



KRAISSL QUARTERLY

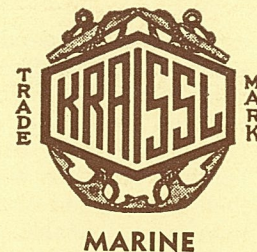
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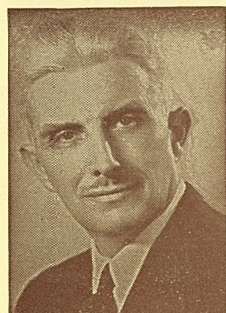
APPEASEMENT IS NOT THE ANSWER TO MOB VIOLENCE

FREDERICK KRAISSL, JR., P. E.

President

THE KRAISSL COMPANY, INC.

The observation that worries many of us with concern for the future of this country is that individuals and even responsible groups do not appear



Consulting Engineer
Kraissl Associates

to be willing to learn by the mistakes of the past.

Appeasers are usually well intentioned with the obvious and commendable desire to avoid conflict where this is possible. However,

well wishing must be submerged under the facts of

realism when there can be no compromise between right and wrong. We hear of group areas where dissimilar opinions, motives and objectives cause conflicts. If we believe in law and order, minorities or even majorities must not be permitted to gain their desires by illegal means.

Probably the greatest example of the futility of appeasement was the return of Premier Chamberlain from conferences with Hitler with the optimistic report that the concessions made would avoid "war in our time." The tragic sequence has been too well documented to require repetition.

Undisciplined peoples are incapable of self-government. Discipline starts in the home. The child that is taught that he can get his way by resorting to tantrums grows up as an undisciplined brat and from there probably a juvenile delinquent unless subjected to discipline from subsequent training which he did not get at home. We always find guidance in the scriptures. "Train up a child in the way he should go; and when he is old he will not depart from it" and in the words of Pope, "Just as the twig is bent, the tree's inclined." Self discipline is the highest form of discipline and when practiced becomes a virtue. It covers the complete range of deportment from weight control to behavior control.

Many people mistake liberty for license to do as they please. There can be no moral justification for violence in defiance of law and order to accomplish any objectives and still *preserve the type of government enabled by such laws.*

All groups living together must have laws or codes of deportment which have the same function—to avoid anarchy. A very good Navaho friend of mine told me that if a warrior of a tribe contested tribal rulings, he was permitted to stand up and state his case. If he found ten or more braves to stand with him, a new tribe was formed and the dissenters permitted to leave in peace. If he could not find this support, a spear was thrown through his chest and a traitor eliminated.

This is more rugged treatment than we could accept, but it worked. We want and have the right to be heard. In the words of Voltaire, "I disapprove of what you say, but I will defend to the death your right to say it." If an idea cannot be sold, it is just possible that the proponents could be wrong. Violent minorities must not be taught that they can gain their objectives by causing so much trouble that they can count on appeasement to obtain them.

MINING FOR TRUTH

The search for the knowledge and wisdom that will provide the solution to a specific problem is somewhat like prospecting for a precious gem mineral.



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

An analogy may help us in our approach to the solution of practical problems.

Some veins of precious mineral may be found as outcroppings on the surface of the earth. Early man first took advantage of these accessible resources and we still are able to find open pit mining in some areas. However, as the vein outcropping is exhausted, it becomes necessary to dig deeper into the earth to continue to reach the vein and exploit it. Eco-

nomics enters into the consideration because usually more effort and cost is associated with increasing depth of excavation. Risk is also involved because there is no absolute assurance that a profitable result can be achieved with greater depths of excavation or that the vein exists at greater depth, even after tests with scientific instruments.

Wisdom and truth are very much like a vein of matrix with its interspersed jewels partially or completely hidden in the "ground of knowledge." The solution of some simple problems can be found easily near the surface of the "ground of knowledge" but the vast majority of more complex problems require much deeper probing.

When test borings are made, it is essential that their patterns overlap so as to leave no area unsearched. Frequently, we think we have answers to problems when we really do not because our search was not extensive or deep enough. It would be very seldom and then only by mere chance that we could find our "gem of truth" with one boring directly into the "ground of knowledge" and the specific "vein of wisdom" that contained our gem.

As time progresses, the search for truth becomes more laborious and costly because the "gems" near the surface have already been found. It is, therefore, increasingly important that we develop more clearly defined and systematic approaches to problems as they become more profound and require "gems of truth" lying deeper in the depths of obscurity.

