The Foundry Roundup

DECEMBER, 1968

It is not always possible to leave pictorial evidence of what one has accomplished in his lifetime.

However, this is possible—to a great extent—so far as the achievements of Walter Trout, Pete Little and Ed Trout.

On the front cover is an aerial photograph made just a few weeks ago of Lufkin Foundry & Machine Company. Spread out over 70 acres in downtown Lufkin, the buildings and storage yards of this giant industry offer exacting and incontrovertible evidence of the success of this company.

A few miles southeast in the progress of construction is a completely automated trailer manufacturing plant in which production will begin in mid-1969.

In stark contrast is the picture on the back cover. It depicts the small repair shop which was the forerunner of the vast complex shown on the cover.

One of the pictures portrays the plant as it was when these three men began their life's work here. The other is as it is today as they take their leave.

If, as the old Chinese proverb proclaims, a picture is worth more than a thousand words, then enough has been said.

THE FOUNDRY ROUNDUP
Volume 26 - Number 11
Published Monthly for Employees and Their Families by Lufkin Foundry & Machine Company
Virginia R. Allen, Editor
Carolyn Curtis, Ass't. Editor

This issue of The Foundry Roundup is dedicated to Walter Trout, Pete Little and Ed Trout. They retired from full time employment with the Lufkin Foundry & Machine Company on April 1, 1968, and accepted employment as company consultants until December 31, 1968.

The combined employment time of these three dedicated employees is 126 years, well over a century of continuous, faithful service.

Each has contributed a great deal to this company in their varied capacities of leadership, and have seen it grow from a small shop to one of the largest industries in East Texas. The company, as we know it today, stands as a monument to their foresight and determination to build a diversified organization, and many of our present plans of expansion and growth were formulated during their administration.

We are glad that they will continue to serve as directors of our company so we will benefit from their wealth of knowledge, experience and good will.

They are fortunate that their health is good, and they will now have the time which was formerly dedicated to the company to indulge in their personal pleasure and enjoyment of their families.

R. L. POLAND
President

Walter Trout

For as long as Walter Trout can remember, his life has been enmeshed with that of Lufkin Foundry & Machine Company. He was just a toddler when his parents moved to Lufkin and his father bought stock in the small repair shop and was employed as general manager.

At age 13, he was paid for "working" at the foundry. "My job was errand boy and in those days every one was paid in cash at the end of the week. I don't know how long it was before I realized my father was putting the cash in my envelope and that I wasn't really on the company payroll," he smilingly recalls. "That was just his way of keeping me off the streets and out of trouble."

His first real job was in the foundry department as an apprentice chipper and grinder for which he was paid $1.38 per day for 10 hours. He was 15 years old and that was top pay in those days.

After that he worked during the summers and all holidays in the machine shop, learning to operate every machine tool in the plant. He stayed out of college one year to work the night shift in the machine shop.

Following his college work at Purdue University, he went to Milwaukee, Wisconsin, to accept a job with Allis-Chalmers. As he rode the bus through Milwaukee, he saw a sign atop a building which read Chain Belt Company. He had heard of that organization and decided to see if they would give him a job paying more than the $100 per month Allis Chalmers had offered.

Impulsively, he stopped the bus and walked into Chain Belt's offices and asked to see the president. He had no appointment and it took some boyish persuasion to get past the secretary. When he told the president what he wanted, the personnel man was called in and he gave Walter such a sales talk on the company and his opportunities with it that Walter agreed to go to work for $10 less per month.

Instead of his taking them, he got "took," he implied with a chuckle.

After two years in Milwaukee, he returned to Lufkin and worked in the engineering department until he was put in sales and sent to the South Liberty Field to assist in the installation of pumping units, the first field to use Lufkin units almost exclusively.

Walter was transferred to Tulsa, Oklahoma, as district manager in December, 1925, and this was where he met and married Mrs. Trout. They moved back to Lufkin in October, 1934, and he was named assistant to the president in charge of sales. He was elected a director in January, 1937, vice president in January, 1943 and president in January, 1948.

His father's shoes were big for him to step into as a relatively young man, but he soon proved he was equal to the job. His penchant for organization, for keeping abreast of the times and need of the industry, and delegation of responsibilities to those who had grown up in the business with him resulted in fantastic growth of the company.

His determination to diversify and equip the plant with the finest machine tools known to industry have been the cornerstones for the success Lufkin Foundry & Machine Company enjoys today.

Edward Trout

To have known Edward Trout as a mechanical engineer, it is difficult to picture him as a locomotive engineer. Yet, he almost chose this career and might now be retiring from his seat on the right side of a diesel engine had not his father intervened.

