

## **Don't Blame the Japanese: The Rise and Fall of Burgmaster**

*The Rise of Burgmaster Corporation Was a Typically American Saga—and Unfortunately, So Was Its Fall*

*By Max Holland*

Many people come to Los Angeles to make movies. Fred Burg came to make machines.

It was 1943, and Burg had a secure, well-paying job as a department store manager in Chicago. But his passion was for things mechanical. Finally, during the Christmas shopping season, Burg got fed up. He uprooted his family and moved to Los Angeles and its booming war economy. He wanted, simply, to get back to machines.

Nothing has fascinated Burg more, ever since he began working, at age 10, as a locksmith in his native Czechoslovakia. When he arrived in America in 1911, he landed a job as a lathe operator at an International Harvester plant and until his marriage nine years later, Burg worked with machinery. He reluctantly changed jobs and went to work in the dry-goods business owned by his in-laws – and invested and tinkered in every spare moment he had. But after two decades, he was tired of the compromise.

Within a few months of his arrival in Los Angeles, he patented a tool-holding device and was running a business out of his garage. Over the next two decades, Fred Burg, aided by his son and son-in-law, would build a manufacturing concern – Burgmaster Corporation – that was the largest of its kind west of the Mississippi.

His enterprise bears all the attributes of a typically American vision – the rags-to-riches saga of an immigrant who had a better idea. More than four decades later, however, the machine tool company he founded no longer exists. In January, 1986, the contents of the Burgmaster plant in Gardena were put up for sale at a public auction.

At the time, Burgmaster's demise was considered proof of American manufacturing's inability to compete. Though the machine tool industry is a small manufacturing sector, it is at the heart of any nation's industrial health. Machine tools are the "mother" or "master" machines. Every manufactured product is made either by machine tool, or made by a machine that was made by a machine tool.

A story about the rise and fall of Burgmaster, then, is more than the tale of one company. It is about the decimation of U.S. manufacturing – its failure to innovate successfully, and to endure increased competition from the global economy. It is a parable of a system out of kilter: of a government seemingly incapable of sustaining a

sound economy, leading to a climate in which “speculation replaces enterprise,” in the words of the economist John Maynard Keynes; of corporate mismanagement of a capable and willing American work force, and lastly, of Wall Street’s ability to win big even while a company is irrevocably damaged.

The idea that put Fred Burg into business for himself was a device, no bigger than a fist, that enabled lathe operators to machine holes with precision much more quickly than had been possible before. He was the inventor, sole manufacturer and salesman of the Tool-flex. When the Army discharged his son Joe and son-in-law Norman Ginsburg in 1945, Fred Burg made them partners.

All three families initially lived in one home, on Detroit Street in Hollywood. The three men made the long drive to the first small shop – at 67th and San Pedro – in one car, ate homemade sandwiches for lunch and worked six-day weeks. Fred Burg was the teacher and salesman, Norman Ginsburg learned how to make the Tool-flex on a lathe and Joe Burg was put to work drafting different designs for the tool holder. Blanche Ginsburg, Fred’s daughter, kept the books.

Then one day in 1946, while he was out selling Tool-flexes, Fred Burg had an inspiration. He’d been brooding about the time and space-consuming aspects of drilling holes in metal. The problem was that no drilling machine could perform more than one kind of operation at a time. If five holes of different sizes were needed in a mass-produced part, five machines were required – or five different, time-consuming setups on a single machine. The potential market for a single drilling machine that allowed, in one setup, access to multiple tools – and with no loss in accuracy – was huge.

Burg saw a turret lathe and believed he had the answer. The operator of such a lathe could switch tools simply by rotating the turret, a circular attachment that gripped several tools simultaneously. If the concept could be adapted to drilling machines – no small engineering achievement – then one turret drilling machine could do the work of several.

Burg took the turret off an old lathe and began to build a prototype of his new machine. He couldn’t afford to order the necessary castings from a foundry, so he welded pieces of metal together. When finished, the prototype looked like a conventional drill – except for the turret smack in the middle of the machine, radiating tools in six directions. In late 1946, the first production model of the Burgmaster turret drill was sold to Beckman Instruments, a manufacturer of precision scientific instruments then based in Pasadena.