We must also weigh the cost of the search for a given truth with its potential value when obtained, just as the prosperous miner does.

In our prospecting let us define the truth we are looking for, appraise its potential value to us, estimate its location in the "ground of knowledge", and establish techniques for recovery consistent with all of these considerations.

How then do we approach the solution to these more complex problems? We can follow several procedures. Most frequently we do not know at what depth a particular "gem of truth" that we are seeking may be found. Therefore, "test borings" are useful in

establishing the depth and breadth of the "vein of wisdom" most likely to contain our "gem of truth." Usually we must bore more deeply and widely than we think necessary, obtain a handful of matrix with its gems, and then sort out and discard what is other than most desirable.

Just as in mining, the search for truth may reveal other than what we first set out to find because the "vein of wisdom" may contain other gems and treasures heretofore un contemplated. Furthermore, we are seldom seeking one particular "gem of truth" but any one of several of suitable quality. Most problems have more than one answer and therefore any one of several "gems of truth" will probably be satisfactory.

OUR SILENT REPRESENTATIVE

This is the tenth year of Kraissl Quarterly and our forty-first 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.

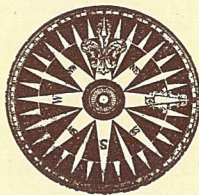
EDITORIALS

Our editors are the senior officers of this company and our policy permits each of us to express thoughts which we believe can be contributions to the voice of public opinion in business. It must be emphasized that the thoughts expressed are those of the author and not necessarily endorsed by the rest of the Board of Directors of this company. Kraissl Associates, acting in the capacity of consultants, handle the technical aspects of our public relations program.

We want this publication to be available when you are able to invite us to exchange current ideas, information and technical data without intrusion.

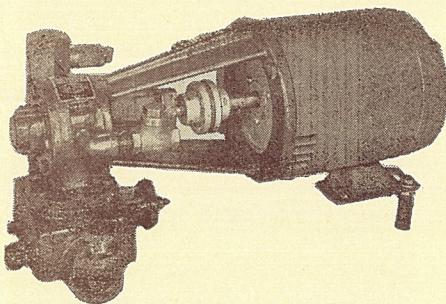


INDUSTRIAL AND MARINE FIELD



NEW DEVELOPMENTS IN CLASS 25 SERIES AIR PUMPS

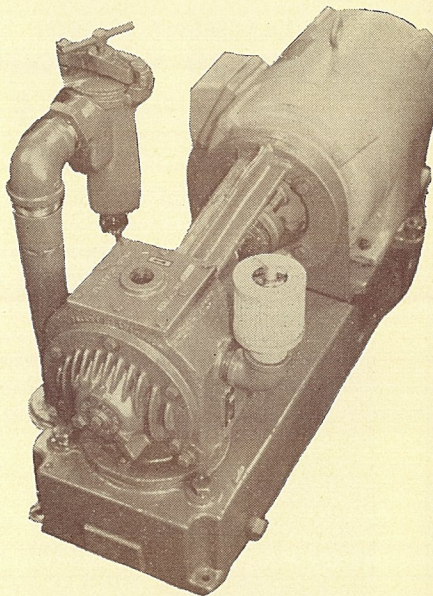
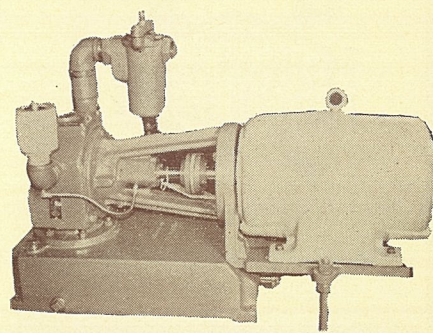
U.S. Patents D-199,101, 2,890,763
and 3,149,575



Previous news items have indicated that we have standardized our line of low capacity Class 25 series AMD units for compactness that have permitted their use as an integral part of continuous duty applications due to our patented system of force feed lubrication and sealing. These units are described in our circular A-2091 available on request.

We have also advised that we have designed these AMD units of large capacity for use under continuous service where unusually difficult service conditions require larger oil capacity. These applications can be summarized by the statement that under severe service conditions more lubricating oil is consumed similar to what would be expected with an automobile running at high speed as compared with ordinary operating conditions. Normally this should present no problem as long as maintenance personnel are available to renew the oil in the oil reservoir when required. However, applications developed where maintenance personnel were not available over weekends or similar intervals so oil reservoir capacities were developed to meet these conditions.

