskilled people" to learn to do skilled work, says Ed Mason, director of operations at the Guaymas plant. Also surprising was "the flexibility of the workforce," he says. "They will do anything you ask to get the job done. You always hear 'not my job' in the U.S. That phrase doesn't exist down here." Smith West initially planned to do rough work at the 65-employee plant in Mexico and send it to Arizona for finish work. Not anymore. Now the company ships directly to the customer from Mexico.

Smith West has thought about China, cheaper labor and even lower costs for customers. "But the benefit of lower labor costs doesn't offset the time and cost of an extended pipeline," stresses Mason.

Foreign-based companies with plants in the U.S. also understand the business appeal of producing in Mexico while still being close to the huge American consumer market. JVC Americas Corp., a subsidiary of Victor Company of Japan Ltd., recently expanded its television plant in Tijuana, Mexico. "JVC manufactures TVs in Mexico because it offers the best combination of costs and location," explains Shigeharu Tsuchitani, the chairman of JVC Americas Corp. "While some manufacturing costs might be lower in other markets, Mexico's proximity to the U.S. makes it the most logical location for manufacturing TVs that will be sold in the U.S.," he says. "Americans prefer large-screen TVs, and the higher freight costs of shipping large TVs from China, for example, outstrip any manufacturing cost savings. In addition, insurance costs for shipping keep going up."

Ask Jean-Francois Phelizon about globalization, and he will tell you that his company, \$37 billion Compagnie de Saint-Gobain, a materials producer that has been in business since 1665, believes that serving the market means being close to customers. With industrial operations in 46 countries, Paris-headquartered Saint-Gobain has 10 plants in Mexico, nine in China and 186 in the U.S. None of its Mexican plants were closed and relocated to China in search of lower labor costs, says Phelizon, president and CEO of Valley Forge, Pa.-based Saint-Gobain Corp., the company's U.S. subsidiary.

"If you have a global market, localization of the plant is mainly dictated by cost. You would not ship a window beyond 300 miles," says Phelizon. Indeed, he advises manufacturers to manage all sorts of distances. "When you are relocating your plant, you can find some issues. Obviously distance, even in Mexico. You have a distance in terms of language you have to manage. You also have different cultures," he says. To be successful a company must successfully manage all those distances, he stresses. "It could be very costly [if you don't]."



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## WHAT'S HOT

The logistics industry in China is set for a round of explosive growth, with a compound annual growth rate of 33% projected out to 2007, supported by the increased outsourcing of logistics functions.

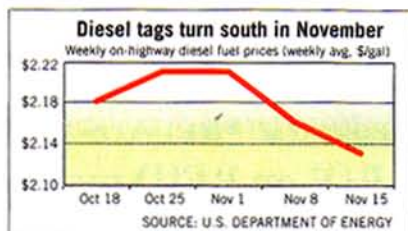
However, the report projecting that growth from Transport Intelligence adds that China's economic growth has papered over major structural problems which need to be addressed if the development is to continue. Those problems include: weak transport; inadequate information and communications infrastructure outside economic zones; a culture of regulation and bureaucracy; fundamental energy-supply problems; high transportation and logistics costs; a poorly educated and badly trained work force as well as high regional imbalances of trade (both domestically and internationally).

"If China's economy does have a hard landing, as many economists predict, there will be a major impact on air, sea, express and logistics companies which have over-invested in capacity in the region," says John Manners-Bell, the report's author. "For the time being though, the fragmented, low value-add nature of the Chinese transport market will provide huge opportunities for foreign, and the more developed domestic players, to grab market share. However, its transformation will not be as straightforward as many logistics companies would like to hope."

dhannon@reedbusiness.com

# logistics

David Hannon, News and Transportation Editor



## INTERNATIONAL SECURITY

### Shippers still adjusting to new trade security rules

More than three years after the terrorist attacks of Sept. 11, international trade security measures continue to be at the top of many shippers' concerns as demand for logistics services booms. PURCHASING recently interviewed government officials and representatives of the shipping and security industries to forge a snapshot of where implementation and enforcement stand and where there might be problems and benefits down the road.

The main U.S. security regulations and programs affecting international shippers are:

- The Container Security Initiative (CSI), with its 24-hour prior to loading notice requirement.
- The Maritime Transportation Security Act of 2002, which has mandates for port and vessel security programs.
- The International Maritime Organiza-

tion (IMO) security code.

- The Transportation Worker Identification Certification (TWIC), which aims to establish a uniform biometric ID card.

- The voluntary Customs-Trade Partnership Against Terrorism (C-TPAT), which offers customs simplification and other benefits to participants in navigating the new security measures from the Department of Homeland Security.

