# Idealism and Persistence Send Mitsui High-tec To the Top

By Makoto Ohno

For Kitakyushu, the industrial city on the northern fringe of Japan's southern island of Kyushu, which has been in deep recession for a long time, a party held in a Kokura city hotel one evening recently provided a bright gleam of hope.

The honored guest at the party celebrating his receipt of the nation's Blue Ribbon Medal was Yoshiaki Mitsui, 63, president of Mitsui High-tec, Inc. It was presented to him by the Japanese government in recognition of his services in promoting trade. In accepting the prestigious award, Mitsui, selecting his words carefully, spoke modestly:

"For 35 years, I have devoted my life to the manufacture of dies. The receipt of this award is due to the cooperation of all of you who have participated with me in technological development."

There was thunderous applause. Then, Kitakyushu Mayor Gohei Tani mounted the rostrum and paid the highest compliment to Mitsui by saying: "We would like Mitsui High-tec to play the role of a messiah for Kitakyushu, which is suffering from a 'cooling' of steel." Shinjiro Nishinaka, director of the Fukuoka Regional Bureau of the Ministry of International Trade and Industry, expressed in his congratulatory speech the sincere hope that Mitsui High-tec "would grow into Kyushu's leading company."

The marked upsurge in the party's gaiety, attended by 250 persons, was due to the earlier listing of Mitsui High-tec on the stock market which made it famous overnight. On September 3, 1984, Mitsui High-tec was listed at a face value of ¥50 per share on the Fukuoka Stock Exchange (Fukuoka City) which handles less than 1% of all domestic stock transactions. Rated as an outstanding firm, there was a



Yoshiaki Mitsui, president of Mitsui High-tec, Inc.

rush of buy orders, and the share price that day hit a ceiling of ¥7,500, when trading was suspended. The stock's popularity continued to soar the following day, rising to ¥8,500. It thereafter kept spiraling and, on November 2, finally reached ¥17,200. The floor of the Fukuoka Stock Exchange was a constant scene of hectic activity.

The price easily exceeded the value of pharmaceutical maker Mochida Seiyaku's stock on the Tokyo Stock Exchange, which had posted a high of ¥16,600 about ten days earlier on the strength of its development of an anticancer drug called "OH-1."

There was an even more surprising development. As a result of the unprecedentedly high share price, Mitsui High-tec decided at a board meeting on

November 9 on a 100% gratis stock offer of 12 million shares by alloting one new share for each one held.

The company explained that it had decided on the capital increase to expand the volume of shares on the market and curb the popularity of its stock. Such a 100% gratis issue itself is almost unprecedented. The share price has since declined to around ¥6,000, but even so it is exceedingly high compared to that of other companies.

While Mitsui High-tec's stock value was rising precipitously, the company published its business results. The mid-year settlement of accounts in July 1984 showed a spectacular gain in both sales and profits. Sales were up by 80.9% over the same period a year earlier, to ¥13,285 million (\$53 million), and current earnings were, higher by 205.1%, to ¥1,980 million (\$8 million). The favorable results were attributed to: 1) the growth in sales of IC (integrated circuit) leadframes in line with increased production of semiconductors; 2) greater sales of dies; and 3) bigger domestic and overseas demand for machine tools.

Behind this favorable record is, of course, the improvement of the world economy. But as far as Mitsui High-tec is concerned, its remarkable performance cannot be attributed solely to the fact that it had ridden the rising wave of the economy. This can be readily perceived by looking at its past record.

In 1959, Mitsui High-tec's sales totaled only ¥100 million, but a decade later, in 1969, they had grown to ¥1 billion, and to ¥10 billion in 1979. In other words, its sales had increased tenfold over a period of only a decade. Mitsui High-tec, which aims to go on expanding, has set a sales

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target of ¥100 billion (\$400 million) for 1989, the 40th anniversary of its establishment. Since it employs roughly 1,000 workers, sales will average ¥100 million per worker.

Driving by car from Kokura to the west on the Kyushu cross-island motor expressway, the plant/headquarters of Mitsui High-tec is located right off the Komine interchange in Yawata Nishi-ku, Kitakyushu. It is an integrated plant combining three factories which had previously been scattered at three different places.

In 1982 a modern plant was built incorporating the latest computer technology. It is a four-story building with a floor space of 24,400 square meters and with a tennis court on its roof. There is also a baseball ground. The sign on the wire fence carrying the slogan: "Let us build a prosperous Japan using 100 million heads and 200 million hands," expresses the spirit of Mitsui High-tec, whose goal is to become an outstanding Japanese company.

