



KRAISSL QUARTERLY

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THE KRAISSL COMPANY

INCORPORATED

PUMPS-SEPARATORS-ENGINEERING EQUIPMENT

HACKENSACK, NEW JERSEY



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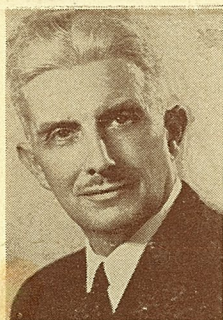
JANUARY 1959

Number 1

WHAT IS THE FUNCTION OF AN APPLICATION ENGINEER?

FREDERICK KRAISSL, JR., P. E. President

A national engineering society to which I belong says that engineering harnesses nature's resources for the benefit of mankind. A current dictionary gives the verb definition of engineer, to plan, construct or manage as an engineer or just to manage.



My examination for a license in professional engineering was taken many years ago when there were not so many applicants that the Board could not question them personally. The applicants were required to appear before the Board and the effect was somewhat like that of a military court with all members anxious and willing to ask the defendant any questions each desired. It was not possible to hide behind the cloak of a written examination where ambiguous answers could be given to ambiguous questions and if the questions required definite answers, there was little time to think and maybe do a few trial computations. In a verbal examination the candidate puts everything he or she has on the line and is judged by the answers. Watch any high pay off TV quiz show and you will understand my point.

The only question and answer remembered was one that may have indicated the direction of my career at an early date. One examiner asked me "Are you a chemist or a chemical engineer?" I was rather taken aback as I thought my majors in the subjects leading to my college and university degrees made this clear. So I answered emphatically, "Chemical engineer". And the reply was just as disconcerting, "Why do you think you are a chemical engineer?"

I have always been happy with my answer under pressure as I said, "Well the chemist like any other pure scientist is interested in finding out scientific facts, the chemical engineer does

not consider he has accomplished his objective until these findings are usefully applied for the benefit of mankind".

The following may be considered controversial but in a free country everyone is entitled to his or her opinion. It is my opinion that in its broadest sense, engineering is applied science in the field of material things resulting in products or structures. In order to harness nature's resources we must apply our scientific knowledge.

If engineering is also technical management, we know one function of management is to accomplish objectives sufficiently acceptable so that customers will pay for the offering or result, and if we do not offer the final result or product in a form that will satisfy an existing need or future requirement, what good is it or how does it benefit mankind?

So will you join me in agreeing that unless we have applied our knowledge in supplying things that meet human requirements, no engineering has been accomplished? And, if this is true, is not one of the most neglected roles of the engineer, that of searching out the needs and requirements of the industry or activity of which he or she is a part, with the objective of offering an adequate solution for each?

If by this reasoning we agree that all engineering is application engineering in a broad sense, can we reserve the specific designation of application engineer for an engineer who devotes his career to searching out the requirements in his field and then finding, designing or developing the product, mechanism, machine or process that will best meet them?

PERSONALS

Alice L. Kraissl has been elected Chairman of the Board of Trustees administering the Scholarship and Headquarters Fund of the Society of Women Engineers.

Robert C. Michel, P.E., was elected Vice-President of the Bergen County Society of Professional Engineers.

Frederick Kraissl, Jr., P.E., was elected a technical member of the American Boat & Yacht Council, Inc., Chairman of the Engineers-In-Industry Committee of N. J. Society of Profes-

(Continued on Page 2)

OUR SILENT REPRESENTATIVE

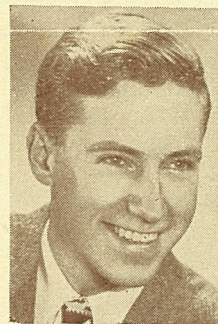
This is the first anniversary of Kraissl Quarterly and our thirty-third calendar year of business activity. We hope you like our publication and its policies.

We have occasionally been disturbed by visits that have been too frequent or too aggressive in presenting the product or service of the visitor. This has led us to place more reliance on our Silent Representative to preclude the possibility of having the same effect on the people we visit. Kraissl Quarterly speaks to you when wanted and can be set aside for future reference when urgent matters demand immediate attention.

It is our belief there is no substitute for personal contact in permitting people to know each other and we hope, like each other. It is our intent that our visits be for this purpose and never so frequent that we wear out our welcome.

In the meantime, we have listed our regional sales representatives and the area covered by personnel from our home office. It is our desire to be of assistance to you when you want us and we hope you will invite us to call should such occasions arise between our regular visits.