### Impact of security regulations on trade

Name	Requirements	Potential effects
<b>Maritime Security Transportation Act</b>	U.S.-port facility and vessel owners must draw up security threat assessments and plans, and implement mitigation measures.	Higher fees charged by port facility and vessel owners; Delays in cargo movement if ports do not ramp up inspection forces fast enough.
<b>Container Security Initiative</b>	Standards for container manifesting, securing and handling. (e.g., 24-hour Rule or advance reporting of container traffic.)	Some shippers claim this speeds up cargo passage through customs. Container shippers may have to install new locking and monitoring technology.
<b>Transportation Worker Identification Certification</b>	A biometric ID card that will be used to control access to secure areas at seaports, airports, rail, pipeline, trucking and mass transit facilities nationwide.	TWIC hopes to eliminate the need for multiple ID cards and facilitate cargo movement.

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### IMPORT SQUEEZE

Yule Log Jam

The holiday shipping season was chaos at the biggest U.S. container port. Globalization means it will happen again.

FORTUNE

Tuesday, November 30, 2004

By Barney Gimbel



(Photo: Ilkka Uimonen--Magnum)

It's two hours before quitting time, and Mickey Main's cellphone won't stop ringing. His longshoremen, the unionized dockworkers who staff Los Angeles and Long Beach's seaports, don't let up. Some are angry they have to work overtime; others believe a shipping line is breaking union rules. Each call requires a visit and each visit requires time.

It doesn't look like it as the 50-year-old mechanic rumbles around these smog-infested ports, which together are the size of Manhattan, but Main may have one of the most critical jobs in America's globalized economy. When just a few dockworkers stop moving cargo—even for an hour or so—the flow of goods from China's factories to neighborhood retailers to your Christmas tree grinds to a halt. **The Los Angeles-Long Beach ports handle 43% of America's imports.** It is Main's job to drive around them all day, in a black Chevy Suburban with *ilwu* business agent inscribed on the side, representing the longshoremen, settling arguments, and keeping the freight moving. "I'm the sheriff for as far as the eye can see," Main says with a smile. He could sure use some deputies.

**With the boom in imports from Asia, this place is out of control.** Just over a month ago some 94 cargo ships—a flotilla bigger than most of the world's navies—were waiting to be unloaded **(43 couldn't even fit in the harbor).** And some of the ships lucky enough to find a dock spent as many as **eight days unloading, twice as long as normal.**

It's hard to overstate the ripple effects of the chaos. Just ask Toys

"R" Us, which had to build ten extra days into its supply chain; or Sharp Electronics, which had to fly in television parts from China; or toymaker MGA Entertainment, which lost some \$40 million in revenues when it couldn't deliver its bestselling Bratz dolls on time to big retailers. Sharper Image even blamed a third-quarter loss in part on reduced inventory from the port backlog. It also cited higher air-freight costs to bypass ports.

The sheer volume of cargo this year has caused problems rivaling the eight-day dockworkers lockout in 2002, which shut down the West Coast ports entirely. This fall the problems were more complex, and more intractable. The railways couldn't take more cargo, the union was short of skilled workers, and truck drivers were quitting right and left. And yes, as with most American economic stories, Wal-Mart played its part. It imported a record amount of goods in just a few months this fall, the peak shipping period of the year. While the situation has improved in the past few weeks, many of the 40- by eight-foot, 22-ton containers are still sitting stacked five high and ten across on the docks. Getting them out is like driving in Calcutta during rush hour. Trucks whiz by the five-mph speed-limit signs, cranes the size of small skyscrapers move between ships—oh, and yes, there are the forklifts. Everywhere.

The chaos doesn't mean that Americans will be shopping at stores with empty shelves this holiday season, but as manufacturing jobs continue to be outsourced, the capacity of the nation's ports, roads, and rail system is nearing a true breaking point. When container rail service between Los Angeles and Chicago began in 1968, the trip took 36 hours. Now it's closer to 56. Why? Too many trains and not enough tracks. This year port volume increased about 12%, three times what had been expected. With other West Coast ports ill-equipped to handle big ships—some new freighters hold more than 4,000 containers each—Los Angeles-Long Beach, the largest U.S. container complex, has to bear the brunt. And many of the ships coming from Asia are too big to make it through the Panama Canal to Eastern seaports, so the ships come here in droves, and wait ... and wait. The two ports combined process 24,000 containers a day, handling 62% of all shipments to West Coast ports from Asian exporters.

