
Investment & Strategy at Morse Cutting Tool

by the Industrial Cooperative Association
(ICA)

Local #277 of the United Electrical, Radio and Machine Workers of America contracted with the ICA for a preliminary assessment of the long term viability of Morse Cutting Tools. The union had become alarmed by declining employment at Morse and by Morse management's statements regarding the company's inadequate profitability and shrinking market share. Of even greater concern was the threat that the conglomerate which owns Morse, Gulf + Western (G+W), might close the New Bedford plant. We were asked to examine Morse's position in the cutting tool business with particular attention to the adequacy of G+W's investment in plant and equipment and of Morse's management strategy.

Because of the lack of access to internal company information and the need for a quick assessment, the scope of this study was limited. It is based on publicly available information and interviews with observers familiar with Morse and the cutting tool industry. It presents preliminary conclusions about the company's ability to compete and identifies destructive policies and practices which should be addressed by Morse or G+W.

The results of the study and our recommendations regarding further research are presented in this report. It is organized in four sections:

- I Summary of results
- II Summary of major research activities
- III Presentation of findings
- IV Recommendations for future study

Summary of Results

U.E. Local 277's concerns about Morse's long term viability are warranted. Preliminary investigation has raised serious questions about Gulf + Western's intent and ability to manage the company in a way which enhances its long term security. There are strong indications that signifi-

cant improvements in both the rate of capital investment in and the management of this company will be required to ensure Morse's continuation as a leader in the cutting tool industry and as an employer of 800 New Bedford area residents.

For several years, Gulf + Western has pursued a company-wide "asset redeployment" strategy which involves systematically removing its assets from capital intensive subsidiaries and investing in the "undervalued" stocks of other companies. When applied to Morse this strategy seems to have meant an unwillingness to make the new investments in plant and equipment necessary to keep Morse competitive. Faced with older, less productive equipment than their competitors and with pressure from G + W to keep profits high in a recession, Morse's management has raised prices and cut important departments and programs. These moves appear to have exacerbated the impact of the recession and have led to declines in both sales and market share.

It is important that the focus of the debate over the causes of Morse's problems shift from labor costs (Morse's wages appear to be lower than the wages paid in other Massachusetts cutting tool plants) to questions of G + W's past, present, and future management of Morse. We believe that continued application of Morse's current investment and pricing policies and cost cutting efforts will further undermine the firm's market position.

It appears that:

- Inadequate investment in new equipment and an inefficient plant have raised Morse's production costs above its competition's, making it difficult for the company to compete.
- Emphasis on short term profitability during a recession has resulted in pricing policies and service and personnel cuts which are undermining relationships with distributors and customers and reducing the company's ability to service the market well.
- An alienating management style and lack of confidence in management's policies and practices have hurt employee morale. As a result, many experienced white collar personnel have left. Many remaining employees are unmotivat-

ed. Low morale and inexperienced workers are bound to hurt Morse's performance.

These problems were identified through discussions with industry experts, past and present distributors of Morse products, and present and past employees of Morse and were highlighted by a comparison with a successful Massachusetts competitor, Litton's Union/Butterfield Division. Our research activities are described briefly in the following Section. A fuller discussion of our findings is presented in Section III.

Summary of Major Research Activities

A. Gulf + Western. We reviewed G + W's SEC Filings (10K's), annual reports for the past three years, and the conglomerate's *Fact Book 1981*. We also discussed G + W's strategy and performance with G + W investment analysts at major brokerage firms in New York.

B. Cutting Tool Industry. Our information-gathering about the industry included: (1) discussions with a Wall-Street industry analyst, the Cutting Tool Manufacturers' Association, and an industry follower at *American Machinist*; (2) review of past and current copies of *American Machinist* and *Machine Age* magazines and recent investment advisory reports on the industry and specific publicly traded competitors; (3) discussions with previous Morse employees, currently working for other companies in the industry and with Morse distributors; and (4) statistics from the Commerce Department's "Annual Survey of Manufacturers."

C. Morse, Greenfield Tap & Die (TRW) and United Twist Drill (Union Butterfield Division of Litton Industries). We collected information about the operations and profitability of these plants by means of (1) interviews with union leaders at the plants; (2) U.E. staff; (3) interviews with Morse employees; (4) discussions with current and past Morse distributors; (5) questioning experienced white and blue collar workers who have left Morse in the last few years; (6) review of Morse's publications and presentations to the U.E.; (7) review of articles from *The Standard Times*. We also spoke briefly with David Cameron, President of Morse Cutting Tool.

