Mueller Service Lines

NEWS ABOUT MUELLER MARKETS, PLANTS, PRODUCTS, PERFORMANCE, AND PEOPLE

Pattern shop carves quality

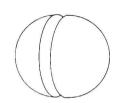
(Editor's note: This is the third in a series of articles tracing the steps in the process of making a product at Mueller Co. We are examining the various departments to see how they are involved with making our products, and how every person in each department adds to the quality of these products by putting in the most important ingredient — the Mueller Margin.)

You're probably familiar with a dress pattern and the kind of pattern that the frost left on our windows all winter. But how familiar are you with the kind of pattern used at Mueller Co.?

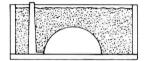
At Mueller, patterns are used to make our products through a process called sand-casting. (See diagrams for a simplified explanation of this process.)

Patterns are very important to this process because they determine the shapes of the cast parts for our products. To find out more about patterns, we visited the pattern shop at Mueller Co.'s foundry in Decatur.

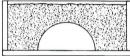
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1) A pattern is made of the desired shape to be cast.

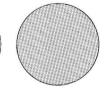


2) Then molding sand is packed around the pattern to form the mold.





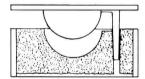




5) When removed, the shape of the cast metal is exactly the same shape as the pattern. (This process will be explored in more detail in the next issue.)

4) Molten metal is poured into this

sand mold and allowed to cool.



3) The pattern is carefully removed, leaving a cavity.

Meet Stanley J. Bogaczyk -V.P. Personnel and **Industrial Relations**

(Editor's note — The following is an exerpt from an interview conducted by the Service Lines editors with Stanley J. Bogaczyk, (pronounced Bo got check) new Vice President of Personnel and Industrial Relations.

SERVICE LINES: Mr. Bogaczyk, how do you view the name and reputation of our company?

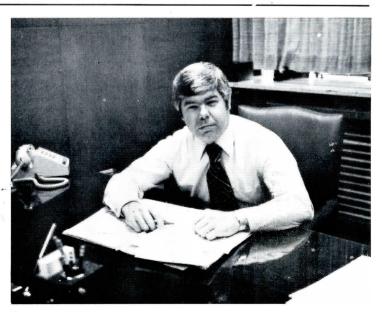
BOGACZYK: Mueller Co. has a name and a reputation which is excellent, and I'm speaking from some experience in the industry having been in it for some five or so years. Our company has a reputation of quality, integrity, and a fine offering of a superior product.

But something I've noticed is that outside of our marketplace, specifically the gas and water markets, we are a relatively unknown company.

This is undoubtedly the result of the fact that Mueller Co. is a privately held company, which means that its stock is held by a limited number of individuals and not traded on the public stock exchange. We don't request or receive the kind of publicity that a publicly held company - one whose stock is available for purchase by the general public would normally get.

Because one of our company's greatest assets is its name, we

Continued on page 3



"I see my primary role here at Mueller Co. as that of helping our company grow. And the biggest contribution to growth, I feel, is the development of human resources for the company." — Stan Bogaczyk describes his new position as Vice President — Personnel and Industrial Relations.

Pattern Shop continued



With a micrometer, a pattern maker checks the dimensions of a pattern for a curb box.

The art of patternmaking

"Patternmaking is an art," according to Harold Peer who supervises the pattern shop. "It requires patience, a lot of skill as a woodcarver and a steady hand for accuracy."

Harold tells us, "It takes a fiveyear apprenticeship to become a Class A pattern maker. But I've been at it for 30 years and I can tell you that it's a continual learning process. There isn't much repetition, so it takes a lot of thinking, which makes it interesting for me. There's always something new."

There are nine Class A pattern makers in the pattern shop, and most of them were trained at Mueller Co. Class A means they can take an engineer's blueprint, interpret it, sit down with their woodcarving tools and carve a precise master pattern out of a block of wood. (The blueprints are sent from industrial engineering as we learned from Rex Camfield in the last article.)

The master patterns are carved out of mahogany or pine. These woods are the best to work with because they have clear, close grains for precise shaping. The average time to complete a wooden master pattern is 40 hours. That's approximately the amount of time it takes to carve a pattern for a corporation stop with an Insta-Tite® connection. And generally, the larger the pattern, the more time it takes to carve.

