



KRAISSL QUARTERLY

Published By

THE KRAISSL COMPANY

INCORPORATED

PUMPS-SEPARATORS-ENGINEERING EQUIPMENT

HACKENSACK, NEW JERSEY



Volume 6

APRIL 1963

Number 2

LET US RENOVATE TEACHING

FREDERICK KRAISSL, Jr., P.E.

President

THE KRAISSL COMPANY, INC.

Many years ago when I was doing post graduate work, the remark was made that I was not interested in anything to which the dollar sign was not attached.



Consulting Engineer
Kraissl Associates

This was a misconception and misunderstanding upon the part of my brother researchers and is cited because it points up what in my opinion, is still a major deficiency in the scientific high level thinking in our colleges and universities.

It is my opinion that most of our advanced scientists whether engineers, chemists or physicists are not well grounded in fundamental business economics or the basic facts of economic life. They do not realize that the circulation of credits and currency through the economic body of our industrial structure has much in common with the circulation of blood through our physical bodies. Stop the circulation of either and both will die.

We run to heart specialists to have "E.K.G.s" or blood pressure tests. It is likewise important to constantly have an eye and ear on the tell-tales of business. This could be done for the purely selfish reason of knowing that technical jobs are dependent on business conditions, or it could be for the patriotic reason that we know that our economy is the basis of our industrial greatness and our ability to defend our way of life.

Our teachings should all be from this type of rostrum and supported by historical examples and experiences from the lives of the teachers. Our "brain washers" have seen to it that least emphasis is placed on history and if our teachers are young, they have not acquired experience.

Industry can play a role in this picture particularly in the technical field. Technical institutions are constantly

appealing to foundations and industrial organizations with altruistic budgets to support academic expansion. Usually the ones that pay the bills should have something to say about how an enterprise is operated.

Younger men are most useful for their leg work and assumed indefatigable energy. Older men who have turned in a satisfactory performance record are most valuable for their judgment based on experience. Older men in good physical shape of this type are the ones who should be teaching our younger men. They would be indoctrinated with workable ideas that have been proven and tested, possibly as late as yesterday, not based on unproven theory.

What we really need are teachers who can tie together scientific thinking with a practical approach for accomplishment under circumstances where a profit can be realized. The source of such teachers can be more readily found in technical industries than among teachers who have only had an academic background. Now add this to a forced or mandatory retirement program where many men and women at their peak of performance are forced to look for new jobs and let us ask ourselves if we are not overlooking a good source of teachers.

Furthermore, I submit from actual experience that there are many points in common between the best types of salesmanship and teaching. I contend, based on the period when I was teaching in a War Department school during World War II, that teaching is nothing more or less than selling an intangible with the possible advantage of having a captive audience if you can overcome any resentment arising from this fact.

Those who have been successful in selling ideas to their superiors or Boards of Directors that have been convinced to back such proposals with hard cash, should be equally successful in selling sound ideas to young scientific neophytes. Instead of letting good men approach with apprehension, the age of retirement, if they could look forward to teaching a next generation how to meet current problems with proven techniques and procedures,

would this not be a preferable outlook for many who are competent?

All that would be necessary is a program where subsidized institutions would be expected to have a place for certain individuals who have indicated an interest and competence to handle such assignments on reaching mandatory retirement ages. This could be scheduled through the office of the Personnel Director and in many cases retirement from industry would be viewed as an opportunity to convey to others the lessons that had been learned; a glorious future until overtaken by incapacity instead of sitting around listening to one's arteries harden.

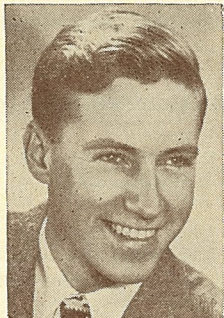
It is my opinion that country, industry, academic institutions and many individuals would benefit from tapping this source of teachers, without in any way limiting the future of young men who make this their profession from the start. Most military men will agree that one seasoned man in eight of a military squad will have a marked stabilizing effect on the entire unit and more rapidly bring it up to peak efficiency than an entire organization of inexperienced men. A similar effect could be expected from the presence of professors from industry in faculty councils when plans are made.

