

THE CHALLENGE OF LOWER COSTS PERSONALS

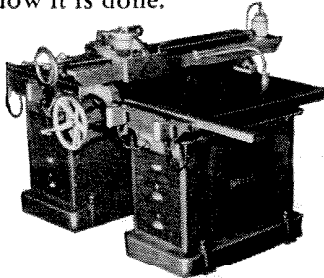
THE engineer who knows how to cut production costs commands the attention of manufacturers everywhere.

Cutting production costs starts with knowing how to use the least costly materials that will both handle the loads and can be fabricated economically.

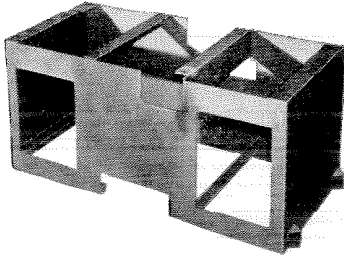
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Utilizing the superior properties of steel to best advantage, material costs can be cut as much as 85%. This means that with today's fast, efficient welding methods, most machine designs can be fabricated with overall reductions in cost averaging up to 50%. Here is an example of how it is done.



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1917

Paul D. V. Manning was recently made an honorary member of the American Institute of Chemists. After receiving his MS at Caltech, Paul got his PhD at Columbia University, then spent the years from 1925 to 1941 in various industrial positions on the West Coast, and lectured in chemical engineering at Stanford on the side. In 1941 he became director of research of the International Minerals and Chemical Corporation in Chicago, and he has been vice-president of the firm since 1943.

1924

Edgar N. Layton and his family moved to Concord, California, last year, when Ed was transferred by the Fluor Corp. to serve as assistant manager of Fluor Maintenance, Inc. He writes: "We like the Bay Area and were glad to get out of Smogtown. Have had the same wife, Anne, for 30 years, a son, 12, in school locally, and a daughter who has been married two years, living in San Jose. We recently learned that we will soon be grandparents. Have enjoyed meeting many old-time alumni at the weekly luncheons in San Francisco, and at *Bob Bowman's* ('26) annual alumni barbeque in Concord in September."

1929

Reymond J. Kircher, formerly with the Bell Telephone Laboratories, has joined the technical staff of the Systems Laboratories of Hughes Research and Development in Culver City, California.

1931

John R. McMillan is now executive vice-president of the Monterey Oil Company in Los Angeles. He was formerly vice-president of the Fullerton Oil Company of Tulsa, which has now become a part of the Los Angeles organization.

1932

Edward C. Keachie, associate professor of industrial engineering at the University of California in Berkeley, is now in Darmstadt, Germany, for a year as a Fulbright instructor at the Technische Hochschule. His wife and three children (Stephen, 14, Douglas, 10, and Pamela, 4) are with him. Ed says he expects to gather more material while in Germany for his study of industrial firms' methods of analysis of plant and equipment spending.

1932

Clark Goodman is taking a leave of absence from MIT to become assistant director of the Reactor Development Division of the Atomic Energy Commission. Now on a part-time basis, he will probably move to Washington about the beginning of February. "During the past year," Clark says, "my wife and I each had Fulbright Fellowships in Japan. We had a wonderful experience and feel that we learned to understand and appreciate the Japanese people. Our children attended an all-Japanese school and certainly

did their share in furthering international good will."

William Shockley, who joined the Bell Telephone Laboratories in 1936, and has been director of transistor physics there since 1954, is now with Beckman Instruments, Inc., in Fullerton, California. He is building a new research group to further development of the semiconductors from which transistors are made.

1933

Robert S. Rose, Jr., PhD, has been named assistant director of the chemical research department of the Atlas Powder Company in Wilmington, Delaware. Bob has been with Atlas since 1935.

1933

Carlton R. Worth, PhD, has been appointed assistant professor of mathematics at Ithaca College, New York.

Ralph Hultgren, PhD, professor of metallurgy at the University of California, will be at Caltech from February until June next year on a sabbatical leave. While here he will study metallic chemical bonding with Dr. Pauling. Ralph's son, Neilen, has enrolled at Caltech this fall as a graduate student in chemistry.

1934

G. Sidney Smith, director of research for Carlon Products, Inc., in Cleveland, writes that, "We are moving into a newly built home in Kent with our sons, 16 and 14, and daughters, 11 and 8. Busy with Soap-Box-Derby clinics, Boy Scouts, A.S.T.M., business trips, and sons' hobbies of radios and chemistry. Spent an evening recently with roommate *Johnny Little* ('34) of Sandusky, Ohio, after 21 years!"

