a-c scope

magazine of allis-chalmers people

july-august, 1961

Steam Turbine-Generator in Old Gold, pages 3-4-5

a-c scope

COVER PHOTO

An overhead crane looks down on a 22,000-kw Allis-Chalmers turbine-generator unit serving the fabulous Black Hills area, one of the nation's prime vacationlands. The Ben French station, in which it is installed, is an attention-getting beauty in a location where beauty is a stock-in-trade.

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PHOTO CREDITS

Cover — Photo courtesy of Stearns-Roger Mfg. Co., Denver, Colo.; Page 3, courtesy Stearns-Roger; Pages 4-5, courtesy of Homestake Mining Co., Lead, S. D. and Stearns-Roger; Pages 6-7, Russ Einwalter, Darrold Pries, West Allis Works; Pages 8-9, Walter Beaver, Pittsburgh Works; Page 10, Harold Shrode, West Allis Works; Page 11, Charles Schorman, Norwood Works; Page 12, Shrode.

A-C SCOPE

MAGAZINE of ALLIS-CHALMERS PEOPLE
Jack Bortness.....Editor
I. J. LaBarbera...Art Director
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growth money

Heartening for Allis-Chalmers people was the recent announcement by our Research Division that its scientists had perfected a way to produce large quantities of boron silicides. These compounds, able to withstand extremely high temperatures, are in demand for nuclear energy applications. In the words of one Research man: "I'm sure we haven't begun to realize all of the possible applications of this material."

This development marks another breakthrough to greater industrial growth. But often obscured by achievements of this nature is the cost of success, costs undertaken at tremendous risk. Only about two per cent of industry's proposed products survive the idea stage, and only half of these will find success once they reach the marketplace.

To finance new developments, as well as to pay for modernization and expansion of equipment and facilities, corporations like Allis-Chalmers rely heavily on reinvested earnings and new money invested by stockholders.

Speaking of corporate earnings in the United States, Keith Funston, president of the New York Stock Exchange, remarked that in the past decade these earnings have undergone a crippling squeeze largely because of strong foreign competition, many failures of domestic productivity to keep pace with costs, and high income taxes. "With reduced profits, many businesses were not able to reinvest sufficient capital in new plants and machinery and their profits declined even more," he said as he called for a bolstering of the U. S. economy.

It's said that United States corporations through 1970 will need some $400 billion to finance their growth. Tax rates, in particular, can be discouraging to people who are thinking of investing their savings to help finance this growth. Corporate profits — their profits — are often taxed as high as 52 per cent. Then their dividend payments from these earnings are further taxed. No other form of personal income is subject to two Federal income taxes.

Unrealistic depreciation allowances (the amount a company can set aside, tax free, to replace old equipment) also place American firms at a disadvantage because they do not take into consideration rising costs of equipment. Estimates are that industry must spend several billion dollars a year more than it is allowed to deduct for tax purposes. By contrast, many other nations have adopted far more practical depreciation laws.

By 1970, industry must provide 20 per cent more jobs to accommodate our growing population. How well it will meet this huge task will be determined in large measure by the amount of money available to stimulate growth.

Power for land of Mt. Rushmore

Glistening new plant serves historic, fast developing area

The "Old Deadwood Road" skirts the Black Hills Power and Light Co.'s glistening new plant at Rapid City, S. D.

This is how it is throughout the entire Black Hills territory: the historic, colorful past rubbing shoulders with fabulous developments of the present.

The friendly Black Hills residents can take you back to the days when Deadwood Gulch was a lusty, brawling mining town populated by the likes of Wild Bill Hickok and Calamity Jane, or remind you of the times when Gen. George Custer and Sam Bass were roaming the countryside.

They can also keep you posted about the $100,000,000 liquid fueled Titan missile installations now under construction at three separate sites about 25 miles from Rapid City.

These installations mean growth — more people, more homes, more businesses. There has been plenty of growth around Rapid City in the last two decades — and this growth has brought with it greater demands for economical electric power.

This growth gave rise to the new Black Hills Power and Light power plant, which is equipped with a host of Allis-Chalmers products sold through the Denver District office.

Named the Ben French station after the firm's chairman of the board, a man who has spent 50 years in the electric utility industry, the plant houses a 22,000-kw Allis-Chalmers turbine-generator unit, largest on the six station system, a 19,000 square foot condenser, main power transformer, oil circuit breaker, pumps and motors.

The $5,500,000 plant — for which Stearns-Roger Mfg. Co. at Denver are consultants — is an attention-getting beauty in an area where beauty is a stock-in-trade.

Harry S. Peterson, director of personnel and public relations for the power company, said that the many people who have toured the plant in the past few months are highly pleased with its appearance and amazed at its cleanliness.

The T-shaped air-conditioned office has an exterior of red brick and white Vermont marble. The adjoining power plant gleams in ribbed aluminum paneling, much of it spruce green. The Allis-Chalmers turbine-generator sparkles in old gold, set off by a deep maroon floor. Light green, yellow and beige colors add to the interior's handsome appearance.

A host of Allis-Chalmers equipment is found in this new Black Hills Power and Light Co. plant at Rapid City, S. D. The firm's power system supplies electricity to such famous locations as the Mount Rushmore national memorial.

Peterson explained, "We all wanted a plant to be proud of, particularly since it is located right on the edge of town. We have a plant we are proud of."

The new plant, since last November, has been part of a system that provides the major electric power requirements of the Black Hills region. Specifically, Black Hills Power and Light serves six western South Dakota and three eastern Wyoming counties.

Peterson summed it up, "We are pretty close to the old West, but we get pretty modern."

These nine counties are a tourist's delight. Mount Rushmore, the most prolific gold mine in the Western Hemisphere at Lead, S. D., Custer State Park,

Power for land of Mt. Rushmore

Homestake Mining Co., Lead, S. D., largest producer of gold in the Western Hemisphere, uses about 61 million kilowatts of electricity annually. This air photo shows most of the firm's surface plants and a small section of the city of Lead.

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Allis-Chalmers serves Homestake in two ways. We manufacture equipment which helps supply Homestake with electric power, and we make processing machinery and auxiliary equipment which Homestake uses in processing gold ore.

(South Dakota Cement plant, a neighbor to the Ben French plant, is another of the firms in the area that uses our processing machinery as well as power from the Black Hills Power and Light system.)

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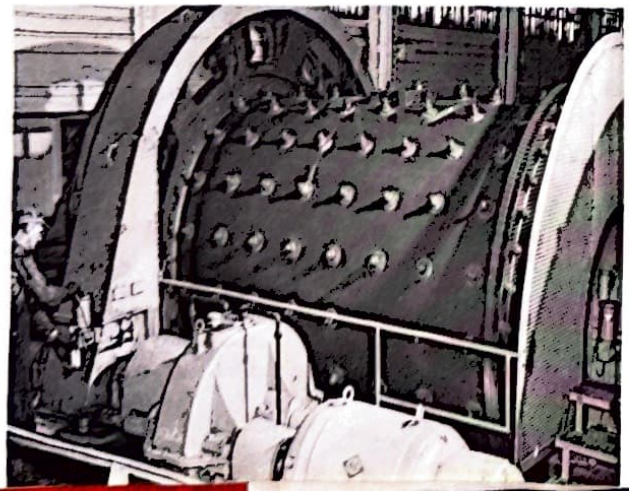
Electric power is the life blood of many of these methods. It takes a tremendous amount of power to produce a nugget of gold only the size of a fingertip. The exceedingly hard and tough Homestake ore is even more resistant

Motors and ball mills are among the Allis-Chalmers equipment used at the Homestake mine. In normal times, Homestake mills and mines 4,850 tons of low-grade ore daily. The mines are operated at 30 levels.