This might also partially answer the contention that there is a shortage of teachers. What reason is there for overlooking this procedure except that men of this background would probably not be susceptible to "crack pot" ideas and would tend to frustrate plans of those whose objective is to bury us according to their own admission? Let us not forget that our institutions of learning produce our thinkers and leaders of the future. There can be no more important secular assignment than training our future leaders. Our opponents and enemies of our way of life know this. Why should we not assume that attempts will be made to teach disorganizing doctrines, supported by half truths and the big lie? Why should not industry fulfill its obligation to the country that has made it great by seeing to it that some of the nonsense that is taught is counteracted by cold hard logic supported by tested facts?

PERSONALS

Robert C. Michel Rejoins our Staff

Most of our friends and customers know that Bob Michel has been a member of our staff for many years and even during the last two years

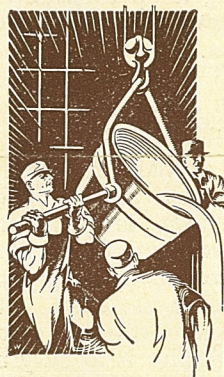


Robert C. Michel, P.E.
Executive Vice President
Sales Manager
Metropolitan District.

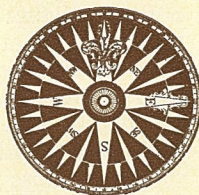
when he was connected with another organization still gave us the benefit of his background experience as one of the Directors of this Corporation as well as his association through Kraissl Associates.

After the impact of the sudden passing of Lee Mills had to be accepted, Bob felt that he would like to undertake the challenge of this responsibility and was unanimously elected Executive Vice President with the functional assignment of Sales Manager of the Home Office territory.

We know Bob's many friends will be glad to know that he is back, looking after their interests and with our expanded production facilities and increased lines of distributed products, our young sales team operating under his guidance should be able to give the type of service and customer coverage so important in this era of quick decisions.



INDUSTRIAL AND MARINE FIELDS



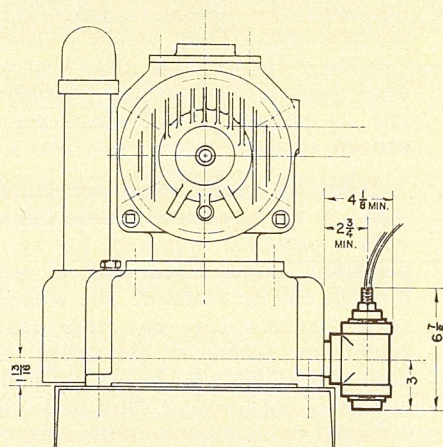
OUR FIRST CUSTOMER STILL USES CLASS 25 SERIES PUMPS ON SEWAGE EJECTORS

In an issue of Kraissl Quarterly published in 1959 we included a letter from The Black-Burn Smith Corporation advising that two Kraissl Class 25 Series Compressors installed with their ejectors in 1936 were still functioning satisfactorily. We were recently informed that they are still going strong, a truly enviable record.

We invite all architects and engineers specifying sewage ejector equipment to write for our publication No. A-1966 entitled "Air Pumps for Sewage Ejectors". In this we suggest reasons for the longevity of our compressors when properly sized, selected and installed.

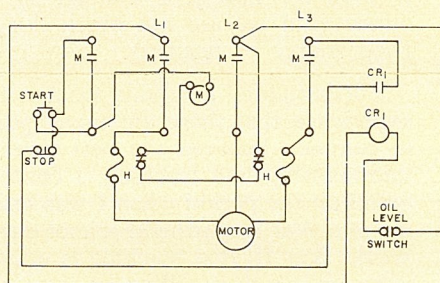
In this connection, in an endeavor to reduce to a minimum, problems relating to running out of oil, we have made provision for a low oil cut off not too different in function from a low water cut off which is regarded as a safety feature on many steam boilers. This is included in our current price list of assemblies for this purpose and is available in sizes from the 25-9 to 25-19 inclusive. The following drawings show mounting dimensions and wiring diagrams for both manual and automatic operation.

