

COMPANY STATS

Name	Bimba Manufacturing Company
Industry	Manufacturing, Fluid Power Industry
Number of Employees	475 total; 400 in Chicago region
Location	Headquartered in Monee, Illinois; 3 other facilities in IL; 1 in UK
Product/Service	Fabricated metal manufacturing-cylinders
Markets	Medical, plastics, transportation, machine tool, printing, agriculture
Revenues	Privately-held company
Year Founded	1957
Ownership	Employee-owned
Web Address	www.bimba.com

A Comprehensive Learning and Development Infrastructure Linked to Corporate Goals

Bimba Manufacturing Company is a leading manufacturer of an extensive line of air cylinders, rotary actuators, linear thrusters, rodless cylinders, flow controls, and position-sensing cylinders—products used in machinery and automation in many industries. The company was built on Charles Bimba's invention of an inexpensive, replaceable, stainless-steel-body cylinder in 1957. Bimba operates five manufacturing plants located in the U.S. and in the United Kingdom, has 150 distributors, and is an ISO 9001-certified company. For many years, the company has set the benchmark in delivery through continuous application of state-of-the-art manufacturing planning systems, inventory commitment, and just-in-time methodologies. Headquartered in Monee, Illinois, Bimba employs 475 people, 400 of which are in the Chicago area.

The Bimba family sold 90 percent of the company stock to the employees in 1986 because the family "wanted them to reap the benefits of their work." Because this established a direct link between the interest of the company and the interest of the employees, everyone at the company believes that it is critical for all employee/owners to be motivated and qualified to perform in their jobs and to understand the company's finances, operations, and risks. To achieve this, Bimba has developed a comprehensive employee development system that, according to President & CEO Patrick Ormsby, has five critical components:

- ◆ A strategic plan with goals that are linked to learning and development
- ◆ A pay and promotion system that is based on performance
- ◆ Continual communication with employees
- ◆ Incentives for employees to access high quality learning opportunities
- ◆ Ongoing measurement to monitor and document impact and improve results

Linking Business Goals to Performance and Development

At Bimba, four levels of goals are linked to employee learning and pay structures: corporate goals set by executive staff; departmental goals set by managers to meet the corporate goals; behavioral goals, designed to help "all of our employees work better together" and to foster Bimba's corporate culture; and individual goals for each employee's job and development. A corporate goal, for example, of reducing the number of units returned due to Bimba error by 10 percent in 2002 translates into a team member's goal of learning how to track processes so that poor quality is not passed along and a department leader's goal of learning how to regularly audit product quality.

As internal consultant, Human Resources plays a major role in this process, especially at the departmental level. There, HR staff assist supervisors and managers in setting their departmental goals and in

assessing their employees' learning and development needs. This process, which draws heavily on the feedback of hourly employees, can take as long as six months. But managers value the process because they can see that the mutually agreed upon training and development offerings are designed to improve their department's performance. HR staff are careful not to "drive" the process because they believe that could lead to conflict between training and operations.

The firm uses a new performance management system to link employee pay to the performance of the company, teams, and individuals. The new system, Striving for Excellence Together (SET), has a compensation structure that includes base pay, variable pay, retirement income, and other flexible benefits. Since 1998, the firm has placed more emphasis on its variable, lump sum incentive, which depends on Bimba's fiscal year performance and, for some salaried employees, individual performance.

The performance review process provides the documentation that sets incentive pay levels. In employee reviews, Bimba's expectations for performance are clearly

In these reviews, career paths for hourly employees are made clear by mapping out levels of job responsibilities with associated pay rates, prerequisite skill levels, and ways to access appropriate education and training. The company emphasizes promotion from within—nearly 50 percent of managers have worked their way up through the ranks.

In addition to developing new employees, Bimba is looking for ways to develop tenured hourly employees by involving them in decision-making capacities generally reserved for supervisors and managers. For example, tenured employees are now instrumental in selecting new machines. Five or six of these employees, working as a team, visit vendors to inspect the equipment, meet with company representatives, evaluate how the machine can contribute to company goals, and then present their recommendations to managers. Senior management has also created new types of leadership positions to keep tenured employees engaged and foster feelings of greater ownership.

"We believe that the success of our company depends on the quality and capabilities of our employee-owners. Therefore, our commitment to effective training and development programs is an important part of our strategic plan. It is also part of our core values and beliefs. Additionally, since Bimba is an employee-owned business, investment in the development of our human capital is an investment in ourselves. While many factors affect the success of a company, one common attribute of the best companies is a well-trained workforce."