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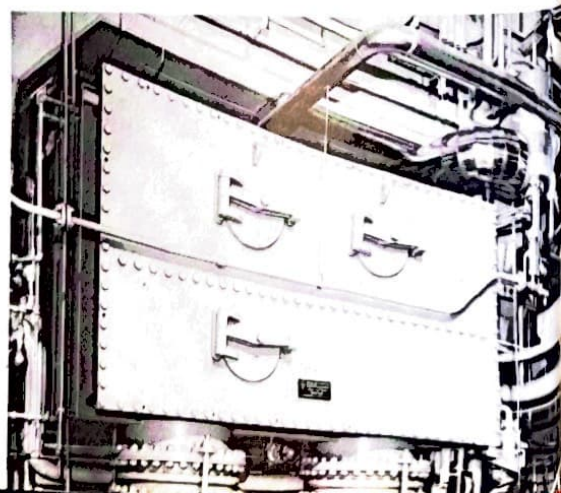

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Since 1940, Rapid City alone has seen its population increase from 14,000 to an estimated 45,000 at present. Nearly 500 new homes were built in the city last year, and prospects for the current year are just as good or better.

Swelling the area's population even more is nearby Ellsworth air force base, with 5,000 military personnel and a city of 15,000. Ellsworth is one of the major bases of the Strategic Air Command. Playing a key role in the nation's defense, Ellsworth is housed on 4,932 acres of government land and represents one of the leading industries of the area.

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The power company operates its own coal mine near Gillette, Wyo., through a subsidiary, the Wyodak Resources Development Corp. The subsidiary has over 40 million tons of recoverable coal under lease and is currently mining about 500,000 tons annually.

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Between 1941 and 1960, the sale of electric energy increased by more than nine times, the number of electric customers served more than doubled to 33,000. Each year the company invests approximately $2½ million for new plant and property. That includes transmission and distribution lines and substations, new generating equipment and the tools used in its work.

"Looking into the future," says the management, "we expect to keep right on building. The area we serve is progressive and on the threshold of its greatest development. That leads us to expect great things for the Black Hills in years to come."

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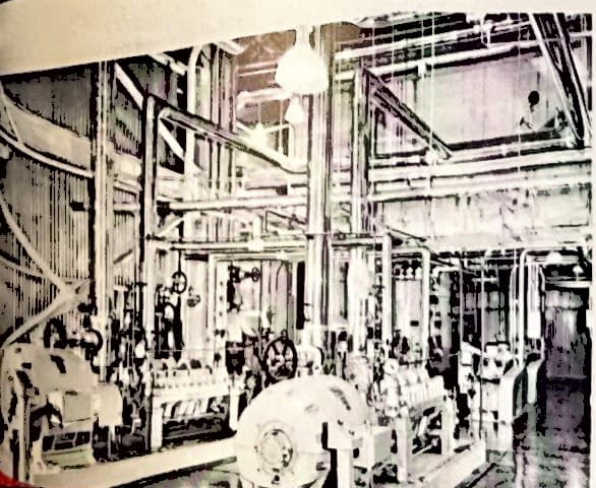

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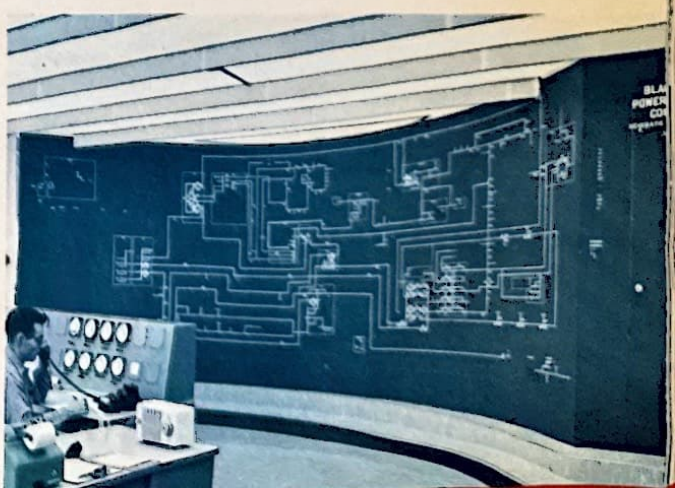

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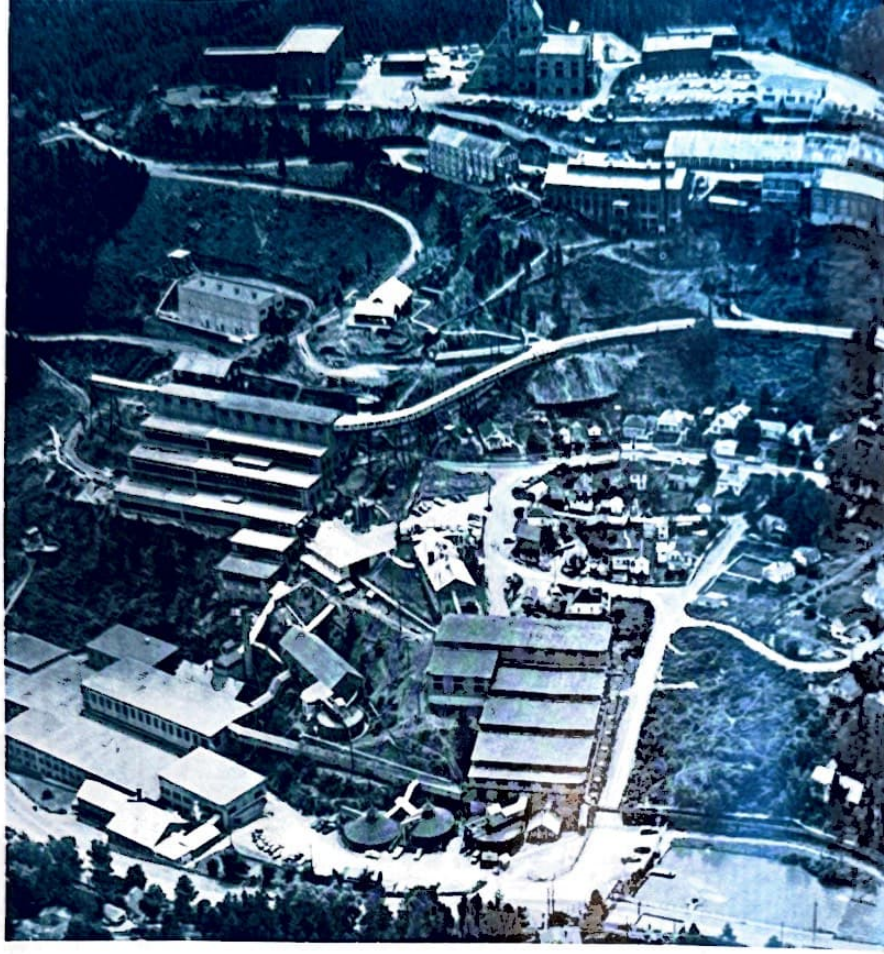