Findings.

G+W's "asset redeployment" strategy involves "the shifting of assets from operations in which substantial capital investments would be required merely to bring their facilities to competitive standards" (1981 Annual Report) and into investments in marketable securities. More simply, G+W is taking its money out of subsidiaries which it does not find profitable enough and investing in the stocks of other corporations which it believes will provide a higher return on investment.

According to one Wall Street analyst with whom we spoke, in the last year or so the investment community has put considerable pressure on G+W to follow through on its divestment program. In the last year and a half, G+W has sold its interest in the capital-intensive paper products operations of its Brown Co. subsidiary (December 1980) and parts of New Jersey Zinc (September 1981). Earlier this month, the sale of Consolidated Cigar Corporation was announced.

Meanwhile, the company increased its holdings of stock and other marketable securities of other companies. This shifting of investment shows up in G+W's financial reports. While the

company's net property, plant, and equipment increased by only \$33 million between 1978 and 1981, their holdings of stock in other corporations (which are not wholly-owned subsidiaries) and other corporate securities increased by \$544 million during the same period.

Some of this \$544 million came from the sale of stock in other companies, but some came from the profits of subsidiaries like Morse. G+W chose to invest these profits in new companies and stock rather than reinvest the money in improving the operations and profitability of the companies which earned it. This process is illustrated in the financial data presented in G+W's *Fact Book 1981*. These figures show that while investing \$386 million in the stock market in 1981, G+W invested only \$6 million for cost saving improvements in its whole manufacturing division (of which Morse is only a small part)—even though that division made \$107 million in operating income. In 1980, an even smaller \$4 million was invested in lowering costs in this large division, despite operating earnings of \$112 million. In fact, on the average, between 1977 and 1981, G+W spent only 94¢ on capital expenditures in the manufacturing division for every dollar of depreciation of plant and equipment, while the average for the conglomerate was \$2.34 of reinvestment for every dollar written off.

Although G+W officials say they have no plans to divest Morse, it is likely that this reallocation policy has and will affect Morse. G+W is moving away from capital intensive industries; the cutting tool industry is capital intensive. G+W is not interested in companies which will require capital investment to bring them to competitive standards; it appears that Morse has fallen far enough behind in modernization of its equipment that it will need a significant injection of capital to keep up with domestic and foreign competitors. Although G+W is concentrating its divesture efforts on its larger operations at present, it would be natural for the company to eventually divest Morse. In the meantime, lack of attention to redevelopment of a viable long term strategy and failure to invest in the plant and equipment at Morse seem to be running down

Gulf + Western's Empire

Segments contributing to fiscal 1981 revenues and operating profits (excluding financial services).

	Sales	Profits
Manufacturing	23%	23%
Apparel & home furnishing	27%	19%
Leisure time	20%	20%
National resources & building products	9%	9%
Automotive replacement parts	9%	8%

Source: Standard & Poor's Corp.

Morse, as G+W shifts its attention and resources to new areas.

An analysis of the three major areas of concern for Morse's viability follows.

B. Plant and Equipment. G+W's detrimental handling of Morse is most clearly illustrated by its failure to invest in new plant and equipment

Equipment. Over the last two decades, whole new generations of machine tools and related equipment have been introduced for use in factories such as Morse. The most modern of these machines—which are computerized and often perform more than one operation—can significantly increase the productivity of the workforce and reduce related costs. An article in the *American Machinist*, written by the Numerical Control Society lists the potential benefits of these new machine tools:

1. Their high speed of production reduces the time necessary to produce a product, shortening the lead time on orders.

2. Since one machine can do several operations, in-process inventory is reduced and inventory carrying costs are lowered.

3. Reduced set-up time means small lots of standard items can be made economically, reducing raw material inventory requirements.

4. Since one machine can replace several old ones, less floor space, less material handling, and less paper work (for routing) are necessary.

5. The accuracy of the machines can minimize secondary grinding and polishing operations and reduce scrap, reworking, and inspection costs.

The increased productivity gained with this new equipment lowers per unit variable costs of production, giving its users a distinct cost advantage over less modern companies. When price competition increases, as it has during the recent recession, lower cost competitors can undercut higher cost producers like Morse. Morse reports that some U.S. competitors are bidding prices which are below Morse's direct cost of manufacturing.

Many of Morse's competitors have invested in new equipment. This seems to be particularly true of fast-growing companies that buy new equipment as they expand, of U.S. companies

with new plants, and of newer foreign competitors. (One Japanese company which is making inroads in U.S. markets uses an advanced machinery center concept and the most advanced technology in its one-story modern plant.)

