# Case Studies
# Hosokawa Micron Corporation

By Takabumi Suzuoki

Hosokawa Micron Corporation
Established: April 1916
Headquarters:
1-9,Shodai-Tajika,Hirakata City,Osaka Pref.
Telephone: 0720-55-2221
President and Chairman of the Board:
Masuo Hosokawa
Capital: ¥49.5 million
Employees:
475 (including those of six subsidiaries)
Overseas affiliates: 22

"Hosokawa Micron Purchases Engineering Division of Ashland Oil of the U.S."

To many readers, this headline in the economic news section of Japanese newspapers dated February 1, 1985 may have merited no more than a passing glance. But among those in the know, it created a sensation. Masuo Hosokawa had struck again.

Hosokawa Micron Corporation may not seem like a glamour industry. An integrated powder processing machine and equipment manufacturer, it and its group of affiliates have annual sales of approximately ¥20 billion ($80 million).

In contrast, Ashland Oil's Engineering Division, also a major powder processing machinery maker, has 14 subsidiaries in six countries, with combined annual sales amounting to ¥27 billion ($108 million).

But Hosokawa Micron's purchase was more than just a case of the little fish swallowing the bigger. It was the latest in a string of foreign acquisitions carefully planned to make Hosokawa Micron the leader in its industry. In 1982, the company acquired a controlling interest in Nautamix B.V. of Holland, a powder processing machinery manufacturer headquartered in Haarlem and capitalized at one million guilders. With its purchase of Ashland's Engineering Division, Hosokawa Micron has now emerged as the world's biggest powder processing machinery group with bases in Japan, the United States and Europe.

Having read this far, one might assume that Masuo Hosokawa, president of Hosokawa Micron and leader of the Hosokawa Micron Group, is a forceful and aggressive chief executive. In reality, however, Hosokawa is a mild-mannered, cool-headed 60-year-old gentleman with streaks of gray in his hair. He is an engineer-turned management executive and is devoted, body and soul, to the development of technology. And, like its president, Hosokawa Micron is a sound and steady company which grapples wholeheartedly with the development of new technologies.

Masuo Hosokawa, president of Hosokawa Micron Corp.

## The two wheels of Hosokawa Micron

The history of Hosokawa Micron is a history of technical development and internationalization. They are as closely interrelated as two wheels on an axle.

Hosokawa Micron was established in 1914 by Eiichi Hosokawa, the current president's father, to manufacture water mills and pumps. The senior Hosokawa developed a pulverizer in 1929 that laid the foundation for the company to become Japan's leading powder processing machinery maker.

However, it was not until after World War II that the company really began to step out.

By then Masuo Hosokawa had graduated from the Engineering Department of Kyoto University in 1946. After a stint of training at a pharmaceutical company, he joined his father's business in 1951. In 1954, he was made senior managing director and in 1959 went on his first business trip to Europe.

In those days, Japanese corporations were rushing to import technology from the United States and Europe, and Hosokawa went to Europe with similar ideas. He visited a powder processing machinery maker in Switzerland, where he saw superb advanced technology. Nonetheless, he did not buy it, though he knew very well it would make him money if he brought it back to Japan. It wasn't that the technology was too expensive—the price was only 200 pounds in the sterling of those days—but a question of principle.

"I thought that no matter how inexpensive it might be, we should not pay money for a technology which we would be able to develop ourselves if we made the extra effort," Hosokawa reminisces. He had pride as an engineer. And above all, he feared that if his company got into

MikroPul, one of Hosokawa Micron Corp.'s new acquisitions

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the habit of taking the easy way out by importing foreign technology, it would never gain the ability to develop new technology on its own.

Hosokawa is no narrow-minded nationalist. In later years he never skimped in buying whatever technology he thought was absolutely necessary. He purchased pulverizer and dust collector technologies from MikroPul Corporation of America in 1961, and in 1963 concluded a cross-licensing agreement with Nautamix, selling them his company's separator technology in exchange for their mixer technology. From 1963 to 1981, Hosokawa Micron exported and/or imported 17 technologies to and from 15 European and American companies.

But significantly, in nine of those cases Hosokawa was the buyer. Pulverizing technology belongs to a relatively young genre. Immediately after World War II, techniques for crushing and pulverizing matter were regarded as "high technology" in Japan. As pulverized matter came into wider and wider use in various industries, however, all kinds of technologies became necessary for mixing, separating, transporting, granulating, and measuring the size of fine particles.

One good example is the PPC (plain paper copier), now after 10 years a fixture in our daily lives. There have been, of course, technical innovations in the machine itself, but the most dramatic improvements in copy quality are attributable mostly to the development of pulverizing technology for making fine black lead particles of even size for the toner, the "ink" of the copier.