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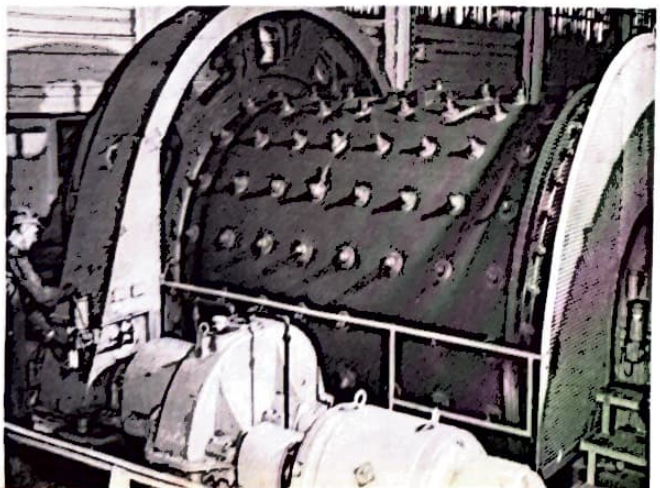

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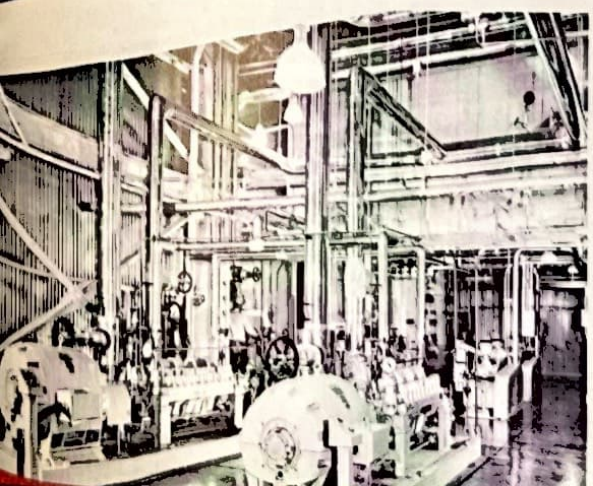

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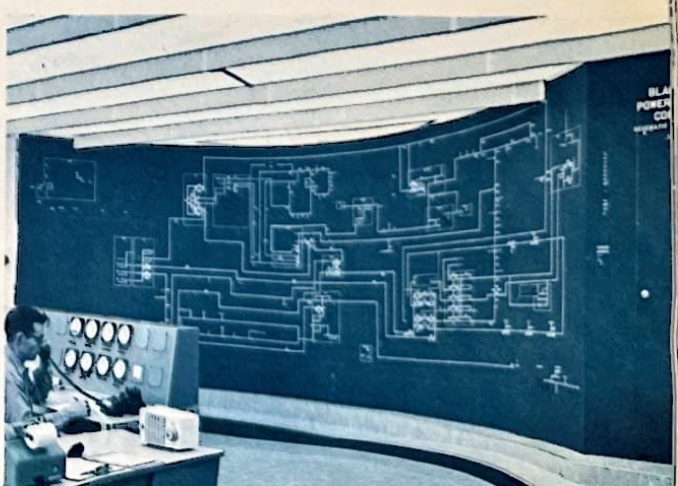
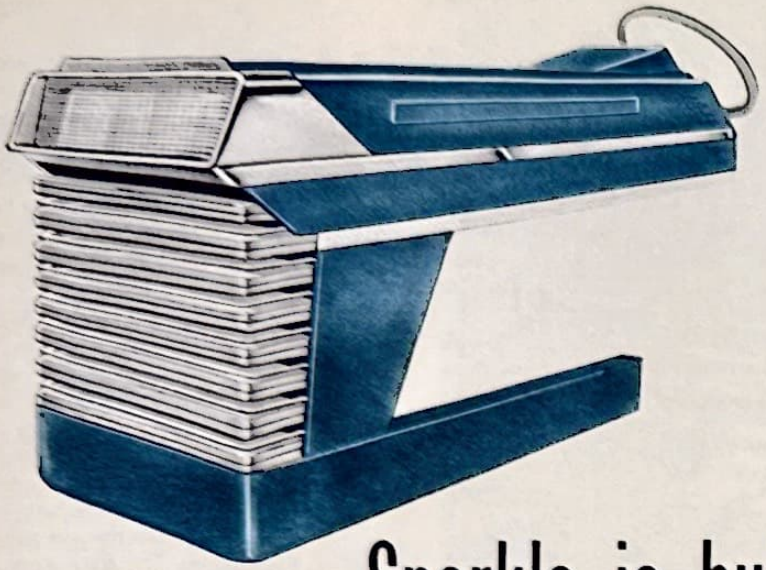
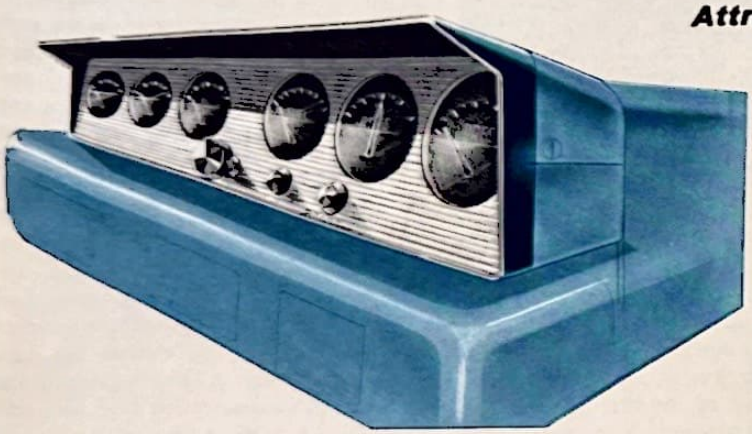