Between his junior and senior years in college, Ed spent a summer working for Kirby Lumber Company. His job was to run the mill's steam locomotive and he fell in love with it. However, being the youth he was, his tendency to "hot rod" the old engine kept him in disfavor with the management.

"Our tracks had a one and one-half percent grade, and 25 miles per hour was about all you could coax out of that engine—but I kept trying each day to best my record as I hauled in the five cars of timbers for the mill," Ed reflects nostalgically.

Then he added, "I suppose that's really why I didn't get to keep the job. They didn't approve my pushing the old engine and Dad didn't like the idea of my not finishing college, so I went back to Purdue the next September and put aside my dreams of being a locomotive engineer."

When he was graduated from Purdue in 1935 with a bachelor of science degree in mechanical engineering, he returned to Lufkin and worked for six months as an apprentice. Following that, he was sent to the field as a service man with headquarters in Tulsa. Later he was transferred to Los Angeles to set up and manage a West Coast Division of the company. While in California, he married Kay Wessling.

Soon after World War II began, Ed was brought back to Lufkin to assist in the company's war production efforts. Specifically he was given the responsibility of the foundry department but continued to manage the West Coast sales.

He was elected vice president in February, 1945, and director in January, 1949. In later years, he also supervised the Personnel department and in 1964, was given the added responsibility of the Mill Supplies division.

Ed has always been a fun-loving fellow who enjoys a good joke. He can originate the gag or he can be the reason for someone else's joke backfiring. In the first instance, in his earlier years, he was taking a visiting young beauty to a dance at Hotel Angelina where he had a handsome Lufkinite waiting as her blind date.

Ed told the girl that her date was almost deaf and she must speak loudly and distinctly to him. He then told her date that she was partially deaf and that to prevent embarrassment he should speak loudly to her. As they danced, they created quite a spectacle almost yelling at each other. When someone cued them in on the prank, Ed had to make a fast retreat to the foundry with the boy in hot pursuit with murder on his mind.

So far as helping a joke to backfire, Ed is a past master. For many years, he always spoke to employees at the annual Christmas parties. In the tradition of his father, who was the first to turn a joke back on the originator, Ed presented many a live turkey to an innocent new employee who had been told by his sage co-workers to go to the president's office to sign up for a free turkey. This was meant to embarrass the fledgling employee who supposedly would be told that there was no such list for him to sign.

However, Ed played along with the gag, purchased the turkey and at the annual meetings before throngs of employees, gave the turkey to the unsuspecting employee, much to the amazement and chagrin of the trick-playing men.

Pete Little

Not many folks are familiar with the name Lloyd Arthur Little, but when the name Pete Little is mentioned, not only Lufkinites but hosts of oil men throughout the industry are well acquainted with this man.

L. A. (Pete) Little traded his status as a yankee for Texas citizenship in 1927. He was born in Cleveland, Ohio. During his college days at Purdue University in West Lafayette, Indiana, he became friends of Walter and Ed Trout who also were at Purdue.

When Walter left Purdue, he went to work for Chain Belt Company in Milwaukee, Wisconsin and Pete followed after he finished school. Pete and Walter shared an apartment until Walter returned to Lufkin.

After three years with Chain Belt Company, Pete decided in 1927 to come with his friends in Lufkin to make his career. He's never regretted his decision to move south for he met and married Tennie Thomas of Woodville, Texas.

Beginning in the engineering department, Pete found he had ample opportunity to use his talents for the Company was small and "the oil industry was in its infancy also. We had the tremendous opportunity to devise and furnish the latest in oilfield equipment to keep abreast of the times and needs," he recalls.

By 1929, he changed from engineering to the sales department. At that time, Lufkin was marketing improved models of the first unit—the worm gear, single crank—which was first sold in 1922.

Pete traveled to South America in 1931, for at Lake Maracaibo, Venezuela, there was a need for a completely new model pumping unit. Lufkin had designed its first twin crank unit for installation on special platforms erected in Lake Maracaibo.

"Lufkin was among the first manufacturers to replace the hand wheel with the more sophisticated gear box and to add a second crank for installation convenience as well as to accommodate the counterbalance requirement for pumping deep wells," Pete says proudly.
He added, with a chuckle, "I traveled to South America by boat and returned by clipper at 120 miles per hour and I thought that was really a fast trip!"