So when things go wrong at this magnitude—costing the economy billions, though there are no solid estimates yet—no one wants the blame. The dockworkers' union, the railroads, and the Pacific Maritime Association, which represents shipping lines and port operators, point fingers at each other. David Arian, president of International Longshore and Warehouse Union Local 13, said the current backlog could have been avoided had the PMA hired more full-time union workers instead of relying

on a limited number of inexperienced temps known as "casuals." For his part, PMA president Jim McKenna admits underestimating the labor demands but blames the union for exaggerating the problem to boost its membership. He says adding full-time workers would do nothing more than change the status of those already on the job without increasing productivity. Both of them blame the railroads for starting the whole mess by being short on locomotives, workers, and container cars.

John Bromley, director of public relations at Union Pacific, had a short answer when asked if the railroad had anticipated the current volume of cargo. "No," he said. Matt Igoe, the Los Angeles senior hub manager of the Burlington Northern and Santa Fe Railway, says it wasn't his fault everyone dumped a lot of containers on his system all at once. But he admits that in less than two years, his rails will be at true capacity. And what to do then? "I'm only worried about this afternoon," he responded.

It's a logistical nightmare many smaller importers didn't consider when they outsourced manufacturing abroad. Take K.C. McCarthy, the supply-chain manager of Topco Sales, a cosmetics company. He thought he would be saving substantial sums of money by manufacturing his goods in China this year, but instead he's had to get some of his products out of Los Angeles on planes to get them to retailers like Target and Wal-Mart on time. (If he misses a deadline, he can suffer fines called chargebacks or, worse, lose his contract altogether.) The cost differences are staggering. A 40-foot container costs about \$900 to ship from Los Angeles to Houston by train, according to Belle Morales of Dynalink Systems, a Los Angeles-based customs broker and freight forwarder. Putting that same "can" on a truck raises the price to more than \$4,000. Air freight for 22 tons of cargo? Try about \$40,000. There go your profits and then some. "The big guys don't care," Morales says. "They say 'get it here or else.'"

And next year will be worse, experts agree. Many shipping companies and importers say they'll simply avoid Los Angeles-Long Beach as best as they can. Gap, for example, redirected some shipments to Seattle and Oakland, and some through the Panama Canal to the East Coast, when the gridlock set in. (About 100 ships went to other ports this year, the first year anyone needed to track diversions.) Other importers say they're just going to have to spend the extra cash to warehouse the goods here earlier in the season. As for what to do with the Los Angeles area, some say moving cargo out of terminals to an inland port by shuttle train may reduce traffic. Others bank on having the ports' gates open around the clock, as opposed to the current 8 a.m. to 5 p.m. schedule. (Ships are unloaded through

the night, but trucks don't move in and out.)

Truck drivers complain that even if the gates were open 24/7, the warehouses where they deliver the containers are generally closed after hours. And they have other problems. Their profit is whatever is left after lease, insurance, gas, registration, and maintenance costs. But many have to wait in line for up to seven hours to pick up loads, destroying their ability to earn a living. An informal survey by the Marine Exchange of Southern California, which tracks port movements, found that hundreds of truck drivers had thrown in the towel. Veteran trucker David Macias, 49, is one of them. Now he hauls only cross-country. "Dealing with the port is a whole lot of stress for not a whole lot of money," he says. "The only problem now is I never see my wife anymore because I'm always on the road."

Macias is right—the port is a stressful, chaotic place. And while importers and retailers are feeling the pain of its antiquated infrastructure, there has never been a better time to be in the shipping business—or to be a dockworker. When the union put out a call for more workers, some 500,000 people applied. Why? The jobs pay \$100,000 or more a year, with great benefits, vacation time, and flexible hours. Just spend an evening in the dispatch hall of Local 13. Workers of all ages, races, and sexes clamor to be assigned work as a carpenter, jitney driver, winchman, "swamper" (trucker's assistant), or crane operator. When the night dispatch starts, at precisely 4:40 p.m., it turns into an auction house. Ten dispatchers yell out jobs; who gets them depends on seniority and hours worked. Alex Lomeli, 36, has been a longshoreman for the past eight years. So have his father, grandfather, brother, uncle, and cousins. "I love my job," he says. "It's been real busy, though. This isn't just a peak period, it's the future." He's in the right business at the right time.