At first, a week rarely went by without a trip to Pasadena to fix the machine. The biggest problem was making the six-spindle model operate as reliably as a conventional machine. No setback was sufficient to persuade Fred Burg that his concept was unworkable. The three partners in what was then called Burg Tool Manufacturing Company decided to take a risk: With just one order for their new drill in hand, they farmed out most of their Tool-flex orders to another shop to free up their own machines, and rented a larger building near Jefferson Boulevard and La Brea Avenue.

Burg Tool's chances for survival in a mature industry long associated with the industrial Midwest and Northeast seemed meager. The machine tool industry is extremely cyclical, prone to sharp drops in demand just before the economy slows down, and equally sharp rises as soon as the economy begins to expand. Yet the company would generally defy cyclical trends. When the economy grew, manufacturers wanted Burgmaster turret drills to increase production. When the economy slowed, manufacturers still wanted a Burgmaster to lower production costs.

The early 1950s were years of dizzying growth. The defense industry was retooling because of the Korean War, and there was intense demand for Burgmasters because of the time and money they could save – up to 35% in some instances. In 1954, Burg Tool again needed larger quarters and opened its own plant, at a cost of \$70,000. The new factory, in an industrial section of Gardena, featured a ceiling hoist that enabled Fred Burg to build larger models. Burg Tool now employed two dozen people, and sales representatives could be found in the all-important manufacturing cities of Chicago and Cleveland.

The company's penchant for innovation helped propel its rapid growth. In the mid-1950s, for example, the Air Force faced unprecedented machining requirements for a new generation of jet fighters. It sponsored research at the Massachusetts Institute of Technology into what was called "numerical control," a method of harnessing computers to run machine tools. Although it would be years before numerical control machines began to meet expectations, Burg Tool was one of the first companies to venture into the field. By 1957, computer-driven Burgmasters were being demonstrated at the Chicago trade show.

But in addition, there was the way the Burg family worked together, and their philosophy, never codified, of how to run a business. Profits were used to finance expansion and development. The taciturn son-in-law, Norman Ginsburg, was in charge of all manufacturing, the practical, down-to-earth part of the team. It was the rare day that he didn't have hands as dirty as those of any machinist in the shop. Joe Burg, the son, headed sales and engineering. Compared to Ginsburg, he was flamboyant, and his relentless optimism as a salesman perpetually obligated the company to develop something new. Though Ginsburg might protest vehemently, he always delivered what Joe Burg promised.

Meanwhile, the "old man," as Fred Burg was called by almost all the employees, was the overall boss, his hand felt in every aspect of the company. He constantly improved the current products. Most of the time, Fred Burg got his ideas from making field trips – to machine tool shows, to customers using Burgmaster machines and to manufacturers who did not. More than once, he "borrowed" concepts from competitors. But wherever the idea came from, Burg Tool made it better.

But the Burgs' entrepreneurial strategy would not have succeeded without the relationship they developed between labor and management. There were only two ranks at Burg Tool: the bosses and the workers. There was no question as to who was in charge.

In return, though, Burg Tool valued its employees, their skill, and ideas. The labor-management relationship, with its annual summer picnics, Thanksgiving turkeys and year-end bonuses, was almost paternal. There was a liberal profit-sharing plan that encouraged all employees, from the highest-paid precision machinists to the sweepers who cleaned up metal shavings, to make suggestions aimed at improving productivity. The result was that although the aerospace industry offered higher wages, many good engineers and machinists were highly devoted to working for Burg Tool.

But the early 1960s, Burgmaster Corporation (the company was incorporated in 1961) had enjoyed more than a decade of uninterrupted success. Net sales had jumped from \$500,000 to \$6 million. The company had acquired an enviable reputation for reliability. Burgmaster held 22 patents, with 14 pending. Despite its relatively small size and late start, the company was in every sense on the industry's cutting edge.

