

DOW JONES, A NEWS CORP COMPANY

DJIA **23924.98** -0.72% ▼S&P 500 **2635.67** -0.72% ▼Nasdaq **7100.90** -0.42% ▼U.S. 10 Yr **5/32 Yield** 2.952% ▲Crude Oil **67.82** -0.16% ▼

THE WALL STREET JOURNAL.

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <http://www.djreprints.com>.

<https://www.wsj.com/articles/SB892073436800454000>

AMERICAS

Thomson Uses Training to Build A Successful Mexican Factory

By Joel Millman Staff Reporter of The Wall Street Journal

Updated April 9, 1998 12:01 a.m. ET

CIUDAD JUAREZ, Mexico -- When it comes to value for money, it's hard to match Leonel Gomez Flores, a trouble-shooter at a giant television assembly plant here on the U.S.-Mexican border.

Mr. Gomez, 36 years old, is one of a handful of technicians correcting assembly-line glitches in a factory that turns out three million television sets a year for France's Thomson SA. With 4,000 workers operating in shifts around the clock, delays aren't tolerated.

That doesn't worry Mr. Gomez. As he moves among machines that mount circuitry on chemically treated boards at a rate of 10 every eight seconds, he pauses to eye a computer screen here and tweak a gauge there. "Most problems I can fix in 30 seconds," he says. "A few might take as much as two minutes."

The fact that Mr. Gomez, who never finished high school, is being entrusted to monitor and repair million-dollar machines is something new here on the border. The fact that he can do his job so well for \$20 a day, slightly more than a comparable U.S. technician makes per hour, explains why this region of dusty flats and prefab industrial complexes is becoming one of the world's most important manufacturing centers.

No More Taboos

"Conventional wisdom, until very recently, was that there were some skilled jobs that shouldn't be sent to Mexico, the so-called taboo jobs," says Enrique Perez, plant manager at Thomson Televisores de Mexico SA. "I don't think there is a taboo against anything anymore."

Until April 1, Thomson's Juarez plant fed another factory in Bloomington, Ind., which completed the sophisticated circuitry work on the television chassis assembled in Mexico. But now the Juarez facility completes the work.

By concentrating production in Juarez, Thomson can build a television set in four hours instead of two weeks. That's key to Thomson's competitiveness, says Mr. Perez, who points out that the price of a television set has dropped to \$200 from \$800 over the past decade.

Thomson's success in improving the productivity of its Mexican workers has also made Juarez a global hub for the company. The factory where Mr. Gomez works is Thomson's most efficient. It produces the same amount of television sets per worker at four-fifths the cost of the company's next-best plant, in France. And despite the fact that wages in Mexico are higher, the Juarez plant produces television sets at half the cost of a Thomson plant in Beijing.

Improved Productivity

Thomson executives cite several factors for their success in raising the productivity of workers who often arrive looking for work with limited education and few skills. The first is cutting down on worker turnover, a problem that has plagued the border industries since the Mexican government first drew investors there with tax incentives and cheap financing 30 years ago.

The second is a program of continuous training that allows workers to adapt easily to changing technology.

Thomson isn't alone in cracking the productivity problem. Many border factories have developed in-house training programs or send their workers to new government-sponsored vocational schools. One measure of the impact: workers in Juarez, where foreign companies operate more than 350 factories, have been increasing the value of their output for most of the decade. Mexican government statistics show the average factory worker produced goods valued at \$7,000 in 1990. Last year, the amount was slightly more than \$12,000. The vast majority of workers make about \$100 a week.

To be sure, improved productivity is only one reason why the border industries, known as maquiladoras, are flourishing. The late-1994 devaluation of the peso strengthened the argument for concentrating more production south of the border. While Mexican workers were paid salaries one-fourth that of their U.S. counterparts, the ratio fell to one-tenth after the peso's collapse.

Record Number of Jobs

The 115,000 new jobs created in border factories in 1997 -- an all-time record -- brings the total to nearly one million. Among the companies increasing their presence on the border are General Motors Corp., Ford Motor Co., Philips NV and United Technologies Corp. This year, Thomson plans to add 1,200 employees at its newest Juarez facility, whose output, in part, will replace that of the 1,100 workers at its Bloomington facility. "Very clearly, we believe you can assemble the product from start to finish in Mexico," says David Hakala, Thomson's vice president for manufacturing operations.