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## Table of Contacts

<u>Company Name/Product</u>	<u>Contact &amp; Title</u>	<u>Employees in Mexico</u>
Alaris Medical Systems Medical Devices	Fidel Flores, Production Manager	3500
Mattel Toys, Inc. Toys	David Smart, Plant Manager	3000
Panasonic (Matsushita) Television & Network Systems	Alfredo Mota, Operations Subdirector For Final Assembly	3000
Bose Corporation Audio Equipment	Raul Corella, Plant Manager	2400
JVC Audio & Video Electronics	Augustin Velazquez, Asst. Manager of Maintenance and Machinery	2500
International Rectifier Corp. Rectifiers and components	Paul Johnson, Materials Manager	2450
Nelcor Puritan Bennett (Tyco) Toys	Jaime Noriega, Production Manager	2400
Douglas Furniture Home & Business Furniture	Janet Alcala, Lean Manufacturing Engineer	2000
Sola International, Inc. Optical Lenses	Jorge Costa, Plant Manager	1700
Formosa Prosonic Speakers and Plastic Injection components	Mauricio Garcia, Buyer	1300
Meditronics, Inc. Medical Devices	Eliox Valdez, Materials Manager	1200
Delphi Auto Parts Auto Parts	Ricardo Fernandez, Production Manager	1100
Lighting Progress Lighting Fixtures & Lamps	Estela Rocha, Purchasing Supervisor	1000
Samsung International Audio & Video Electronics	Chun Monchoy, Purchasing Manager	1000

## Table of Contacts (page 2)

<u>Company Name/Product</u>	<u>Contact &amp; Title</u>	<u>Employees in Mexico</u>
Comair Rotron Telecommunications Components	Mike Barr, VP Sales & Marketing	880
Sanyo Energy Audio & Video Electronics	Rose Eastman, Customs/Traffic Assistant Manager	800
Powerware Products Electronic Components	Monica Gurrola, Production Manager	270
PARPRO Wire Kits & Harnesses	Jose Luis Vega, Operations Manager	150
Polk Audio Audio Speakers & Components	Scott Kendall, VP Quality Assurance	200



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January 27, 2005

## Summary of Responses

### 1. What is your experience with manufacturing in China?

The majority of manufacturers have experience in China with either manufacturing, subassembly or raw material purchases.

### 2. Do you currently have plants in both locations?

About ½ of the companies interviewed had operations in both Mexico and China. Others have outsourced subassemblies through already established manufacturers and others have sourced raw materials in China.

### 3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?

The consensus is that several companies have moved portions of their operations from Mexico to China. Some have been unsuccessful and returned to Mexico (Flextronics, Hasbro, etc.). The operations that have moved to China have been the less technical and less elaborate product lines.

### 4. What was the rationale in choosing Mexico over China?

Overwhelming responses indicate that proximity to their customer base was the primary rationale in choosing Mexico over China. For those with customers in the US and Europe, Mexico was a better fit. This proximity has created fewer problems with freight and lead times therefore maintaining good customer service levels to their customers. Less freight and travel costs were also mentioned by several companies as reasons to maintain their Mexico operations.

### 5. What do you see as the future of the Maquiladora business in Mexico?

Some felt that there was a decrease in growth over the last few years due to newly established opportunities in China. This slow growth pattern is on the decline and it appears that there may be a new influx of Maquiladoras in Mexico over the next few years.

### 6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?

Most companies indicated that they anticipated some growth in their Mexico operations. Only 1 company indicated that they were considering the closure of their Mexico operations but this company was already heavily vested in Asian operations.

### 7. Will China cause Mexico to lose more business?

Most responses indicated that they felt the mass exodus of manufacturing from Mexico to China was over. Many indicated they anticipated the Maquila industries to grow. It was clear that particular types of production were a better fit for China and others for Mexico. Most indicated that the smaller, less technical products were well suited for China while the more technical products lines were better suited for Mexico.

#### Things to consider regarding China:

- Quality control
- Design theft (industrial espionage)
- Longer lead times
- Longer travel time and expense
- Complex cultural differences
- Freight delays
- Poor infrastructure
- Poor utility coverage
- Variances in province regulations
- Political instability

#### Things to consider regarding Mexico:

- Higher labor rates
- Longer distance (costs) from Asian Customer base
- Higher tax levied by Mexican government
- Complex regulations and programs



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January 27, 2005

Alaris Medical Systems  
Fidel Flores, Production Manager  
Manufacturer of medical devices  
3500 employees in Mexico

**1. What is your experience with manufacturing in China?**

No experience with manufacturing in China. They purchase their raw materials from USA, Italy, Israel and Europe.

**2. Do you currently have plants in both locations?**

No, they have operations in Tijuana and Mexicali Mexico.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No

**4. What was the rationale in choosing Mexico over China?**

They did not consider China as their customer base is in the US and Europe.

**5. What do you see as the future of the Maquiladora business in Mexico?**

They expect it to increase

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They are growing their Mexico operations and are building a new facility to keep up with their production.

**7. Will China cause Mexico to lose more business?**

The wave of movement from Mexico to China has stopped. They expect to see more companies return to Mexico.

**Comments:**

About 2 years ago, they did several studies regarding moving operations into different countries to see where the greatest cost savings would be realized. They considered China, Costa Rica and expansion in Mexico. They found that Mexico was still their best opportunity for controlling costs as long as they kept a close eye on productivity and quality control.