### Top IC frames

In 1982, the U.S. magazine *Electronics Business* carried an article on Mitsui Hightec, which it described as the best IC leadframe maker in the world. In fact, including the production of its overseas plants—International Leadframe Corporation, Mitsui Mfg. (Singapore) Pte. Ltd., and Mitsui Mfg. (Hong Kong) Ltd.—Mitsui High-tec accounts for 30% of the world leadframe market.

Now a first-rate high-tech enterprise, Mitsui High-tec was originally just a small plant located in the Kitakyushu Industrial Area. It was developed into the world's leading IC leadframe manufacturer principally through the efforts of its president, Akira Mitsui, a man with an in-

dividualistic personality. -

Mitsui's life has been full of ups and downs. Born the third son of a textile wholesaler in the city of Yatsushiro in Kumamoto Prefecture, located in south-central Kyushu, his father died when he was 11 years old. As a result, his family was plunged into poverty. At 14, he left trade school while still in the second year and obtained a job as a die operator with Yaskawa Electric Mfg. Co., a prominent company in Kitakyushu. This move determined his future. Mitsui doggedly worked 10 hours a day, while polishing his skills as a die operator, and attended middle school night classes.

It occurred to Mitsui, who specialized in making dies for motor components, that distortion resulted when the die was first filed and then tempered. He wondered whether it would not be possible instead first to temper the die and then give it the finishing touches. Even as a young worker, he displayed a talent for basic innovations. His superiors, however, ignored the suggestion of Mitsui, whom they regarded as just a simple, inexperienced youth. Disappointed, Mitsui felt the challenge well up in his heart; he decided that he would have to go it alone some day.

Mitsui's opportunity arrived after the end of the war. As a result of the democratization movement implemented by the Allied Forces as part of their occupation policy, he came to play an active role as a labor union leader. He was, however, impressed by America's materialistic culture and its overwhelming supply of goods. Even in making guns, for instance, whereas Japan used the machinery method which required much labor, the United States relied on mold processing with the use of dies. He realized that therein lay the secret of mass production.

In 1949, Mitsui, who was imbued with a spirit of venture, persuaded two fellow colleagues at Yaskawa Electric to join with him in establishing a die manufacturing plant. The company was named Mitsui Kosakusho but the plant had a floor space of only 10 square meters in which was installed three vises and one grinder. Its workers consisted of three persons, including Mitsui himself. It was a dismal start, and in order to help the business financially, Mitsui's wife Hideko opened a shop serving zenzai, a thick, sweet bean meal soup containing rice cakes.

At a glance, the new venture appeared to be a rash undertaking, but Mitsui surmised that there would eventually be a sharp increase in demand for dies along with the recovery of the postwar Japanese economy. Take motors, for example. His unusual talent was displayed in his line of reasoning: Japan has been stimulated by the materialistic culture of the United States, and thus there will be an unlimited increase in demand for motors in connection with refrigerators and other equipment. In that event, there will surely be a rise in demand for high-precision dies. To meet the demand, it will be necessary to rationalize the erstwhile production system relying only on veteran operators and to improve technical skills.

#### Constant innovation

When Mitsui set up his small manufacturing plant, people told him that he would not be able to make a go of it with dies. While wondering whether they were right, he persisted in making dies and in seeking technological innovations. He has maintained this attitude to the present.

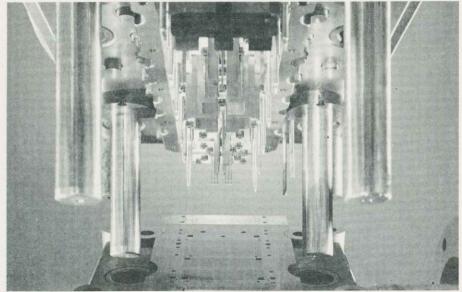
In 1961, while visiting NASA (National Aeronautics and Space Administration) facilities in California, he picked up a shining object at his feet. It was a flat, metal piece of an IC leadframe, the panel board on which IC silicon chips are mounted.

Immediately upon returning to Japan, he assembled his executives and told them: "From now on, we must make IC leadframes." They wondered whether they had heard right. Mitsui Kosakusho was at the time manufacturing large quantities of precision dies as a result of the importation of tungsten carbide dies capable of continuous stamping up to one million times. Furthermore, the IC leadframe at the time was based primarily on photo etching. The executives thought their president was mad in proposing that stamping be undertaken with press dies. They expressed their opposition.

On the condition, therefore, that he would not cause the parent company any trouble, Mitsui set up a subsidiary company, Mitsui Denki, to develop IC lead-frame technology and engage in its pro-



Mitsui High-tec's headquarters in Kitakyushu



Manufacturers worldwide use dies produced by Mitsui High-tec.

duction. It succeeded in stamping dies with a thickness of one micron (1/1000 millimeter).