UNCLE SAM CAN CUT COSTS



R. C. MICHEL, P.E.
Vice-President

The reviewing of current government specifications cited in quotations and contracts has convinced me that great government savings could be effected by careful analysis and revision of many of these specifications.

The reasons for high cost usually involve over-specification in an effort to insure a satisfactory purchase. Quite often specifications include personal preferences that have no effect on the overall performance of the product for the application intended.

Some specifications suggest that little or no preliminary work has been done to determine whether standard commercial products will be satisfactory or whether complete redesign and

manufacturing specifications are necessary.

A common offense, in my opinion, is the citation of a long list of reference specification in toto with no limitation to those paragraphs in the reference that specifically apply. The result is a hopelessly complicated specification that discourages qualified bidders because of the burden of detailed investigation and also a higher price from those who do quote.

An example of this problem involves a material specification which is cited merely to convey to the bidder the material required rather than to imply costly quality control tests, especially on minor parts. A stocked part may have to be made over in small quantity at high cost just to permit a special unnecessary test and identification with the original heat or lot of raw material.

Unnecessary drawings and literature are other cost raisers which sometimes exceed the cost of the product.

Here are a few suggestions for specifiers of manufactured products:

1. Decide initially whether the application warrants a special design or whether a standardized commercial product, produced by one or more manufacturers, will meet the service requirements.
2. Specify in terms of product performance and not design when standard products will suffice.
3. If a special design is required, specify by detailed drawings rather than hopelessly cross-referenced word specifications.
4. Keep specifications as general as possible and cross reference only those paragraphs of secondary specifications that apply. If possible, incorporate them in primary specifications to avoid cross references.
5. Keep material quality control specifications within commercial standards for the product involved, if possible, and avoid costly qualifying tests, especially on minor parts.
6. Utilize standard literature available at no cost wherever possible. Where special drawings or literature are required, consider obtaining separate bids on the products and the literature. The low bidder on the drawings and literature may not be the manufacturer of the product.

Let us cut our red tape and realize we are all on the same team. Uncle Sam's costs will go down if we do more business over a hand shake and depend on reputable sources of supply for government requirements rather than by trying to write involved, fool-proof, specifications that merely raise costs.

INITIATIVE



ALICE L. KRAISSL
Treasurer

Initiative is a God-given quality, and like other Divinely inspired attributes of man can be nurtured and developed to its full, or allowed to wither and be lost.

The great people of the past, whose effort has built the United States since days of the first colonies, were spurred on in great measure by initiative, the desire to create, and the will to drive through against all odds to a satisfactory conclusion.

It appears, sadly enough, that the general interest on the part of many workers today seems to be "how much can I get for the least amount of effort expended", and when the day is done that part of the mind concerned with business is closed and locked, as is the office safe. No initiative, no ideas born of thoughts that come with solitude after the day's work is done, and no helpful planning for the future. It is doubtful if this procedure, had it been followed years ago, would have resulted in the country we live in and cherish today.

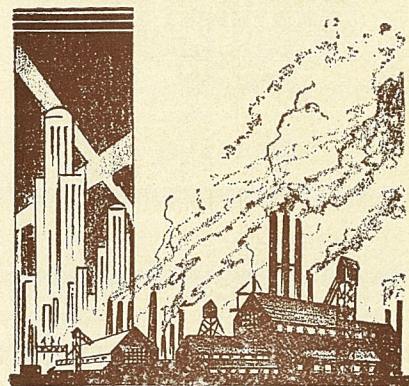
What of our country 200 years from now? Are we doing as much for our descendants as our ancestors did for us, or will our habits and policies result in initiative becoming as extinct as the dodo? Much of the action taken by our Government in the past three decades has seemed to weaken initiative, and to treat adults as incompetent children. One instance of this is the withholding tax which clearly indicates that the Government considers us unable to make proper plans for payment of our obligations, or does not trust us to do so, either premise being abhorrent to self-respecting individuals. Social security and pension plans, inclining toward lulling people to anticipate unproductive later years also are effective poisons directed against budding initiative.

The answer must be a continual struggle against social, economic and governmental pressures that tend to bind, stunt, and throttle this wonderful quality of initiative which is the essence of today's United States, and the greatest insurance of its continuance on the same high plane in years to come.

PERSONALS (Cont.)