The AMD units make use of flange mounted motors eliminating the added weight and cost of base plates. There have been times where due to delivery problems, motor manufacturers could not make desired deliveries of flange type motors and to meet this need we have developed adapter plates permit-

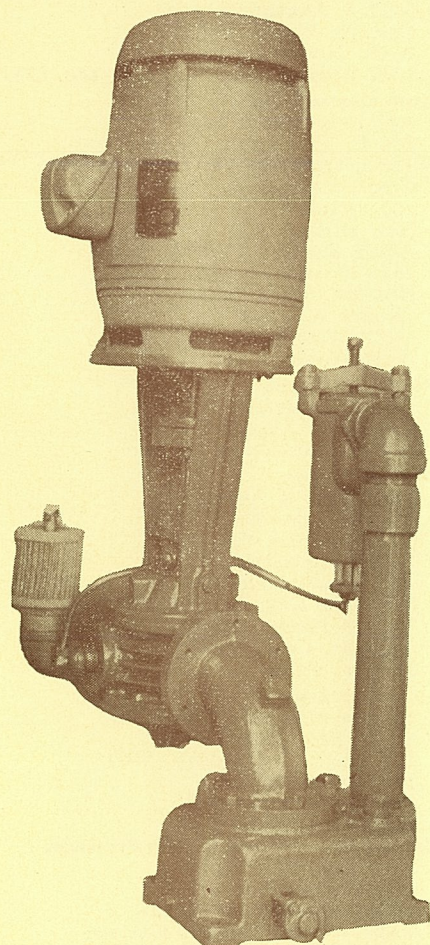


ting the use of our AMD units with standard motors as illustrated.

The ejector field is constantly looking for more compact units to accomplish ejector pumping. This is a means for transferring liquids that are very difficult to handle for many reasons. Such materials vary from extremely corrosive chemicals to nauseating liquids such as sewage. The use of our compressors to transfer such liquids as an integral part of an automatic and continuous operation is not new but has been well tested over many years which we know from our compressor units in the field. When properly sized and selected our force feed lubricated compressors offer many advantages. The servicing of a clean accessible air compressor comprises a much more acceptable assignment than the servicing of a liquid pump submerged in sewage. However, space is more and more becoming a premium item.

The Power Equipment Company of Richmond, Virginia have under development an ejector system where space is saved by installing our compressor in a vertical position as indicated in the accompanying illustration. Our patented force feed oiling and sealing system again becomes even more important. The pressure applied to the projected area of the buried end of the pump shaft somewhat compensates for the weights of the rotor

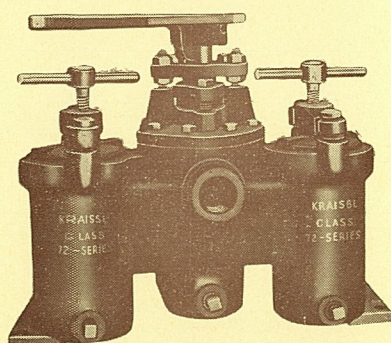
against the face plate and the force feed pressure of the oil minimizes the possibility of the absence of lubricating film between all adjacent parts.



Vertical operation is not limited to ejection applications. It can be considered wherever vertical space is less costly to allocate than horizontal or floor space. Large capacity oil reservoirs are not limited to continuous duty industrial oil burners.

We make these comments to stimulate the imagination of design engineers to determine whether any of these developments fit in with problems they would like to solve and to encourage them to ask our help with others.

KRAISSL FILTERS



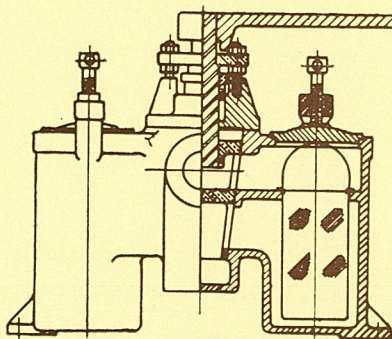
After many years of continuous engineering and business activities we believe that Kraissl Separators are well known as devices where a permeable

barrier is placed between an inlet and outlet source in a suitable housing for the separation of fluids or particulate matter in fluids. Liquids of differing viscosities such as water in fuel or finely dispersed liquids in gas or particulate matter in either liquids or gases may be separated by suitable combinations.