The longest job that Harold can recall took 75 hours. It was a wooden master pattern for the cut-away miniature model of a Mueller hydrant that the sales representatives use.

Since the patterns will be used to make thousands of sand molds, wooden master patterns are converted into metal patterns to resist wear. Each pattern is reproduced into several metal or urethane copies and fastened to a plate for mass production of the casting. These are called pattern plates.

Metal patterns are durable but they are subject to wear. The pattern shop is responsible for the maintenance of these patterns. This calls for filling in nicks, machining rough spots, or in some cases, replacing worn out patterns with new ones.

Other master patterns, for low production runs, are converted into plastic. Plastic works well for these small quantities because it is strong and less expensive than metal. The plastic patterns are also made at Mueller Co.

The patterns are stored in a fire proof vault at the foundry which might remind you of a library. Patterns are kept on racks and filed like a library has cataloged books. There are approximately 5500 brass pattern plates, 2000 iron pattern plates, 3000 core boxes and 300 sets of plastic pattern plates kept there.

Patterns are made in Decatur.
Many are used in Decatur and
some are sent to Albertville and
Chattanooga. However, Albertville
and Chattanooga both have small
pattern shops for pattern
maintenance.

Mueller Margin

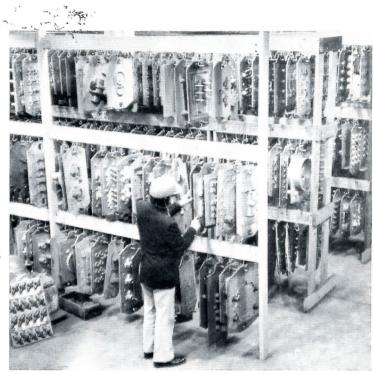
Harold tells us that Mueller Co. has tried purchasing patterns from outside the company in the past. But now all patterns are made in-house (in our plant). Harold explains, "That's because we know what we need. We have more control over the specifications and quality of the patterns, too."

"Quality is important. Since the cast shape is identical to that of the pattern, a flaw in the pattern

means a flaw in every product made using that pattern. Pattern makers are carving the quality right into our products," Harold tells us.

It's the care and pride that they take in their skill that makes our patterns the high quality that they are."

And that's exactly what the Mueller Margin is — extra care and pride in our work to do a better job.□



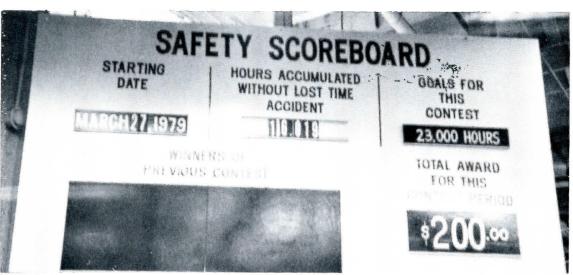
This vault room stores Mueller Co. patterns similarly to the way a library catalogs books.



Pattern maintenance is the responsibility of the Pattern Shop. This pattern maker takes great care in repairing a pattern.

Strictly Personal Decatur

NEWS ABOUT MUELLER CO. EMPLOYEES AND THEIR FAMILIES



NEW SAFETY PROGRAM NOW UNDERWAY

The Decatur Plant announced a new Lost Time Injury Reduction Program which commenced March 1, 1979. There will be contests, increased safety committee participation, and publicity to encourage employees to become more safety conscious, to take time and care to prevent accidents and not to hide them, and to reward the employees for doing so!

CONTEST

All Production Maintenance and Plant Service employees in the following departments will participate: 10, 20, 50, 60, 70, 80A, 80B, 31, 32, 33, 34, 35, 36, 37, 38, 39, 41, 41A, 44 (Test Lab & Model Shop only), 47, 100, 102 and 104.

Employees must have worked at least one (1) day during the award period and be on the active payroll the last day of the award period. Vacation shall be considered a day worked for drawing eligibility.

AWARDS

The contest will consist of awards, by drawing, for periods of hours worked in which there are No Lost Time accidents.