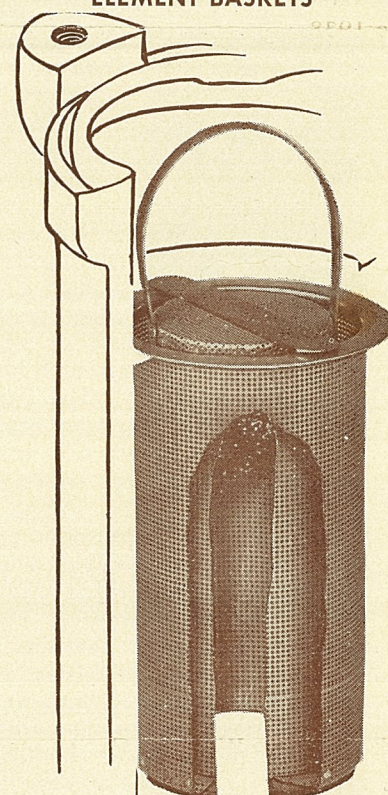
sional Engineers and Chairman of the Bergen County Air Pollution Control Association.

INDUSTRIAL FIELD

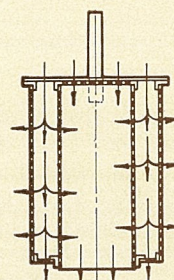


OIL BURNING INDUSTRY

INCREASED STRAINING AREA FOR SINGLE AND DUPLEX SEPARATORS WITH INTERCHANGEABLE DOUBLE ELEMENT BASKETS



Our Patented Multi-Element Baskets are easily dismantlable for cleaning and provide greater straining areas in the same separator housing. Double Element Baskets are listed by Underwriters Laboratories, Inc. for a great variety of sizes.



BASKET CAT. NO.	PIPE SIZES	BASKET DIMENSIONS		TOTAL SCREEN AREA SQ. IN.	APPROX. OPEN SCREEN AREA, SQ. IN.	
		O. D.	LENGTH		1/4" HOLE DIA.*	3/8" HOLE DIA.**
72-7/3	3/4" & 1"	1 1/8"	3 1/8"	38.3	15.3	10.7
72-9/7 1/2	1 1/2"	2 1/8"	3 3/8"	50.5	20.2	14.1
72-11/3	1 3/4"	2 3/8"	5	63.0	25.2	17.6
72-11/7	1 3/4"	2 3/8"	5	69.0	27.6	19.3
72-13/7	2"	3 1/8"	5 1/8"	84.9	34.0	23.8
72-15/7	2 1/2"	4 1/8"	6 1/8"	121	48.4	33.9
72-17/11	3"	4 3/8"	6 3/4"	141	56.4	39.5
72-21/11	4"	4 3/8"	10 3/8"	220	88.0	61.6

ORIGINAL EQUIPMENT MANUFACTURERS



CLASS 25 SERIES PUMPS ON SEWAGE EJECTORS

We mentioned in a recent issue that according to our records a pair of Class 25-15WJ series air compressors have been operating day in and day out since 1938.

It was our sincere pleasure to receive the following letter from the Blackburn Smith Mfg. Co.:

"Kraissl Company
Hackensack, N. J.

Attention: Mr. L. E. Mills, V.P.

Dear Lee:

It just so happened when we received the October issue of the KRAISSL QUARTERLY and read in it the remark about the long service of the Kraissl compressors on a Blackburn-Smith unit operating since 1938, that our Mr. Bendlin had just returned from Irvington, N. J. and checked over an installation that was installed in 1936. At this installation were 2 Kraissl 25-9 air cooled units still operating and going strong.

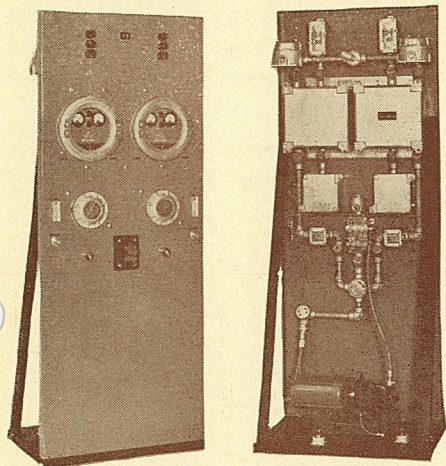
We thought this would be of interest to you.

M. Kitalf,
Manager"

CLASS 21 SERIES PUMPS IN HAZARDOUS GAS DETECTION EQUIPMENT

A number of manufacturers use our roller design air pumps for handling corrosive gases that might cause blade mechanisms to malfunction.

The Johnson-Williams Company of Palo Alto, California, recently sent us a picture of their well designed unit and you will note the Class 21 series pump indicated in the rear view.



