

The

Pipeline

SPRING 1992 VOL. 5 NO. 1

A Newsletter for Employees of the Tyco Family of Companies

GRINNELL NORTH AMERICAN OPERATIONS

Overview

◆ Grinnell Corporation has been North America's leading fire protection company for over a century, and today is by far the largest manufacturer, installer and supplier of automatic sprinkler and fire protection and detection systems in the United States, Canada, and Mexico. Since the acquisition of Wormald International Limited in 1990, Grinnell is the largest fire protection company in the world.

The 1980's was a decade of considerable growth for Grinnell in North America. The 1990's offer another decade of expansion opportunities. Grinnell's growth-through-acquisition strategy has positioned the Company as an industry leader, expanding its reach far beyond our roots as a New England manufacturing company. The Company's growth has been highly focused, strengthening our presence in the fire protection market, while simultaneously bringing us into the forefront of the flow control industry.

Grinnell is the leading manufacturer and distributor of a wide range of flow control products, including pipe and pipe fittings, tubing, many kinds of valves, hydrants, water meters, castings and related products. With a reputation for providing a wide range of high quality products and for prompt and efficient service, we have become the largest manufacturer and distributor of flow control products in North America.

Growth

The flow control group has been expanding steadily since 1987, when Grinnell acquired Allied Tube and Conduit, a leading maker of pipe, steel tubing and fence products. In 1988 Mueller was purchased, a top maker of water and gas distribution products. We combined the Mueller operations with those of Hersey, a valve and meter company which was acquired in 1986. In North

America, few companies, if any, can match the breadth of product offerings and depth of experience of Grinnell's flow control operations.

The latest addition to the Grinnell family is Canvil Ltd./Anvil Products, Inc. They manufacture forged steel fittings, forged steel valves, and welded and seamless pipe nipples.

With the acquisitions of Mueller, Allied, Hersey, and Canvil/Anvil, we have created a full-service company which sets the industry standard for fire protection and flow control products and services.

Looking Ahead

Grinnell is ideally positioned to expand its lead in both the domestic and international fire protection and flow control markets. Domestically, we will continue our strong market growth by responding to new sprinkler legislation, adding more innovative products to the Grinnell package and expanding our vast distribution network. In addition to fire sprinkler retrofitting, we will continue to monitor the growing residential sprinkler market in North America. Approximately 200 cities have passed mandatory residential sprinkler ordinances, and there is increased legislative momentum to insure this market continues to expand throughout the 1990's.

Grinnell's North American operations, with numerous locations in the United States, Canada, and Mexico, look forward to continued success and expansion and carrying on the tradition of excellent service Grinnell customers have come to expect. ■

(See centerfold map for locations)

FromTheTop



L. Dennis Kozlowski, President

In December, L. Dennis Kozlowski was named Chief Executive Officer of Tyco Labs, effective July 1, 1992. Dennis has been president of Tyco and Grinnell for the last few years. Pipeline associate editor Kathy Stockman recently interviewed Dennis regarding his future responsibilities as CEO. Following are a few highlights from the interview.

Pipeline: *How will your new responsibilities as chief executive officer differ from your current role as president of Grinnell and chief operating officer of Tyco?*

Kozlowski: Actually, as CEO, I'll be doing many of the same things that I do now. Operations will continue to report to me just as they have in the past, and many of my day-to-day responsibilities will remain the same. One difference is that I'll be more involved in making strategic decisions for the company, along with our chairman, John Fort. Becoming CEO is more of a natural progression of my current responsibilities rather than a major shift.

Pipeline: *How do you go about setting the direction for a corporation the size of Tyco with so many different companies?*

Kozlowski: We all work to benefit the owners of the company - the shareholders - by developing an increasingly profitable company. We set our direction by working with people in our companies to gain their insight and advice. We also use common sense. We always try to take the course of action which will provide some flexibility so that we'll be able to adapt to changes as needed.

The key is to find a balance between setting the right course and making the necessary adjustments in order to reach your goal. In a way it's like sailing. You set the course when you begin your journey, but you continually check to see if you're on course. If you're not, you make the necessary adjustments. Occasionally, you may hit some bad weather or some other unanticipated occurrence, and you might have to tack or jibe to reach your destination, but you make the necessary adjustments without ever losing sight of your goal.

Pipeline: *You've had quite a bit of experience with the company, initially as assistant controller and director of Internal Audit for Tyco, and most recently as president of Grinnell. Can you recap your career with the company, and do you feel your various roles at Tyco and Grinnell will help you in your new role as CEO?*

Kozlowski: Absolutely. When I joined the company in 1975, I worked for five years in the financial area gaining a solid understanding of the underpinnings of Tyco. When the company acquired Ludlow Corporation, I became its vice president of finance, then president. Two years later, I moved back to Grinnell as president and was named to Tyco's Board of Directors. In 1989, I became chief operating officer and president of Tyco. I had changed jobs within the company about five times. In addition to becoming somewhat of an expert on relocation, I gained valuable insight and knowledge about the organization, its operations, finances as well as the industries it's involved in. This multidimensional orientation has provided me with a lot of information about the company at a working level. You could say I've had a lot of on-the-job training, which I believe has served me well and will continue to help me in my new role as CEO.

Pipeline: *How do you keep a perspective on the corporation?*

Kozlowski: As I've come up through the ranks, I've gotten to know quite a few people in the company and have developed personal relationships with many of them. I also maintain an "open door" policy so that anyone, at anytime can come talk to me. I encourage this for all of our managers as well. My greatest frustration as the company has grown is that even though I'm spending half my time traveling to our various locations, I have less time to spend with our operations personnel around the world. While I enjoy my responsibilities, I do miss the amount of personal contact I have with employees.