January 27, 2005

Mattel Toys, Inc.  
David Smart, Plant Manager  
Manufacturer of Toys  
3000 employees in Mexico

**1. What is your experience with manufacturing in China?**

Manufacturing small items is better in China because they are more labor intensive, can be transported to the US in great volumes and the freight cost is lower. Larger items are better manufactured in Mexico due to less labor and freight is lower which provides better customer service and shorter lead times. Actually both large and small items are manufactured in Mexico quite successfully.

**2. Do you currently have plants in both locations?**

Yes

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No

**4. What was the rationale in choosing Mexico over China?**

They are doing well in Mexico with shorter lead times to their distribution channels in US and the freight is cheaper. They have manufacturing in China but only to meet the demands for their Asian customers. They only ship a small amount to the US from China.

**5. What do you see as the future of the Maquiladora business in Mexico?**

They expect a personal growth in their industry. In order to stay competitive, Mexico will need to reduce pricing of raw materials, reduce government taxes, reduce energy bills, etc.

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They expect it to grow and most particularly in the electronic, automotive and medical device industries.

**7. Will China cause Mexico to lose more business?**

No.

**Comments:**

There are 3 factors that are key and must be taken into consideration when moving any operation to foreign soils:

- 1) labor costs
- 2) freight costs
- 3) Raw Material costs to import/export



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January 27, 2005

Panasonic (Matsushita)  
Alfredo Mota, Operations Subdirector for Final Assembly  
Manufacturer of television and network systems  
3000 employees in Mexico

**1. What is your experience with manufacturing in China?**

They manufacture televisions and components in several Asian countries

**2. Do you currently have plants in both locations?**

They have operations in China, Malaysia, Japan, North American and Mexico. The production in Mexico supports customers in Europe, US and Latin America. Panasonic is doing quite well in Mexico.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No but Sony moved part of their operation to China to reduce costs however their major production remains in Mexico.

**4. What was the rationale in choosing Mexico over China?**

Originally to save on operational costs.

**5. What do you see as the future of the Maquiladora business in Mexico?**

They feel that the Maquiladora industry is at a stand still. The Mexican government needs to do more for the manufacturing companies in Mexico to reduce taxes as Mexico wants to tax everything.

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They are expected to have some growth

**7. Will China cause Mexico to lose more business?**

Yes.

**Comments:**

There is poor quality and training in China so you would need to teach them extensively in order to obtain the quality product in order to obtain the cost savings you are looking for.



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January 27, 2005

Bose Corporation  
Raul Corella, Plant Manager  
Audio equipment  
2400 employees in Mexico

**1. What is your experience with manufacturing in China?**

It all depends on the type of materials or technology. There is a lot of technical espionage to produce copies of the original products. They want to sale/distribute their products in China and that is why they are opening a plant there.

**2. Do you currently have plants in both locations?**

They have plans to open a plant in China but they have plants in Tijuana and San Luis Rio Colorado Mexico as well.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No.

**4. What was the rationale in choosing Mexico over China?**

Mexico is closer to most of their customers in the USA.

**5. What do you see as the future of the Maquiladora business in Mexico?**

After a 7 year range of slow growth, they see in influx of move maquila business

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

There have big plans in Mexicali to open an Industrial Park exclusively to manufacture semiconductors, actually 80% of semiconductors are made in Asia but there are plans to move that production to Mexicali. The government is planning to help those manufacturing companies by reducing taxes and other types of benefits.

**7. Will China cause Mexico to lose more business?**

No

**Comments:**

Their words of wisdom regarding China are be watchful of the freight, weighted cost of the total operation and design theft.



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January 27, 2005

JVC

Augustin Velazquez, Asst. Manager of Maintenance and Machinery  
Manufacturer of audio and video electronics  
2500 employees in Mexico

**1. What is your experience with manufacturing in China?**

They do not have any production lines in China. China only provides them with modules and PCB subassemblies for their TV production

**2. Do you currently have plants in both locations?**

They have plants in England, Belgium, Mexico, Thailand, Singapore and Japan. They moved their facility from New Jersey to Mexico.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No

**4. What was the rationale in choosing Mexico over China?**

They never considered China. Their major customers are in the US and Canada.

**5. What do you see as the future of the Maquiladora business in Mexico?**

It is growing.

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They expect a growth in their Mexico facility as the electronics business is going well there.

**7. Will China cause Mexico to lose more business?**

No

**Comments:**

None



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January 27, 2005

International Rectifier Corp  
Paul Johnson, Materials Manager  
Manufacturer of Rectifiers and components  
2450 employees in Mexico

**1. What is your experience with manufacturing in China?**

Very little experience in China. Most of their production is in Mexico, US, Great Britain and Italy. They have subsidiaries in Japan and Singapore.