It was time to grow again. Plans were drawn for a state-of-the art factory that would make Burgmaster the largest machine tool manufacturer in the West. In the fall of 1964, with construction well under way, the company's financial advisers brought the news that a Buffalo, New York corporation wanted to buy Burgmaster.

Burgmaster's suitor was Houdaille Industries Incorporated (pronounced WHO-dye), which had interests in industrial products, construction materials, machine tools, and automobile parts. (The company was named after the Frenchman who had invented the recoil-less shock absorber.) Changes in the auto industry were putting pressure on Houdaille to diversify.

The strain of another move had persuaded the Burgs to entertain the idea of selling the business. "We began to think of a merger," Ginsburg says, "because every expansion put three families in [financial] jeopardy." And, too, by the mid-1960s, industry had caught up to Fred Burg's 1940s idea of one machine with multiple tools. The phrase on everyone's lips was "machining centers" – machines that would have not six or eight tools like a Burgmaster, but 24, 36, perhaps as many as 60.

The Burgs recognized that their own resources might prove insufficient for a new generation of Burgmasters. Houdaille, 17 times larger than Burgmaster, had the funds and had made a commitment to becoming one of the top 10 machine tool producers by the end of the decade. The Burgmaster-Houdaille partnership was to be a marriage of expertise and capital.

In June, 1965, after months of negotiating, directors of both Houdaille and Burgmaster approved the takeover. Houdaille further announced that "Burgmaster will operate under present management, personnel and policies [but] as a Houdaille division."

Burgmaster would never be the same.

For the first few months after the takeover, it seemed that little had changed. There was no more friction between Houdaille and Burgmaster management than there had been

among the Burgs. Nevertheless, Norman Ginsburg recalls, the Burgs were “in a state of shock.” They had relinquished ultimate control.

Initially, no one was more deeply committed than Fred Burg, then in his 70s, to seeing that the merger succeeded and that Burgmaster continued to thrive, tapping the unfolding market for machining centers. But Burg was convinced that moving tools in and out would inevitably compromise a machining center’s accuracy. The stature and single-mindedness of the “old man” were such that he could not be overruled.

Burg’s alternative to a machining center was the 20T, which proved to be Burgmaster’s first major mistake, and a costly one. The 20T dispensed with the ubiquitous turret; instead, 20 tools in 20 spindles were arranged around the edge of a rotating drum. It took four years to design, engineer and produce the machine. And then the fatal flaw became apparent: The drum was of such great mass that after a few months of use it could no longer perform within the required tolerances. In late 1968, after building and selling about a dozen machines, Burgmaster discontinued the 20T.

A more serious development, though, was the erosion of the Burgs’ hands-on approach to management. Norman Ginsburg spent about half his time out on the floor, and it was said he could tell which machines were running even while he sat in his office. “When Norman was in charge of manufacturing,” recalls Ben Bezdziecki, the general foreman at the time, “if he was going to spend a nickel, we were going to make a quarter. That rubbed off, and the basic thought was to be as efficient as we could, while making a quality product.” The old Burgmaster employees soon noticed that Houdaille’s new mid-level management didn’t spend as much time on the floor, and they certainly weren’t going to get their hands dirty. Under Houdaille’s management, “you learned to live with” the squandering of money, and the attitude of foremen like Bezdziecki became one of “just leave my people alone.” The division between white and blue collar had materialized.

The Burgs weren’t about the challenge the management style of the parent company. Perhaps, they reasoned, more bureaucracy was inevitable in a work force of 400. Perhaps they didn’t see some of the changes because they were busy trying to integrate Houdaille management into Burgmaster. “The Houdaille guys wanted to know [the operation],” Ginsburg recalls, “And we did everything we could to get them embedded, to do the best job that they could.” And perhaps the Burg family didn’t want to recognize the transformation that was occurring in the enterprise they had struggled to build.

Rank-and-file workers were less inhibited. Productivity had always been synonymous with pride, with mutual respect between management and labor. The Burgs knew which workers were the most productive, and rewarded them. Houdaille replaced these tenets with posted slogans that were ridiculed by an increasingly cynical work force. In 1968, hourly Burgmaster employees called their first strike.