The housings containing and positioning these barrier separator elements may be the same and most frequently do permit the use of interchangeable elements greatly increasing the versatility and adaptability of these assemblies for a wide variety of applications. However, for the purpose of simplified nomenclature, when the barrier is a strainer element, the complete device is termed a strainer and when the barrier is a filter element the complete separator is sold as a filter. Strainer elements are limited under this system of nomenclature to applications where perforated metal construction alone meets the requirements. Filter elements frequently make use of perforated metal to support a finer mesh metallic or other membrane that is needed to meet application requirements that cannot be accommodated by the smallest size perforation of perforated metal available.

We are limiting this article to separators with filter elements which are termed filters and will indicate the types of construction available and some examples as a guide line for appropriate selections. It should be stressed that a single filter has an application where a process is intermittent and can be shut down for filter element cleaning or servicing or where the filter cannot be serviced to advantage while the process is in progress. Under such circumstances a duplex unit should be used so the flow can be diverted by the transfer valve from the side in use to the standby unit.

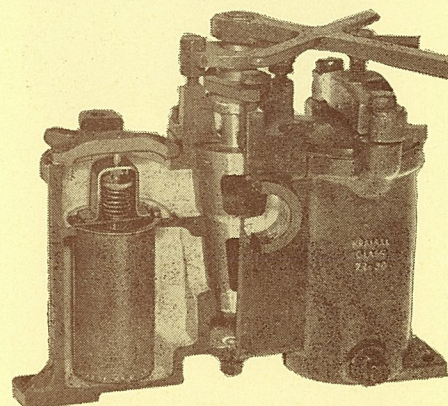
INTERNAL FLOW



Probably the most familiar filter assembly is the one providing what we term internal flow. The construction is such that the filter element is designed for the maximum pressure drop differential that can be anticipated. Normally this may not be more than a few pounds, depending on the entrained material and the viscosity of

the fluid to be separated or clarified. The preference for internal flow may be directed by the desire to remove in the cleanable elements the material separated. The protection of the filter elements against over pressure build up can be accomplished in two ways and here is where economics enters. A relief valve can be supplied on the inlet side that will open when the pressure drop caused by impurity build up, exceeds the accepted design pressure. Or, if economics are not too important, a design pressure for the element can be set with an adequate factor of safety.

EXTERIOR FLOW



The next approach makes use of exterior flow, which accepts impurities on the outside of the barrier element. The elements in this type of flow are positioned on their seats by hold down mechanisms with adjustable spring tension, permitting temporary overloads to be relieved, minimizing the chance of element collapse because of exceeding design pressures by sudden surges or quick cloggage before the flow can be transferred in duplex units or single elements cleaned. In these units steam lines can be connected for cleaning purposes and the debris flushed to drain.

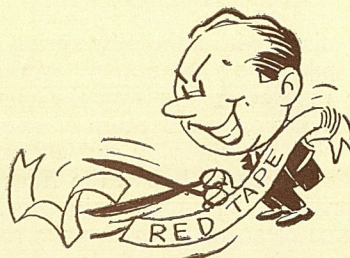
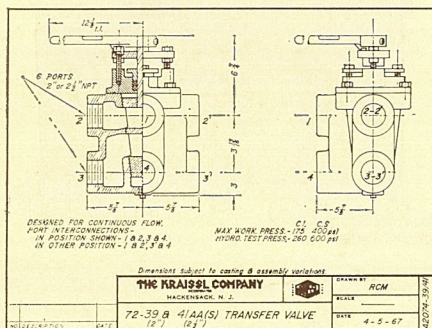
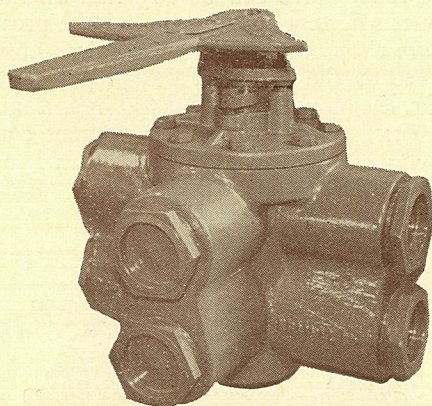
Both internal and exterior flow duplex units can be supplied with automatic transfer valves that will divert flow to the clean standby unit with signals to a control panel that transfer has happened, calling for cleaning the unit now out of service.