**2. Do you currently have plants in both locations?**

Limited amount of manufacturing in China because they are trying to keep all production loaded in Mexico which is more strategic and closer to their customers.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No

**4. What was the rationale in choosing Mexico over China?**

Mexico is better located close to the US, easy access to raw materials, freight is cheaper, and has shorter lead times to their customers.

**5. What do you see as the future of the Maquiladora business in Mexico?**

They anticipate growth

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They expect an increase in Maquiladora industries

**7. Will China cause Mexico to lose more business?**

No

**Comments:**

None



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January 27, 2005

Nellcor Puritan Bennett (Tyco)  
Jaime Noriega, Production Manager  
Manufacturer of Toys  
2400 employees in Mexico

**1. What is your experience with manufacturing in China?**

They have brought production lines from China to Mexico because it reduced the lead times which helped to reduce sale prices to their customers. The only advantage in China is the cheaper labor and lower government taxes. The company is doing well in Mexico and they are making profits.

**2. Do you currently have plants in both locations?**

Yes

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No

**4. What was the rationale in choosing Mexico over China?**

They are doing well in Mexico and most of their customers are located in USA/Europe. It would depend on where the greatest demand is coming from. Do they have a greater demand in Asia or US/Europe? In addition, how you will finance, makes a difference.

**5. What do you see as the future of the Maquiladora business in Mexico?**

It is growing. The most recent investment made in Mexico was by Toyota.

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

It is growing.

**7. Will China cause Mexico to lose more business?**

No.

**Comments:**

None



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January 27, 2005

Douglas Furniture  
Janet Alcala, Lean Manufacturing Engineer  
Manufacturer of furniture  
2000 employees in Mexico

**1. What is your experience with manufacturing in China?**

Very little, they only outsource subassemblies in China and transport them via ship to Mexico

**2. Do you currently have plants in both locations?**

No

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No

**4. What was the rationale in choosing Mexico over China?**

Mexico is closer to their customers in both the US and in Mexico

**5. What do you see as the future of the Maquiladora business in Mexico?**

It is growing

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They expect growth in their Maquila business

**7. Will China cause Mexico to lose more business?**

No

**Comments:**

None



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January 27, 2005

Sola International, Inc.  
Jorge Costa, Plant Manager  
Manufacturer of optical lenses  
1700 employees in Mexico

**1. What is your experience with manufacturing in China?**

China has lower costing, but they pay close attention to freight. They primarily make subassemblies in China

**2. Do you currently have plants in both locations?**

They operate in China, Brazil, Venezuela and Mexico. The majority of their customers are located in US and Europe

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No

**4. What was the rationale in choosing Mexico over China?**

Closer to the border and their major customers are in the US/Europe so they can service them better

**5. What do you see as the future of the Maquiladora business in Mexico?**

They expect the maquila industry to grow

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They are expecting to grow their Mexico operations as well

**7. Will China cause Mexico to lose more business?**

No

**Comments:**

None

January 27, 2005

Formosa Prosonic  
Mauricio Garcia, Buyer  
Manufacturer of speakers and plastic injection components  
1300 employees in Mexico

**1. What is your experience with manufacturing in China?**

They have a major investment in China/Taiwan as the parent company is located in China. They are a subcontractor for Sony, JVC, Sharp & Hitachi. However they had a very profitable year in Mexico.

**2. Do you currently have plants in both locations?**

Yes, in Taiwan and Mexico

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No but Lamkin transferred part of their production to China (they make golf clubs & Nike products) to reduce costs but maintained the majority of their production in Mexico.

**4. What was the rationale in choosing Mexico over China?**

They moved to China to reduce operational costs as Japan is where the majority of their customers are. Second is the US.

**5. What do you see as the future of the Maquiladora business in Mexico?**

They expect some growth

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They expect it to be the same

**7. Will China cause Mexico to lose more business?**

No

**Comments:**

They advise it best to determine where the majority of your customers are located to help determine which site will work best.



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January 27, 2005

Meditronics

Eliox Valdez, Materials Manager

Manufacturer of medical devices

1200 employees in Mexico

**1. What is your experience with manufacturing in China?**

They have no experience in manufacturing in China

**2. Do you currently have plants in both locations?**

No, their major customers are in the US and Europe. They have been successful with their Mexico operations.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No

**4. What was the rationale in choosing Mexico over China?**

Location of their customers was the primary rationale.

**5. What do you see as the future of the Maquiladora business in Mexico?**

It is growing and becoming more selective. Mexico manufacturing companies are starting to manufacture products with more aggregate value using complex processes (more quality and technology).