Pipeline: *Looking ahead, what do you see for the company's future?*

Kozlowski: I think it's extremely important to focus on increasing shareholder return by maximizing our earnings per share. We'll also continue our philosophy of decentralized management and empowering our employees to make decisions. We will continue to encourage employees to become company owners through a generous employee stock purchase plan. I really believe we can achieve these objectives by constantly seeking the best management possible. We'll promote this approach by recognizing and rewarding employee competence and supporting diversity in our work force.

Pipeline: *When you're not wearing your CEO hat, what kinds of things do you do to relax?*

Kozlowski: Well, I relax by running, playing tennis, racing sailboats and by getting the really big picture while flying helicopters. It helps me to put things in perspective. ■

New Product

Gruvlok Breaks the Steam Barrier

◆ Congratulations are due to Grinnell Corporation which recently introduced their Gruvlok Grade S Gasket; a technologically advanced grooved coupling gasket designed specifically for steam service applications. This product represents breakthrough technology as it is the first gasket to achieve superior results in steam and hot water service applications.

In addition, the new Gruvlok Grade S Gasket significantly outperforms the EPDM (the gasket currently available) in hot water and steam applications. The gasket retains its properties at elevated temperatures in excess of 230° F and will maintain its flexibility and elasticity ranging down to -40° F; it also has superior heat resistance.



New Gruvlok Grade S Gasket

"We are confident this product will be the standard-bearer of the industry," stated Ed Coughlan, Manager - Technical Services located at our Cranston, Rhode Island USA Research and Development facility. "Our on-going research and development of the Gruvlok Grade S Gasket assures that we will continue to make significant progress in the future for higher pressure and temperature for steam as well as hot water service applications. This breakthrough affirms the Gruvlok piping system as the innovative leader in all phases of the grooved piping market," he concluded.

Grinnell has done it once again Breaking all barriers in gasket technology.... Applause is in order!! ■

Pipeline Committee

Tamera Balkus, Exeter
Terri Blouin, Exeter
Janet Brode, Exeter
George Mathis, Mueller/Chattanooga
Lou Chiesa, Exeter
Rose Dougherty, Exeter
Ed Federman, Australia (Wormald)

Peggy Fleckenstein, Mueller/Albertville
Pat Fleetwood, Mueller/Decatur
Andrew Hallack, Brussels
Barbara Jacques, Exeter
Susan Lane, Allied/Harvey
Don Lanier (Nancy Martin), Statesboro Mfg.
Lily Legenza, SS/Toronto, Canada

Scott MacArthur, Exeter
Jamilah Massod, Australia
Cheryl McCarthy, Exeter
Helene Muha, Canada (Canvil)
Wayne Murphy, Columbia PA Mfg.
Gary Nadolny (Jim Cox), Ansul/Marinette
Jim Phillips, Henderson Mfg.

Nancy Ross, Exeter
David Rovelto, Exeter
Katharine Stookman, Exeter
Viviane Vanovermeire, Brussels

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The Tyco family of companies includes

Armin Corporation, Grinnell Corporation, Ludlow Corporation, Simplex Wire & Cable, and Tyco Printed Circuit Board Group



The Spotlight

GRINNELL'S TRADE SHOW EXHIBIT: "ON THE ROAD AGAIN..."

The purpose of a trade show is to get products or services displayed at a gathering of interested organizations within a given industry. For example, a "construction trade show" will usually include products from every conceivable phase of the construction industry, and then some! Trade shows are scheduled by various organizations throughout North America during almost every month of the year and attendance is usually by invitation, generally they are not open to the public.

Because of the range of building products and services we can provide, Grinnell's exposure at these trade shows is very important. It is a great way to make contacts within the industry: potential customers can pick up Grinnell product literature, touch Grinnell products which are on display and talk with Grinnell salespeople. At times we have even scheduled press conferences in our booth with various trade journals to announce new products.

Wayne Marcotte, Advertising/Marketing Services Manager, and his staff in Cranston, Rhode Island take great care to organize every tiny detail which goes into making the Grinnell exhibit a success at each trade show it is involved in. "All trade show attendees are potential leads," Wayne comments, "but we usually come home with a good percentage of quality sales leads."



THE GRINNELL CITY - premiered at the ASHRAE show, January, 1992



The "seasoned" U.S.A. set up and tear down crew - B. Bussierre, F. Wilhelm, B. Koester, E. Riess



The "Northern" veterans of Canadian set up and tear down - D. Bourgeois, A. Lamothe, D. Leduc.

Much of this is a direct result of the way our products are displayed and the attention they draw. "We have won several 'Best of Show Awards' for our exhibits," Wayne says proudly, "but the best recognition is having our competitor's advertising manager stop and say how great Grinnell looks!"

Painstaking preparations go into the setting-up of this complex exhibit at each individual trade show. When the show is over, it is again torn down, crated up and shipped off to wherever the next show is scheduled. The Grinnell trade show exhibit is always, "on the road again!" ■

