

Local Production: U.S. Labor/ Japanese Management

By Shozo Hochi

Japanese automakers gave Detroit a shock in the 1970s with small car exports. Local production is a new Japan breakthrough, but so far it looks like a rejuvenating one, both locally and industry-wide.

After the 1981 voluntary restrictions on finished passenger car exports were enacted, major Japanese automakers moved swiftly to start local production in the United States. Honda Motor broke ground when the first Accord sedan rolled off the assembly line at Marysville, Ohio in October 1982. Nissan Motor Mfg. Corp. U.S.A. (NMMC) first put out Nissan light trucks in June 1983, and started production of passenger cars this March. Through a joint venture with General Motors, Toyota Motor began passenger car production in December of last year in Fremont, California. The local content rate of these plants is currently about 50%, but Honda has already announced plans to produce passenger car engines in the U.S., and Toyota plans to build its own auto production facility by the middle of 1988 to produce medium-sized passenger cars in the Midwest. Japan's big three car makers have set up production footholds in the United States and the remaining major car makers, Mazda and Mitsubishi Motors Corp., will follow suit very soon. A new era in car production has begun.

My taxi driver for the long drive from Columbus to the Honda of America Mfg., Inc. (HAM) plant in Marysville, Ohio, told me, "My parents enjoy driving their Honda Accord. It's a good car and they are proud of having it." I was the young driver's first fare to Marysville and we finally managed to find the huge HAM factory near Route 33 by asking people along the way.

Honda's "You meet the nicest people

on a Honda" ad campaign made its motorcycle exports to the U.S. a success in the 1960s, and in 1979 it started motorcycle production in Marysville. No sooner had the first American-made Honda motorcycle rolled off the assembly line than Honda concluded a feasibility study on the production of automobiles in America on a site adjacent to the motorcycle plant. Convinced of the capabilities of the area's work force and of favorable response from the local community to the motorcycle operation, Honda determined that construction of an automobile production facility could begin before the end of 1980. Never before had a Japanese automaker built cars in the U.S.

In 1982 HAM completed the 165,000-square-meter (40.7-acre) Accord facility on a 3.5-million square-meter (864-acre) site, and production of four-door Accord sedans and three-door hatchbacks was soon under way. Much more than an assembly facility, the Marysville operation houses stamping, welding, painting, plastic injection molding and assembly in its mammoth building. The plant's local content rate is 50%, the remainder coming from Japan including engines, transmissions, drive shafts and brakes.

From the start, HAM made it clear to the local residents that the company intended to be an American corporation, a responsible corporate citizen working with the community. It has already attained membership in the Motor Vehicle Manufacturers Association, indicating its determination to operate as "an American automaker." While a few upper management personnel are Japanese, and people from Honda Motor have been brought over to help train the staff, the great majority of workers are American.

All employees at the plant are referred to as "associates" to convey the idea of

management-labor teamwork. Maximizing the efficiency of the team by valuing the input of the individual is the idea that sets Honda apart. Associates participate in daily "team" meetings. Their ideas are exchanged and the day's production goals, and how best to reach them, are discussed.

Secure foothold in U.S. market

Honda is already conducting a \$240 million expansion of the plant. When the expansion is completed next autumn, and full capacity reached, HAM will be producing 300,000 cars—Accords and Civics—at the facility per year. All of which brings Honda's total manufacturing commitment in America to nearly \$600 million.

Shige Yoshida, executive vice president of HAM, emphasizes Honda's determination to succeed here by saying, "Toyota, Mazda and Mitsubishi will soon build plants here in the U.S. Furthermore, General Motors is now working on its 'Saturn project' to produce small cars. In addition, after its successful sales in Canada, South Korea's auto industry is enthusiastic about making inroads into this market with subcompact cars. The competition will be harsh. The only way we can survive is by winning."

Yoshida says, "Marysville is only a four-hour drive from Detroit, the heart of union territory. As soon as Honda built the motorcycle plant in 1979, the UAW set up a branch office in Marysville in order to woo Honda employees. Despite its efforts, only three employees have joined. Our employees seem to be satisfied with our way of management, though the wage level is slightly lower than that of the UAW members at other automakers' plants."

Local support for the plant has been high. Though HAM has never run a help wanted ad, many employment inquiries flow into the company from local people.