“Before the takeover, I had never heard guys complain about the company,” Bezdziecki, who had started at Burgmaster in May, 1959, says. “[Then] it became ‘the damn company this, the damn company that.’ A lot of harmony was lost.”

Houdaille undoubtedly did not share Bezdziecki’s assessment of its management. But it agreed with him on one point: Burgmaster was not performing to expectations. Houdaille placed the blame largely on Burgmaster’s resistance to modern methods of production. Specifically, Houdaille President Gerald Saltarelli believed that Joe Burg’s tendency to emphasize sales had come at the expense of production, which is why Burgmaster had a backlog of orders “big enough to choke a horse,” according to one Houdaille executive.

Saltarelli resolved to replace Joe Burg as soon as he could. When a financial forecast proved erroneous, Saltarelli had his opening. Almost exactly two years after the takeover, Joe Burg was promoted out of Burgmaster, to vice president for international sales in the Houdaille organization.

The new president was a long-time Houdaille executive named Tom Norton. For the first time, the head of Burgmaster had almost no knowledge of the machine tool industry. Norton had spent most of his time with Houdaille’s auto-bumper plant in Canada. But neither Norton, nor Norman Ginsburg, considered this an overwhelming obstacle. Ginsburg took an immediate liking to the affable Norton, who made no secret of his need and eagerness to learn the business.

In the short time Norton was president – 16 months – Burgmaster began developing a lucrative market niche for computer-controlled machining centers. Norton essentially gave Ginsburg free rein to develop the Econ-O-Center, a bargain-basement version of Burgmaster’s eight-spindle turret drills. Cheaper and more reliable than genuine machining centers, and more productive than traditional drilling machines, the Econ-O-Center line would prove very profitable. And the line gave Burgmaster a competitive, deliverable product at the low end of the market. Nevertheless, it was a stop-gap measure, more of a marketing and production play on the industry catchword “center” than a true indication of Burgmaster’s ability to adapt to a changing market. There was still time to develop a genuine machining center, but Burgmaster was losing its technological lead.

But if Norton and Ginsburg thought they had gotten Burgmaster moving, Saltarelli still believed it was not fast enough. He ordered Houdaille’s vice president for the machine tools group out to Los Angeles to give Norton the news that he was being reassigned.

One by one, members of the Burg family severed their ties with Burgmaster and Houdaille as the relationship between the companies failed to live up to everyone’s expectations. Fred Burg had been the first to distance himself. In 1966, little more than a year after the takeover, he had retired as a consultant. His visits to the factory gradually diminished. “He was treated as a worn-out piece of equipment,” recalls his son. Norman Ginsburg grew weary of, and felt powerless to stop, the shift in management practices. As soon as his first contract expired, in 1969, he left the company. A year later, Joe Burg,

tired of Houdaille's insularity and what he regarded as the company's narrow emphasis on the bottom line, left his vice presidency.

Houdaille executives, especially Saltarelli, had wanted to groom Ginsburg to rise in the corporate hierarchy, and were sorry to lose him. They were less concerned about Joe Burg's departure. As for the "old man," they were relieved to be rid of his stories about how things used to be done.

Houdaille picked Allan Folger to succeed Tom Norton. There was no doubt he had the necessary background: Folger had a degree in mechanical engineering from the University of Cincinnati, had worked at Cincinnati Milacron – the GM of the machine tool industry – and also had the master's in business administration from the University of Chicago. But many Houdaille executives were surprised by the appointment. Folger was a rather remote man, and they did not figure him to be the person to pull Burgmaster out of its doldrums.

Folger and Buffalo agreed to pursue a two-track strategy. Burgmaster would develop its own machining centers as rapidly as possible. But while it played catch-up, it would sell another manufacturer's product. That machine was the Dualcenter, sold in the United States by the Hughes Tool Company but manufactured in West Germany. In August, 1969, Burgmaster paid \$4 million for Hughes' rights to the machine.