These periods shall consist of the following with total hours prorated among the three sections of the Decatur Plant.

One of three Safety Scoreboards in Decatur

Period	
1	Plant #4 27,000 Hrs.
1	Plant #1 East of Monroe 30,000 Hrs.
1	Plant #1 West of Monroe 23,000 Hrs.
12 101 0	

(From whichever Section that has No Lost Time Man Hours Worked - 4 drawings of \$50.00 each)

Perio	d		
2		Plar 40,500	nt #4 Hrs.
2	Ea	Plar ast of Mo 45,000	
2	W	Plar est of Mo 34,500	
m wh	ichever	Section	that

(From whichever Section that has No Lost Time Man Hours Worked - 4 drawings of \$75.00 each)

Period

3	Plant #4 54,000 Hrs.
3	Plant #1 East of Monroe 60,000 Hrs.
3	Plant #1 West of Monroe 46,000 Hrs.

(From whichever Section that has No Lost Time Man Hours Worked - 4 drawings of \$100.00 each)

acity	
Period	
4	Plant #4 67,500 Hrs.
4	Plant #1 East of Monroe 75,000 Hrs.
4	Plant #1 West of Monroe 57,500 Hrs.
	0

(From whichever Section that has No Lost Time Man Hours Worked - 4 drawings of \$100.00

eac	n)	
	Period	
	5	Plant #4 81,000 Hrs.
	5	Plant #1 East of Monroe 90,000 Hrs.
	5	Plant #1 West of Monroe 69,000 Hrs.
1		

(From whichever Section that has No Lost Time Man Hours Worked - 4 drawings of \$100.00 each)

DRAWINGS

When a Section achieves the No Injury Hours shown above, a drawing will be held for Production employees, from which three (3) names will be drawn, then another drawing will be held for confidential and supervisory employees from which one name will be drawn.

Employees will participate in the drawing where their Home Department is located, with a few exceptions where employees are permanently assigned to work in another Section.

*Whenever a Lost Time Accident occurs, a new contest period will commence the next day. A "Lost Time Accident" is defined as an injury one day which causes the employee to be absent the following day.

*Drawings will be held under supervision of the Safety Director, a member of Plant Management and a Safety Committee member from the area.

SPECIAL AWARDS

Period

Special awards will be made, in addition to the ones listed above, when the following No Lost Time Man Hours Worked are completed:

. 0.104	
1	Plant #4 94,500 Hrs.
1	Plant #1 East of Monroe 105,000 Hrs.
1	Plant #1 West of Monroe 80,500 Hrs.
has No Lost T	ver Section that ime Man Hours ving-allexpense

persons to Las	Vegas or \$500.00)
Period	
2	Plant #4 189,000 Hrs.
2	Plant #1 East of Monroe 210,000 Hrs.
2	Plant #1 West of Monroe 161,000 Hrs.

paid weekend trip for two (2)

(From whichever Section that has No Lost Time Man Hours Worked - 1 drawing - all expense paid trip for two (2) persons to Florida for a week or \$1,000.00)

Con't. back page



Loyd G. Hawkey has joined the Mueller Co. as Manager - Employee Relations. In this new position Mr. Hawkey will assist S. J. Bogaczyk, Vice President-Personnel and Industrial Relations in all functions, with an initial concentration in the recruitment area.

Mr. Hawkey joins Mueller Co. from the Georgia-Pacific Corporation in Taylorville, Illinois where he was Industrial Relations Manager. Prior to that he had extensive experience in all phases of Personnel with Tuttle Electric, Division of Emerson Electric and McDonnel Douglas Companies.

Mr. Hawkey was graduated from Eastern Illinois University and is a native of the Decatur, Illinois area. He resides in Taylorville with his wife Claudette, and their son, Mike.

APOLOGY FROM THE EDITOR

Some time back the responsibility for Service Lines changed hands. During this process we inadvertently left out the following item:

RETIREMENTS

John A. Harding, Universal Machine Operator, Department 70, 37 years, 11 months, 5 days. October 10, 1978 (Disability)

EDITORS NOTE:

John A. Harding, Age 61, Passed away October 15, 1978.

ROY C. WALL, Burgmaster Machine Operator, Dept. 80, 38 years, 1 month, 24 days, May 23, 1979.