Almost everyone we talked to who was familiar with the equipment used by Morse and its competitors believes Morse is behind its successful U.S. and foreign competitors in modernization of its equipment. Our estimate of recent equipment expenditures at three large Massachusetts cutting tool plants (Greenfield Tap and Die in Greenfield, Mass., Morse's New Bedford plant, and Litton's Union/Butterfield division in Athol, Mass.) confirmed these observations.

In order to estimate equipment expenditure figures, we asked union officials at Morse, GTD, and UTD to compile lists of the equipment brought into their plants in recent years—along with their management's cost estimates or the equipment model numbers.¹ We then called the equipment manufacturers of the unestimated equipment and compiled rough estimates of total equipment expenditures in each plant over the last several years. The results show Morse falling surprisingly far behind both GTD and UTD in equipment expenditures. While GTD spent an estimated \$5 million in the last three years, and UTD spent more than \$1.5 million,² Morse has spent less than \$.8 million in the last five years—of which only approximately \$.5 million remains at the plant today.³ (See Appendices 1 through 3 for cost estimate calculations.)

Morse's level of equipment expenditures in recent years compares unfavorably with the company's own purchases in the 1960's and early 1970's. According to articles in *The Standard Times*, Morse spent \$.5 million in fiscal 1962 and promised even more purchases in the following year. Morse reported spending nearly \$1 million each year in 1966, 1967, 1974, 1975 and 1976. After 1976, Morse's public reporting of equipment expenditures seems to have ceased. It appears that Morse has spent less in the last five years than in most previous single years for which we have information.

Our third and final comparison of Morse's

equipment purchases relates it to the average spending on plant and equipment (capital expenditures) of companies in Morse's SIC code—SIC 3545, Machine Tool Accessories. Our calculations, using U.S. Commerce Department figures for capital expenditures for this group, show that average capital expenditures for a company of Morse's size were \$1.4 million per year for the four years 1977-1980.⁴ (See Appendix 5.) This figure provides another rough measure of the relative size of Morse's outlays.⁵ At the rate of \$1.4 million per year, Morse would have spent almost \$6.8 million in a five year period. Since Morse spent less than \$1 million on equipment, and no major plant expansion was undertaken, we can assume that Morse's total capital expenditures fall well below the average.

Compared with similar Massachusetts plants, Morse's own previous spending, and the national average for its industrial classification, Morse's estimated, recent equipment purchases are remarkably small. Failure to match the competition's modernization efforts almost inevitably causes a firm to become uncompetitive. Moreover, these figures cast doubt on G+W's intent to maintain Morse on an on-going basis.

Plant. Morse's old multi-story plant (part of which is approximately 100 years old) and inefficient lay-out further undermine its ability to compete with companies that have invested in new, one-story facilities or have reorganized their work flows efficiently in older factories. According to reports in the *Standard Times*, back in 1968 Morse's president, Hayes, recognized that Morse's multi-story character "is against all modern day practices of manufacturing." In 1969, top management at Morse was considering a move to the New Bedford Industrial Park. The move was never made.

With the help of workers at the New Bedford plant, we traced the movement of seven different products (two drills, two mills, two reamers, and one tap) through Morse's two adjoining, multi-story buildings. We found that during the manufacturing process, the products were moved from one floor to another between eight and thirteen times, moving among the four floors of the older

building and two floors of the "newer" building. (See a sample production flow in Appendix 4.) This kind of inefficient lay-out increases inventory carrying costs, production time, and indirect manufacturing costs. Morse ordinarily employs seven or eight full time people to move materials and tools from work station to work station, from floor to floor.

C. Short Term Orientation. Instead of increasing profitability by means of more efficient plant and equipment, Morse seems to have adopted a strategy of achieving profit goals by reducing inventory, setting high prices, and cutting costs. Our research indicate that Morse's pricing policies and cost cutting efforts are both undermining public relations with distributors and customers and diminishing Morse's ability to provide good service and competitively priced products in the long run.

Prices. Everyone we talked with felt Morse's prices are generally too high to be competitive and that, in combination with inflexible relations with distributors; Morse's prices are forcing more and more distributors to carry competing lines of cutting tools in addition to or instead of Morse's products.

The distributors we called had all been loyal Morse partners for more than 30 years, but all had either started carrying other lines or were considering switching away from Morse. Some felt forced by Morse's high pricing of "specials" (custom tools) and certain standard tools to take much of their business to other companies. The deterioration of longstanding relationships with distributors is especially problematic in a business which is highly price competitive. Morse is losing loyalty built over the last century and is therefore losing access to markets that will be difficult to regain.