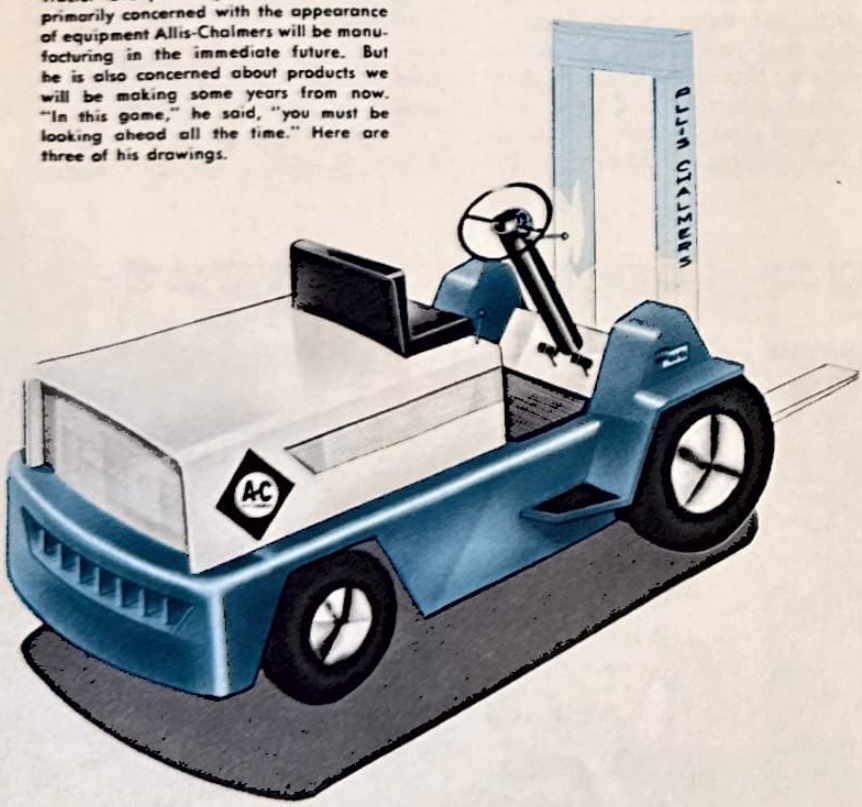
Bob works extensively with clay and models. His job is to put engineered components into an appealing, functional and practical "package."

Sparkle is built right in

Attractive, functional design adds to saleability of Tractor Group products



Tractor Group designer Bob Stortz is primarily concerned with the appearance of equipment Allis-Chalmers will be manufacturing in the immediate future. But he is also concerned about products we will be making some years from now. "In this game," he said, "you must be looking ahead all the time." Here are three of his drawings.



On the fifth floor of the Tractor Group Office building in West Allis you find a young man whittling away on some clay. On every side he is flanked by model tractors and drawings of farm and construction equipment that look a little like something from the pages of a space age magazine. You ask yourself a legitimate question — what goes on here?

To answer, Bob Stortz, head of the Industrial Design department for the Tractor Group is a person with a serious mission. For if you look beyond the models and drawings you will uncover a phase of product development that means a lot to Allis-Chalmers people and to every Tractor Group customer.

Industrial design and styling is many things at once. Bob calls it sort of an "end product" of engineering; putting engineered components into a "package" that is appealing, functional, and practical. Whether this "package" is a FT-40 lift truck, D-17 farm tractor, or a TS-360 motor scraper, the brand image or "personality", if you will, of this equipment is a vital factor in customer acceptance.

Eye appeal, brand identification, safety factors, and functional advantages can be realized through product design. Then, too, product design can lead to manufacturing efficiencies to produce quality products at the lowest possible cost.

Fred Worley, works manager, West Allis Tractor Manufacturing, Stortz and foreman Gordon Seitz, talk over a point Stortz may wish to consider in his design work. Product design can reduce production costs.

Eye appeal, brand identification, safety factors, and functional advantages can be obtained through product design. Often styling can contribute materially to improving a unit's strength characteristics.

Bob confers with A. W. Van Hercke, director of Tractor Group engineering, and a vice president; L. F. Shoemaker, assistant to Van Hercke, W. F. Strehlow, senior consulting engineer, Tractor Group.

Bob is quick to tell you that product design is not a one man show, but really supplemental to research and development and engineering. He confers directly with division general managers, works managers, and chief engineers of the various divisions of the Tractor Group. His immediate supervisor is A. W. Van Hercke, director of engineering, Tractor Group, and a vice president.

Bob's work may include the styling of a whole new family of farm tractors, or he may be called upon to incorporate a new or improved component into an existing piece of equipment.

It wouldn't be unusual at all to see him in the shop stirring a specially concocted paint and applying it to a piece of equipment. The choice of color is not just a whim. Actually, it can have a profound influence upon the appearance and salability of equipment.

Even a shade variation of color can be significant. The new and deeper Persian orange and complementary "wheat" color of the 1961 line of farm equipment is the result of extensive research.

But appearance is only part of the story. In the case of construction equipment, Allis-Chalmers unveiled a shade of yellow that satisfied several requirements. It combines eye appeal with high visibility for safety, and is a more durable color for the type of work encountered by construction machinery.

Brand identification, or decals as they are known in the trade, have been improved on the complete line of Tractor Group products to promote quick corporate and model identity of our equipment on the job.

A complete style change for an entire family of tractors or other products is a complicated job. Bob says you could liken the task to a woman who buys a dress. The dress is lovely, but her hat is old, no shoes to match, and of course, she needs a new handbag. And so it is with a major style revision. If you lower the hood, you may have to relocate the air cleaner. Maybe you'll slant the front grill, but clearance is a problem.

Styling must be accomplished so as not to impair the structural strength of the unit. Often styling can contribute materially to improving strength characteristics.

In creating modern funtional lines in our equipment, it is a requirement that such changes are economically practical from a production standpoint. The farmer, contractor, or plant superintendent wants good looking equipment, but he will not pay a premium price for appearance.

Through industrial design often come materials and ideas that will result in production economies and at the same time improve the quality of the product.

Bob talks a lot about human engineering when he discusses styling. Operator comfort is almost a fetish with Allis-Chalmers. The operator is "King" and Bob and the engineering department spend much time on this feature alone.

Those little models he works with have a significant place in industrial design and styling. They often provide the answer to design problems, and can reveal aesthetic values of styling before the mock-up or prototype machine is fabricated.

Those "space age" drawings may one day be the likeness of operating equipment. In this game, Bob explains, you have to be looking ahead all the time.

This Texas farmer was well satisfied with his Allis-Chalmers farm tractor in 1917. But today he would expect much more in performance, ease of operation and appearance. Our engineers and design people work together to fulfill these expectations.

Make mine baseball

Two Pittsburgh fans follow Pirates through both good and lean years

Our national pastime was meant for men like John A. Kenitz and John Lipchak Jr.

They ardently followed the Pittsburgh Pirates to their first world championship in 33 years during 1960. They also occupied the stands during those lean years when an exploding hand grenade would have damaged only the seats in most areas.

Employes in the same department at the Pittsburgh Works (Kenitz is a transformer tank test helper and Lipchak is a tank welder), the men share the opinion that there is no better way of relaxing than at the old ball park. They differ only as to where it should be watched.

Kenitz, at 61, is a diehard bleacher fan. "The bleacher fan is your best fan" he will tell you. Lipchak agrees, but prefers to sit in the grandstand, "close to the action."

The 47 year old Lipchak has been an Allis-Chalmers employe since 1934, shortly after a tour in the CCC camps, and a faithful Pirate supporter almost as long.

For the past 15 years or so he has purchased a modified season ticket which entitles him to see the weekend and the few holiday games played at Forbes Field.

He took one of his four weeks of vacation during World Series time last October and saw two games. He was in the stands when second baseman Bill Mazeroski's ninth inning home run toppled the mighty Yankees. Easily, this was his biggest thrill.

Kenitz, who followed the Pirates through a knothole in the old right field fence at Forbes Field as far back as 1909, wasn't quite as certain about his biggest thrill. The plays of Hall of Famer Honus Wagner, the Waner brothers, and a dozen other Pirate superstars hamper an easy decision.