1935

Hsia-Chien Huang, MS, PhD '38, an escapee from Red China, is now with the American Institute of Aerological Research in Denver, Colorado. His one regret is that his eldest son is still in China, although his wife (a former high school teacher in China) and his other two sons are here with him. He was head of the department of meteorology in the National Central University before the political changes in China, and established the first nationwide weather reporting system, the Central Weather Bureau of China.

Oliver C. Dunbar reports that, after nine and a half years in the U.S., he's "being shipped back overseas, Army Signal Corps, to head the Engineering Branch, Communication Division, at Camp Zama near Tokyo, Japan. This will mean a three-year tour of duty so my family and I probably won't be back until 1959."

Wallace Johnson, president of Up-Right Scaffolds, writes from Berkeley, Calif., that he combined a recent pleasure trip to Europe with business and arranged licensing agreements with a company in

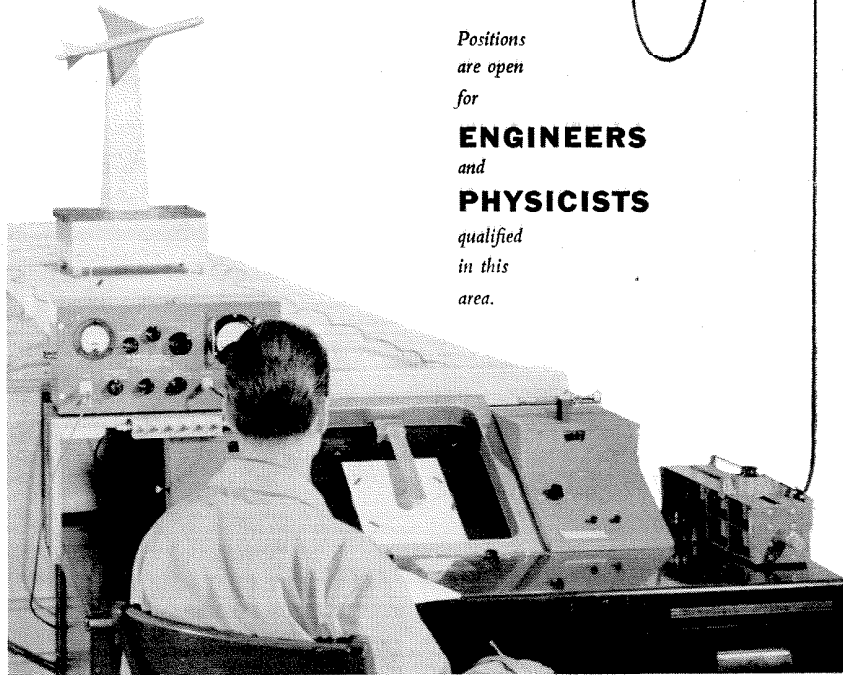
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Instrumentation is developed for new measuring equipment to meet needs of the program. This has included development of automatic impedance and antenna pattern recorders, microwave power supplies stabilized in amplitude and frequency, microwave circuitry, and microwave applications of ferrite devices.

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Culver City, Los Angeles County
California

Personals . . . CONTINUED

England and one in Switzerland to manufacture and sell his aluminum scaffolds.

1936

Frank J. Malina, MS '35, PhD '40, had a one man show in Paris recently of his electro-paintings. He writes: "You might say I am trying in a small way to bridge the gap between science and art. Last year the city of Paris purchased one of my wire screen transparencies, which was both encouraging and satisfying to one who has strayed a long way from rocket research."

F. L. Johnson, manager of physical research and development of the Sun Oil Company in Dallas, has been appointed director of production research and development for the same organization.

1937

John R. Schultz, PhD, has been made chief geologist of the Manu-mine Research and Development Company in Reading, Pa. He had been with the U. S. Engineers in Vicksburg, Miss., for a number of years before this change.

1938

Maurice J. Schlatter, PhD '41, writes that he is "employed at the California Research Corporation in Richmond, and now have a son, four months old. Janie, 12, and Susan, 9, are wholeheartedly exercising their maternal instincts in helping their mother and father bring up Ronald Maurice 'properly.'"

Carlton L. Horine, who has been working at the Naval Ordnance Test Station at Inyokern, has now joined the development department of Brea Chemicals, in Brea, California, as senior process engineer.

