

KRAISSL QUARTERLY

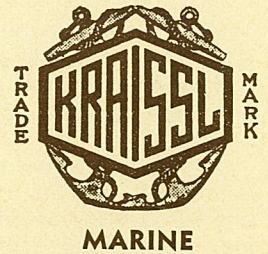
Published By

THE KRAISSL COMPANY

INCORPORATED

PUMPS-SEPARATORS-ENGINEERING EQUIPMENT

HACKENSACK, NEW JERSEY



Volume 12

JANUARY 1969

Number 1

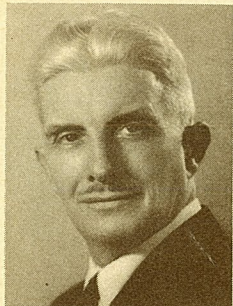
IS TEACHING A PROFESSION OR A TRADE?

FREDERICK KRAISSL, JR., P. E.

President

THE KRAISSL COMPANY, INC.

As a professional in the field of engineering it seems important to first examine the basic principles and motivations of professionalism as an



Kraissl Associates
Consulting Engineer

integral part of a free society. It is important to establish guide lines that are voluntarily accepted by the majority and probably the overwhelming plurality of those who constitute the classified segment under con-

sideration. As a beginning it seems essential to agree on a basic definition of what constitutes a Profession as contrasted with a Trade.

Here is an area for an interesting discussion in semantics but let us take what appears to be definitions that apply to the principles generally accepted. We can say that profession is the act of avowing, as profession of faith; that a profession is a vocation that requires learning and that a professional is one that engages in a learned vocation. We can also say that a professor is one who makes an avowal such as faith and a teacher of highest grade.

Now let us contrast this with an acceptable definition for Trade. Can we get together on the definition that Trade is the buying and selling for gain? If so we can carry this further as defining a special craft or those engaged in it.

Where does this bring us in getting our concepts clarified? Well, the definition of a profession does not emphasize the carrying on of its functions with gain as the primary objective and I think from here on we can rely on our appraisal of current acceptance of what we expect in a profession when this word is used to designate a learned vocation.

It would seem that a profession must be dedicated to the service of humanity.

Since it is a learned vocation it should attract practitioners who are anxious to help and upgrade the populace which implies ministration, teaching and inspirational leadership. I think we can carry this even to the point where we would expect a true professional to place the interests of the people and his country ahead of his own personal interests.

If we accept some of these basic tenets we come out with one essential conclusion. Professionals do not and will not strike to achieve their personal or collective ends. To strike means putting personal ends ahead of the interests of the public. It is my belief that grouping together with the threat or intent to strike is a weapon of bargaining and immediately places those so engaged in the category of trading and such a vocation then becomes a trade.

It should be clear that it is always possible to de-classify any profession by placing individual interests above public interests. It should also be clear that it is possible to segmatize learned vocations into the professional group which places public interests higher than personal interests and the trade segment that places personal interests ahead of the public interest.

The following comment would be categorized as corny by materialists but the professional has much the same motivation as the patriot who sets aside personal interests and puts on a uniform to defend his country. You see it in the doctor who gets out of bed in the middle of the night to attend a patient who cannot afford to pay the usual fee for such services, the minister who takes time to call on the sick and troubled at a remuneration much less than he could command in other fields, the lawyer who accepts an assignment as a Public Defender in the knowledge that there are many who would be erroneously convicted because of inadequate defense due to incapacity to pay usual legal fees.

To carry out the philosophy of a teacher of professional caliber being a teacher of the highest grade, we should expect and demand that our Boards of Education place character highest on the qualification list as being of even greater importance than a high academic rating. People of high character do not abrogate contracts. When

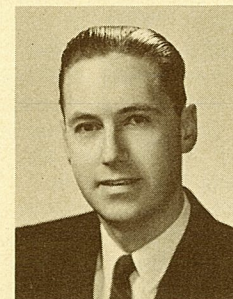
they agree to do something they do it for the term of the agreement and do not sit down, slow down or even tone down their enthusiasm in doing one of the most essential assignments one could have.

People of high character know that what they do is more important than what they say. This is known as setting a good example. It is important with adults and such a lack is now known as a "credibility gap" when discussing leadership in high places. However, with minors a good example is essential. With lawlessness, misbehavior and poor family life in many cases, a minor with decent motivation needs the firm anchorage of a dedicated teacher for whom he or she can have admiration, respect and sufficient loyalty to follow inspired guidance. Many currently successful adults have admitted that they owe much to their teachers. Must we not select for them teachers who by word and example make it clear that the dollar sign is **not** the standard for human values but that high character and integrity are the goals to be achieved?

Let us ask ourselves what is more important than the proper education and training of our young people? They constitute the hope and promise for the future. Can we place them under the guidance of less than professionals?