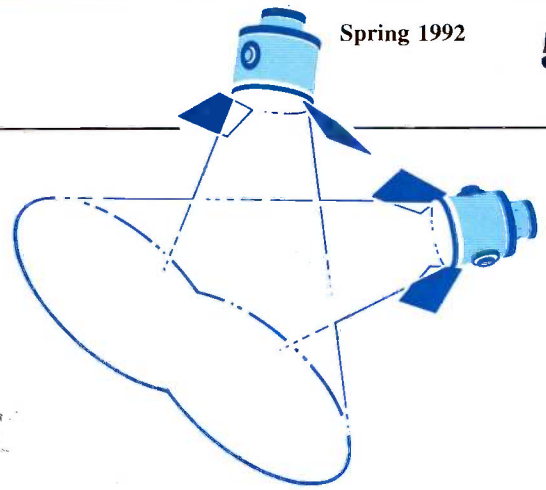
THE LEGACY OF ALBERTVILLE CONTINUES

♦ "Countdown to Albertville," the television commentator announced, and then they started counting the phone calls. The Albertville Chamber of Commerce could have begun selling tickets for the Olympics right then and there. But wait a minute.... which Albertville. Where? Why? There are four Albertvilles around the world and two are sister cities. One is in Alabama, U.S.A. and one is in France. The one in Alabama, U.S.A. is known as the "fire hydrant capital of the world" and is where our Mueller plant is located. The sister city is located in the French Alps near the Swiss border and was the home of the 1992 Winter Olympic Games. The TV announcer didn't tell the audience that it was Albertville, France he was talking about. That's why calls came into the Albertville, Alabama Chamber of Commerce requesting tickets to the opening ceremonies and figure skating events.

There are more differences between the cities than simply geographic location.

They both have sports stadiums but the U.S. Albertville holds 2,000 fans when the local Aggies play. The other Albertville holds 35,000 and the Olympics opening night ceremonies were watched by an estimated one billion television viewers.

People in Albertville, Alabama, U.S.A. ski, but they do it on water, on nearby Lake Gunterville which is also known as the best bass lake in America. They also skate but its at the Carousel roller rink and Mega-Skate for \$2, with skate rental extra. A major basketball team, the Harlem Globe Trotters, once performed at the gym where the high school team plays and townspeople can swim in the Olympic size pool at the recreation center. So you can see that there are Winter and Summer sports in Albertville, Alabama but not like the Olympic Games.



The focus of the Olympics is on excellence. That is where these two cities, separated by continents, are similar. The residents of Albertville, Alabama agree on the quality of life. They feel that they have good, decent, hard-working people living there. The work ethic is very much alive. One native son remarks, "The main thing about Albertville is the hospitality and the friendly, hard-working people."

Cancel my plane ticket to France, I'll fly to Alabama, U.S.A. this trip! ■



Joe Gallagher,
Aquila Club Winner

Correction

In our Fall Issue of the Grinnell Pipeline in the 1991 Aquila Club Winners list we left out Joe Gallagher, Mueller, Milton. We are very sorry, Joe.

Achievements



OLYMPIC HOPEFUL

◆ During January 1992, Chris Coughlan and Dusty Grant competed with the U.S. Junior National Luge Team in the Junior Luge World Championship at Sapporo, Japan. Chris is the son of Ed Coughlan, an employee at our Cranston, RI facility. The boys were off to a rocky start finishing fifth after crashing on their second run! Fortunately, neither was seriously hurt. During training they had several mishaps leaving them with a bleak forecast for the future. But... on the final race day, "they put it all together" and had their best time on the last run to move them into third place and capture the Bronze Medal. This achievement has never been matched by any other U.S. Junior Luge Doubles team. Although they did not qualify for the 1992 Albertville France Winter Olympics, LOOK OUT NORWAY IN 1994!! ■



Chris Coughlan, son of Ed Coughlan, is part of a two-person sled-racing team and is an Olympic hopeful!
(Photo courtesy of Providence Journal-Bulletin)



The Statesboro Plant reaches the milestone of working 1 million hours without a lost time accident for the third time since joining Tyco.

year, supervisors of Grinnell's 22 departments held an impressive 1,086 safety meetings. Employees are constantly involved in the plant's safety standards.

Working one million hours without a lost time accident shows the high quality of employee safety awareness in Statesboro and an example of their commitment to be the best. Safety awareness and accident prevention are the keys to improving lost time injuries. "Everyone Wins" is the real payoff when employees are involved and committed to eliminating accidents on the job. ■

A MUG FOR A MILLION

◆ For the third time, the Grinnell Corporation Statesboro Plant reached the safety milestone of surpassing one million hours worked without a lost time accident. This is an impressive accomplishment in any industry and particularly significant in a foundry and machining operation with 648 employees.

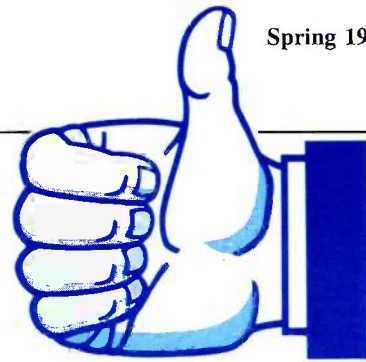
To celebrate this record, employees were given free coke and coffee for a day. Also, coffee mugs were made listing the accomplishment dates of November 3, 1990 through August 16, 1991.

Statesboro has always put safety foremost in its operations. During the years 1985 through 1987, a record 2,350,000 hours were worked without losing time due to a work related accident. Safety meetings are only a portion of Statesboro's total safety commitment. During the 1991



IDEAS 400 PROGRAM A GIANT SUCCESS -

They were Ready for the Race



♦ Grinnell Supply Sales Branches participated in the IDEAS 400 Program during the fall of 1991. The purpose of the program was to generate improvements to the new Grinnell Supply Sales Computerized Distribution System which runs on IBM AS/400 computers. Each of the 39 Branches formed one or more teams to develop ideas which were focused on improving productivity and reducing cost through automation. Teams whose ideas were accepted as excellent or outstanding received awards for catalog merchandise. In addition, the team with the best overall suggestions received a substantial bonus.