In the latter part of 1933 or early 1934, Pete was sent to head up the Texas sales division in Dallas. He was elected a director of the Company in January, 1943, and vice president in February, 1945. He returned to Lufkin as general sales manager in January, 1949.

Among Pete's fondest memories of his past four decades with Lufkin are those stemming from his travels and meetings with business contacts.
"I've made many friends through my associations with industrial people. I've met the great, the near-great and the so-called little fellow who makes the wheels of industry turn. I like them all; in fact, I just like people," he commented.

He remembers 1959 as the year he traveled most for the Company. He covered several hundred thousand miles including two trips to Argentina as well as a voyage to Europe.

As mentioned earlier, Pete has used that nickname all his life. His son was asked what his middle initial stood for.

"Arthur—as in the Roundtable," he quickly replied. "He's a Knight!"

That pretty well sums up how a lot of people feel about Pete Little.

LUFKIN...our company

Looking at a new-born baby, one finds it difficult to project his vision some 60 years into the future when this tiny, helpless bundle of humanity will be a towering man with muscles and brainwaves to affect his environment and productivity in his own sphere of existence.

Even more difficult was it for the few men back at the turn of the century, who founded and worked for a sawmill repair shop, to envision the giant industry that Lufkin Foundry & Machine Company would be some 66 years later.

In 1902, Lufkin was a small agricultural and timber-oriented town of about 2500 residents. The downtown section consisted mostly of wood buildings fronted with plank sidewalks. The unpaved streets were lob-lollies of gray, sticky mud after a rain, and even the stoutest mules pulling their wagons or buggies found the going slow and arduous.

There were no paved streets nor automobiles. One train each way was run daily between Houston and Lufkin; it was a mixed train pulling freight cars and a couple of passenger coaches along with baggage, mail and express cars on the tail end. The business section of Lufkin faced on Cotton Square with First Street serving as a back alley. On the grounds now occupied by the library stood the city water tower, a big stand pipe and the fire station.

The little town was surrounded by some of the finest virgin long-leaf yellow pine forests to be found anywhere. Scattered throughout the rolling pineclad hills in every direction were large lumber companies as well as hundreds of smaller sawmills, called "peckerwoods" in those days. The mechanical needs of these sawmills were the birth pains of Lufkin Foundry & Machine Company.

When a piece of machinery broke down, the nearest repair facility was in Houston, necessitating a long journey over root-bound, chug-holed roads into Lufkin and then to Houston by train. Perhaps the repairs could be made and the piece of machinery back in operation in two weeks, but more likely the time was longer.

Practically all sawmill machinery was manufactured in Milwaukee, Wisconsin. Major parts that could not be repaired had to be replaced by new parts shipped from the factory, requiring three weeks if shipped by express and six weeks if they came by rail freight.

In an effort to solve this vexing problem, five men formed a small sawmill repair shop. The year was 1902 and the men were J. H. Kurth, Sr., S. W. Henderson, Sr., F. Kavanaugh, F. Kavanaugh, Jr. and Eli Wiener. The original machine shop was built and equipped at a cost of $21,500.

In 1904, W. C. Trout, a machinery salesman for Allis Chalmers of Milwaukee, who travelled in this area, was employed as general manager of the newly formed repair shop. Having inherited the inventive ability of his father, Mr. Trout began immediately to expand the operations of the company. A mill supply department was added, as was a small foundry that poured a small heat once a week. Individual pieces of machinery were designed and sold until the line was complete enough to furnish equipment for a complete mill. From this time on most of the mills in the southwest were designed by Mr. Trout and the machinery furnished from Lufkin.

The company also had a locomotive pit and did all the major repairs for the sawmills' locomotive engines in this area.

When the timber supply diminished and the small sawmills began to close, Mr. Trout started looking for other fields to utilize the ever increasing facilities of the company. In 1919, the company was manufacturing pipe line and refinery fittings, then a steam engine, and a refinement of a rotary table for drilling wells promulgated by a production superintendent for Gulf Oil Corporation.

About this time, a superintendent and an engineer for Humble Oil & Refining Company began to experiment with the idea of pumping oil by getting away from flat belts and wooden band wheels. They put a crank on the shaft of a worm gear which was originally used as a differential for a tractor that had been wrecked. Their

experiments came to the attention of the president of the Humble Company and through his acquaintance with Mr. Trout, Lufkin designed and built the first oil field pumping unit which was installed by Humble at Goose Creek, Texas, in 1922.

Having pioneered and developed the application of reduction gears to oil well pumping, the company then devoted its entire facilities to such production.