Morse's price problems are exacerbated by what was referred to as insensitivity to distributors' needs and the market in which they deal. Morse has apparently been heavy-handed in its efforts to keep distributors from selling its competitors' lower priced tools. One major, longstanding distributor no longer carries Morse after a dispute over prices and its handling of compet-

ing lines. The loss of this distributor, a major supplier of drills to the automobile manufacturers, has cost Morse an estimated \$1,000,000 a year in sales.

Salespeople who have left the company estimate that five or six other major distributors have turned to competing lines or have stopped carrying Morse in recent years. Furthermore, many sales people left Morse because the company's policies and prices made it difficult for them to meet customer needs and caught them in the crossfire between resentful customers and the company.

Reduced access to markets through distributors and high prices, which make it difficult to attract new distributors and customers, have undoubtedly been main factors in Morse's loss of market share in recent years. The company's figures indicate that their market share fell 14% (from 7.4% to 6.8%) between 1978 and 1980 alone.

Cost cutting. Many Morse employees feel that management cut indirect and overhead costs in ways which reduce Morse's ability to provide good service to its customers, develop new products, and produce efficiently. Examples of problems caused by cost cutting throughout the organization were cited by current and previous employees.

- The Sales Service Engineering Department was responsible for troubleshooting and providing application advice and technical service to customers. Its staff has been reduced over the last five years from six people to one person (who reportedly has had little or no engineering experience). Even when staffed by two or three people, the department was unable to undertake any significant new product development and was unable to meet many customers needs on a timely basis.

Sales Service representatives can play a critical sales support role, keeping customers happy and accounts growing. This kind of support becomes particularly important when there is high sales staff turnover and many sales people are unfamiliar with the company's products.

- According to the October, 1981, issue of

American Machinist, "To view the maintenance department as an unavoidable expense that should be cut to the bone...is shortsighted," since costs of downtime for sophisticated machines can run as high as \$400 to \$600 per hour. The article recommends a serious preventive maintenance program.

Morse has no formal preventive maintenance program in place. According to one maintenance worker, manufacturers' suggestions for new equipment maintenance are not followed and with the exception of some preventive work by millwrights, little or no repair work is done until the machines stop functioning satisfactorily.

- Morse's Method Engineering and Standards departments were merged a year ago. The combined department is reportedly dwindling and unable to keep up with its workload. As a result, specials are not always properly screened, and the company incurs unnecessary losses due to failure to properly assess the special costly features of the custom tools. One engineer suggested that Morse is not competitive on specials because they do not give Methods engineers the time or resources necessary to analyze the most efficient way to produce them or buy the special tooling that may be necessary. Instead the specials go through standard operations, causing costly spoilage.

- Many believe that there is inadequate training of new personnel throughout the plant. Training for product engineers has dropped over the years from 40 to 4 weeks. Maintenance people are expected to learn about new generations of equipment on their own initiative and are compensated for tuition costs only in proportion to their grades in the classes. Inside sales people receive little technical training. Inadequate training is especially problematic when a firm experiences high turnover, like that experienced recently at Morse.

Morale and turnover. High employee turnover among non-union workers in recent years has resulted in the loss of many experienced white collar workers. Most recent departees we contacted had been with the company for 14 years or more. Four out of six regional sales managers have left

the company in the last five years. The total loss of sales people in the past several years has been estimated at 60% or more of the sales force. Similarly, all experienced sales service engineers have left the company or been laid off. Turnover in most non-union departments is reported to be high. High turnover inevitably results in a workforce unfamiliar with its product, its industry, and its customers and in many individuals who are new to their specific jobs.

Morale seems to be low among remaining employees. There seems to be a widespread belief that (a) the company is not being run well, (b) that the employees themselves are not treated like valued and respected parts of the company, and (c) there are inexperienced people in supervisory and lower level management positions.

While it was not possible to verify workers' allegations of mismanagement and inexperienced supervision, it is clear that management policies and attitudes are creating resentment and lack of faith in the workforce—driving some more mobile employees to find jobs elsewhere and creating a morale problem for those who remain. Low morale cannot help but hurt the quality of the service provided and the productivity of the company.