Patrick Ormsby, President and CEO, Bimba Manufacturing Company

defined in relation to company objectives, department and/or team objectives, valued behavior and attitude objectives, and the employee's contribution to productivity, skill attainment, and flexibility. A group of mid-level managers agreed, "We have to spend a lot of time translating goals and results to employees because we are an employee-owned company."

Leadership Vision and Commitment

Bimba takes a holistic approach to employee learning, embedding it throughout the culture and into every job with a great deal of positive reinforcement, including up to 10 percent additional salary for participating in learning activities. In order to shape the company culture, the CEO participates in new employee orientations. "I try to create a learning environment and to get employees to think about themselves as life-long learners," he said.

The CEO's top communication priorities are for employees to learn 1) how the business works, 2) the rationale behind management decisions, and 3) what risks the business faces. He considers communication with the workforce, especially about the

implications of employee ownership, as a strategic goal and "as the most important role for senior managers."

Managers meet regularly, both formally and informally, with employees to share information about how their department is progressing toward its goals and how the employee's job is linked to company's goals. Above all, one manager said, "We work to convey the message: 'What can we, as managers, do to help you in your jobs?'" Managers believe that the company has created "an open environment, where people can speak freely and talk about any issues." As one said, "I don't mind it when workers storm into my office because they don't have the right supplies or equipment. It shows that they care about the work they do. They want to do their jobs well."

Bimba offers formal and informal learning through onsite and offsite classroom training, cross-training, mentoring, peer-training, team-learning, self-paced learning modules, one-on-one sessions, videos, and its Visual Management System.

Bimba's Visual Management System

Human Resources believes that communicating visually is effective for a number of reasons: most adults are visual learners; displaying critical information reinforces formal training and provides just-in-time learning; visual communication decreases confusion and conflict by clearly spelling things out; and prominent display helps draw attention to critical information that employees must have to participate actively in decisions and ultimately "run the business."

Bimba's Visual Management System includes:

- ♦ "Bimba Speak," a glossary of all terminology and acronyms used throughout the company

- ♦ Quality measures, which are posted weekly to stimulate discussions about what worked and what did not during that week
- ♦ Monthly newsletters that post the company's daily and monthly sales and profits
- ♦ Labels on all machines, equipment, and parts bins

Eric Kulper began his employment at Bimba in 1991 as a machinist. Since 1998, he has worked as a Process Technician, a senior-level machinist. Eric said, "I absolutely would not have been able to go to college if Bimba didn't have a tuition reimbursement benefit." Eric has used the tuition reimbursement benefit to earn a Certificate in Machining from a local Community College. Eric is grateful to Bimba for altering his work schedule so that he could go to college. He said that his supervisor "bent over backwards to work it out." He indicated the work environment is one that is very open and encourages employees to learn from each other. According to Eric, "There's no such thing as a stupid question at Bimba. When mistakes happen, we talk about them and learn from them so they don't happen again." Eric reports that at prior jobs he did not have any ambition, but at Bimba he feels more responsible to increase his skill level so that he can share it with others.

- ♦ Process flow diagrams documented by employees and detailed process instructions that are posted throughout the plant
- ♦ A Training Guide for manufacturing employees that serves as a roadmap and tracking/certification system for on-the-job training
- ♦ Work instructions
- ♦ All company policies, which are kept updated and available for employees
- ♦ Minutes of key committee meetings, which are posted on bulletin boards
- ♦ Highly detailed machine and process manuals that are easily accessed throughout the facility

Formal Training and Education

Once departments have established their yearly training requirements in the goal-setting process, Human Resources selects and brokers the best providers. Maureen Fitzsimmons, Benefits and Development Manager, explained the selection process.

"We are very passionate about training, so we are very tough on instructors—especially instructors from the outside. We look for educational vendors who have a reputation for excellence. We conduct interviews with potential trainers, ask them to conduct a short training program as part of the interview process, review samples of their training programs, and require documentation that measures the success of past training programs—as measured by the trainees. We are very interested in trainee impression of trainers. We look for trainers who take responsibility for the learning outcomes of each trainee. We ask trainers to lecture for less than 50 percent of the total training time. We don't want our employees to feel like they are back in school. We want our employees actively engaged in the learning process. We look for trainers who acknowledge that trainees come into the classroom with experience and information. The trainer role is to affirm what they bring into the training experience and to build upon it."