Steve Yoder, an assembly manager at Honda's motorcycle plant, is satisfied working at the plant. Yoder was one of the six initial assembly line workers when HAM started motorcycle production six years ago. He had no previous experience in producing motorcycles, but had worked as an assembly line worker for a local travel trailer manufacturer. Yoder emphasizes the uniqueness of Honda's production and management systems as compared with that maker: "I find a much better quality control system, better techniques, and much more training and associate involvement in production here. We have more input so we have a stronger willingness to work and feel more pride as workers here."



Honda broke ground in the U.S. when its Accord sedan rolled off the assembly line at its Ohio plant in 1982.

Good labor response

Concern that American employees might not be able to adjust to Japanese management and vice versa seems unfounded. And it's not just Honda. Kathy Thomas, a technician at the body, frame and stamping plant of Nissan Motor Mfg. Corp. U.S.A. (NMMC) in Smyrna, Tennessee, is also satisfied with the Japanese-style work environment: "I was a secretary for 13 years before joining Nissan, so I've really jumped out of one career into another, but I've enjoyed the changes and challenges. At Nissan, there's always a challenge. There's always opportunity. If you stay at one level it's because you want to. Someone's always opening up new doors here."

The initial hiring process at the Nissan plant included a brief exam and a series of interviews, the interviews being the focus. The state of Tennessee helped in hiring employees; applicants applied to the state, and the state processed the applications and presented them to Nissan, which then proceeded with the interviews.

Kathy is raising two daughters single-handedly; "The salary," she says, "is sufficient to take care of them. And the investment plan is a real boon. Money is deducted from your check each week and invested in securities. There's also a leased car program by which you can lease a Nissan-made car or truck. My oldest wants to start working here as soon as she gets out of school." When I asked whether the work the women here are doing is any easier than or different from what the men are doing, she replied, "No. Whatever the men are doing, the women are doing too."

Another lead technician at the factory's trim and chassis plant, Carolyn Netherton, commutes from Nashville, some 15 miles away, by a Nissan leased car. She runs the line and is a supervisor-in-training in engine. Asked about her impressions of the production system at Nissan compared with other plants, Carolyn replied, "The production system here doesn't vary from other plants all that much—production is production anywhere. But I don't think it's timed so closely at other plants; it's timed really close here."

"The management at Nissan is different and it's proven itself to be a success. Everybody likes to have management out and around, mixing with people," Carolyn says. "This is the first place I've ever worked at where management uses the same cafeteria. A lot of changes have come about from informal talks between management and employees here, just at the cafeteria or wherever; they are always very receptive."

"I was a member of the UAW at the other plant, but I've got benefits here that I didn't have with the UAW so I'm satisfied. When I was trying to get on here at NMMC I was concerned that having been a UAW member might be held against me, but it wasn't."

Quality rivals that of imports

NMMC is located in Smyrna, Tennessee, about 15 miles southeast of Nashville. The 317,000-square-meter (78.2-acre) production facility represents an investment of over \$745 million, Nissan's largest investment outside of Japan. General Motors recently selected

Spring Hill, Tenn., only 40 minutes from Smyrna, as the site of its Saturn project; Nissan's shrewd evaluation of the Smyrna site as superior in terms of both human resources and convenience of transportation of components and finished cars is now being recognized and imitated.

Production of light trucks at NMMC began in June 1983 under the management of Marvin T. Runyon, a former Ford Motor Co. vice president. NMMC's truck output reached 10,000 per month in June 1984. The company began production of the two-door 1600cc Sentra this March. Because of increased production, NMMC moved to two-shift production as of June.

The facility houses stamping, body assembly, painting, and final assembly areas, administrative offices and several service buildings. The current output is 15,000 units per month including trucks. NMMC plans to increase output to 10,000 passenger cars and 10,000 light trucks from next summer with 3,000 employees on two shifts.

According to Jerry L. Benefield, vice president manufacturing and a former Ford plant manager, "Before starting operation here, we made producing the highest quality vehicles sold in North America the corporate objective and I believe we have already achieved that target. We are producing very high quality vehicles equal to, if not better than, the imported Nissan vehicles. Basically, we have established an environment here in which every employee can contribute his best to the achievement of this objective. We give them all the information so they understand everything concerning the company."



Working with the state of Tennessee, Nissan trains employees extensively.