Through the years many inventions were owned by Lufkin Foundry & Machine Company applicable to the oil industry, particularly the Trout Counter Balance Crank which revolutionized and brought to perfection the extremely important factor of oil well balancing. Today, 45 years after the first unit was installed, some 93,500 pumping units have been manufactured and shipped to every oilfield throughout the world.

Diversification has been a word which fired the imaginations of the "brains" of this company since the moment W. C. Trout walked into the plant as General Manager. He never ceased looking for a new product to utilize to the fullest all manufacturing facilities. This legacy he left to those who followed him.

When native Tennessean Daniel Webster Martin, a blacksmith by trade, decided in 1902 to look for greener pastures in Texas, he brought with him an inventive mind. Two products of his fertile brain, the Martin De-Railer and Martin Grip Hook, were produced for him by Lufkin Foundry. By 1910, he was granted a patent on an eight-wheel log wagon that proved to be the forerunner of Lufkin's Trailer Division.

With the advent, several years later, of paved roads and rubber-tired trucks, the day of the wagon as a means of transportation was fast coming to an end. Building trailers was the natural thing to do and Martin Wagon Company had a fairly prosperous business in this field when in 1939, they sold out to Lufkin Foundry & Machine Company. The business was moved to the home office site and has been a steadily growing segment of Lufkin's business since that time.

Under construction is a 360,000 square-foot trailer plant spread over 50 acres of a 400-acre tract of land five miles southeast of the present plant site. Production in the new fully automated plant is scheduled to begin in early June, 1969, with an output of 20 trailers per day.

The company's first venture into commercial and industrial gears began in 1939 also. Necessary changes were made in pumping unit gears in order to manufacture commercial gears for a new industry, Southland Paper Mills, Inc. This beginning was destined to become so well accepted worldwide that major expansions in plant facilities as well as significant expenditures of funds for tools were to follow in the years to come.

On that bleak December day in 1941, when Pearl Harbor was bombed by the Japanese and the United States became embroiled in World War II, the Lufkin Foundry & Machine Company offered its entire facilities to the country. For the war effort, the company manufactured carriages for 4.5" and 6.5" guns, final drive assembly gears for the M-4, better known as General Sherman tanks, 1000 horsepower reduction and reverse gears for naval landing craft, turbo electric gears, mobile laundry units and all types of castings for the Army, Navy and Maritime Commission.

For the United States, the year 1943 was the beginning of victory for the Allied Powers in World War II. For Lufkin Foundry, it was the beginning of another new product—a gasoline engine to complement the pumping unit.

Lufkin purchased the oilfield rights of pumping engines from the Cooper-Bessmer Corporation. At that time, the popular engine was a two-cylinder, vertical design, but by 1945, Lufkin marketed a new series of engines which were known as the GSDH, a horizontal, two-cylinder, two-cycle, heavy-duty gas engine rated at 60 HP at 600 RPM. Later, the H-333 came along, the first in the field to be equipped with an electric or an air-gas motor starter. This was followed in 1954 by the HT-333.

The current Lufkin engines are H1770 and H2165 which continue to feature two-cycle, twin cylinder engines rated at 125 and 155 horsepower and offer such options as fuel injection, air cooled pistons, 24-volt electric starter or air-gas motor starter, low tension and tachometer.

The heartbeat of Lufkin's products, other than those of the Trailer Division, begins in the foundry department. Back in the 1902 beginning, the cupola was charged by five to seven men in a back-breaking, hand-lifting, fire-bucket brigade operation. Perhaps they poured heats amounting to five tons a week. Today, machines charge the cupolas which pour approximately 168 tons per day.

The first step toward mechanizing the original foundry began in 1938 when a molding machine, designed specifically for Lufkin, was purchased from a Davenport, Iowa, firm. This special molding machine was twice as large as any they had ever built. It still is the only one like it in the United States.

This new molder changed the lives of Lufkin employees in several ways. Until it was in operation, all sand was mixed by hand. The first thing a foundry employee did each morning was to dump sand on the floor, pour water and clay onto it and prepare the mixture with a square-backed shovel. All patterns were loose and flasks were made of wood or cast iron. Even the ramming of sand, gating, rolling of the flasks and drawing of patterns were done by hand. It was not unusual to take half a day to get one flask, for there was only one electric overhead crane and a hand-operated block on a beam for moving equipment in this department.

With the purchase of this big molder, a complete sand system was installed. The sand was screened, elevated to overhead stories and delivered back through a sand mullor to prepare it for the new mechanical molding process.

In subsequent years, other molding machines were added for small castings but none of them included mechanized sand handling as did the big Iowa machine.