Kenitz was at work when Mazeroski immortalized himself. But John admits that it took him a few days to get over the excitement and back to normal.

When the Pirates last won a pennant in 1927 he frankly admitted that money was too scarce to permit the luxury of a ticket.

Kenitz says he occasionally will walk seven miles from church on a Sunday morning to the ball park — and back home again. He takes pride in the ability of his feet to get him places.

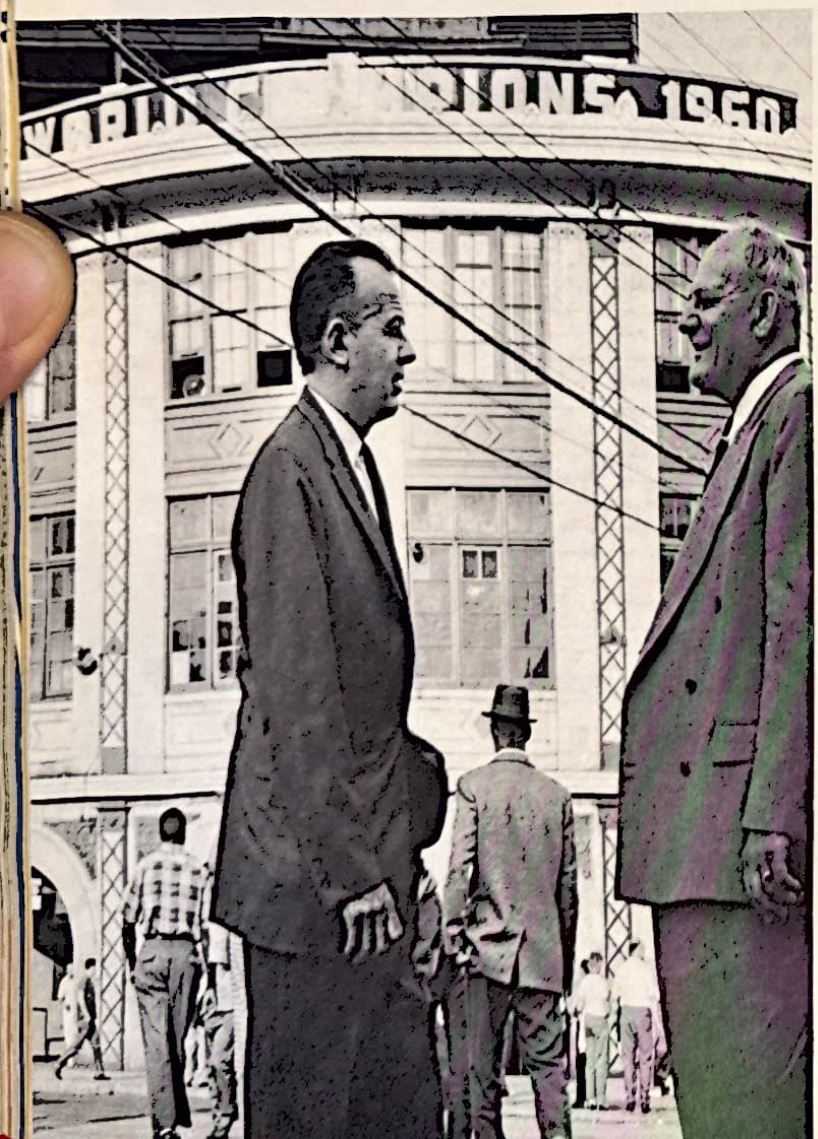
During the aftermath of a snowstorm which brought all traffic to a standstill, Kenitz, then 58, made a round trip of about 20 miles from home to work, and arrived at work on time. "I hate to be late under any circumstances," he said.

Kenitz admits that he never has been able to make a fan out of his wife, but she has heartily endorsed her husband's interest in the game. Besides, she says this gives her a night "out with the girls." John, instead, is developing his grandson into a bleacher fan. John's son is a high school coach.

Lipchak has four children. They and his wife will occasionally join him at the ballpark. His oldest son is a sophomore at Duquense University; another is a junior in high school, a third is in grade school and plays Little League ball. He has one girl, pre-school age.

At this writing, it appears that the Pirates, hampered by injuries to key players, may revive a little too late to repeat as World champions. But neither Lipchak or Kenitz were ready to throw in the towel. In fact, Lipchak again is reserving a week's vacation for World Series time.

Even if the Pirates don't win it all in 1961, they are still champs until a new one is crowned this fall. And then, there is always next year.



While many A-C employes relax at the bowling alley, fishing pond or golf course, men like John Lipchak (left) and John Kenitz of the Pittsburgh Works feel there is no better way of enjoying themselves than at the old ballpark. They are long-time Pirate fans.

Lipchak and Kenitz talk things over prior to a Pirate-Dodger game with pitcher Fred Green (second from left) and first baseman Dick Stuart. The slugging Stuart was a star of the game. He tripled home three runs in the first inning to give the Pirates a lead they never relinquished.

Both Kenitz and Lipchak followed the Pirates through their bad as well as good years. Kenitz is a bleacher fan and Lipchak prefers the grandstand "close to the action." They got together here for picture purposes.

An exciting bit of action in the Pirate-Dodger game is reflected on the faces of the pair. Kenitz fondly recalls the days when Honus Wagner was a Pirate. Lipchak's big thrill was the final game of the 1960 World Series.