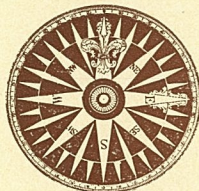
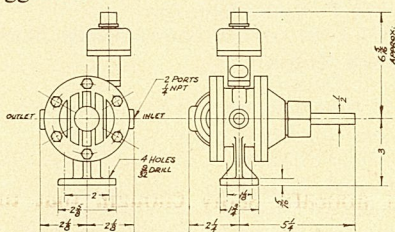
CLASS 29 SERIES AIR PUMPS

This will introduce our Class 29 series drip lubricated air pumps.

These are offered for applications particularly in the intermittent service field where our patented continuous recirculating system of oil lubrication and sealing may not be required.

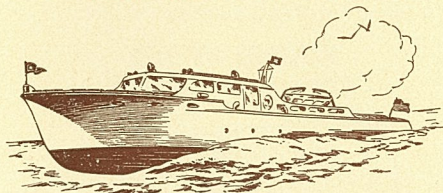
These drip lubricated pumps are available in capacity ranges of 2 to 7 cfm.

If larger capacities are required our automatically lubricated models are suggested.



MARINE FIELD

BOATING INDUSTRY



AT LAST A GOOD MARINE PUMP

Our bronze Class 60 series pumps make available the advantages of modern plastics and bearing materials.

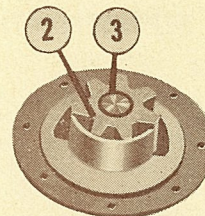
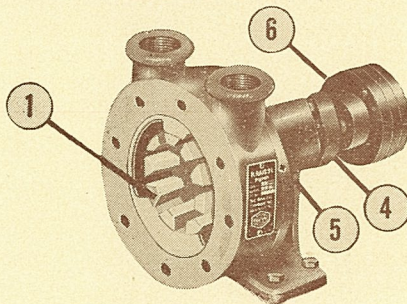
When two metal displacement gears run together with non-lubricating materials they wear each other.

When one of these gears is a plastic that is lubricated by water, wear is reduced to a minimum.

These principles have been applied to our well known Class 60 series design that has been used for so many years in the fuel oil field.

These pumps have high suction characteristics and pressures are limited to the type of bearings required to meet service conditions.

Write for Bulletin A1904.



FEATURES

1. Internal gear design provides high suction lift characteristics.
2. Interchangeable idler best suited to application.
3. Integral bearing and idler assembly.
4. Adjustable stuffing box fitted with return seal and soft packing keeps shaft wear and chance of leakage to a minimum.
5. Interchangeable return seal design allows change of rotation in field.
6. Flexible coupling of our design available most sizes.

SHIPBUILDING INDUSTRY



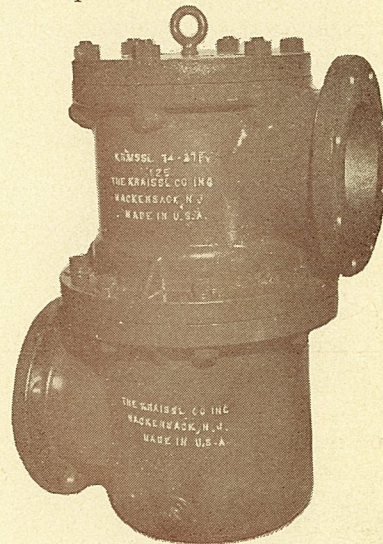
CLASS 74 STRAINERS GOING ABOARD HULLS 521/23 N.Y. SHIPBUILDING CORP.

This design strainer is the best news the shipbuilding industry has had for some time.

When you get up to eight, ten and twelve inch size strainers, piping on shipboard can become a problem. The fact that you can change the relationship of the ports to each other every 45° is a tremendous advantage.

Ports can be on the same side, opposite side, adjacent to each other, either front or back or 45 degrees from each of these positions.

There should be many cases where elbows can be eliminated which is not inconsequential with these sizes.



SALES REPRESENTATION

HOME OFFICE

We have reserved the areas of Connecticut, Delaware, Metropolitan New York, including the Hudson valley, Long Island, New Jersey and eastern Pennsylvania less Philadelphia District for coverage by Kraissl Company personnel.

Northeast Region

Robert Bacon Co.
272 Centre Street, Newton, Mass.
John S. Stone
P. O. Box 127, Holcomb, N. Y.