By 1946, the war was nearing its torturous end, and W. C. Trout decided the company had outgrown its foundry. One of his fondest dreams was to build a completely mechanized foundry that would serve the company's needs for many future years. He lived to see the first heat poured in this new foundry on April 11, 1947. A brief 13 days later, he died. His eldest son, Walter Trout, was named Acting President and then President in 1948.

Improvements and expansions in the foundry department have been common place during the past several years. Recent major additions include an oven for annealing ductile iron and stress relieving cast iron and steel weldments. This oven incorporates the latest safety features including a 20,000-pound safety interlock door which is made with a one-piece monolithic lining.

The car carrying products to be heat treated is 12 feet wide, 27½ feet long with a capacity of 180,000 pounds. The car must be in the oven and the door locked before the heat can be turned on. Temperatures inside the oven can be controlled from 10 degrees to 2000 degrees.

Also purchased for the foundry department are three jolt molding machines with the new simultaneous "impact squeeze" process which produces harder and more dense molds in a faster cycle. Another addition is a sand silo for storing washed and dried silica sand. The new concrete sand silo has a capacity of 500 tons. The sand is discharged from a railroad hopper car onto a screw conveyor and carried to an elevator and into the silo.

On order now are two production molding machines for medium-sized castings and immediate future plans call for the purchase of sand reclaiming systems.

Hardly a semblance is left of the little repair shop which is now a giant industry complex sprawled across some 70 acres in the heart of downtown Lufkin. Growth, expansion, diversification have taken their toll on the original wooden buildings that occupied less than 10 acres in the early 1900s. From modern shops equipped with the finest tools known to the trade, Lufkin manufactures conventional twin crank pumping units for shipment to worldwide oilfields.

There has been a shift in recent years from concentrating solely on mass-produced items such as the general line of pumping units to individually-produced products such as commercial gears. Updating equipment, Lufkin has purchased the latest designed tape controlled machines used primarily to build gears.

Another innovation has been the shift toward the hobbing process of gear cutting as opposed to the older oscillating process of the Sykes cutters. The hobbing method uses rotary cutters as a more exact generating process.

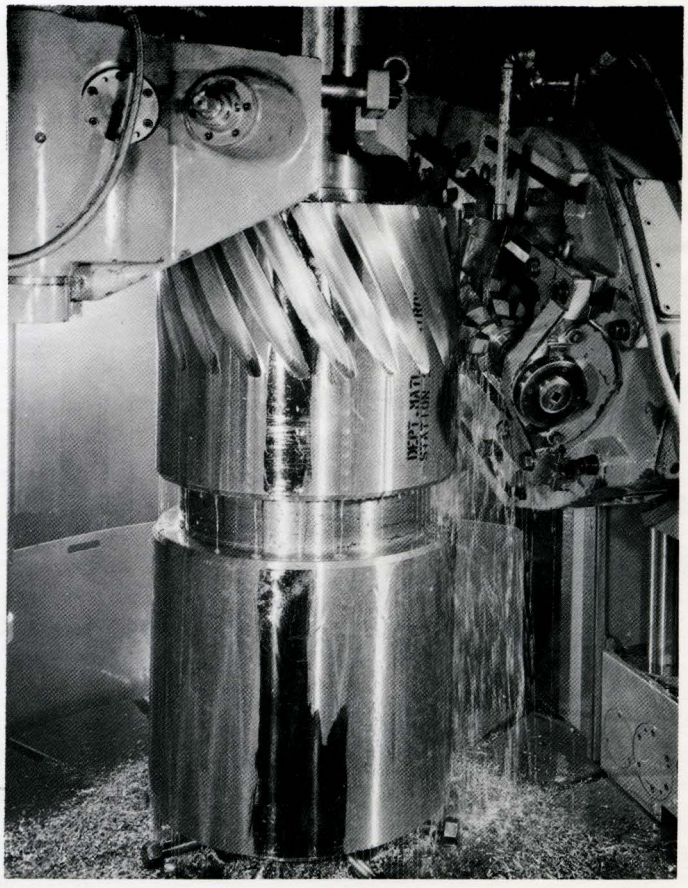
To effect these innovations, Lufkin has purchased two large hobbing machines from Germany—the Pfauter and the Schiess. The Schiess, largest gear cutting machine south of Chicago, can cut gears 16 feet in diameter with face widths up to 47 inches. Another Pfauter is now on order.