Multitude of ideas produced competitive Norwood speed changer

Everybody got into the act

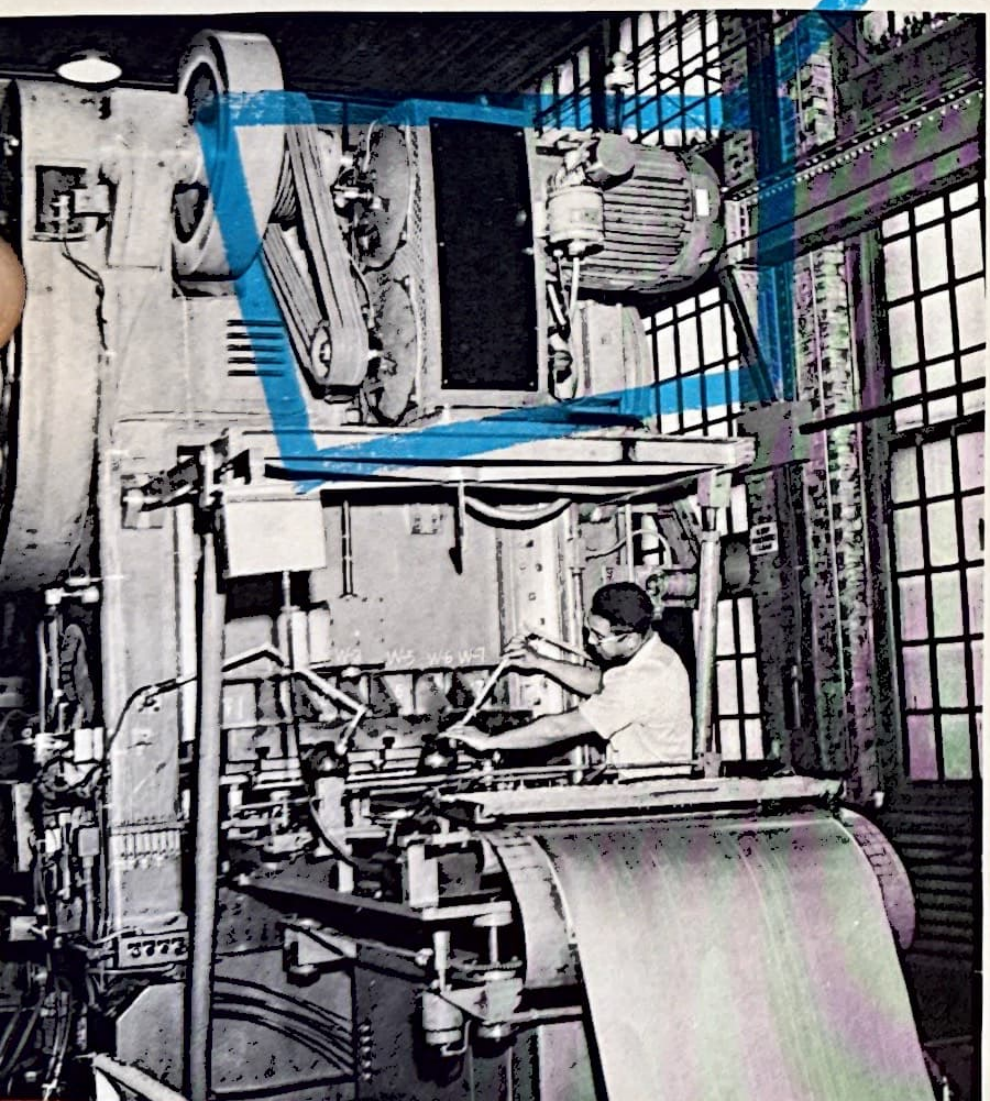
Seventy cents.

By itself, the amount doesn't seem like much. But to the men seated around a blueprint-covered table at a Norwood Works Design-Manufacturing Liaison meeting, a saving of approximately 70¢ on the machining of certain keyways for the new VARI-TEX speed changer line was significant. It meant just that much less cost to contend with in manufacturing a unit that would buck the stiffest kind of competition.

Norwood looks to the *Vari-Tex* speed changer as a product that "will really put us in the market". The market in this case is provided by customers looking for a dependable, low cost means of mechanically adjusting the speed supplied to such equipment as conveyors, pumps, mixers, and machine tools. Essentially, A-C's speed changer is a combined motor and V-belt drive which can produce a range of output speeds.

The men seated at the table were concerned with many things. There were two basic meetings for the purpose of considering and finding ways to improve the "manufacturability" of the unit. That is, change the design to reduce cost, improve quality, utilize existing tooling and eliminate production problems.

From the very beginning, men from the development laboratory, product engineering, industrial engineering, quality control and production were brought into the act. Norwood feels that potential shop "headaches" can be eliminated and costs reduced *before* patterns and tools are made by bringing the production and industrial engineering people in from the beginning.



At first they exchanged ideas using the brain-storming approach. Nothing was rejected. Even obviously impractical ideas were tossed about in hope that they would be the inspiration for an idea that *was* practical.

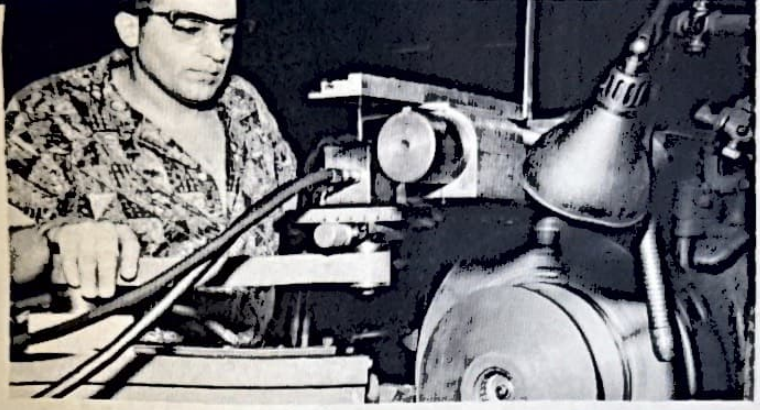
"This was a cooperative effort, as all our new products are. We are strong on that at Norwood," said Toby Mercuro, supervisor of manufacturing engineering in the Industrial Engineering department. "We had people from all the departments involved, adding their own viewpoint on design, tooling, and methods. It takes varied backgrounds and outlooks to make a successful product, and a product can't be considered successful till it's making a profit".

How successful were these discussions?

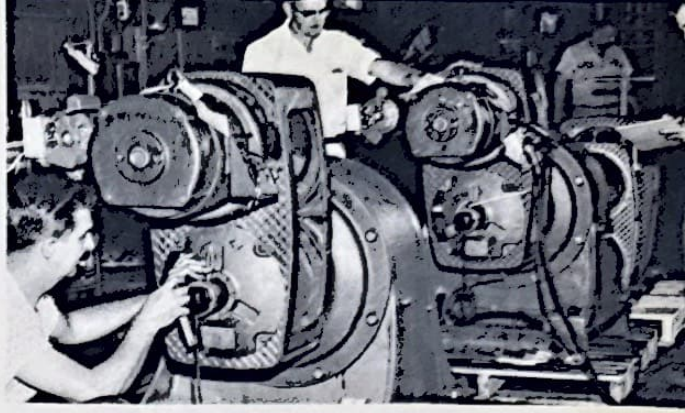
Les Brueggeman, supervisory engineer of the mechanical engineering section in the Electrical department said, "Feature-wise — of course, I'm prejudiced — our product is more than competitive. Cost-wise, it has to be competitive."

Suggestions and improvements made during the Design-Manufacturing Liaison meetings and the Production Tooling meetings fill pages. Standing alone, some innovations seem almost trivial.

***VARI-TEX** speed changers have a variety of applications. Here a unit helps regulate a machine being operated at the West Allis Works by Glenn Banks, punch press operator. The speed changers are manufactured at the Norwood Works. Nationally, the market potential is indicated as being in the neighborhood of $12 million.*



Machining a disc for a *VARI-TEX* unit is turret lathe operator H. Gordon Polly. Although much thought has been given to keeping the unit competitive, Norwood realizes that the battle against costs is a continuing struggle that must be fought by all employes.



Norwood looks to the new speed changer as a product that "will really put us in the market." Assembler Ottice Phillips attaches a component to a gear reducer. Testing the unit is George Henderson (right), inspection foreman, and James Tilford, shop foreman.

Taken together, they make the difference between beating out competitors in this field — or losing out.

Cost, as always, was a guidepost. The keyway mentioned was simply changed from a round end to a sled-type end to produce the 70¢ savings for each keyway so machined. Other design changes altered the weight of the castings, tolerances, and finishes. As often as feasible they were selected so existing tooling could be utilized. Some components were so designed to be used in more than one size speed changer through standardization. Covered and answered in these sessions were such questions as: "Should we make or buy this part?" "Should we cast or fabricate?" "What less expensive material can be used?"