Eastern Region

Engineering Associates, Div. Trymac, Inc.
16 West 5th St., Erie, Pa.
Valley Equipment Company
404 Frick Building, Pittsburgh 19, Pa.
Shanklin Company
330 East 25th St., Baltimore, Md.
W. H. Titus
401 North Broad St., Philadelphia, Pa.

Southeast Region

L. M. Lee, Jr.
Richmond Federal Bldg., Richmond, Va.
Dillon Supply Company
Raleigh, N. C.
Boiler Supply Company, Inc.
490 Craighead Street, Nashville, Tenn.
2006 Sutherland Ave., Knoxville, Tenn.
Applied Engineering Co., Inc.
P. O. Box 506, Orangeburg, S. C.
Spotswood Parker & Co.
313 Techwood Drive, Atlanta, Ga.
T. W. McCuiston
504 S. W. 69th Ave., Miami, Fla.

North Central Region

Charles R. Davis
2970 W. Grand Blvd., Detroit, Mich.
Hetler Equipment Co.
1904 Clyde Park Ave., S. W.
Grand Rapids, Mich.

Central Region

Wm. G. Taylor
1900 Euclid Bldg., Cleveland, Ohio
Lightfoot Pump & Equipment Co.
1989 Guilford Rd., Columbus, Ohio
The Jordan Engineering Co.
Roselawn Center Bldg., Cincinnati, Ohio

T. A. Heidenreich Co., Inc.
912 E. Westfield Blvd., Indianapolis, Ind.
Lowden & Company
3404 N. Harlem St., Chicago, Ill.
A. K. Howell Co.
1001 Bellevue Ave., St. Louis, Mo.

South Central Region

Creole Engineering Co.
130 Harrison Ave., New Orleans, La.
3786 Scenic Highway, Baton Rouge, La.
BISCO
2635 S. Main St., Houston, Texas

Northwest Region

Bruce P. Rutherford, Inc.
122 First Ave., S. W., Portland, Oregon
Bruce P. Rutherford, Inc.
1954 First Avenue South, Seattle, Wash.

Western Region

A. C. Cope Co.
435 Bryant Street, San Francisco, Cal.
Power Engineering Co.
1806 South State St., Salt Lake City, Utah

Southwest Region

Walter T. Humes Co.
230 East Anaheim, Wilmington, Cal.
Wagner Hydraulic Equip. Co.
10814 Santa Monica Blvd.
Los Angeles, California

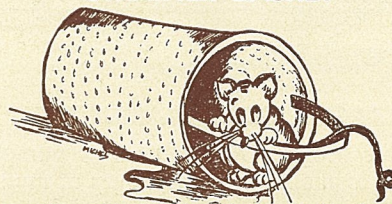
Canada—Ontario and Quebec Provinces

Kirk Equipment Ltd.
1460 Bishop Street
Montreal, Quebec, Canada

Vancouver—Fuel Oil Field

Fred McMeans & Co.
1608 West 5th Avenue
Vancouver, B. C., Canada

FOUND IN THE STRAINER BASKET



"Dad", said the daughter of the family,
"That bank in which you told me to
open an account must be in a bad way".
"Why do you say that?" said her

father. "That bank is one of the
strongest in the county".

"Well, it returned one of my checks
for \$25.00 marked "No Funds".

A business man got himself so in-
volved with his investments that he
became sufficiently ill to require hos-
pitalization. The nurse was taking
his temperature as he was somewhat
delirious.

"What is it now nurse?" he asked.
She answered, "102".

"When it gets to 102½, sell", said
the patient.

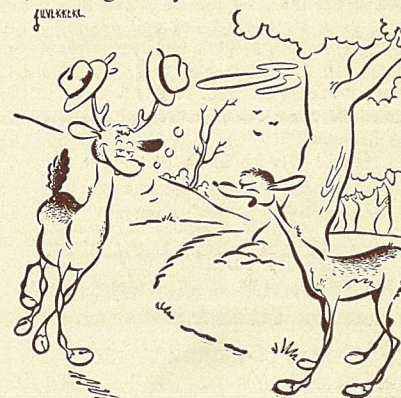
An official of a local gas and electric
company was making a stirring address
at a Chamber of Commerce meeting.

"Think of the good this company has
done", he said, "If I were permitted a
pun, I should say, "Honor the Light
Brigade".

And from the audience came the
reply, "Oh! What a charge they made".

Plumber, coming after the usual
interminable long wait, "Well, how is
the leak?"

"Not so bad", said the young house
owner, "While we were waiting for
you, I taught my wife how to swim".



"Well where have you been?"

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