The machine continued to be built in Germany, then disassembled, shipped to Los Angeles, reassembled with motors and wiring supplied by Burgmaster, and then sold in the United States (thus qualifying as a machine "built in the United States"). But the decision to continue manufacturing overseas turned the Dualcenter into a multimillion-dollar mistake. When the Nixon Administration devalued the dollar in the early 1970s, the Dualcenter's price tag became exorbitant.

Burgmaster's plans to develop its own machining center, meanwhile, were hampered by patent disputes over the Dualcenter and engineering problems. It took five years before Burgmaster began to market its line of vertical and horizontal tool centers. The horizontal version had chronic trouble with oil leaks around the spindle. It took 18 months before engineering solved these problems. It should have taken less, but Burgmaster no longer attracted the best engineering talent.

The Burgmaster machining centers nevertheless found a market niche, primarily because they tended to be cheaper than their counterparts. Yet balanced against the years of effort, the engineering mistakes and the production obstacles, Burgmaster did not truly realize profits on its tool centers until very late in the decade. Success, such as it was in the 1970s, derived more from past accomplishments rather than a continuing commitment to innovation and reliability.

For most of the postwar period, the U.S. machine tool industry had one tremendous asset: a large and essentially captive domestic market. Then, in the 1970s, a new

competitor arrived. On the heels of their advances in the steel auto and electronics industries, the Japanese became a force to be reckoned with in machine tools.

But the mid-1960s, Japanese exports of machine tools to the United States were still small but growing rapidly – about 50% from 1964 to 1965 alone. “Our builders cannot yet match the highly sophisticated versatility of many American machines,” said Yutaka Imai, managing director of the Japanese Machine Tool Trade Association, at a Cleveland trade fair in 1965, “so we must concentrate for now on standard types that will produce at least as efficiently as yours, cost less, and be deliverable within 45 days.”

It was precisely the strategy the Japanese were using in other industries. It worked just as well in machine tools. Japanese imports began a steady rise, even as the domestic industry went through periodic slumps. Aided by the tremendous surge in Japanese auto production, Japan’s machine tool builders continued to chip away at the remaining U.S. advantage: engineering superiority.

Houdaille and Burgmaster had several responses to the Japanese challenge. But, significantly, the Americans did not put their primary emphasis on outproducing the Japanese in the engineering department, on the factory floor, or in the field. Instead, management’s answers were characterized by a mixture of naivete and complacency, even arrogance. The telling moment was Houdaille’s decision to sell all Burgmaster manufacturing rights to a Japanese firm in 1970, rather than aggressively protect what remained of Burgmaster’s technological lead.

Yamazaki Manufacturing, the company that bought the license to build almost the entire line of Burgmaster machines in the Far East, was the largest privately held machine tool builder in Japan. Houdaille executives rationalized the transfer of technology on the grounds that “getting access to the Japanese markets was so damn remote, it would never happen,” recalls Saltarelli. “The rationale for giving them a license was if we don’t, they’ll do it [manufacture] anyway. So at least we can get some income by selling them rights.”

Mazak (as Yamazaki is known in the United States) employees became frequent visitors to the Burgmaster factory. Every four or six months, a new group would arrive and Burgmaster would show them everything: new machines on the drawing boards, turret drills made to customer specifications, marketing strategies. They took pictures of every facet of the operation, and Mazak representatives were introduced to Burgmaster customers to see for themselves how the machines performed in the field.

Robert French, a design engineer who had worked for Burgmaster since 1956, recalls one occasion when Mazak counterparts “were constantly bugging me for blueprints” of a new machine still on the drawing boards. Before Burgmaster itself had even finished building the prototype of the new machine. Mazak had theirs built and running. But nothing could shake management’s feeling that Burgmaster was far ahead of the Japanese and would remain so.

But 1976, Mazak began to produce machines little different from Burgmaster's for sale in the United States. Burgmaster said that at least two patent claims were being copied, but Mazak argued it was within the letter of the agreements – and it had a legal case. Eventually, Mazak agree to pay Burgmaster a royalty for each machine it imported, plus a one-time fee of \$1 million. But the damage was done.