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

It should grow

**7. Will China cause Mexico to lose more business?**

Yes but only on cheap products

**Comments:**

None



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January 27, 2005

Delphi Auto Parts  
Ricardo Fernandez, Production Manager  
Manufacturer of auto parts  
1100 employees in Mexico

**1. What is your experience with manufacturing in China?**

Part of their production is in China and part of it is in Mexico. They transferred 40% of their production from Argentina to China and it was a disaster. It was at high cost as training of the personnel is expensive. The provinces of China vary and some provinces require a rotation of employees every 3 months to ensure all citizens have equal opportunity however they offer lower taxes. High value production is not suited for China as training is very expensive.

**2. Do you currently have plants in both locations?**

They were 1 year in China and closed their operations and moved to Matamoros Mexico

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

Yes, they did. There has been lots of changing within the last 7 years with lots of ups and downs.

**4. What was the rationale in choosing Mexico over China?**

Mexico and Argentina are better and easier to work in.

**5. What do you see as the future of the Maquiladora business in Mexico?**

They expect more growth for Mexico

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They expect to grow

**7. Will China cause Mexico to lose more business?**

No, it all depends of the product (simple and repetitive only is best suited for China)

**Comments:**

None



# SCANTIBODIES Laboratory, Inc.

*The Power of Antibodies to Select and Detect*



ISO 9001 QUALITY SYSTEM

9336 Abraham Way • Santee, CA 92071-2862 USA • Phone: (619) 258-9300 • Fax: (619) 258-9344 • [www.scantibodies.com](http://www.scantibodies.com)

January 27, 2005

## Lighting Progress

Estela Rocha, Purchasing Supervisor  
Manufacturer of light fixtures and lamps  
1000 employees in Mexico

### 1. What is your experience with manufacturing in China?

They purchase their raw materials from China. Some of their production lines in the US have moved to Mexico and some of their product lines made in Mexico are moving to China.

### 2. Do you currently have plants in both locations?

No but they plan on moving a few products lines to China (due to their customer's request)

### 3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?

No

### 4. What was the rationale in choosing Mexico over China?

They did not originally consider China.

### 5. What do you see as the future of the Maquiladora business in Mexico?

They expect to see an increase in electronics and medical device manufacturing

### 6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?

They are growing their Mexico operations

### 7. Will China cause Mexico to lose more business?

Not sure

### Comments:

None

January 27, 2005

Samsung International  
Chun Monchoy, Purchasing Manager  
Manufacturer of audio & video electronics  
1000 employees in Mexico

**1. What is your experience with manufacturing in China?**

They have manufacturing facilities in China, Hungary, Thailand, Philippines and their headquarters are in Korea.

**2. Do you currently have plants in both locations?**

Yes, they also manufacture components in Mexico which get shipped to other manufacturing sites.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No, they have only heard of people moving from Mexico to China and not vice versa

**4. What was the rationale in choosing Mexico over China?**

10 years ago, when they moved into Mexico, the labor rates were quite competitive but now that China has opened up, they find that Mexico no longer is as competitive as their other facilities.

**5. What do you see as the future of the Maquiladora business in Mexico?**

They do not expect much change or growth in the Maquiladora industry.

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They are not doing well in Mexico. They are actually discussing closure of the Mexico plant as they do not consider it competitive enough to their other facilities

**7. Will China cause Mexico to lose more business?**

Yes, I think so.

**Comments:**

None



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January 27, 2005

Comair Rotron, Inc.  
Mike Barr, VP Sales & Marketing  
Manufacturer of telecommunication components  
880 employees in Mexico

**1. What is your experience with manufacturing in China?**

They established a Chinese facility to service their Asian customers only. If they did not feel that they would have lost this business, they would not have moved any operations to China. China is not flexible in their shipping and they generally add an additional 20% onto the piece price to cover the extra inventory, late shipments and broker issues that are incurred.

**2. Do you currently have plants in both locations?**

Yes, they are in the telecommunications industry. They are not convinced that it's more cost effective to operate in China.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

They have heard that Flextronics moved out of Mexico, went to China and are in the process of moving back but into Guadalajara

**4. What was the rationale in choosing Mexico over China?**

They moved from NY to Mexico in 1990 when China's door were not open but given the same circumstances today, they would still have gone to Mexico.

**5. What do you see as the future of the Maquiladora business in Mexico?**

They see growth in the Maquiladora industry.

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They are going strong and expect to grow and increase their business in Mexico.

**7. Will China cause Mexico to lose more business?**

Certain Industries may lose to China but others will lose to Mexico.

**Comments:**

None



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January 27, 2005

Sanyo Energy  
Rose Eastman, Customs/Traffic Assistant Manager  
Manufacturer of audio and video electronics  
800 employees in Mexico

**1. What is your experience with manufacturing in China?**

They have 2 facilities in China, 1 in Europe and 1 in Mexico. They have found that the more technical and smaller the item, it better fits the Mexico environment. The less technical and bigger the product, the better it is for China. "It all depends on the chemistry of the product."