Irvin K. Campbell has joined Mueller Co. as Manager - Manufacturing Programs. In this position he will report directly to the Vice President - Manufacturing and be responsible for coordinating operational programs within the Manufacturing Division.

Mr. Campbell received his B. S. Engineering and M. B. A. Degrees from Drexel University. He has extensive experience in manufacturing operations very similar in scope to the Mueller Co. with ITT and Westinghouse Corporations.

Irv, his wife Sharon, and their two children, will be relocating to the Decatur area in the near future.

SERVICE AWARDS DECATUR

10 years: Richard E. Marvin
Daniel A. Ellis
Lawrence E. Rhodes
Robert E. Blakeman
Roger D. Oldfield

20 years:

Roger D. Oldfield Donald E. Parkison Betty V. Wheatley Donald Dagley Richard McKinley

Richard McKinley
James A. Brandt
Terry McCoy
Wilma Badorek
Henry H. Austin
Laben F. Bowling
Harold G. Brunken

Jennie McDaniel

Edward A. Turner 30 years: Ray F. Foster



David C. Bagby has joined Mueller Co. as Manager - Cost Accounting for Decatur operations. In this capacity he will report directly to the Plant Controller and will be responsible for the Cost Accounting and Billing operations.

Dave received his B. S. in Business Administration from Youngstown State University in Youngstown, Ohio. He has an extensive background in cost accounting from his prior work with National Rubber Machinery and most recently with Valmont Industries in Omaha, Nebraska.

Dave and his wife Vicky will be relocating to the Decatur area in the near future.

PROMOTIONS

MR. C. H. ASHMORE is transferred from the position of Supervisor of Safety and Plant Protection to the position of Safety Director. Effective April 1, 1979.

MR. B. L. DAVENPORT is promoted from the position of Night Janitor Foreman, Plant #1, to the position of Plant Protection Officer. Effective April 1, 1979.

MR. DAVID M. SEAY is promoted from a Brass Foundry Molder to the position of Night Janitor Foreman, Plant #1. Effective May 1, 1979.

Con't. from front page

Period	
3	Plant #4 283,500 Hrs.
3	Plant #1 East of Monroe 315,000 Hrs.
3	Plant #1 West of Monroe 241.500 Hrs.

(From whichever Section that has No Lost Time Man Hours Worked - 1 drawing - all expense paid trip for two (2) persons to California for a week or \$1,500.00)

Period 4 Plant #4 378,000 Hrs. 4 Plant #1 East of Monroe 420,000 Hrs. 4 Plant #1 West of Monroe

322,000 Hrs.

(From whichever Section that has No Lost Time Man Hours Worked - 1 drawing - all expense paid Carribean Cruise for two (2) persons or \$2,000.00)

When a Section achieves the No Injury Hours shown above, names of all employees in the Section will be placed in the selection drum and one name will be drawn for the Special Award.



SAFETY GLASSES DO WORK!

On May 1, 1979, William Jarrett started to pour the first mold of the morning when the hot metal hit a cold weight and popped. William suffered some burns on the knuckles of his right hand and singed his left eye lash, however thanks to his safety glasses, his eyes were not damaged. The glasses were shattered!

A little extra effort... that's all it takes

to maintain the Mueller Margin

A little extra effort

We've seen it in the engineering and industrial engineering departments in past issues. We see it in the pattern shop in this issue. And we'll look for it in the foundry in the next one. A little extra effort . . . that's all it takes to maintain the Mueller Margin. Will we see it in your department, too? □

Stanley J. Bogaczyk continued

intend to capitalize on it by finding new ways to promote the Mueller name outside our marketplace.

We're not going to make any overnight transitions in the company, I think we all recognize that, but if we want to attract good people to support and strengthen our management team, it certainly helps to have a widely recognized, positive image.

SERVICE LINES: How do you see your role in the company? It is a rather new position, isn't it?

BOGACZYK: Yes, it's a new position. However, the duties I perform have generally been performed in the past in the company, but they were dispersed among officials, outside consultants and attorneys. That is a normal condition in a smaller company. But now that Mueller Co. has developed into a large company, it only makes sense that we have this new position to consolidate all activities and plan our growth.