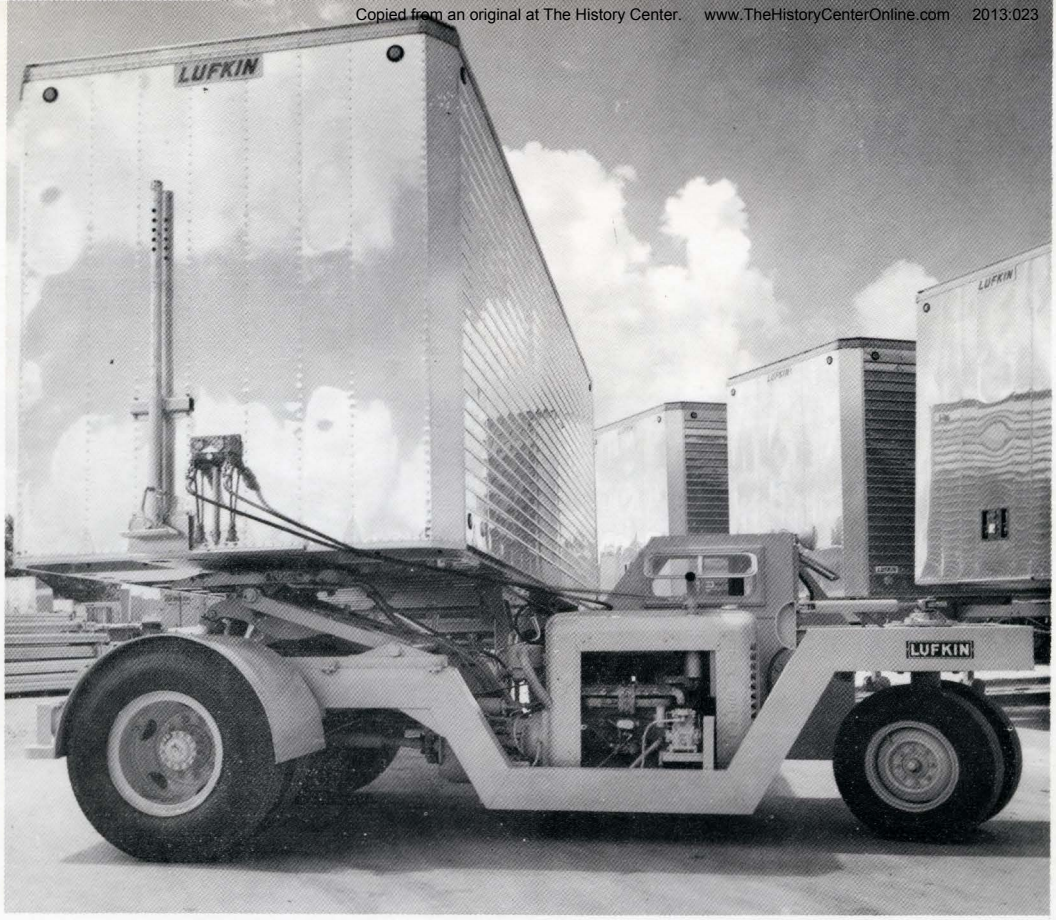
This year Lufkin entered a relatively new field of gear grinding, acquiring an extremely precise Maag gear grinder from Switzerland which can produce gears more accurately at higher speeds.

Traditionally Lufkin updates its plant by purchasing new machines and expanding existing or erecting new buildings. Some years this updating is more dramatic than in others, but one of the long range changes has been in the specializing of labor skills.

Formerly machinists had to be skilled in grinding their own tools. They were rated by how long a tool would last, even at the sacrifice of time. Today, there is a separate department which produces "throw-away" tools that are worn out as quickly as possible and sold for scrap.

Not all machines for bettering production are purchased from outside sources. Lufkin's engineers and production workers team up to design and build new machines which sometimes leads to new products for the plant.