Folger, the Burgmaster president, says that “what they did was pretty damn shady.” But Houdaille had given Yamazaki carte blanche to do to Burgmaster what Fred Burg had done on his own during the 1950s and 1960s – imitate good ideas, and beat the competition by doing them better. Little wonder that when a boom in the machine tool industry commenced in 1979, Mazak and a score of Japanese machine tool builders were poised not only to compete, but also to dominate U.S. markets for several of the most popular machine tools. Competition from Mazak was part of the reason why Burgmaster's market share would later fall almost 30%.

As competition stiffened, Folger beseeched his engineers to speed development of the horizontal and vertical machine tool centers, and urged the machine shop to build into these new models the same quality and reliability that had once been the company's trademark. But these efforts were hampered by a new problem: High school graduates, who had traditionally filled entry-level openings in the factory, were increasingly inept at elementary arithmetic. Now Burgmaster had to devote an inordinate amount of time training apprentice machinists, before losing the best ones to aerospace manufacturers.

Two of the three circumstances that would bring about Burgmaster's demise were firmly in place: Its work force was less motivated and less capable, and its leadership in its field had evaporated. In 1979, the final element fell into place. Houdaille became one of the first conglomerates to undergo what has since come to be known as a “leveraged buyout.”

Despite the problems at Burgmaster, Houdaille had a reputation of being one of the better-managed U.S. industrial companies. Under Saltarelli's conservative stewardship, it had put up-to-date machinery in its plants, carried a negligible debt and featured a very lean white-collar staff at its corporate headquarters. Rumors about Saltarelli's imminent retirement had made Houdaille the object of recurrent takeover speculation. That, and the possibility of an unfriendly takeover, distressed Saltarelli and other top executives.

The answer to Houdaille's dilemma came from the private investment banking firm of Kohlberg, Kravis, Roberts & Company (KKR). KKR had been watching Houdaille for some time, searching for a formula that would allow them and other investors to reap the benefits of Houdaille's conservative management while satisfying its executives and shareholders. How could they offer \$355 million for a company while providing less than 2% of the funds? The answer was to borrow most of the amount against the company's own assets and future cash flow – a leveraged buyout.

KKR offered the unheard-of price of \$40 per common share of Houdaille stock – almost double Houdaille's all-time high, and a price Saltarelli had never expected to see.

KKR also pledged that it had no desire to run Houdaille; all it intended to do was act as good, informed directors while management stayed in place. More than 80% of the purchase price would be financed through high-yield, or “junk,” bonds. The cash needed to service Houdaille’s massive junk bond debt would be generated by profits protected from taxation through the re-depreciation of Houdaille’s assets.

The buyout’s impact on Burgmaster was immediate and palpable. As Phillip O’Reilly told *The New York Times* the day he succeeded Saltarelli as president of the new Houdaille in May, 1979, “we’re highly leveraged right now, so our first goal is to pay off some of the debt.” That pressure never waned. Headquarters now demanded more extensive financial reports – so many that Allan Folger, Burgmaster’s president, believed it interfered with his efforts to pull Burgmaster out of its slump. “After the buyout, Houdaille changed, and seemed to lose its equilibrium,” recalls Folger. Accounting hires seemed to grow faster than manufacturing hires, because generating paper profits to retire the debt became “the whole end.”

In mid-1980, a dispute over a personnel matter prompted Houdaille to fire Folger suddenly. George W. Delaney became president, and for a time, employees welcomed the change from Folger’s austere style. Because he had virtually no experience in the machine tool field, Delaney made a point of being very visible throughout the factory and of soliciting the opinion of all senior personnel. But eventually he treated to the executive offices, and control of day-to-day operations was left to a cadre of accountants and computer “whiz kids” dedicated to seeing that costs were controlled and the paper flowed. Making machines almost seemed to be an afterthought.

Pressure to meet production quotas, no matter what the cost to Burgmaster’s reputation for quality, reached an unprecedented level. Ironically, the management posted a new banner in the factory: “THE NEXT INSPECTOR IS THE CUSTOMER. HE MUST BE SATISFIED.” But if 10 machines were scheduled to be shipped by the 30th of the month, Delaney was going to show on his monthly report that 10 machines had been sent out. More than once a machine costing \$100,000 or more was delivered with one or two pages listing things to be “fixed by field service.”