1939

Edmund J. Pinney, PhD '42, is associate professor of mathematics at the University of California at Berkeley.

1940

Mark Muir Mills, PhD '48, is now working at the Livermore site of the University of California Radiation Lab as head of the theoretical division, and is also teaching nuclear engineering at Cal. He and his wife, Polly, have two children, Mark John, 9, and Ann, 6.

Miller W. Quarles, Jr., MS '41, resigned his position as chief geophysicist and Gulf Coast manager of the Precision Exploration Company in June. He is now with Ralph E. Fait, Inc., in San Antonio, Texas, as geologist and geophysicist.

Robert S. Neiswander, MS '46, PhD '54, is now a member of the technical staff of the electronics tube laboratory of Hughes Research and Development. He was formerly with Aerojet as an engineer.

1942

Robert A. Spurr, PhD, formerly associate professor of chemistry at the University of Maryland, is now a member of the research laboratories at Hughes Aircraft in Culver City, California.

Personals . . . CONTINUED

Philip O. Johnson, MS '43, has joined the Semi-Conductor Laboratory at Hughes Aircraft. He had been working at North American Aviation.

1943

Amasa Stone Bishop is heading the Atomic Energy Commission's Sherwood Project in Washington, D.C., which is doing research on the conversion of sea water into usable energy.

Raymond Homer Simpson, MS, died of cancer on March 25 at his home, 105 Highland Avenue Drive, Lamesa, Texas. He was a wholesale agent for the Humble Oil and Refining Company. Ray is survived by his wife, Evelyn Storey Simpson, two sons and one daughter.

Herbert A. Lassen, PhD '50, who is with Hughes Aircraft as a senior staff engineer, is teaching a course in advanced kinematics of mechanisms at the UCLA Engineering Extension Division in Los Angeles.

Richard M. Lemmon, MS, is a chemist in the radiation laboratory at the University of California in Berkeley. He is also serving as secretary of the California Section of the American Chemical Society.

Alexander C. Ridland is now with Solar Aircraft as an experimental engineer in their gas turbine project in San Diego. Before going to Solar, he had worked with Convair in design engineering. Alex, his wife, and two children live in Rancho Santa Fe, near San Diego.

1946

George R. Watt has been named product planning coordinator for the Consolidated Engineering Corporation in Pasadena. George has been with Consolidated for two years as a market research engineer.

Donald Gray Furst, MS '48, has been transferred to Phoenix as an assistant project engineer in charge of development of two gas turbine engines for the AirResearch Manufacturing Company.

John O. Nigra, MS, is back at Tulane University after spending a year in Iraq on a Fulbright Fellowship.

Ali Bulent Cambel, MS, has received a Fellow Membership in the American Rocket Society. He is an associate professor of mechanical engineering at Northwestern, in charge of the university's gas dynamics laboratory.

1947

David L. Douglas, PhD '51, recently transferred from the chemistry section of the Knolls Atomic Power Laboratory, operated by General Electric for the AEC, to the G.E. Research Lab (chemistry research department), in Schenectady.

Telford Oswald, MS, PhD '51, senior staff engineer in the guided missiles division of Hughes Aircraft, is lecturing in intermediate fluid mechanics this fall at UCLA.

1948

Lt. Col. Edward N. Hall, MS, has received the Robert H. Goddard Memorial Award from the American Rocket Society for his development of liquid propellant rockets. Ed is supervisor of propulsion at the Western Development Division headquarters of the Air Research and Development Command in Inglewood, California.

Abner Kaplan, MS '49, is now working in the aeromechanics group of the Guided Missile Research Division of the Ramo-Wooldrige Corporation in Los Angeles. The Kaplans have two children, Eric David, 4, and Ellen Louise, 1.

Donald P. Wilkinson, who was formerly with the technical staff of the Propulsion Research Corporation, has joined the sys-

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Personals . . . CONTINUED

terms division of Hughes Research and Development in Culver City, California.

1949

Edward C. DuFort, MS '52, writes that he is "still with Continental Oil Company and was transferred to Houston last month. Now have an energetic son running about. All is well except my golf game."

Albert S. Hook, recently became a member of the advanced electronics laboratory of Hughes Research and Development. He was formerly with the National Cash Register Company.

1950

Carel Otte, MS, PhD '54, and his wife, Mary have a four-month-old son, Stuart Carel. They're living in Casper, Wyoming.