Lastly, the development of our self-cleaning units under patents recently granted to Kraissl Associates is proceeding rapidly. These units are being tested in our hydraulic laboratory and by actual test on working processes that will probably be more intensive than those experienced in the field.

All Kraissl Separators of internal flow, external flow and self-cleaning models are manufactured under patents granting such a wide range of choices with a variety of applications that most applications can be accommodated within the flow range in pipe sizes that are offered.

TWO INCH SCREWED PORT TRANSFER VALVE

Our Kraissl 72-37AA size 1½" transfer valves have proven so popular that we have made available the 72-39AA screwed port size. Please write us for prices if you need this item, in the material of construction desired.



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OF

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SALES REPRESENTATION

HOME OFFICE

We have reserved the areas of Connecticut, 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

Filtration Unlimited
373 Hertel Avenue
Buffalo, New York 14207
Williams Bros., Inc., 70 Commercial St.,
Portland, Me. 04181

Eastern Region

Boston-Cooper Corp.
95 Holland Street
Somerville, Mass. 02143
Valley Equipment Company
404 Frick Bldg.,
Pittsburgh, Pa. 15219
J. W. Pearson Co., Box 282
Hatboro, Penn. 19040
Jobe & Co., Inc., 2857 Greenmount Ave.
Baltimore, Md. 21218

Southeast Region

Power Equipment Co.
1307 West Main St.
Richmond, Va. 23201
Dillon Supply Company—Main Office
Raleigh, N. C. 27602
Dillon Supply Company
Durham, No. Carolina 27702
Dillon Supply Company
Rocky Mt., No. Carolina 27801
Dillon Supply Company
Goldsboro, No. Carolina 27530
Dillon Supply Company
Charlotte, No. Carolina 28201
Boiler Supply Company, Inc.
490 Craighead Street
Nashville, Tenn. 37204
1628 Island Home Avenue
Knoxville, Tenn. 37920
Applied Engineering Co., Inc.
P.O. Box 506, Orangeburg, S. C. 29115
Spotswood Parker & Co.
313 Techwood Drive, Atlanta, Ga. 30313
Florida Filters, Inc.
5570 N.E. 4th Ave., Miami, Fla. 33137

North Central Region

Charles R. Davis
2970 W. Grand Boulevard
Detroit, Mich. 48202
Hetler Equipment Co.
P.O. Box 1904
Grand Rapids, Mich. 49501

Central Region

W. G. Taylor Co.
1900 Euclid Building
Cleveland, Ohio 44115

The Jordan Engineering Co.
7401 Shewango Way
Cincinnati, Ohio 45243
T. A. Heidenreich Co., Inc.
2525 E. 54th Street
Indianapolis, Ind. 46220
Tobra Engineering Co.
6422 S. Marshfield Ave.
Chicago, Illinois 60636
A. K. Howell Co.
1001 Bellevue Ave., St. Louis, Mo. 63117

South Central Region

Ace Engrg. Sales Inc.
246 E. 15th Street
Tulsa, Okla. 74119
Creole Engineering Co.
2627 Banks Street
New Orleans, La. 70119
Albert Sterling & Assoc., Inc.
2611 Crocker St.
Houston, Texas 77006
Walter A. Lamb Co.
3228 West 6th Street
Fort Worth, Texas 76107

Northwest Region

Baxter-Rutherford, Inc.
1932 First Avenue S.
Seattle, Washington 98134

Western Region

Jay Besore & Associates
380 Bayshore Blvd.
San Francisco, Cal. 94124
Power Engineering Co.
1806 South State Street
Salt Lake City, Utah 84115
Vernon Hines
1400 So. Lipan Street
Denver, Colorado 80209

Southwest Region

Wagner Hydraulic Equip. Co.
10814 Santa Monica Blvd.
Los Angeles, California 90025
Engineered Sales Co.
4146 E. Washington St.
Phoenix, Arizona 85002

Canada—Ontario and Quebec Provinces

Kirk Equipment Ltd.
375 Victoria Ave.
Montreal, Quebec, Canada

Canada—British Columbia Province

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

Hawaii

Foster Equipment Co.
719 Ahua St.
Honolulu, Hawaii 96803

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