LOW OIL LEVEL SHUT-OFF FOR CLASS 25 AIR PUMPS



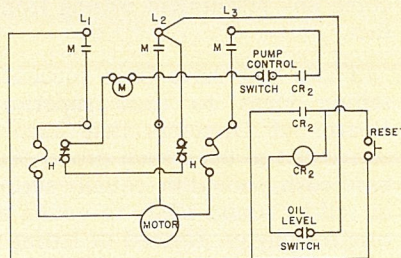
MOUNTING DIMENSIONS

Fig. 1



MANUAL OPERATION

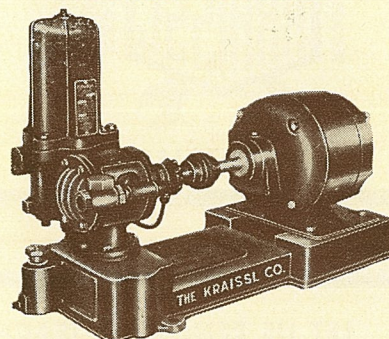
Fig. 2



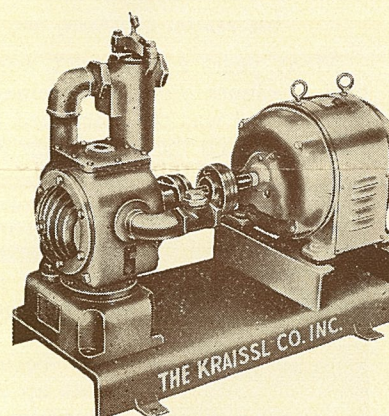
AUTOMATIC OPERATION

Fig. 3

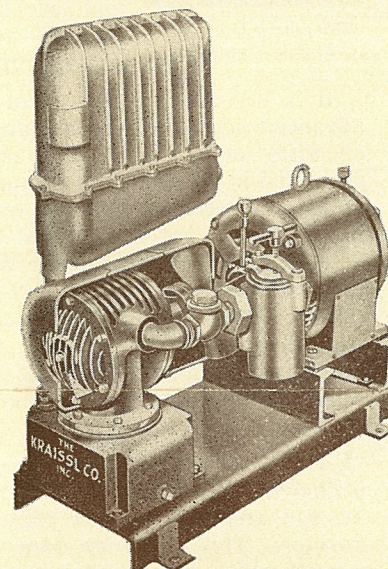
CONVECTION COOLED



WATER COOLED



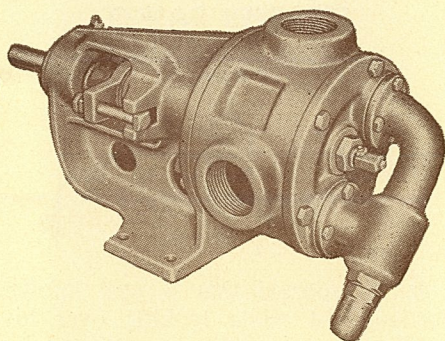
FAN COOLED



KRAISSL-DEMING CLASS 62 SERIES TRANSFER PUMPS AVAILABLE IN DIFFERENT ASSEMBLIES

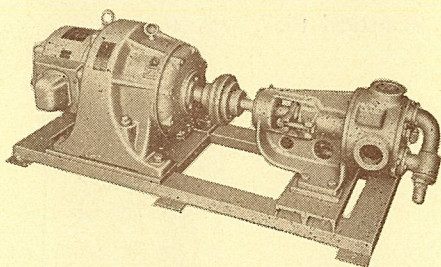
Our Kraissl-Deming Class 62 Series Transfer Pumps with built in relief valves are available in several assemblies. The first photograph illustrates the basic unit with integrated ball-bearing shaft support which makes it suitable for mounting on tank trucks directly to power take off.