"The response to the program has been outstanding," said Tom Lynch of Exeter, the program coordinator. "Over 500 ideas have been submitted from 60 teams throughout the U.S. and Canada. Some ideas have been very innovative, while others have been simple but effective." Of the ideas submitted, twelve were ranked "outstanding," forty eight "excellent," and seventy nine "honorable mention." The grand prize of \$5000, in merchandise, was awarded to the Chicago Branch. The top five finishers were as follows:

- Chicago -
- St. Louis -
- Winnipeg -
- Cleveland -
- Houston -

! Congratulations - Congratulations - Congratulations !

The program is expected to produce between 50 to 100 system improvements during 1992. ■



Grand Prize winners of the Chicago Branch.

Standing:(L to R) Denise Ayala, Cheryl Leigh, Diane Lawrenz, Debbie Novak, Tom McIntyre, Gil Lopez.

Seated:(l to R) Jim Prankus, Brenda Hearne, Carmen Samara, Brenda Zack, Dave Dorich, Sheila Maraffino.

L E G E N D NORTH AMERICAN OPERATIONS

FIRE PROTECTION

USA

Albuquerque, NM
Anchorage, AK
Atlanta, GA
Austin, TX
Baltimore, MD
Beaumont, TX
Birmingham, AL
Boston, MA
Buffalo, NY
Chantilly, VA
Charleston, SC
Charlotte, NC
Chattanooga, TN
Chicago, IL
Cleveland, OH
Cincinnati, OH
Columbus, OH
Dallas, TX
Denver, CO
Detroit, MI
East Meadow, NY
El Paso, TX
Everett, WA
Fayetteville, NC
Fresno, CA
Harrisburg, PA
Hartford, CT
Honolulu, HI
Houston, TX
Huntsville, AL
Indianapolis, IN
Jacksonville, FL
Johnson City, TN
Kansas City, KS
Little Rock, AR
Las Vegas, NV
Lexington, KY
Louisville, KY
Los Angeles, CA
Lubbock, TX
McAllen, TX
Memphis, TN
Miami, FL
Milwaukee, WI
Minneapolis, MN
Mobile, AL
Monroe, LA
Nashville, TN
New Orleans, LA
New York City, NY
Newark, NJ
Newburgh, NY
Oklahoma City, OK
Omaha, NE
Philadelphia, PA
Phoenix, AZ
Pittsburgh, PA
Portland, ME
Portland, OR
Providence, RI
Reno, NV
Richmond, VA
Rochester, NY
Sacramento, CA
Salt Lake City, UT
St. Louis, MO
San Antonio, TX
San Diego, CA

San Francisco, CA
San Juan, PR
Santa Rosa, CA
Scranton, PA
Seattle, WA
Spokane, WA
Tampa, FL
Temecula, CA
Tifton, GA
Toledo, OH
Tucson, AZ
Tulsa, OK
Tupelo, MS
Van Nuys, CA
Wichita, KS
Wilmington, DE

Mexico

Cancun, Mexico
Juarez, Mexico
Mexico City, Mexico
Monterrey, Mexico

Canada

Breslau, ON
Calgary, AB
Edmonton, AB
Halifax, NS
Hamilton, ON
London, ON
Montreal, PQ
Oshawa, ON
Ottawa, ON
Regina, SK
St. John's, NF
Saskatoon, SK
Toronto, ON
Vancouver, BC
Westbank, BC
Windsor, ON
Winnipeg, MB

SUPPLY SALES

USA

Atlanta, GA
Baltimore, MD
Bloomington, MN
Canton, MA
Charlotte, NC
Chicago, IL
Cincinnati, OH
Cleveland, OH
Dallas, TX
Denver, CO
Detroit, MI
El Cajon, CA
Fullerton, CA
Hayward, CA
Houston, TX
Indianapolis, IN
Kent, WA
Lincoln Park, NJ
Longview, TX
Longview, WA
Memphis, TN
Milwaukee, WI
Nashville, TN
New Orleans, LA

Norfolk, VA
N. Kansas City, MO
Philadelphia, PA
Phoenix, AZ
Pittsburgh, PA
Portland, OR
Richmond, VA
Sacramento, CA
St. Louis, MO
Tampa, FL
Tulsa, OK

Canada

Calgary, AB
Edmonton, AB
Montreal, PQ
Nanaimo, BC
Regina, SK
Sarnia, ON
Saskatoon, SK
Stoney Creek, ON
Sudbury, ON
Thunder Bay, ON
Toronto, ON
Vancouver, BC
Winnipeg, MB

MANUFACTURING AND FABRICATION

USA

Albertville, AL (Mueller)
Blue Island, IL (Allied)
Chattanooga, TN (Mueller)
Cleveland, NC (Fab. & Mfg.)
Columbia, PA
Cranston, RI
Dallas, TX (Fab.)
Decatur, IL (Mueller)
Fresno, CA (Fab.)
Ft. Worth, TX (Anvil)
Greencastle, PA (Anvil)
Harvey, IL (Allied)
Henderson, TN
Houston, TX (Allied)
Indianapolis, IN (Fab.)
Liberty, TX (Allied)
Longview, TX (Anvil)
Lubbock, TX
Marinette, WI (Anvil)
Naugatuck, CT (Fab.)
Philadelphia, PA (Allied)
Renton, WA (Fab.)
Statesboro, GA
Tampa, FL (Fab.)

Canada

Acton Vale, PQ (Canvil Ltd.)
Milton, ON (Mueller)
Mississauga, ON
Simcoe, ON (Canvil Ltd.)
St. Jerome, PQ (Mueller)

RESEARCH & DEVELOPMENT

Cranston, RI

CENTRAL DESIGN GROUP

Dallas, TX

GRINNELL HEADQUARTERS

Exeter, NH



Grinnell
CORPORATION





NT

CANADA

katoon

MB

Winnipeg

ON

PQ

NF

NF

St. John's

PE

NB

St. John

NS

Halifax

ME

Portland

VT

NH

Exeter

Boston

MA

Providence

RI

CT

New York City

NY

Hartford

PA

Pittsburgh

Philadelphia

NJ

DE

Washington D.C.