**2. Do you currently have plants in both locations?**

Yes

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

She has heard of someone but can not recall the name of the manufacturer

**4. What was the rationale in choosing Mexico over China?**

Mexico was established first and then China. They anticipate moving some of the product line from Mexico to China. They feel that Mexico has made it harder to import/export with their new convoluted programs which have made things harder, not easier.

**5. What do you see as the future of the Maquiladora business in Mexico?**

Due to the Mexican government restrictions, they anticipate a decrease in maquila industry

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

No, it will remain stagnant at best.

**7. Will China cause Mexico to lose more business?**

Yes as they can not compete. The US will suffer the same fate eventually.

**Comments:**

None



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January 27, 2005

Powerware Products  
Monica Gurrola, Production Manager  
Manufacturer of electronic components  
270 employees in Mexico

**1. What is your experience with manufacturing in China?**

They hired a manufacturing company already established (one production line).

**2. Do you currently have plants in both locations?**

Their locations for PCB's (magellan) are in China but most of their production is in Mexico

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

Yes, Lamda went to Asia and came back. Injection molding was one of the first industries to move to China but they have seen some companies return to Mexico as the cost savings were not as great as originally expected.

**4. What was the rationale in choosing Mexico over China?**

Savings were not as great in China

**5. What do you see as the future of the Maquiladora business in Mexico?**

It should grow because things are already coming back from China

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

They expect to grow the Mexico business

**7. Will China cause Mexico to lose more business?**

No

**Comments:**

None

January 27, 2005

PARPRO

Jose Luis Vega, Operations Manager  
Manufacturer of wire kits & harnesses  
150 employees in Mexico

**1. What is your experience with manufacturing in China?**

They have an indirect relationship with China in the purchase of some raw materials.

**2. Do you currently have plants in both locations?**

No, only in Mexico

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

No but they have heard that one of their customers came back to Mexico after only 6 months.

**4. What was the rationale in choosing Mexico over China?**

To be closer to their customers in the US and Europe

**5. What do you see as the future of the Maquiladora business in Mexico?**

They expect to see growth

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

It should grow

**7. Will China cause Mexico to lose more business?**

No, right now things have slowed down in Mexico from the moves to China but that should pick back up

**Comments:**

Politics and social issues are a threat in China. China is a Socialist country so one should be careful. It is an extremely poor country. Sometimes companies in China make the manufacturers sign long term contracts (5 to 20 years) to stay with ramifications for early withdrawal. In addition China has a very complex language and culture.

Stated Cons to China

\*Lead times are 12 to 16 weeks

\*Freight problems (both big and small) with loss and delays causing expedited freight costs

\*Quality problems as China is not ready to accept high quality and high tech products yet

January 27, 2005

Polk Audio  
Scott Kendall, VP Quality Assurance  
Manufacturer of audio speakers and components  
200 Employees in Mexico

**1. What is your experience with manufacturing in China?**

Closed Mexico operations and moved it overseas. It is working out well. They eliminated all expenses related to manufacturing, QC, and maintenance while leaving only Sales, Marketing, Engineering, Design, Purchasing, and some Accounting in the US. They outsource the entire manufacturing process. The savings have been substantial. They have had difficulties in qualifying the factories with a lot of time and travel to China. It was completely done internally without any consulting expenses. Asian tradeshow are a good help in finding and qualifying suppliers.

**2. Do you currently have plants in both locations?**

No, only overseas. They hired suppliers already established in China, Korea, Taiwan and Vietnam.

**3. Do you know of anyone who was manufacturing in Mexico, moved their operations to China and then moved it back to Mexico?**

Yes, Hasbro. They came back to Mexico because they did it the wrong way. They opened their own manufacturing facility and it was a disaster.

**4. What was the rationale in choosing Mexico over China?**

Existing manufacturing capabilities is the rationale as it reduces the risk. A 30%-40% cost savings makes it worth the investment to China as they can do larger volumes than other countries.

**5. What do you see as the future of the Maquiladora business in Mexico?**

Okay (same). The cost differences between China and Mexico is not that great if you are doing your own manufacturing. If it will not save you more than 10%, it is not worth the investment to go overseas. Distance, cultural and social business in China are much greater than in Mexico. Crossing the border into Mexico does not invest much travel time or expenses. For instance, a Production Manager costs \$100,000 in Mexico vs. \$150,000 in China.

**6. Do you see a growth in manufacturing? Do you expect it to stay the same or has it reached its peak?**

It may grow some.

**7. Will China cause Mexico to lose more business?**

Not really.

**Comments:**

None