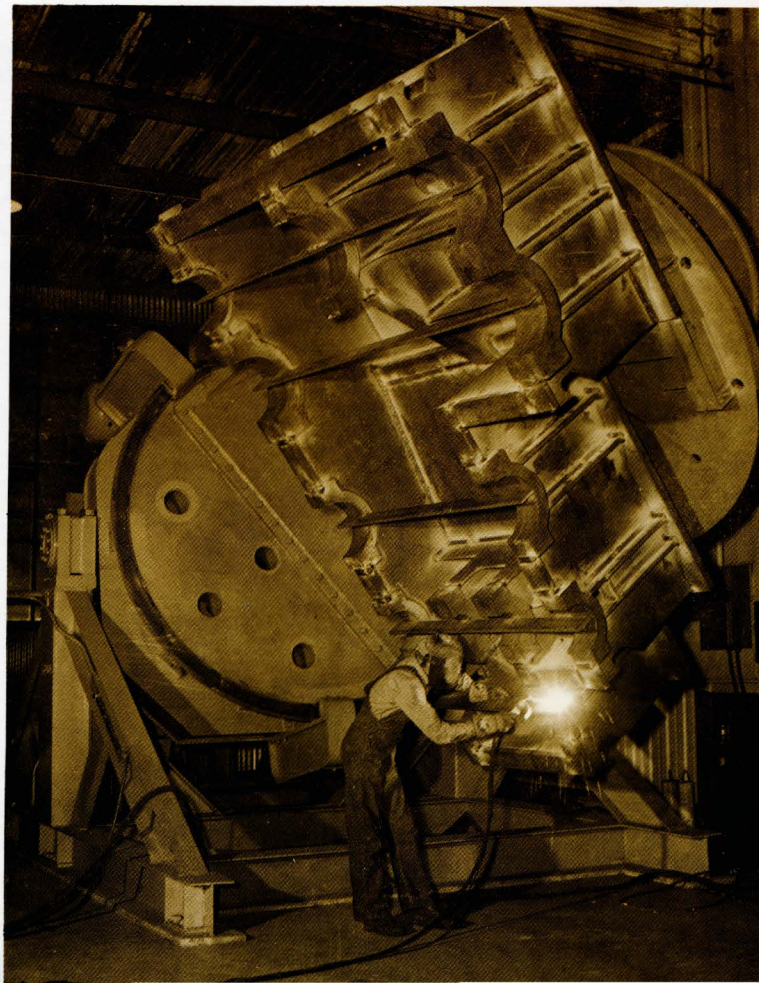


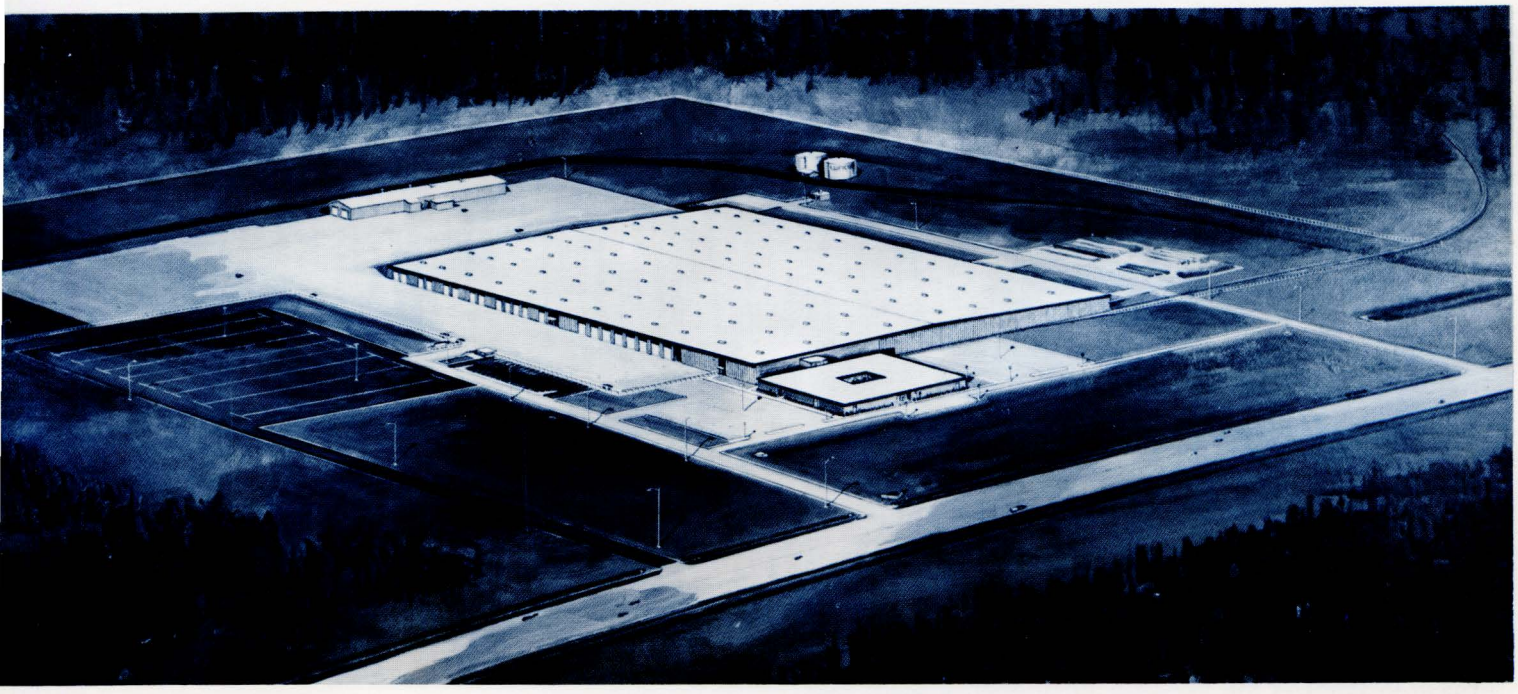
A case in point is the Welding Positioner, a giant machine 14'5" high and 32'3" long, weighing 117,247 pounds. This machine enables a welder to increase his speed on large gear housings thereby increasing production by 25 to 33 percent.