MD

ATLANTIC OCEAN

SD
STATES

ND

MN

Minneapolis

WI

Milwaukee

MI

Detroit

IL

Chicago

IN

Indianapolis

OH

Cleveland

WV

Louisville

KY

Richmond

VA

Charlotte

NC

SC

Charleston

GA

Atlanta

MS

Montgomery

AL

Mobile

LA

New Orleans

TX

Houston

OK

Oklahoma City

AR

Little Rock

IA

St. Louis

KS

Kansas City

NE

Omaha

MEXICO

Mexico City

Bahamas

Cuba

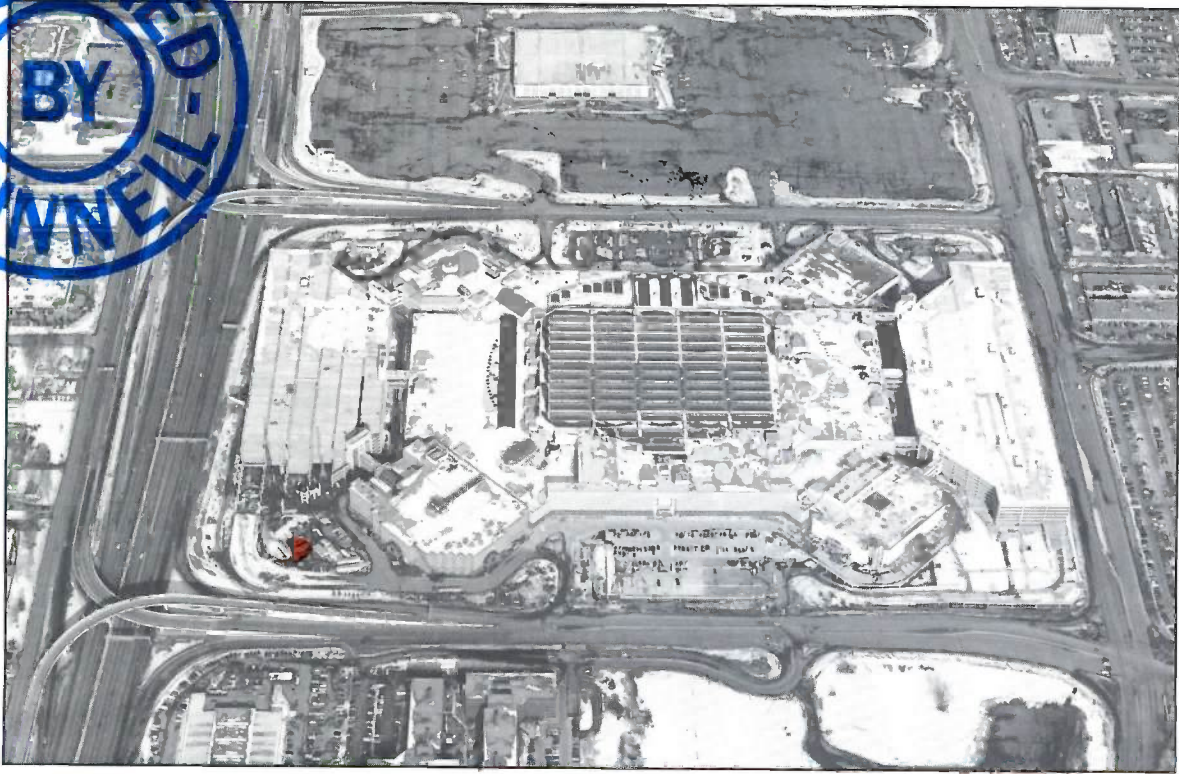
Jamaica

Dominican Republic

Haiti

San Juan

PR



Aerial view of the Mall of America in Bloomington, Minnesota, USA (photo courtesy of Bordner Aerials).

THE MALL OF AMERICA - “What Will They Think of Next?”

◆ Do you find a trip to the local shopping mall to be an unexciting experience? Are your kids constantly asking when they can go to Disney World? If the answer to either of these questions is yes, you may want to make plans to visit the Mall of America. Located near Minneapolis, Minnesota in the town of Bloomington, the Mall of America may have everything you need for your next family outing and it may just redefine the phrase “shop ‘til you drop.” When complete in August, 1992, the Mall of America will include over 400 stores, a 1.2 million gallon aquarium complex called “Underwater World,” a 5,000 square foot “LEGO Showplace” featuring the well-known building block toy, a two-story “Golf Mountain” miniature golf course, 14 movie theaters, nightclubs, comedy clubs as well as a 26 ride amusement park. That’s right! A 26 ride amusement park spanning nearly seven acres with a full size roller coaster and a log flume ride. Built by Knotts Berry Farm of California, the theme park will feature characters from the “Peanuts” comic strip and will be known as “Camp Snoopy”

The mall resembles a flattened X from the air, with the theme park at its center and two 6,000 car parking garages on opposite sides. At each point of the X will be a large three-story department store. Skylights make up 60% of the theme park roof, providing ample natural light to brighten the interior. In total, there will be 4.2 million square feet of space at the mall and there are plans for two adjacent hotels with 1,000 rooms. To avoid intimidating visitors with the sheer size of the project, the developers have broken the mall into four interconnected “pedestrian streets,” each with a different character and each opening into the theme park. (continued on the next page)

THE MALL OF AMERICA - Continued

With such a massive enclosed complex, visitor safety is very important. An integral part of visitor safety is the fire protection system provided by Grinnell. Grinnell's contract for the mall project is valued at nearly \$7,000,000 and will span two years. At the completion of their efforts, Grinnell employees will have installed, among other things, 36,000 sprinkler heads and 118 miles of pipe as well as the fire protection equipment needed to protect a 45-foot tall walk-in "Snoopy" replica. Other notable numbers include 209 wet, dry, hood and preaction systems; 2,500 feet of underground piping; 64 standpipes with a total of 241 hose valves and 5 fire pumps. The majority of the materials for the project are Grinnell manufactured products and most of the fabrication for the project was done by Grinnell Supply Sales in the Bloomington and Indianapolis, Indiana, U.S.A. fabrication plants.