Every part was gone over with a thoroughness that would do credit to Sherlock Holmes. In the case of a shifter fork, it was discovered that a part which it was at first thought must be purchased from an outside supplier could better be made at the plant, bringing still more work into the shops.

With the exception of items like belts, springs and bearings, an estimated 90 per cent of the components for the VARI-TEX speed changer is being produced at Norwood.

Since the sales prospects for this essentially new product are many times greater than the old line it replaces, it brings with it the prospect of more work.

Brueggeman and Mercuro stressed, however, that the fight to keep the units competitive is just underway. "We are still finding ways to reduce costs and improve the product, and this is only the beginning. We will be depending on our supervisors and on-the-line employes through the Suggestion and Better Methods programs to figure out ways to shave costs further. We know this is exactly what our competition will also be doing."

Mercuro said, "Of course, without quality, the price of the product means nothing. We are selling to people who are paying more attention than ever before to increasing the productivity of the machines, processes and systems in their plants. They want equipment that will do a better job with less maintenance and down time, whether it is working with a conveyor in a bakery or in a stone crushing operation."

D. W. Hertel, Application Engineering, said, "We have kept our product simple and versatile. Each of our three basic units has a wide range of speeds, and the over-all efficiency, from the top to the lower speeds, is greater than with any other type of drive. We are quite proud of this."

The entire project at Norwood amounts to a cooperative commando attack for greater sales and more work for its shops and offices.

Norwood prides itself on cooperation between departments. Above are men involved in a production tooling methods meeting: (from left) Les Brueggeman, Bob Craig, Ken Little, Toby Mercuro, Paul Sons, Bill Manne, Paul Williams. At left, studying a blueprint in a design to manufacturing liaison meeting are (clockwise, from left) Carl Ogden, Frank Grooms, Brueggeman, Mercuro, Steve Weitlauf, John Warrall.

The Remarkable Woos

Hard study has helped bring three Allis-Chalmers scholarships into the Anthony Woo family, West Allis. The Woo children are Diana (standing), Steve, and Jo Anna. Tony said, "My wife and I have tried to instill the feeling that school is a serious thing, not something you just 'get by'."

Jo Anna Woo

Craig Andrews

Carl Banfield

Bonnie Hieber

Sarah Klassen

15 outstanding students bring total recipients to 133

The 15 new winners of Allis-Chalmers $600 scholarships this year, followed by parents' names, are:

Craig N. Andrews, Donald Andrews, field representative, York.

Carl E. Banfield, Carl Banfield, machine operator, Terre Haute.

Carol A. Bauer, Thomas Bauer, welder, Pittsburgh.

Edwin E. Borkenhagen, Curtis Borkenhagen, layout man, West Allis.

Charlene Cox, Charles Cox, assistant foreman, Norwood.

Ray C. Flesher, Ralph Flesher (deceased), assistant chief accountant, Harvey.

Daniel Hathaway, Ernest Hathaway, accounting clerk, West Allis.

Bonnie G. Hieber, William L. Hieber, superintendent, Terre Haute.

Sarah J. Klassen, Eugene J. Klassen, tool die and gauge maker, LaPorte.

William C. Kristy, O. M. Kristy, supervisory engineer, West Allis.

Gwendolyn L. Lewis, Robert M. Lewis, erection superintendent, West Allis.

William E. Maltby, William C. Maltby, senior layout draftsman, Harvey.

Sally J. Ringland, William L. Ringland, chief engineer, Motor and Generator department, West Allis.

Jo Anna Woo, Anthony Woo, application engineer, West Allis.

Stephen J. Zubarik, Rudolph Zubarik, watch engineer, West Allis.

(Alan E. Siebe, son of Charles Siebe, superintendent, Norwood, was on the original list of 15 winners but has withdrawn in favor of an appointment to the U.S. Naval Academy).

These 15 bring to 133 the number of scholarships awarded since 1950. They are awarded on the basis of scholastic records, a college entrance examination, appraisal by high school officials, and character and leadership.

Third member of family merits A-C scholarship

Chinese rank scholars in a class by themselves. Education is esteemed more than wealth, says Anthony Woo, an application engineer in A-C International Division.

Tony's three children — Steve, Diana and Jo Anna — have been raised on this principle. That they have learned it well is found in the fact that all three have won Allis-Chalmers scholarships — an unprecedented achievement during the 12 years the program has been in existence.

"I don't consider my children geniuses, but they make it up by studying hard," said Tony. "My wife and I have tried to instill the feeling that school is a serious thing, not something you just 'get by'."

Their list of scholastic achievements read like this:

Steve — Graduated from Marquette University high school, Milwaukee, with a 94-plus average, fourth highest in his class; graduated *magna cum laude* from Marquette university's college of liberal arts; just completed his first year at Marquette's school of medicine and this summer is doing research work under a fellowship award.

Diana — Graduated from Mercy high school, Milwaukee, as valedictorian with a 95.16 average; has completed her sophomore year at Mount Mary college, Milwaukee, as a medical technology student.

Jo Anna — One of 15 new 1961 recipients of an A-C scholarship, also was valedictorian at Mercy (average 95.65); plans to follow in her sister's footsteps at Mount Mary.

Tony's attention to his children's education is detailed in three scrapbooks, one for each child. They contain every report card the Woos ever received, plus other information related to scholastic and a variety of extra-curricular achievements — from a ping pong championship to "Homemaker of Tomorrow" awards.

There is little variety in the report cards. "A's" predominate.

Tony knows the value of scholarships. A small award helped him receive his electrical engineering degree from Marquette in 1935. He waited on tables in a boarding house, and received some financial aid from a brother to help him the rest of the way.

He started with Allis-Chalmers a few months after graduating, and has been with the company ever since.

"I try to impress on my children that the only reason they were able to receive a scholarship in the first place is that I am an A-C employe. I would go into debt to send my children through college, but these scholarships have been a great help to us."

After Steve won his award, Tony was hesitant about letting his daughters apply. Then he learned the company imposed no limitations. Allis-Chalmers is seeking the most capable and deserving students wherever they may be found among the families of its employes.

"Finally," said Woo, "I felt I should not discriminate among my own children," and he allowed them to take their chances in open competition with some of the finest students in the country. "When I learned that Jo Anna won, I almost fainted."

Although both were born American citiens, Mr. and Mrs. Woo spent their early years in China. There the printed word was so revered that any printed matter blowing about the streets was placed in special containers. The Chinese could not abide disrespect for knowledge in any form, just as nations do not tolerate disrespect for their flags.

It's safe to say you won't find printed matter treated lightly at the Woo home.

Carol Bauer

Edwin Borkenhagen

Charlene Cox

Ray Flesher

Daniel Hathaway

William Kristy

Gwendolyn Lewis

William Maltby

Sally Ringland

Stephen Zubarik

They made a profit today

Susan Smith, a stenographer, made a profit for Allis-Chalmers today. So did John Jones (he's a turret lathe operator), Robert Cullen (an accountant), and Karl Peterson (Karl is a shipper.)

You all know these employes, under different names and job titles.

When Allis-Chalmers hired these people, no specific mention was made of profit. They were told what their duties would be, a bit about the company, and what it had to offer them. But no one explicitly tied their jobs in with profits.