When foreign companies first put down roots on the border, they were looking for cheap labor. Because of the simple nature of the work, say managers, there was little incentive to retain and train employees.

Indeed, if there was any one thing that could be called an enduring tradition in the world of the maquiladora, it was the wholesale Christmas exodus of workers to their hometowns in other parts of Mexico. Many never returned, at least not to their former employers. Executives estimate that turnover at an average factory was a staggering 20% a month.

"U.S. industry viewed Mexico's labor as a cheap input, something for a quick gain," says Edward Boyd, the Thomson manager who first opened the Juarez plant. "Then you woke up, and with this turnover, you realized the gains you achieved in labor costs were being offset with pretty shoddy quality."

From the start, says Mr. Boyd, Thomson conceived of its Juarez facility as a way to break this vicious cycle. Thomson planners envisaged the plant as a hub in a thriving middle-class community.

Thomson chose a site, then on the edge of town, called Valle Sur after city officials agreed to zone the surrounding desert for residential construction and to construct a school. It also entered into talks with a local shopping-mall developer to put up a 24-hour supermarket right across the street from the plant's main entrance.

Turnover Problems

Then Thomson executives set about attacking the turnover problem in other ways. From the first shift, for instance, arriving workers were asked how they wanted to be addressed before being issued a laminated name tag. With workers' first names emblazoned in large letters, the tags emphasized the familiar over the formal. It was a simple step, but one that Thomson says has helped to wean Mexican managers from being overly patronizing and to break down the social barriers that stifle communications.

Assembly line technician Jesus Cervantes says he noticed the difference immediately. Mr. Cervantes, 29, previously fetched bolts of fabric and vinyl at a maquiladora making car seats for Ford. There, he had always been addressed as "boy." Such treatment, he says, only encouraged self-respecting workers to leave, even though they seldom found anything better.

Thomson's human resource office also lobbies Mexican officials to get workers day passes to shop in El Paso, Texas, or to process mortgage applications for state-subsidized housing in Valle Sur. Thomson even lobbies for better bus service.

Within the first year of operation of the Juarez plant, Thomson cut the number of monthly employee defections from 20% to under 6%. That percentage has begun to creep back up, as more factories open in the area, but it is still lower than the Juarez average. What's more, most of the workers that Thomson does lose have the lowest skill levels and are the most easily replaceable.

Take, Mr. Gomez, the line technician. Previously, he worked as an electrician in a Mexico City foundry. There, he says, career advancement depended more on kickbacks to union shop bosses than on talent. "It was a farce," he says, sitting in the sparsely furnished living room of his cinderblock home near the plant. It was partly the difficulty in getting ahead, and partly a sense of opportunity that drew Mr. Gomez to Juarez.

No Unions

The Thomson plant, with its sleek computerized assembly lines, was a far cry from the smoky foundry where Mr. Gomez used to work. There is no union, corrupt or otherwise, which Mr. Gomez says suits him fine. And managers, he says, have encouraged him to improve his skills.

He attended classes held after hours to become an all-purpose trouble-shooter, mastering everything from the meat freezer-size consoles that mount circuitry to the mechanics of the assembly line itself. He attended other classes to learn rudimentary English. Later, management sent him outside the plant to classes at a private vocational center. On one wall of his home, he proudly displays a diploma from the course.

Such training courses are important to the transformation of the maquiladoras into self-contained production centers, says Charles Robinson, a workplace consultant at Total Systems Development Inc. in Minnesota. "The reason you don't graduate from high school in Mexico may not be that you aren't smart enough or didn't want to," he says. "Here you get a line worker with the same analytical skill as an engineer in the U.S. The reason he isn't an engineer? He didn't have the opportunity."

That holds true for Mr. Gomez. He can now adapt to any machine in a matter of weeks and, say executives here, in a few years time he'll be able to train others. "The reason you pay to train these guys is that they'll be the ones to train the next generation," says LeRoy Boone, a Thomson efficiency expert based in Indianapolis, Ind.

He'll probably be around to do so, too. Punching out at the end of his shift, Mr. Gomez checks a bulletin board to see if he has won a prize for perfect attendance this month. "I could probably make a little more someplace else," he says. "But I'm looking for security now."

Copyright ©2017 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <http://www.djreprints.com>.