The majority of the engineering for the project was done by the Grinnell special projects engineering group in Dallas, Texas and, at various times, involved up to 12 engineers. The entire project used extensive computer aided design (CAD) techniques and the Grinnell Design System (GDS).

While some may question the wisdom of building such a large mall in these current economic times and in a city that already has several "normal size" malls, the developer is naturally optimistic since the mall is currently 70% leased.

Given this and the American public's appetite for "bigger and better," it's probably a safe bet that visitors will be waiting in line when the Mall of America opens its doors this summer. When the doors do open, visitors will enjoy this mega-mall and amusement park while being silently *protected by Grinnell*. ■



Grinnell stands proud at The Mall of America

Ansul Employees Receive Attendance Award



Ron Carriveau, Tool and Die Maker (center), accepts his award jacket from Supervisor Steve Langill (left), and Paul Gregoire, Industrial Relations Manager (right).

◆ On December 31, 1991 seventy-four (74) hourly employees at Ansul Fire Protection, Marinette, Wisconsin, U.S.A. became eligible for award jackets under the company's new "Wellness/ Attendance Program." The program was designed last June to compensate and reward employees with outstanding attendance records.

Under the program, employees who attain eighteen (18) consecutive months, without incurring any absence, receive an Ansul jacket. For each additional six (6) months without any absence, employees receive a day off with pay.

According to the Human Resources Department, "Employees have taken a great interest in earning their jacket. Eighteen months without an absence is quite an accomplishment in the eyes of one's peers at Ansul." ■

CHATTANOOGA STANDS TALL

♦ The Mueller Co. employees in Chattanooga, Tennessee are known as winners in their community in both the business and sporting arenas. Mueller Co. sponsors many community activities in which their employees can participate.

The Mueller Co. Employee Basketball Team is led by player/coach Jerome Jackson (Foundry Pep Set Operator). They have won the Y.M.C.A. Early Bird League and/or the Y.M.C.A. Winter League 14 times in the last 8 years. This year's team has proudly continued the tradition by winning the Early Bird Championship once again.

Chattanooga is proud of the winning performance of it's employees both at work and on the court . ■

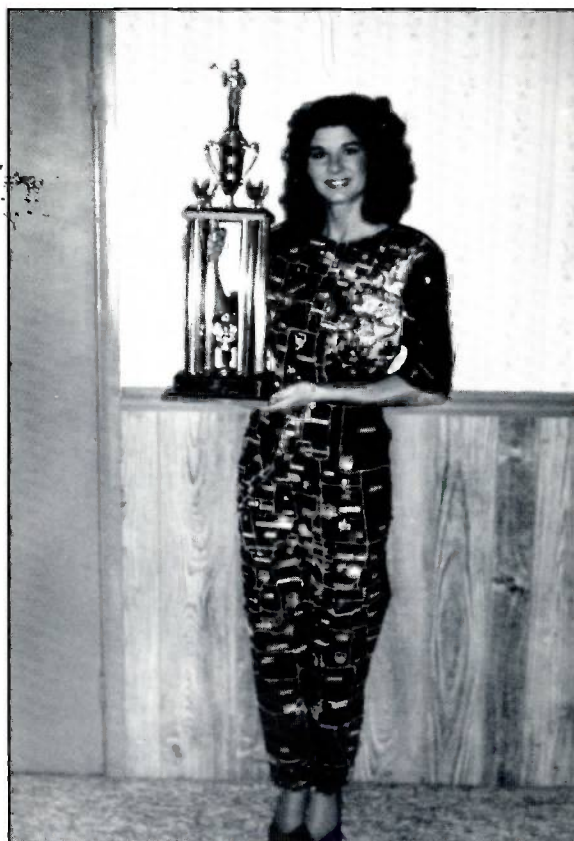


Top row: Jerome Jackson

Middle row (L to R): Todd Landsen, Francis Steger, Adrian Ellis

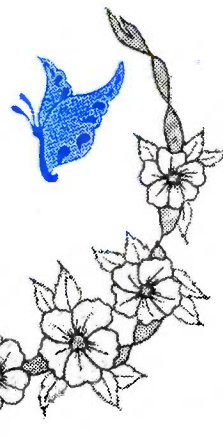
Bottom row (L to R): Reginald Favors, Leon Strickland

Beauty Contestant



Elisa Ziolkowski, daughter of Ann Ziolkowski (Allied Tube & Conduit) recently competed in the Miss Illinois Beauty Pageant sponsored by Allied. Elisa won 1st place for her Illinois roadmap costume which she made by hand. Congratulations to Elisa and her proud mother.