Jerome E. Jacobs, MS '51, a member of the technical staff of Hughes Aircraft, is a lecturer in engineering this fall at UCLA. He's teaching a course in basic electronics.

Ralph Lutwack, PhD '55, recently joined the Shell Development Company's Emeryville, California, Research Center as a chemist in the lubricants general department.

James C. Blom, who received his PhD at Innsbruck in 1953, recently completed a hitch in the Corps of Engineers, and is now working for the Standard Oil Company. He is the father of a baby girl, Monica Charlotte.

1951

Robert H. Harner, MS, who is working as a development engineer with the S. and C. Electric Company in Chicago, was married last March to Mary E. Forsland of Chicago.

Robert Hildebrand Ahlers, MS, is now working at the Dow Chemical Company in Midland, Michigan.

Jan A. Narud, MS, received his PhD at Stanford last spring and was appointed assistant professor at Harvard University this summer. Jan and his wife have a six-month old son.

1952

William L. Wise writes that he is in the development laboratory of the Hewlett-Packard Company in Palo Alto and reports that altogether, six engineers of Tech origin are with the Lab. Bill and his wife have three children, Lawrence, 3, Sandra, 19 months, and Teri, 4 months.

John Baugher is back at Caltech studying for an MS in electrical engineering.

Dick Quan, MS, is employed as a design group leader in the design analysis section of the Gas Turbine Division of A. V. Roe, Canada, in Toronto.

1953

David I. MacDonald, Jr., MS '54, is stationed at Dugway proving ground in the Chemical Corps of the Army.

Arnold A. Strassenburg, MS, is assistant professor of physics at the University of Kansas.

Earl D. Jacobs, MS, has joined the technical staff of the electron tube laboratory at Hughes Research and Development in Culver City.

William D. Gardner resigned his commission in the U.S. Coast and Geodetic Survey and is assistant director of Public Works for Corona, California. He was recently married to the former Barbara Paton.

Edwin Jule Stofel was married in Glendale to Connie Orr, a student at UCLA. Edwin is stationed in San Francisco with the Army.

Neal H. Cosand is working for his MS under a Hughes Cooperative Program fellowship, and working concurrently in the Field Engineering Division. *Daniel Gerlough*, BS '37, is also on the technical staff of Hughes, at Culver City.

1954

Frederick W. Garrison is working for General Electric in Schenectady. He and his wife, the former Ramona Fulp, have a daughter, Vicki Lynn, three months old.

Robert Keith Campbell is also in Schenectady, working in General Electric's turbine department.

1955

Allen I. Ormsbee, PhD, *Walter A. Johnson*, MS, *Regis E. Neuman*, MS, and *Martin Vogel* have all joined the technical staff at Hughes Research and Development at Culver City.

Edwin J. Furshpan, PhD, is working with Professor B. Katz at the University College in London. He will be there for a year on a National Science Foundation post-doctoral fellowship.

Roy Sachs, PhD, is in Italy at the University of Parma. His research is in plant physiology and is sponsored on a fellowship from the National Science Foundation.

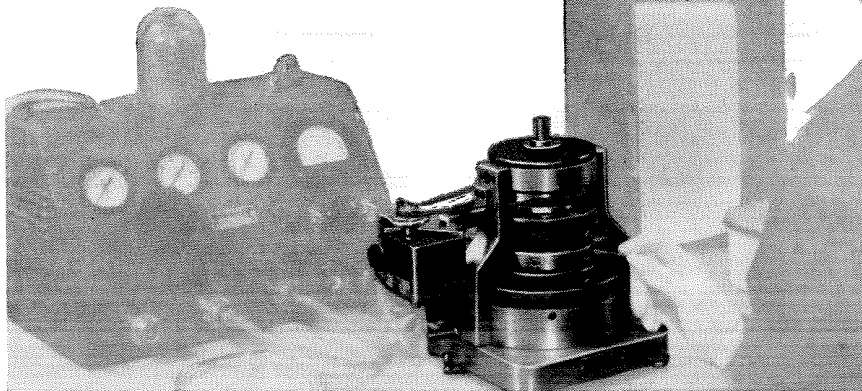
David R. Viglierchio, PhD, is at the University of California in Davis, Calif. His work is concerned with plant nematology.

Charles J. Brokaw is doing graduate work at the University of Cambridge in England.

Ernest A. Dernburg has been awarded a graduate assistantship at UCLA and is majoring in zoology.

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