Eventually, there were buyers. As a result of Mitsui's all-out sales campaign in which it claimed that it would manufacture leadframes at 1/10 the cost of photoengraved plates, Texas Instruments, Inc. (TIC) in the United States placed an order. IC leadframe manufacture is an extension of dies technology, but it was from this point that Mitsui Kosakusho embarked on the road to becoming a full-fledged electronics maker.

Mitsui, who succeeded through his independent efforts to produce IC leadframes, dismissed all 15 of the directors who had strongly opposed his action. Charging them with having erred in their management judgment, he claimed that they sat complacently in their executive chairs and, far from fulfilling their responsibilities, neglected cost management and permitted a surplus inventory.

The fact that he did not retain his son-in-law, Satoshi Nagata, as a managing director for 10 years thereafter was due to his dislike of compromise, an obstinate trait known as "higo mokkos," which is peculiar to the people of Kumamoto Prefecture. It was also attributed to his firm belief that the business would not grow unless he displayed to the utmost his persistent determination to challenge technological development.

Because of such convictions, Mitsui admits that his only hobby is work. The closest one can get to describing his hobby, in the accepted sense, is "field cultivation." On his days off, Mitsui silently tills the uncultivated land around the new plant and headquarters, using a shovel for the purpose. He then has workers sow the seeds and raise the crops. While tilling the soil, he keeps his

mind open for flashes of new ideas on technological development. Also, while in bed at night, he jots down in a memo pad ideas that occur to him. Through such effort, Mitsui has managed to advance independently into fields which others have not yet ventured.

## Umbrella principle

As a result of such individualistic thinking and actions. Mitsui has established a management theory which he calls the "umbrella principle." The idea is that when prices are high, the market is small; but when prices are lowered, the market expands like an umbrella that is unfolded. On the basis of this principle, a company should seek to expand the market for its products. For example, as a result of the entry of more manufacturers into the market, the production costs of ICs, which sustain the electronics industry, are falling. But it is believed that the market will grow even larger. The foregoing also applies to Mitsui High-tec products. Their prices should not simply be raised when the basic material costs of IC leadframes rise. The rise in costs should be absorbed as much as possible. Then, according to the theory, the market will automatically expand.

On May 8, 1984 the company's name changed to Mitsui High-tec. The action was taken because IC-related products accounted for over 70% of its entire output, and because the company intended to stress high technology.

The fact that Mitsui High-tec's performance fits in with that of the advanced technology industry is illustrated by the rise in its stock value. Among the technological developments following those relating to IC leadframes can be mentioned: 1) the establishment of ultra-

fast stamping technology of 1,000 strokes per minute which helped greatly to reduce the cost of die products; and 2) the development of a MAC (Mitsui Automatic Core) system concentrating on precision die technology.

Despite its spectacular technological advances. Mitsui High-tec is not satisfied with the status quo. The company appears to have developed healthily, but it has been beset by several crises in the past. One of the biggest it encountered was the effects of the so-called "Nixon shock." The sharp rise in the value of the ven, just when the company had begun exporting to the United States IC leadframes that it had gone to great lengths to develop, badly shook the financial foundations of Mitsui Kosakusho. After studying how to go about exporting profitably, the company decided to locate abroad. But then came the second oil shock. As a result, its overseas plant was hit by a drop in the value of the ven, and it was not until 1978 that its foreign sales went into the black.

Such adversities, however, tend to strengthen a company that is fearlessly pressing ahead. Mitsui recalls that the lesson he learned from these crises was that the only thing a company could do in such a case is to streamline its business thoroughly. At the same time, a fact which cannot be overlooked is that the location of plants abroad is proving useful in developing personnel for sustaining Mitsui High-tec in the future.

The company has four plants overseas, including Mitsui Precision Machinery Corp. in Chicago, which are managed by young employees 30-35 years old sent from the home office. At first, they are unable to speak hardly any English, but Mitsui notes with satisfaction that by the time they return to Japan five years later, they have developed into highly capable executives.

Mitsui High-tec, which previously had the image of being a dictatorial "one-man" organization, has gradually increased in stability. Middle-level management imbued with the spirit of "Mitsuism" are steadily being developed.

Mitsui High-tec's creed lists three points: 1) Manufacture products which are useful to people throughout the world; 2) Uphold the principle of reciprocal gains and seek to achieve mutual benefits; and 3) Create a paradise for workers on the basis of the spirit of equality.

The personnel brims with idealism, but needless to say the spirit of constantly challenging technological innovations runs just below the surface. Those who know Mitsui High-tec well would not be surprised if it meets its current earnings target of ¥30 billion (\$120 million) in 1989 without excessive effort.