With all the outside influence over business today, my job involves dealing with the government in many areas — whether we're talking about the National Labor Relations Act, the Civil Rights Act, OSHA, ERISA, and many others. Part of my responsibility will be to act as the administrative contact with the government in those areas. But I don't list this as my major role in the company.

What's really important is the organization and *relationship* between the employees and the business. Regardless of the administrative classifications made

by the government under which we tend to categorize groups of employees — bargaining units, females, minorities, supervisors, administrators, or whatever — the company has one commitment. We are committed to providing the opportunity for each employee to develop to his or her fullest potential, based solely upon merit and performance.

I really see my primary role as helping to manage the company growth. The biggest contribution I can make is to develop the human resources of our company to correspond with our overall goals and objectives. This will include formulation of labor relations policy, organization planning, compensation plans, training and development programs and a host of other personnel and administrative functions.

SERVICE LINES: What do you think about the area of the corporation's social responsibility, which is a major issue these days?

BOGACZYK: Our corporate responsibility, and in fact, any corporation's responsibility today is evolving into a social responsibility to some degree. This is quite different than it was years ago. I see some transitions going on today that would be difficult to believe fifteen years ago.

People are beginning to realize that a company can be a good corporate citizen as well as an employer and profit-maker. Mueller Co. has a long tradition of living up to this obligation. More so than do many publicly held companies.

SERVICE LINES: What are your feelings as to the employees' responsibilities in this — be it a manager, someone in the assembly line or on the shipping dock?

BOGACZYK: When you are a manager of a company, any company, your ultimate responsibility is to the owners of that company, through the management channels. This is equally true of publicly and privately held companies.

It may sound like an anachronism these days to say that when a company provides a person with a job, then that person working for the company has a certain reciprocal responsibility. But I do believe that it's true. Economics finally prevail in any corporation. If the company cannot justify selling products at a competitive price because of high labor content, and the company isn't getting the required productivity in return for that higher labor price, then ultimately everyone loses.

Too many times, we don't really sit back and think about this situation arising until it is too late. Frequently, the price of labor goes up beyond what can be recaptured in the price of the product. Without a corresponding increase in productivity, the company becomes less competitive. As a result, the company may start to lose business and perhaps even shut down. In that situation, nobody wins — not the company, not management, not the community and certainly not

the employee. Of course, the company also has a responsibility to provide for the safety and welfare of its employees. Obviously, then, productivity is the keystone to a successful enterprise that satisfies all parties.

However, I am very optimistic about the future of Mueller Co. As I previously mentioned, we have an excellent reputation and this has to be attributed to the people who worked for Mueller Co. over the years and contributed to this effort. The people that make up Mueller Co. also represent the future of the company and I look forward to assisting in that future.

Stan Bogaczyk came to Mueller Co. from ITT-Grinnell Valve Co. where he held a similar position. He also previously held the position of General Manager — Employee and Labor Relations with the Northeast Region of the U.S. Postal Service. Prior to that, he was Manager of Industrial Relations for the Okonite Company.

As a graduate of Rider College in New Jersey, he hold a bachelor's degree in Commerce. Stan also attended Seton Hall University in New Jersey. The Bogaczyk family — Stan, his wife Claire and their children, Mark, Michelle and Lauren — recently relocated to Decatur from Elmira, in New York. Besides work, Stan cites trout fishing and woodworking as his hobbies.



In the next issue . . .

In the next issue of SERVICE LINES, we will be interviewing Fred C. Ausnehmer. Fred has been appointed Vice President of Finance and Chief Financial Officer of Mueller Co. □

Mueller Co. pays increased medical benefits and premiums

Over \$230,000. That's the increase in costs, premiums and direct benefits for employees that Mueller Co. paid in 1978. Total disbursements in 1978 were \$1,894,374 up from \$1,664,449 in 1977.

What does this mean to you and your family? It means that you have extra money in your paycheck that doesn't get spent on medical expenses. In effect, you save money. It also means an extra margin of security for all of us.

Good news — new mortgages

Three new types of mortgages have been authorized by the Federal Home Loan Bank, the board that regulates Federally chartered savings and loan associations.