TANK TRUCK ASSEMBLY



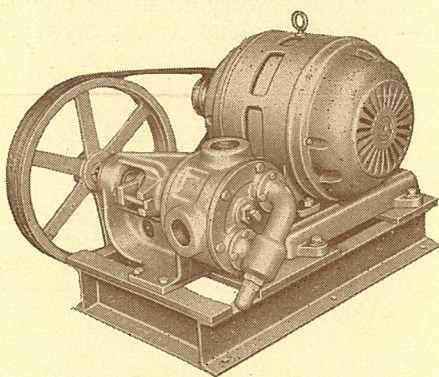
The second photograph shows the unit direct connected to motor for bulk station transfer service handling light oils of a viscosity suitable for pumping at direct motor speeds.

DIRECT CONNECTED ASSEMBLY



The last photograph shows the unit complete with V Belt Reduction Drive for bulk station and transfer service handling oils of greater viscosity where slow speed pumps are mandatory to avoid cavitation. This produces a well rounded line of transfer pumps that will meet a large range of requirements.

REDUCTION DRIVE ASSEMBLY



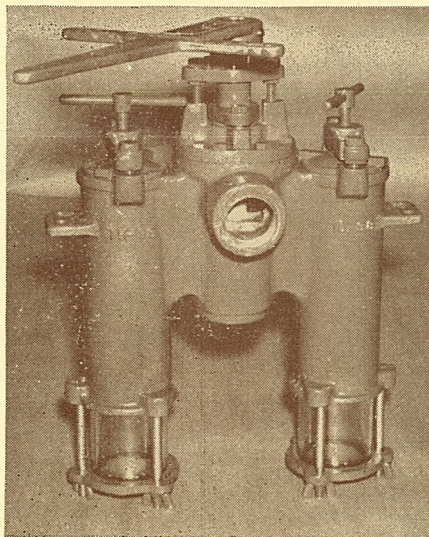
KRAISSL CLASS 75 SERIES DUPLEX FUEL FILTERS

It is said that nothing succeeds like success so when we were contacted by one of our customers to ask whether we would make our new Class 75 series design available as a duplex filter we immediately got busy.

It so happened that the 1½" size

was required so this size has been added to our line of specials. Somewhere there are ships sailing around with these fuel filters separating extraneous matter from the fuel supply which use our baffle principle to pass this through a rat trap hole with the visible trap to determine when cleaning is necessary.

The same type of simple battery syringe procedure for taking water and extraneous matter from the visible sump that was standardized for our Class 72-72 series can be applied to these filters so that explosive fumes in the bilge can be minimized.



PLUG VALVES ARE BEST FOR MARINE DUPLEX STRAINERS

Plug valves have always been considered probably the most tightly fitted valve that can be produced. This is due to the fact that the taper shape lends itself to a ground or lapped fit when required and since the tapered plug mates with a tapered seat take up for wear is easily provided.

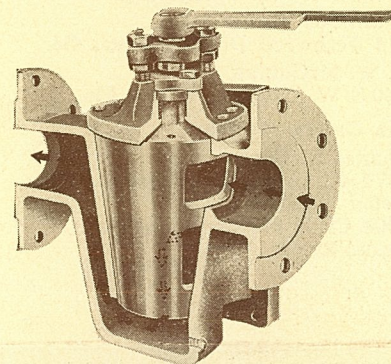
The important design feature which must be insisted upon is that the valve be a true plug valve and not just look like a plug valve. According to our definition, the surface of a true plug valve must be continuous between port openings which should not be greater than the channels with which they communicate. This provides a bearing surface permitting the plug to rotate in contact with this seating surface with some similarity of a shaft rotating within a journal bearing.

Our plug valves are designed with a sufficiently wide taper to minimize any wedging action under normal operating conditions precluding the necessity of lifting jacks for most operations. This can be proven by the fact that for fuel oil service, the Underwriters' Labora-

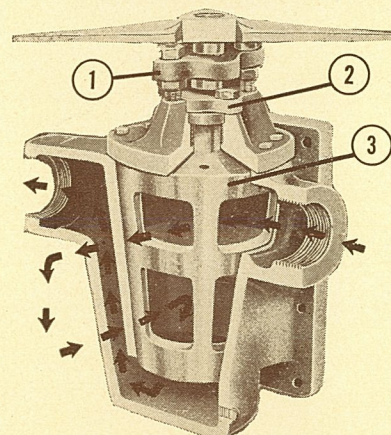
tories have listed our duplex strainers without lifting jacks and this listing has been retained over a long period of time with materials of construction of cast iron, steel, bronze and stainless steel.