The emphasis on production quotas was particularly galling to one employee, Pete Ives, the man in charge of field service. He was one of the few long-time employees still working. Ives watched as Burgmaster quickly became known as a buyer-beware tool builder. Customers began to insist on sending out their own employees to check out purchases before they would accept delivery. More than one customer, Ives reported, was saying that he would “never buy another Burgmaster.”

With the low end of its market taken over by the Japanese, Burgmaster became a “promise them anything” company. Orders were eagerly accepted for “specials,” even though experience showed that these machines inevitably took longer to build than promised and exceeded cost estimates. Yet because of the re-depreciation afforded by the leveraged buyout, the true costs of these specials were camouflaged. Through 1980, Burgmaster appeared to be highly profitable, but these were profits without production.

In 1981, the worst recession since the 1930s put Burgmaster into a down cycle and Houdaille into a squeeze. The company couldn't afford to wait for an upturn, especially when dozens of Japanese companies were making startling inroads into the U.S. market. Houdaille president O'Reilly turned to Washington, hoping to gain some measure of protection from imports. At considerable expense, Houdaille retained a high-powered Washington law firm to make the case that Japan's success stemmed from conscious "targeting" of the U.S. tool industry.

The Houdaille petition caused a remarkably long and harsh dispute between "free trade" advocates and "Japan bashers" in the Reagan administration. Members rose in Congress to deliver impassioned speeches about foreign penetration and the perfidy of the Japanese. Half-a-dozen committees launched investigations into the state of the machine tool industry, and the Departments of Defense, Commerce, State, Treasury, Transportation and Labor, and the National Security Council, the Office of Management and Budget, and the president's special trade representative all grappled with the problem. The Cabinet was so bitterly divided by the issue that it could not agree on a recommendation to President Reagan. The president eventually decided against granting relief in April, 1983.

The narrow failure of Houdaille's appeal to Washington sealed Burgmaster's fate as an independent division within Houdaille. In late September, 1985, Houdaille announced a "business restructuring program" that meant the selling off or closing of virtually all its operations in the machine tool business. Burgmaster was among those divisions that would be closed within 60 to 90 days. The purpose, Houdaille announced, was to "enable the company to lower its debt, thereby reducing its interest expense and enhancing its future."

The fortunes of present and former Houdaille managers, and the institutional investors who participated in the leveraged buyout, stood in stark contrast to Burgmaster's demise. But no party fared better than Kohlberg, Kravis, and Roberts. Houdaille had been only the first in a series of KKR-managed buyouts that were changing the face of corporate America, a process that was also making the company's four partners worth an estimated \$150 million to \$500 million each.

On January 15, 1986, the contents of the Burgmaster plant were auctioned off. Everything from briefcases with the Burgmaster logo to \$1-million machine tools went on sale. It took an entire day, and three auctioneers, to walk with the crowd through the plant, which just 10 years earlier had been cited in the trade press as a model industrial facility.

Among the 200 or so people who came to the auction, there was a reunion of sorts of veteran Burgmaster employees. One said he had heard that Norman Ginsburg had visited the factory the day before the auction with his grandchildren to show them the enterprise which had once been the family business. Fred Burg had become an environmentalist, concerned over the use and misuse of ocean resources. But illness prevented him from

visiting on last time the company that started in his garage. Indeed, the family decided it was best not to tell him about it all.

During the auction, two small areas were cordoned off by ropes. The symbolism was hard to miss. In one area, near what used to be final assembly, stood the last two machines that would leave the plant. Three employees were being paid special retainers to get the problem-plagued machines to a point where they worked sufficiently to ship them out.

A few yards away, another cordoned area kept people away from four shiny machines, familiar to anyone in the machine tool business because their characteristic turret heads. They were small Burgmaster table models, not much different from the prototype that Fred Burg, Joe Burg, and Norman Ginsburg had arduously pieced together more than 40 years earlier.

But a closer look showed they were made in Japan, for sale in the United States.