One of the most technically advanced automotive facilities in the world, the NMMC plant utilizes state-of-the-art computer and communication technologies for maintenance and monitoring functions. The highly automated plant has more than 200 robots that apply paint and sealants, spot and arc weld, and select tires for tire assembly.

Light trucks manufactured at NMMC currently have a local content of between 50 and 55%, depending on the value of the yen. Mandated by its parent company to achieve the highest possible percentage local content, NMMC already has 92 local suppliers for truck production. When production of the Sentra passenger car started this March, roughly 20 U.S. companies were supplying parts for the Sentra, making start-up local content over 47%. Additional U.S. suppliers have been aggressively sought by NMMC.

Nissan is committed to spending the time and money necessary to train employees extensively. For technicians, training begins with a unique pre-employment training program in which the state of Tennessee, in cooperation with NMMC, helps job candidates acquire basic skills needed for work in the auto industry. Before truck production began in June 1983, over 380 supervisory personnel and technicians were sent to Japan for training in all areas of truck production.

According to Akira Noro, vice president finance, the average attendance rate is 95%, and is high even on heavy snow days. Many employees have been promoted from the assembly line to the office and even to managerial posts. The company conducts periodic promotion tests as an incentive.

NMMC's pay rate is comparable to the industry as a whole, but beyond that there is the employees' satisfaction at "being a part of a group of people who have come together to face a new challenge, who have created something new and are watching it grow," in the words of Benefield. "We can look back over the past two years and see many milestones. It gives us a feeling of accomplishment."

The NMMC plant is certainly having an effect on the local community, but what about the industry as a whole? Elton Coleman, plant manager for body, frame and stamping, is positive about its repercussions industry-wide. "I think Nissan's building a plant here demonstrates Nissan's and Japan's willingness to invest, to build plants in the U.S. It also demonstrates that Americans are capable of building good quality cars, with good productivity, and I think American automakers are going to respond to this challenge. We have to realize that we are part of a world market; we can't depend on one country for a market. Whether U.S. automakers decline depends on the individual company. All automakers, worldwide, will be engaged in international competition."

Transition from GM to NUMMI

Though it's not car country, the California car industry too has been hard hit by imports. Attracted by its location and labor force, Japanese makers are setting up here too. Robert Wood, a millwright at New United Motor Mfg. Inc. (NUMMI) in Fremont, California, says of the venture: "I think a lot of people are just

happy to see this plant opening up and making automobiles again. It brought jobs to many people who were out of work. I was out for two-and-a-half years and it was tough."

The former GM plant had been closed two-and-a-half years when NUMMI started production of the 1600cc Chevrolet Nova sedan in December of last year.

In February 1983, General Motors and Toyota Motor agreed to establish a joint venture to produce passenger cars using the facility at Fremont. The cars would be sold through GM networks in the U.S. Since the beginning of the operation, NUMMI has already supplied GM's Chevrolet Division with some 36,000 Novas and is currently producing 380 units per day.

The Federal Trade Commission gave final approval to the joint venture project in April 1984 on the conditions that: the period of the joint venture agreement be limited to 12 years; NUMMI's yearly production be limited to approximately 250,000 cars for GM; both partners not exchange information on technology, sales strategy, pricing, etc., except where concerning the NUMMI operation.

General Motors and Toyota recognized that establishing good relations with the UAW was key to the success of the NUMMI operation. They asked former Secretary of Labor, William J. Usery, to act as the go-between. After frank and sincere talks, an agreement with the UAW was reached in September 1983.

According to the agreement, NUMMI agreed to employ former GM employees for a majority of its work force, while the UAW agreed to accept NUMMI's new production setup based on the Toyota production system, and to help establish cooperative management-labor relations built on mutual trust and respect. Based on the initial agreement with the UAW, NUMMI reached a formal agreement with the UAW this June and it came into effect the following month.

NUMMI was established February 1984 with capital of \$200 million invested on a fifty-fifty basis by the two companies. A total of \$500 million has been invested in facilities and production at the 850,000 square-meter (210-acre) site. NUMMI's employment is about 2,100 currently, but is expected to increase to 2,500 by the end of this year. Thirty-five Japanese staff members have been dispatched from Toyota as a part of the management team, and currently 30 other Japanese staffers are stationed at the factory to train local personnel.