*Is it a caterpillar's
ending
or a butterfly's
beginning?*



ReThink - ReUse - ReCycle

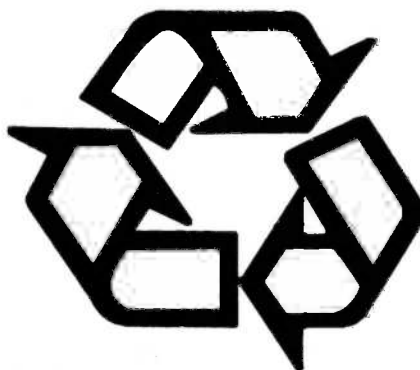
◆ Thanks to the efforts of Alida Potocki, a buyer in the Purchasing Department at Allied Tube and Conduit's Plant in Harvey, Illinois, U.S.A., over 450 trees were saved last year!

Their recycling effort began somewhat informally late in 1990 and was limited to aluminum cans and computer paper. Then in the spring of 1991, Alida made arrangements with Recycling Services, a Chicago, Illinois, U.S.A. firm, which recycles all office paper; including stationery, white and colored bond paper, business forms, even index cards and used note paper.

Representatives from Recycling Services came to the office and held employee meetings to launch the newly expanded recycling program. They talked to employees about recycling in general, explained how the program would work and answered questions. At the end of the meeting the employees were given a desk-side recycling container, and challenged to "Rethink - Reuse - Recycle."

The program is already a great success. In the first six months, they not only saved the trees, but also saved almost 186,000 gallons of water, prevented 1,600 pounds of pollution from being released into the atmosphere, and saved \$1,500 in disposal costs. In addition to the aluminum and office paper recycling program, they also recycle scrap metal and used pallets. Their Recycling Committee is now looking into recycling wood.

Alida said she would be happy to share the recycling knowledge she and the rest of the Committee have gained with any other of the Tyco family who would like to set up a program or expand their current efforts. ■



**PLEASE
RECYCLE**

The Pipeline is now being printed on recycled paper. As part of the effort toward environmental awareness, we encourage all our employees to support recycling.



The truck in the background is a mobile darkroom, utilized for field projects involving radiography where on-site development is required. Joe DeSantis (left) and George Mulvaney (right) are seen here at a new gas metering station.

Over 25 Years of Service: Non-Destructive Testing Group

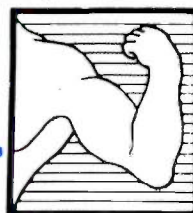
♦ In order to improve the availability and safe distribution of natural gas, a number of major gas line expansion projects have been initiated in the U.S. over the past few years. Grinnell's Non-Destructive Testing Group, based in Cranston, Rhode Island, U.S.A., has been heavily involved in some of these projects.

The term "non-destructive testing" is used because the methods used do not harm the components being tested. Using x-ray technology similar to that used by doctors, the highly experienced radiographers and technicians in this group examine welds and other connections on gas pipes to determine if they meet safety standards. In instances where welds are rejected, repairs must be made until all defects are removed.

In addition to gas line inspections, the group has been asked to examine a wide variety of items ranging from submarine hatches to new toys for kids!

This rather unique service, coupled with Mueller's gas distribution products, makes Grinnell one of the few full service companies in that industry. ■

FITNESS TIPS



YOUR MUSCLES

BUILD UP YOUR MUSCLES

As a general rule, gains in muscle strength are made by lifting heavy weights a limited number of repetitions. Gains in muscular endurance involve lifting lighter weights numerous repetitions.

STRONG YET FLEXIBLE

The idea that heavy muscular development inhibits movement is false. Studies show that strength training speeds up reaction time, and with stretching exercises, does not lessen flexibility.

FAT OR MUSCLE?

Exercise does not convert fat to muscle. The right combination of exercise reduces fat tissue while building muscle tissue. Since muscle is heavier than fat, you may reduce body measurements without reducing body weight.

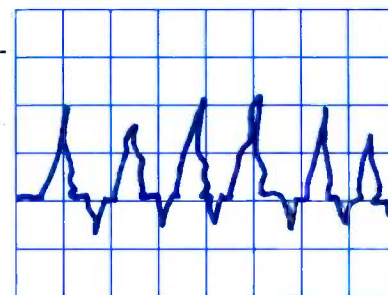


FROM THE PRESIDENT'S
COUNCIL ON PHYSICAL
FITNESS AND SPORTS

Another Word about the NEW Pipeline

With this issue of **The Grinnell Pipeline** we are again changing the masthead on the front cover. Our new name: **The Pipeline** will reflect the expansion of our publication to include the family of Tyco companies. The Pipeline Committee will establish contacts with personnel at Armin Corporation, Ludlow Corporation, Simplex Wire and Cable, and Tyco Printed Circuit Board Group who will submit articles for inclusion in **The Pipeline**. The Pipeline Committee invites articles from Tyco employees all around the world.

Health Watch



The Pipeline's Health Watch column is devoted to helping you improve your overall health and fitness. Being healthy makes for a happier life. It also helps you, and the Company, control the cost of providing a good benefits package. In this issue we focus on maintaining a healthy lifestyle.

A LIFETIME OF FITNESS!

♦ If you're like most people you've probably made a resolution to lose 10 pounds, get back in shape with an exercise program, or both! This Health Watch column will show you how you can develop a healthy lifestyle for you and your family, through preventive care, diet, and exercise.

TAKING CARE OF YOUR HEALTH

One of the best ways to stay healthy is to practice preventive care. Regular check-ups and blood pressure and cholesterol screenings are effective preventive health measures

Taking care of yourself means following these simple preventive health tips:

- o Don't smoke! If you're trying to quit, consider joining a smoking cessation program.
- o Avoid drugs and excessive alcohol use.
- o Get plenty of sleep! Approximately seven to nine hours per night are recommended for 35-year-olds; five to seven hours per night are recommended for 65-year-olds.
- o Avoid over exposure to the sun. Wear sunscreen and protective clothing when you expect to be outdoors in both summer and winter.