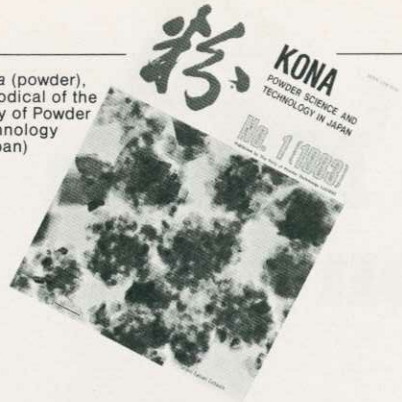
Powder processing machines have evolved from single-unit machines into multi-unit engineering systems. Hosokawa Micron has kept pace by filling the chinks in its own technologies with selective foreign imports.

## Technological tie-ups paved the way

In 1982, Hosokawa Micron purchased its first foreign company, Nautamix. The following year, it picked up Machinefabriek Vrieco Zelhem B.V., rival of Nautamix and capitalized at $140,000, and Isem B.V., capitalized at $10,000, both Dutch companies.

In February 1985, Hosokawa Micron purchased the 14 companies comprising the engineering division of Kentucky-based Ashland Oil in one fell swoop for ¥6.5 billion ($26 million). The nucleus of these 14 companies is MikroPul.

Nautamix and Ashland were also the first two companies with which Hosokawa Micron established technical tie-up after World War II. And although chance played a major role in the purchases, Hosokawa explains that long-standing friendly relations contributed greatly to the smooth conclusion of the negotiations.




*Kona* (powder), periodical of the Party of Powder Technology (Japan)

The owner of financially strained Nautamix was looking for someone who would take over his company. Neither he nor his employees had any objection to selling out to Hosokawa Micron, which they knew very well after 18 years of cross-licensing relations.

Ashland Oil had taken over the 14 companies and brought them under its control four years earlier. When Ashland decided recently to concentrate on its oil business, it began looking for a buyer for its engineering division. And though several American companies studied the advisability of taking over the division, it was Hosokawa Micron which won the day on the strength of its technical tie-up with MikroPul, the core company of the group.

## International efforts from stage one

What does Hosokawa Micron hope to gain from its purchase of these companies? The sales networks which Nautamix and MikroPul had in Europe and in America respectively were naturally an attraction. But more than that, President Hosokawa wanted to fuse Japanese, American and European techniques to create more sophisticated technologies.

Through its cross licensing agreements, Hosokawa Micron has had some measure of technical exchange with Nautamix and with MikroPul for more than 20 years. A technical tie-up, however, is limited to exchanging designs for specific machines; it does not involve exchange of the thinking and concepts behind those designs.

Hosokawa has always believed that wonderful machines can be developed if only Japanese, American and European experts in powder processing technology can be brought together to exchange opinions frankly and sincerely on the basis of an objective recognition of each other's strengths and weaknesses.

## Making the results of R&D known

It was Hosokawa Micron's technical development skills which enabled the company to stand on an equal footing with European and American manufacturers for 20 years and to establish its own global network. In 1958, the company established Hosokawa Micromeritics Laboratory at a time when most Japanese companies were lagging in basic research. Hosokawa Micron was an exception; it has been conducting basic research ever since it was a little outfit with less than 100 employees, and it is just as aggressive today. Whereas many big corporations set a ceiling on their annual research appropriations, Hosokawa Micron makes it a policy to spend as much money as needed for R&D.

Hosokawa Micromeritics Laboratory has close connections with Japan's academic community specializing in powdered matter. Since 1959, it has sponsored the "Powder Processing Technology Conference," which is attended by the foremost scholars in the field, and also holds small seminars four or five times a year and an international symposium once a year. The results of these symposia are published in the Laboratory's annual organ, *Funsai* (pulverization), of which 5,000 copies are printed.

In 1983, the Laboratory started publishing *Kona* (powder), an English-language academic journal of advanced research in powder processing technology. Although Japan's technical level has risen, its progress is little appreciated by scholars abroad because most academic papers on new achievements are written in Japanese. To remedy the situation, Japanese scholars of powder processing technology, including Hosokawa, joined forces to issue this unique journal. It is published once a year in October. Three thousand copies are sent by mail to 20 countries around the world, including the Communist Bloc nations.

Hosokawa summed up his philosophy best himself on February 16, when he addressed a gathering of Ashland Oil Engineering Division top managers for the first time after the takeover. "Today I want all of you to understand that I have no intention of forcing Japanese management on you," the president said. "Let us skillfully fuse Japanese, American and European approaches to create an efficient new style of management." ●