D. Intercompany Comparison. In order to test our conclusions about Morse's strategies, we collected information about competing plants. In this process, we focused on one plant which has more successfully faced the same market as Morse. The Union Butterfield Division of Litton Industries (UTD) in Athol, Mass., is part of a large conglomerate, competes directly with Morse, has a similar product line (endmills, countersinks, carbide tip tools cutters, drills, etc.), is about the same size, is located in an older plant in Massachusetts, is organized by the U.E., and pays its unionized employees more than Morse. (See the comparison of wages and benefits paid to workers at Morse, Greenfield Tap and Die, and UTD provided by the U.E. staff in Appendix 6.)

We talked with Jack Davidson, president of U.E. Local 276 and Secretary of the Conference of Cutting Tool Unions, who provided us with

the information which follows. Mr. Davidson portrays UTD as a company with a successful, forward-thinking cutting tool strategy. It stands in contrast with Morse.

Plant and Equipment. Over the past decade UTD has updated its equipment, facility, and parking lots. In the last four years, they have purchased new equipment costing more than \$1.5 million, while Morse invested only \$.5 million. This investment has increased productivity without causing a reduction in the workforce. Employment of production workers increased slowly and steadily from 1974 until the current recession recently forced the lay-off of 50 workers, bringing union employment there down from 650 to 600.

Long Range Orientation. We did not research UTD's prices, and therefore cannot provide that comparative information. However, UTD's management's emphasis on long range profitability is evident from its management of its resources and current strategy.

- Since the mid-seventies, UTD has improved its method engineering and sales departments and now aggressively pursue sales which will bring in work suited to the skilled workforce at UTD.

- Their Sales Service Department has two product managers who stay in close contact with customers.

- The company seeks out orders for the less profitable specials in order to attract customers to their full line of products.

- UTD gives each operator 30 minutes to an hour each week to oil, grease, and clean his or her machine, replace belts and other disposable elements, and to identify repairs for which professional help will be needed.

- UTD's strategy in the current recession has been to retain as much of the workforce as possible so as to maintain the quality of their service and be in a position to prosper as the economy recovers. A UTD vice president has reported to the union that Litton understands that this long range strategy will mean lower profits in the short run and still supports pursuit of long term profitability.

- Union members at UTD express confidence

in their management's ability and sincere interest in making UTD prosper. They say their local management works hard to get the resources they need from Litton. The company claims that it is now number one in the cutting tool industry.

• Turnover among white collar workers is low, as is salesforce turnover.

According to Davidson, when UTD was in financial difficulty in the early 1970's, it pursued a strategy similar to Morse's current direction, cutting costs and demanding union givebacks. Now they admit to the union that it was capital investment and long range commitment to the company which brought about the turnaround. Managers have reported to the union that UTD has done exceptionally well for the past five years and that they are optimistic about the future.

Recommendations.

It is now time for Morse and G+W to present their plans for securing the company's future profitability through capital investment and a management strategy which rebuilds Morse's market share and ability to meet customer needs.

An additional, more detailed study of Gulf + Western's investment in and management of Morse Cutting Tools is not recommended at present. G+W's disinvestment and detrimental emphasis on short term profitability have emerged clearly from the data available to this study. While further exploration might lead to a refinement of the estimates presented in this report, it is unlikely that the conclusions of a more thorough study would be different.

If Morse presents a genuine turnaround plan and opens its books, a different kind of study—one which evaluates the plan's adequacy—should be considered. ■

1. We received management estimates for most GTD equipment and model numbers for Morse and UTD.
2. UTD's estimate includes more unpriced items than the others.
3. \$250,000 of the equipment was removed earlier this year.
4. The last years for which this information is available.
5. This SIC includes cutting tool companies and manufacturers of other "accessories" which face similar market conditions.

Appendix 1

New Equipment Purchased at Greenfield Tap and Die in the Last Three Years

Equipment ¹	Estimated Cost Per Unit ²	Total Estimated Cost
8 Hertlein Squaring-off machines	\$ 70,000 ³	\$ 560,000
3 Hertlein Cut-off machines up to 3/8" taps	65,000 ³	195,000
2 Castro Cut-off machines	65,000	130,000
Junkers		
1 Flute grinder	75,000	75,000
1 Thread grinder	86,000	86,000
16 Lindener Thread grinders	250,000	4,000,000
J&L Comparator	18,000 ³	18,000
	TOTAL	\$5,064,000

We were unable to price: 1 Hudson Vibrator,
3 Heat Treating Machines

The Company has rebuilt: 6 Flute grinders,
6 Thread grinders

1. Compiled by the Chief Steward at GTD
2. Unless otherwise indicated, these are management's estimates
3. Manufacturer's estimate