In an interview in Fremont, NUMMI President Tatsuro Toyoda said, "Before

starting operation, NUMMI sent letters to the 5,000 former GM employees and received about 3,500 responses applying for employment by NUMMI. After screening, the current work force of 2,100 members has been formed. As we are planning to move to two-shift operation around the end of this year, another 400 employees will be added. The ratio of former GM employees is and will be larger than that of other workers. Of the current 2,100 employees, 350 are either group leaders or office workers, and these are non-UAW."

The approximately 30 job classifications used in GM operation have been reduced to only three: one for unskilled workers and two for skilled. As a result, NUMMI can adopt production setups as flexible as those used in Toyota plants in Japan.

"The major difference between the GM operation and NUMMI is the teamwork," says Rosalind Woods, a masking and sanding worker in the paint department. "Here, if we have a problem, we are able to go to the next department and say, 'Look, we have a problem.' At GM, we couldn't do that. The constant meetings here assure good communication, but even without a formal meeting, we can go to the next group, talk to them, and they'll try to solve the problem. It won't just linger on."

Wages are comparable to those in the U.S. auto industry as a whole. Pension funds and other fringe benefits have been prepared. The union's greatest concern for the employees is job security, Toyoda says. "We agreed to avoid at all costs laying off employees. In the worst case, we would take affirmative measures, such as

reducing management salaries and seeking voluntary layoffs from employees, before laying off any employees. Our flexible setup is regarded as epochmaking within U.S. labor circles. I believe such flexible management will help vitalize industry here."

Japanese concepts work in U.S.

At NUMMI, some Japanese terms widely used in Toyota factories in Japan have been adopted with both the Japanese and the concepts intact. Toyota's unique production formula insists on strict maintenance of cost reduction and high quality, known as Just-in-Time (JIT) production. Using JIT, only needed parts and components are supplied to the production line in just the amount needed, just when they are needed, so that wasteful inventory can be eliminated.

In order to maintain the quality of products at the highest level all the time, a concept called *jidoka* is used throughout the plant. For instance, when assembly line personnel discover a defect in a half-finished product on the line, they can immediately stop the line by pulling a stop rope so that the defective product cannot be passed to the following production process.

Using these Japanese terms, in Japanese, is intended to avoid the misunderstanding of the terms that might occur were they used in English. *Kaizen*, for instance, means something like "improvement" in English, but the English concept can be more broadly interpreted. By using the Japanese, NUMMI can stick to the original meaning of *kaizen*. In prac-

tice, *kaizen* means that workers submit ideas for new methods, rationalized setups, or more efficient ways of operating machinery, and so forth. The people on the line are most often the ones who know best what's going on there. Trust in employees is a key point.

Kenny Fedder, a group leader for body welding with some 30 people working under him, takes an enlightened view of the group leader. Fedder says, "The group leader and team leaders, we're here for one reason and that's to serve the team members. If we can't give them what they need to get the job done, if we can't give them the help they need, then there's not much point in our being around."

Fedder also says, "I feel comfortable with Japanese words and concepts, such as *kaizen*, *jidoka* and others." He continues, "I worked for Fisher Body, which is a part of GM, in Grand Rapids, Michigan. We built sub-assemblies there, as we do here, and the only difference is that we are putting them on the cars here, instead of shipping them to another plant for assembly as we did at Fisher. Here, any defects—even chips in the paint—are fixed immediately, right where the car is at. There's no waiting for it to get to the end of the line and get into a repair spot."

As in the Japanese auto plants in Ohio and Tennessee, NUMMI's management shares the parking areas and cafeteria with its employees. The office area is also wide open; the managers' individual rooms of yesteryear have been eliminated for smoother communication and team spirit.

Group leaders and team leaders have been sent to Japan for training at Toyota's plant in Takaoka. So far, a total of 260 employees, including Fedder, have undergone training at the assembly line and studied the management-labor relations with great results, according to President Toyoda. NUMMI's attendance record is extremely high, averaging 98%.

NUMMI seems to have already established a high reputation for both its products and management: NUMMI employee Rosalind Woods says, "A lot of my friends are waiting for Novas to come out, because I tell them these are good cars. I'm proud of them." NUMMI's team spirit may become a family spirit, employees' family members too attracted to NUMMI. Bob Wood testifies, "My 18-year-old son is still in school, but as soon as he gets out, he wants to get a job like mine. He likes working with tools like I do. I'm going to try to get him in here." Japanese companies feel right at home here. ●



NUMMI's paint inspection area; defects are fixed immediately, right where the car is at.