Another example of "do-it-yourself" production is a trailer tug which can maneuver a 40-foot trailer in only 40 feet of space. The operator of the tug sits low enough to see beneath the trailer he is moving, eliminating the necessity of his having to dismount the tug while parking a trailer.

Both these Lufkin-designed and produced products have received widespread attention and requests come regularly for quotes on manufacturing them.

When Lufkin Foundry & Machine Company was in its infancy, one of the most important segments of the business was the Mill Supplies. Originally its function was to stock saws, knives and sundry parts for sawmills. As Lufkin's operations grew and expanded, the Mill Supplies was set up as a separate division and is currently jobbers and distributors of automotive, plumbing, pole line hardware and industrial supplies as well as maintaining its usual sawmill supplies. From a one-man department, this division now employs some 50 persons including an outside sales force who covers Texas and adjoining Louisiana, Arkansas and Oklahoma.





Lufkin has branch and division sales and service offices from coast to coast, from Canada to Mexico, as well as throughout South America and Libya. The sales organization is divided into four segments including oilfield and machinery sales, commercial marine gears, Trailer Division and Mill Supplies Division.

Directors of the company are W. W. Trout, chairman, L. A. Little, E. P. Trout, Robert Poland, S. W. Henderson, Jr., Samson Wiener, Jacques Wiener, Melvin Kurth, Sr., Melvin Kurth, Jr., W. W. Trout, Jr. and W. T. Little.

Officers of the company are Robert Poland, president and chief executive officer; Bayo Hopper, Cooper Richards, C. J. Schuller, C. W. Alexander, Robert Barr, Robert Lang, vice presidents; W. A. Kirkland, secretary; and H. L. Dyer, treasurer.

The story of Lufkin Foundry & Machine Company would not be complete nor one of success were it not for the men who spent and are spending their life careers with this company. It is impossible to name them all but the list would include the blue collar production worker as well as the white collar management men who believed there was a great future for this company and who undergirded their belief with long hours of work and loyalty.

Among those names in history are those of the three men to whom this issue of The Foundry Roundup is dedicated. Walter Trout, Pete Little and Ed Trout retired from full time employment April 1, 1968, and will have served as consultants until January 1, 1969.

Each of these men began his career with Lufkin in his early youth and adulthood. Each in his own capacity in later years—Walter as President and Chairman of the Board; Pete as Executive Vice President, Director and Oilfield Machinery Sales Manager; Ed as Executive Vice President, Director and responsible for the foundry department and West Coast Sales—has added his knowledge and strength and efforts to the foundation laid by those pioneer founders before them.

We today who work in these modern buildings with the latest tools and equipment for a company that is respected worldwide for dependable, quality products owe much to these three men.

We salute them and wish them life's best as they pass on their duties and responsibilities to those who follow.

LUFKIN OFFICES AROUND THE WORLD

Anaco
Ankara
Atlanta
Bakersfield
Baltimore
Birmingham
Bogota
Buenos Aires
Calgary
Casper
Cleveland
Crystal Lake
Dallas
Denver
Edmonton
Estevan
Great Bend
Hobbs
Houston
Jackson
Kansas City
Kilgore
Kuwait
Lafayette
La Paz
Los Angeles
Lubbock
Lufkin
Maracaibo
Memphis
Mexico City
Natchez
New Orleans
New York City
Odessa
Oklahoma City
Pampa
Pittsburgh
Portland
Rio de Janeiro
San Antonio
San Fernando
San Francisco
St. Louis
Seattle
Shreveport
Sidney
Talara
Tripoli
Tulsa
Wichita Falls
Williston