Two of the new mortgages — graduated payment mortgages and reverse annuity mortgages — may be offered nationwide. The third — variable rate mortgages — for the time being, may only be offered in Galifornia. (Note: Savings and loan associations are not required to offer these mortgages, the board has given permission to offer them if they so choose.)

These alternatives to the standard fixed payment type mortgage are being offered so the consumer has protection and flexibility in financing a home. Consumers may now make an informed choice by weighing the various options and choosing the one that best suits their financial needs.

Graduated payment mortgages

This type of mortgage has scheduled monthly payments that start out at a lower level than the standard type mortgage. These payments increase over the life of the loan at predetermined times, then after several years, level off at a predetermined limit.

For example, a 30-year \$35,000 loan at 8.5% would require \$269 monthly payments under the standard fixed payment type mortgage. Under the new graduated payment mortgage, the payments would start at \$238 the first year and rise to \$290 over the first 10 years and stay at \$290 for the remaining 20 years of the loan term.

Young families and families with lower to moderate incomes will find it easier to purchase a home with this new type of mortgage. The lower monthly payments in the early years help make a home more affordable. However, over the long term of the loan, graduated payment mortgages will

cost more than standard mortgages.

Reverse annuity mortgages

Older homeowners interested in getting a return on their major investment — their home, will find the reverse annuity mortgage appealing.

This plan involves providing the homeowner an income from annuity payments charged against the accumulated equity in their home. It also includes a provision for guaranteed refinancing at the end of any preset period of time and prepayment without penalty at any time during the loan term. Reverse annuity mortgages will be approved by the board on a case-by-case basis.

Variable rate mortgages

This type of mortgage has been the subject of much controversy because the interest rate on this mortgage changes with the market. The interest rate is tied to an index which means future monthly payments may vary and are "unknown" at the time the loan is taken out.

Because of the uncertainty of this mortgage, the board has set up some consumer safeguards. Interest rates may be changed only once a year with a maximum of ½% a year. The interest rate may increase up to 2½% total over the life of the loan.

Interest rate decreases are limited to ½% a year but there is no limit to the total decrease in the interest rate over the term of the loan. Also, borrowers must be given advance notice of interest rate changes.

Many state chartered lenders offer variable rate mortgages. The board felt that savings and loan associations needed to offer them, too, to maintain a competitive balance. At the present time, the board has determined that California's competitive situation is the only one that warrants offering this type of mortgage.

MUELLER CO. MEDICAL PLAN INCOME AND EXPENDITURES YEAR ENDED SEPTEMBER 30, 1978

RECEIPTS:

DISBURSEMENTS:

Balance Sheet as of September 30, 1978

ASSETS: None

Benefits for medical and doctors' expenses are paid from the general assets of the sponsor, Mueller Co.

Life and accidental death and dismemberment benefits are insured with Republic National Life Insurance Company.

LIABILITIES:

The only liabilities are the amounts for claims in process and which were incurred prior to September 30, 1978.

The above statement shows only cash receipts and payments. It does not include amounts for claims in process at the end of the year. Payments for benefits are paid as claims are submitted and approved. Insurance premiums are paid monthly. The plan does not operate from an established fund.

There were no party-ininterest transactions, no loans, obligations or leases in default. The statement of receipts and disbursements includes all transactions.

Those participating in the plan and their beneficiaries

can obtain a copy of the plan's annual report filed with the Internal Revenue Service for \$1.00 from the plant personnel department. A copy of the report may be examined at any of the company's personnel offices without charge.

Booklets describing the coverages and benefits in detail have previously been distributed to all employees. Extra copies are available without charge from any of the company's personnel offices.

Other documents are available from the plan administrator by specific request. □

Plan Administrator

Robert W. Mallow, Secretary-Treasurer Mueller Co. 500 West Eldorado St. Decatur, Illinois 62525 Telephone 217-423-4471

MUELLER CO.

DECATUR, ILL. 62525

Factories at Decatur, III., Chattanooga, Tenn., Albertville, Ala. MUELLER LIMITED, Sarnia, Ont., St. Jerome Que., Canada. Sales office and Western Service Center, Sparks, Nevada.

serving the water and gas industries since 1857