Mary Fote began her employment at Bimba in 1981 as the Executive Secretary to the President. In her job search, Mary looked for an employer that offered a tuition reimbursement plan as well as internal training programs to facilitate growth in her position. Mary pursued a degree in Accounting, and after 9 years of working on her degree part-time, she earned a CPA in 1988. She was promoted to an administrative position prior to her promotion to Human Resources Manager in 1987. In 1995, Mary was promoted to Vice President of Human Resources. A crowning achievement of her career was her 2001 election to the Board of Directors at Bimba, the first woman to serve in that capacity. Mary credits the mentoring she received on the job, as well as the more formalized training opportunities, as two critical factors that enabled her to advance in the company. Mary continues her pursuit of higher education with her current enrollment in a Master's in Human Resource Management program.

To develop and deliver courses, HR has built strategic alliances with a number of private training vendors, colleges and universities, especially Northern Illinois University and Purdue University.

Bimba is most proud of its technical training programs. Since approximately 50

percent of its sales come from custom orders, sometimes for just one or two cylinders, employees must be extremely well trained to handle a range of complex variations in their work, without the aid of automation. "We have created a market niche with our ability to manufacture customized products," said one manager. (This customizing ability took Bimba to the 1996 Summer Olympics, where its rotary actuators controlled the nine underwater cameras that filmed the synchronized swimming, diving, and water polo events).

The Basics and Fundamentals of Machining program has evolved over five years into a progression of training modules. There are now five levels of technical training:

- ♦ Level 1 (60 hrs): Blueprint reading, precision measurement, and shop math (required of all employees)
- ♦ Level 2 (60 hrs): Pre-machining: Bench work, drill press operations, geometry, and more shop math
 - ♦ Level 3 (30 hrs): Machining I: Basics of drilling, tapping, reaming, turning, and milling
 - ♦ Level 4 (62 hrs): Machining II: Improving Level 3 skills, adding Advanced Precision Measurement skills
 - ♦ Level 5 (40 hrs): Introduction to CNC machining with math and hands-on activities

These programs were the result of the combined efforts of outside training consultants from Northern Illinois University and Purdue University, in-house training staff, manufacturing management, and frontline manufacturing personnel. Human Resources continually reviews this

program and analyzes test results and feedback from students and instructors. "We read every single comment, conduct follow-ups, and capture it all on spreadsheets," said Fitzsimmons. The first Computer Numerical Control (CNC) training program, for example, "... initially was a disaster. We discovered that people did not have the necessary math skills. So we revised the

entire matrix and incorporated math into every level. Now you can't go to the next level without it. We had to go back and inform all the employees it was going to be tougher."

In 2000, a self-study math CD-ROM was introduced as an option for employees to learn at their own pace. Employees who take the math component of the program through self-study can get assistance from a facilitator/mentor. HR is also in the process of developing a formalized CNC machine mentoring/training program that would be customized for each division. In addition, HR provides a host of other training activities, including Dale Carnegie Leadership courses, onsite reading courses (something that has been done for 15 years), some Internet-based training programs for IT and engineering, and courses and workshops in conflict resolution, leadership development, computer skills, communication, how to read financial statements, and diversity training. A microwave dish linked to Governors State University enables the company to access the National University Teleconference Network.

Diversity represents another critical area for the company. According to the CEO, "We have spent as much on diversity training as on technical training. Diversity training has really changed people here. They are much more receptive to things, and more open to change because they see things differently."

Bimba is savvy about accessing local resources to subsidize its training and development activities. To fund technical training programs, the company used DCCA's (Illinois Department of Commerce and Community Affairs) Industrial Training Program grant funds through a partnership with Northern Illinois University. In the past two years, they accessed funds for DCCA's Industrial Training Program and "Making Work Pay" grants. Senior managers are active at area high schools, working to bridge the gap between school and work.

Through the school-to-work program, Business Education Partnership, the CEO serves on the foundation at Governors State University, helping to advise educators on the skills, work ethic, and behaviors students need for employment. Last summer, an area high school teacher worked at Bimba to gain a better understanding of what employers are looking for in new recruits.

"In order to execute our business strategy, we must develop our workforce."

"I try to create a learning environment and to get employees to think about themselves as lifelong learners."

*Patrick Ormsby, President and CEO,
Bimba Manufacturing
Company*

Each year, the company spends 15 to 20 percent of its education budget on tuition assistance. Tuition is reimbursed for undergraduate credit courses, for vocational courses directly related to present or anticipated job responsibilities, and for graduate courses, which are intended to improve or maintain existing job skills. A letter grade of "A" is reimbursed at 95 percent of tuition; a "B" at 85 percent; and a "C" at 75 percent. Any lower grade is not reimbursed. Maximum tuition reimbursement per calendar year is \$5,250.

