

## **NUMMI**

### **New United Motor Manufacturing Inc.**

*(Excerpted from "KAIZEN: The Key to Japan's Competitive Success," published by Random House, 1986.)*

**T**here are several avenues through which KAIZEN activities may be pursued in a plant. The first and most common of them is for the worker to change the way he does his job to make it more productive, less tiring, more efficient, or safer. This usually leads to a change in the work pace.

The second avenue is to make equipment improvements, such as installing foolproof mechanisms and changing the machinery layout. The third avenue is to make improvements in the systems and procedures, and the fourth is a combination of the other three. All these alternatives should be exhausted before management starts thinking about innovation.

One of the many activities to be conducted at the first stage is reviewing the current work standards to see if there is room for improving performance to meet the standards and then to upgrade the standards. This is the starting point for worker KAIZEN.

Generally speaking, however, labor unions in the West have been very sensitive to such issues as changing the way workers work, since they fear any changes may lead to harder work and exploitation. Consequently, organized labor has shown great reluctance to changing work standards in the West.

NUMMI (New United Motor Manufacturing, Inc.) a joint venture between Toyota and General Motors in Fremont, California, deserves special mention in this respect. At the NUMMI plant, the UAW (United Auto Workers) has negotiated a pact that includes agreement to worker involvement in KAIZEN. (Management and the union have not only agreed to the concept of KAIZEN but even used the Japanese term KAIZEN in the contract in lieu of "improvement," which did not seem to represent the right concept!)

Work standardization is one of the mainstays of the Toyota production system. As Toyota defines it, standardized work is the optimum combination of workers, machines and material. The *raison d'être* for standardized work is that it is the best way to ensure such things as quality, cost and volume. Standardized work is also regarded as the safest way to do the job.

There are three major components of standardized work at Toyota: cycle time, work sequence and the number of pieces in process. If the worker is unable to do the standardized work, the team leader's concern is to help him do a better job. Once this has been done, the next step is to raise the work standards themselves. The challenge of KAIZEN is constant.

At Toyota, a team leader is expected to do this by involving workers in the KAIZEN process. Thus, KAIZEN at Toyota means first improving worker performance to enable the workers to perform up to standard and then raising the standards themselves in a total effort involving the workers.

The experience at NUMMI indicates that the union has accepted management's role in

KAIZEN as well as worker participation in KAIZEN, which will lead to upgraded work standards. Practically every worker at NUMMI speaks of KAIZEN today. This is the first instance in Western labor relations where there has been accord on the joint commitment to KAIZEN in the workplace. It should also be added that the NUMMI management has made a commitment to the union that KAIZEN activities in the workplace will not result in a reduce work force.

Many workers at NUMMI had been employed at GM's Fremont plant, which was shut down because it was not competitive. They had no difficulty understanding that they had to produce quality cars in order to keep their jobs viable. If standardized work and KAIZEN are what it takes to produce quality cars, then it follows that they should welcome the opportunity to participate in KAIZEN.

Another development at this plant has been multiple job assignments. Instead of breaking the jobs down into many different categories, labor and management agreed to establish fewer job categories and to encourage workers to engage in multiple jobs.

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