Susan, in fact, occasionally gets kidded about being part of "overhead" or "burden." Yet, Susan made a profit for the company today. She made a profit yesterday too, and in all probability she will make one tomorrow.

How did she go about it?

Well, she was hired to type correspondence and to keep files in order for her section of a product sales department. Somewhere along the line her salary is added to the costs of those products. In the long run, the customer is paying for her services, and she gives the customer his money's worth.

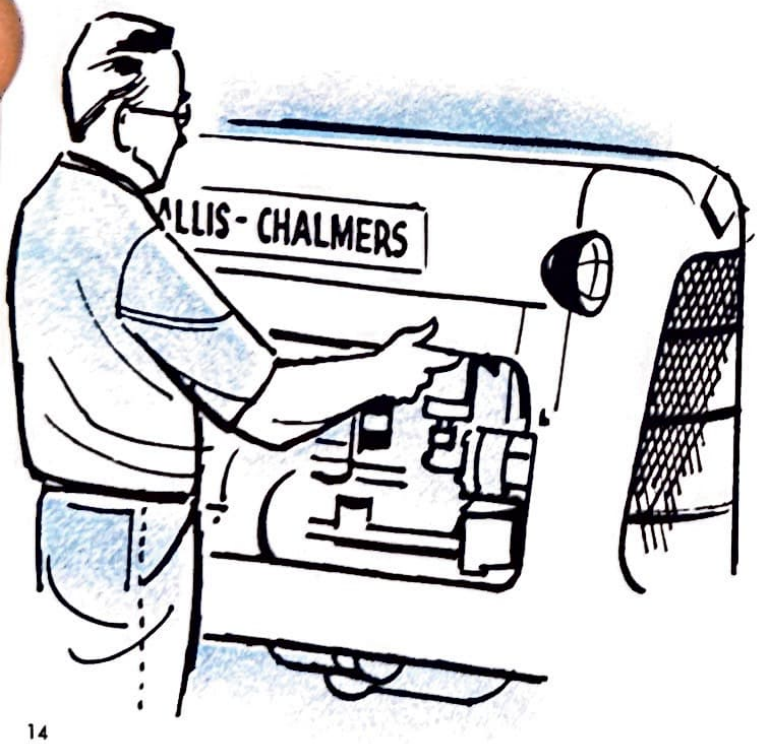
When she types a letter, it's invariably right the first time. When she does a job, she keeps her mind on it. She uses her time well — and the time of others. When one of the men in her department needs a report from the files, she has it for him promptly. He isn't kept waiting, while perhaps someone else, in turn, is kept waiting on the telephone.

When Susan's department quotes a price on a product to a customer, the department is certain that the charges against her work will be accurate. This price is figured so that Allis-Chalmers will make a profit on the sale. If the cost of Susan's work is above what was estimated, the profit realized is less than anticipated.

What about John Jones? It is obvious that Jones, a skilled employe, helps turn out a profit every time he machines a component with accuracy, and within the time Allis-Chalmers counted on when a price was quoted to the customer.

Beyond this, however, John realizes that he can reduce some of the costs involved in his work if he gives it a little thought. Last week he decided that a cutting tool, once discarded after it served its purpose, could be adapted for another operation. Over the course of a year, the savings through his idea will amount to about $500.

This helps offset rising costs in his and other areas of production, and makes it that much easier to sell the product at a price acceptable to the customer, and to make an acceptable profit. (The costs of materials and services to Allis-Chalmers increased from $280 million in 1959 to $290 million in 1960.)



Our accountant, Robert Cullen, meanwhile, was doing his part. He knows his business, and gets it done right. But he also considers that there is more to his job than making numbers balance.

He is on the telephone a lot, often long distance. But he keeps his calls as short as possible, and never telephones if a letter will do the job as well.

Telephone calls may not seem like much, but Allis-Chalmers bill last year amounted to $2,313,720. Reduce this by just one per cent, and you have quite a savings — savings that can be used to buy new equipment.

Shipper Karl Peterson is one of those fellows you can set your clock by. It's a rare day when he isn't on the job. There's no last minute scrambling to find a replacement for him, no unnecessary delays on his account.

Karl once heard that he — and every other A-C employe — is in direct competition with his counterparts at every other firm making the same kind of products Allis-Chalmers makes. This information was hardly enough to startle him, or to stir him to great new achievements. But it made sense.

He came to Allis-Chalmers primarily to make a good living for himself and his family. He realized that by performing his tasks as they should be performed he is helping the company get ahead. When the company is making progress, he has a better chance of making progress.

Susan Smith, John Jones, Robert Cullen, and Karl Peterson are only four of well over 30,000 Allis-Chalmers employes who were hired to make a profit for the company, and they do.

This profit, in a very real sense, is their's as well. It is only the company making a profit which can afford to spend money on the development of new products and markets to help insure jobs for the future.

It is only the company making a profit that is in a good position to buy expensive new machinery, to improve efficiency of operations and control costs.

It is only the company with a profit that can do all the things expected of it by employes, customers, stockholders.

. . . another kind of profit

Allis-Chalmers people know how to work safely. For all of 1960 our company-wide mark of 3.6 lost time mishaps for every one million manhours worked was the best ever established by employes and was well below the national industrial average.

In the past six months, though, these accidents increased, according to preliminary reports. The number of lost time mishaps for every one million manhours during the first half of 1961 is 4.3 compared with 3.6 for the same period in 1960.

The point is, Allis-Chalmers people have proven (see back cover) they not only know how to profit from common sense safety habits, but how to reap a greater degree of profit from them with each succeeding year.

A continuation of these achievements is still well within reach during the balance of 1961.

Following is a comparison breakdown of accident frequency experience at various Allis-Chalmers operations for the first six months of 1960 and 1961.

	1961	1960		1961	1960
Atomic Power Division	0	—	Norwood	1.9	1.7
Boston	4.6	5.8	Oxnard	0	12.3
Cedar Rapids	2.9	1.6	Pittsburgh	3.6	7.5
Deerfield	7.0	3.4	Springfield	4.1	3.1
Gadsden	4.3	0	Terre Haute	3.8	10.1
Harvey	0	0	Tractor Group Branches	15.1	9.7
Independence	0	1.5	Valley Iron Works Corp.	6.6	24.6
Industries Group District Offices	2.6	0	West Allis	4.3	3.1
Lachine	0	3.7	York	8.7	9.2
LaCrosse	2.5	2.3	Company	4.3	3.6
LaPorte	2.6	2.1			

a-c scope

ALLIS-CHALMERS MFG. CO.
Box 512
Milwaukee, Wis.

Another bouquet for Allis-Chalmers people

Allis-Chalmers earns or wins nothing. Take this Award of Merit recently presented for significant improvement in 1960 industrial injury rates. The plaque says "Presented to Allis-Chalmers Mfg. Co. for a Noteworthy Safety Performance." This is merely a manner of speaking. People win awards, not companies. In this case involved were more than 32,000 employes in 17 plants and more than 150 sales offices throughout the United States. The award is not lightly given. Selection is made on the basis of a rigid improvement formula developed by the National Safety Council. Allis-Chalmers people filled the bill.