"Ideally," said the CEO, "we would like to set up individual learning accounts that each employee can use for any type of learning, but we don't have the resources now."

Integrating Learning and Work

Peer training, cross-training, and rotational assignments are a part of the culture at Bimba, and increase during downturns. "During business downturns," stated the CEO, "we take advantage of the slowed production to conduct more cross-training to increase overall company flexibility."

In this knowledge transfer process, experienced employees train less experienced employees within their departments and/or cross-train those unfamiliar with the practices of their departments. In the Accounting Department, for example, staff with degrees have successfully trained those without degrees in sophisticated accounting principles.

Bimba formalizes its peer training activities. Expectations are made clear before the arrangement begins. The inexperienced employees will have specific learning goals with deadlines and must report back to their

technically proficient. The key is the ability to form productive working relationships. Initially, Bimba had to overcome the resistance of workers who did not want to share their hard-won knowledge by offering them incentives to become trainers. Trainers are recognized by the company and this new role reflects positively on their performance evaluation.

Cross-training, which builds the capacity of the entire workforce, has long been a priority at Bimba, but because of steadily increasing skill requirements in the industry, it is even more important today. "Ten years ago," HR staff said, "an employee worked on just one machine. Now employees

work in teams or 'work centers' and are expected to know how to run multiple machines."

At the company's smallest facility in Frankfort, employees are rewarded for the number of days they cross-train, because cross-training enables the workforce to respond quickly to job orders, no matter who is absent. Accounting Department employees speak highly of this practice. "We have our procedures in place and continue to do lots of cross-training. We can switch jobs once a month and keep fresh in other areas. This allows us to learn and grow, have flexibility and have back-ups, and that means we can

take vacations when we need to." In that same department, several long-term employees agreed, "Without a lot of formal training, our people can do things they would have never been able to do 20 years ago." Cross-training and rotational assignments also offer a good way for employees to try out a job to see if they would be

COMPANY SNAPSHOT

STRATEGY USED	PARTICIPANTS			
	Management/ Supervisors	Technical/ Professional	Frontline Workers	Part-time Workers
Tuition assistance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
On-site workshops and training	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Financial support for attending off-site classes, seminars, workshops and conferences	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Training/education on company time (on- or off-site)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Online learning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Individual Development Plans linked to performance evaluations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Career counseling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Formal mentoring			<input checked="" type="checkbox"/>	
Job shadowing				

supervisors on their progress. Supervisors monitor the process, sometimes observing and recommending more effective techniques to the trainer, and evaluate both the trainer and the trainee. Performance reviews will often include an employee's ability to train other staff. The best trainers, it turns out, are not necessarily the most

interested in it in the future. Inevitably, this leads to internal turnover, but, as one manager explained, "We view this as good turnover."

Impact Assessment

Measurement is the final component critical to Bimba's comprehensive employee development system. The company spends a great deal of time and resources measuring results, monitoring procedures, documenting impact, and creating visual charts and graphs to communicate findings to employees. "If you don't measure and report pay-offs, then employees don't think it matters," explained the CEO. "Show them it matters."

HR measures the effectiveness of training by following the four-level model for evaluating training programs laid out by Donald Kirkpatrick. According to Fitzsimmons, "For all of our training programs, we measure the employee's reaction to the training (Level One—Reaction) and the amount of learning that occurred in the training through a pre-test and post-test (Level Two—Knowledge Gained). All new training programs that we anticipate will remain a permanent fixture of the overall training plan, and not a one-time event, are also evaluated on Levels Three and Four of Kirkpatrick's model. To measure Knowledge Transfer (Level Three), we look at the productivity, efficiency, and quality of individual performance before and after training. Using control groups, we compare the performance of employees who engaged in the training

with those who did not. For Level Four (Results) evaluation, we use company indicators such as quality, scrap rate, product margin, etc."

HR has conducted two comprehensive ROI studies to assess the impact of training activities on the overall company. Both studies measured the return on investment of the company's technical training program, Basics and Fundamentals of Machining. It took almost a full year for HR to convince key managers of the need to conduct these analyses, but the lobbying paid off. For the most part, "the return on investment was substantial," and now it is generally accepted among managers and board members that training and education contribute to the company's profit picture.

Bimba's growth continues to outpace the industry. Bimba is able to run its operation with a high ratio of employees to supervisors, largely because of its emphasis upon goals, performance measures, and employee development. Bimba has a low employee turnover rate—ten percent production, five percent office. And to date, Bimba has never had a layoff. As CEO Patrick Ormsby explained, "Employees come first at the company."

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