EATING RIGHT FOR LIFE

Now with summer approaching, it is the perfect time to reduce your fat intake and eat healthy again. By avoiding foods high in fat, sodium, and sugar, you can reduce your risk of heart disease, high blood pressure, and other illnesses. Experts say adults should limit their fat intake to 30% or less of total calories. To reduce the level of fat in

your diet, eat a balanced mix of the four basic food groups: fruits and vegetables, breads and cereals, lean meat and fish, and dairy foods. However, note that your children need more fat in their diet than you do: generally, between 30% and 40% of total calories. Their bodies are still growing, and they need additional calories to develop their muscles and central nervous system.

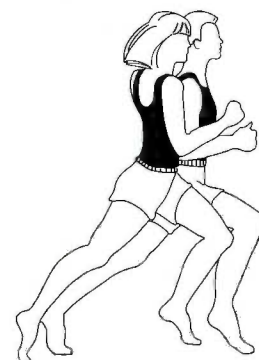
EXERCISE SHOULD BE FUN!

Forget the old saying, "No pain, no gain." To get maximum benefits from an exercise program, do something that you enjoy. During the winter, you may want to choose an indoor activity, like swimming, aerobics, or basketball. You don't need to belong to an expensive fitness club to enjoy these activities; see what programs are available through your local YMCA or recreation council. If you enjoy being outside, take advantage of outdoor activities, like ice skating, jogging, or bicycling.

Many people enjoy exercise more if it's a shared activity. For example, walking is something the whole family can do together and it's inexpensive. It's also a great way to start your children on a regular exercise program. Walking is one exercise that's easy to make a lifetime habit.

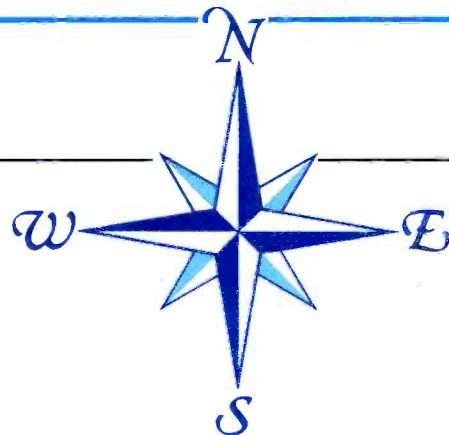
ON YOUR MARK, GET SET, GET HEALTHY!

Begin today! Get off to the right start by practicing the preventive care, diet, and exercise tips described here. They're habits you and your family can live with! ■



Moving On

This is another in a series of articles to help us understand the make-up of the Tyco 'family' of companies.



◆ Originally founded in 1821 as the Springfield Manufacturing Company, the Ludlow Corporation had its beginnings in the small town of Ludlow, Massachusetts, U.S.A. in 1868.

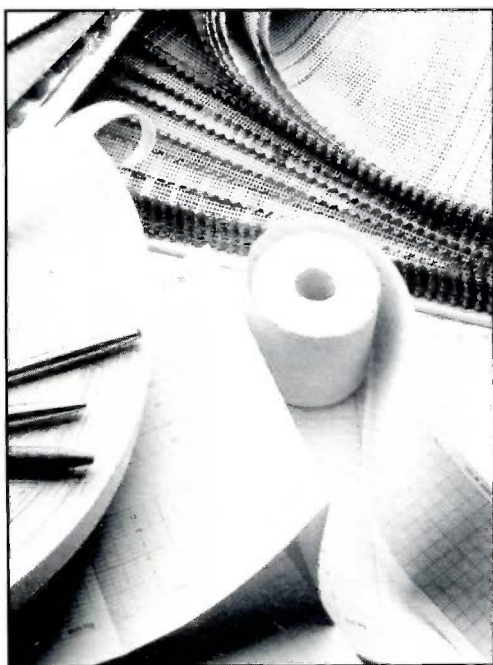
Originally, Ludlow manufactured and sold products made from jute, hemp and flax - all natural fibers. In 1955 the age of synthetic materials was well underway and was making significant inroads into many of Ludlow's markets. With this in mind, Ludlow began to diversify, intending to minimize its dependence on products manufactured from natural fibers.

Originally traded as an Over-the-Counter Stock, Ludlow was listed on the New York Stock Exchange in February, 1965. 1971 was Ludlow's 100th consecutive year of dividend payments; the 5th longest consecutive dividend payment record of all companies listed on the New York Stock Exchange.

Acquired by Tyco Laboratories, Inc. in 1981, Ludlow continued its operations as a wholly owned subsidiary, evolving into a company with four operating divisions in the U.S.A.

Ludlow Technical Products with plants in Chicopee, Massachusetts and Vancouver, Washington, manufacture medical and industrial recording charts, facsimile papers, computer graphics papers, pressure sensitive transfer tapes, and sensor products for the biomedical electrode market.

The Twitchell Division is located in Dothan, Alabama and manufactures Textilene[®], a polyester fabric for casual and poolside furniture and Kane Kraft, a woven paper product which is used to simulate bamboo and wicker in both commercial and residential applications. It also manufactures other woven fabrics for style-oriented industrial and residential use.



The Laminating and Coating Division (L&C) has plants in Homer, Louisiana and Meridian, Mississippi. Using polyethylene extrusion coating and laminating as the base process, L&C manufactures industrial packaging materials, military specification barrier materials, silicone coated release papers and various specialty items for the photographic industry.

Accurate Forming in Hamburg, New Jersey, U.S.A., manufactures deep drawn metal products primarily for the ballpoint pen and cosmetic industries.

Ludlow continues its reputation of excellence which began more than a century ago. ■

Ludlow meets the challenge to provide more complex packaging and paper products.