This is very important as the lifting of the plug from its seat can introduce extraneous matter between these elements. Most engineers and designers know that true plug valves without reference to any connection with duplex strainers have been used with complete success without lifting jacks and it is only when there is departure from the true plug valve design that the bearing effect between plug and seat is lost and other means for dealing with the problems experienced must be found. Of course, where the metals of construction do not supply a bearing effect with the fluids being handled, a different situation obtains, but this is usually limited to combinations of stainless steel which is notorious for its galling and scoring action. This is where the lifting jack can be employed to advantage, but lifting jacks are not suggested for most marine services with usual metals employed.

But be careful to specify strainers with true plug valves such as we employ in our designs.



FLANGED VALVE
in one position



SCREWED VALVE
in second position

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

John S. Stone
P. O. Box 247, Holcomb, N. Y.
Williams Bros., Inc., 70 Commercial St.,
Portland 3, Me.

Eastern Region

Valley Equipment Company
4105 Northern Pike, Monroeville, Pa.
J. W. Pearson Co., Box 282
Hatboro, Penn.
Shanklin Company
330 East 25th St., Baltimore, Md.

Southeast Region

Power Equipment Co.
1307 West Main St., Richmond, Va.
Dillon Supply Company—Main Office
Raleigh, N. C.
Dillon Supply Company
Durham, No. Carolina
Dillon Supply Company
Rocky Mt., No. Carolina
Dillon Supply Company
Goldsboro, North Carolina
Dillon Supply Company
Charlotte, No. Carolina
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
540 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

W. G. Taylor Co.
1900 Euclid Bldg., Cleveland, Ohio
The Jordan Engineering Co.
7401 Shewango Way, Cincinnati 43, Ohio
T. A. Heidenreich Co., Inc.
5250 Keystone Ct., Indianapolis 20, Ind.
Lowden & Company
3404 N. Harlem Ave., Chicago, Ill.
A. K. Howell Co.
1001 Bellevue Ave., St. Louis, Mo.

South Central Region

Creole Engineering Co.
2617 Banks Street, New Orleans, La.
Albert Sterling & Assoc., Inc.
2611 Crocker St.
Houston, Texas
I. P. Newby & Assoc.
4431 Maple Ave.
Dallas 9, Texas

Northwest Region

Bruce P. Rutherford Co.
122 First Ave., S. W., Portland, Oregon
Bruce P. Rutherford Co.
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
Thermo Tech Products Co.
1400 So. Lipan
Denver 23, Colorado

Southwest Region

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

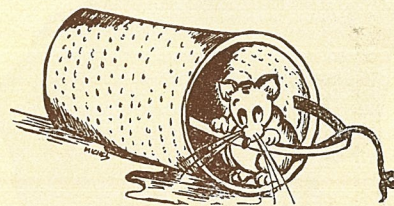
Canada—Ontario and Quebec Provinces

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

Canada—British Columbia Province

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

FOUND IN THE STRAINER BASKET



It is reported that a well known horticulturist while looking over his outdoor experiments was accosted by an officious acquaintance who said:

"Well, what are you doing today?"

"Trying to cross an egg plant with milk weed", said the horticulturist.

"And what do you expect to get from that?"

"Custard Pie", was the reply.



"Now don't worry about the operation—it's only an experiment anyway."

THE KRAISSL COMPANY

INCORPORATED

HACKENSACK, NEW JERSEY

RETURN POSTAGE GUARANTEED



YOUR
COPY
OF

**KRAISSL
QUARTERLY**

BULK RATE

U. S. POSTAGE

PAID

Permit No. 1268

Hackensack, N. J.