EDUCATION OUTSIDE SCHOOL

In my new position as president of a public school board of education, I have been faced with the thought of evaluating our educational procedure



ROBERT C. MICHEL
Executive Vice President

from a standpoint of cost and effectiveness. The question arises, to what extent should the public school system be charged with the responsibility of a child's education? Although we are all dedicated in principle to the concept of availability of a public education for all children, there are many areas of education that I believe can be more effectively handled outside of school.

Unfortunately, too many parents send their children to public school with the idea that the child's total education is the responsibility of the teaching staff.

The formal school room, as I see it, is probably still the most effective setting for developing the skills of reading, writing and arithmetic requiring repetitive practice and factual conveyance from teacher to pupil. But how about the development of creativity on the one hand and self-discipline on the other?

Should not the parents, religious organizations and community service organizations also be looked to for assuming an increasingly important role in child development? Parents and the community as a whole can not only reduce the cost of education by this route, but can also insure a more well rounded future citizen.

During the late summer months, after the vacation period has just about run its course, children have time on their hands and some outlet must be found for their energies. If these energies are not directed toward creative use, windows are broken and other acts of vandalism occur. We lost over a thousand dollars on broken school windows on one school this past summer in our town.

Parents and community organizations can provide an atmosphere for children where creative development of skills can be the natural growth of free time. Children can learn for themselves through their experiences in areas of interest to them, without being formally taught. They will often emulate those for whom they have respect and who give them wanted direction.

Some of the things that parents can do is be active themselves in public service, scouting, recreational clubs and church work. Children will tend to follow into these creative fields and learn public responsibility as well as the art of team work and cooperative effort. Parents can also provide access to tools and work areas that permit children to pursue technical interests not open to them otherwise.

I have always felt that one of my most important educational experiences was that of steward in a fraternity house at college. What an education it was to have to buy food for over fifty people, supervise the help, plan the menus, and meet the budget, and still satisfy the appetites of my ravenous brothers. All of this was in addition to learning a profession.

Younger children, too, can share in household responsibilities and learn to realize that just to exist, to prepare food, to maintain the house, to solve daily problems in cooperative living is part of the learning process.

If we share the burden of the education of our children as parents and community leaders with the school

system, we will not only lower our educational costs, but improve the educational development of our children.

OUR SILENT REPRESENTATIVE

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

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.

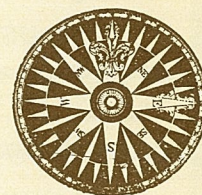
We want this publication to be available when you are able to invite us to exchange current ideas, information and technical data without intrusion.

PUBLICITY FOR CUSTOMERS PRODUCTS

We have long had a policy of showing pictures of machines, devices and installations, with short write ups where our products are used as components. This has varied from ships on which our separators have been used to pump and heater sets assembled by our customers. We are sure other customers will be glad to avail themselves of this publicity but we need time to use any material supplied.

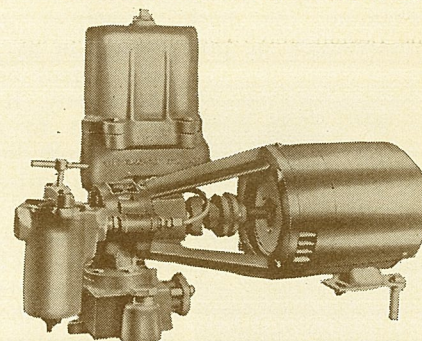


INDUSTRIAL AND MARINE FIELD



AIR-OIL SEPARATORS FOR AIR PUMPS

U.S. Patents 2,144,681—2,792,118—2,890,763—
2,982,413—3,347,386—3,348,689 and 3,415,041



WITH INTEGRAL AIR FILTER

To save a great deal of extra words, we have used the name of air pumps to cover both vacuum pumps and compressors. We know, of course, that air is a gas or rather a mixture of the two largest components of oxygen and nitrogen but we do not use the word gas pump as we believe this would introduce a possible safety hazard. Many gases are ignitable with various degrees of explosive characteristics and we wish to have potential customers raise the question of possible suitability of the use of our pumps for gases other than air so that we can point out potential hazards if they can be foreseeable.

As manufacturers, producing a standardized trade marked line under the Uniform Sales Act, we have no intention of performing the function of consulting engineers who make it their professional mission to write specifications concerning equipment to meet definite requirements. However, we attempt to also be careful in not using nomenclature that might lead the unwary into unwarranted assumptions.

It is normally impractical to so select a lubrication system for any application that will **exactly** supply adequate lubrication without under supply or over supply under any part of the lubricating cycle. It is axiomatic that lubrication in under supply will result in excessive wear of the parts needing lubrication. Since our air pumps are

designed for continuous service under very rigorous operating conditions, our patented system of force feed lubrication operates on the side of over supply sending the excess lubricating oil back to the oil reservoir for recirculation.

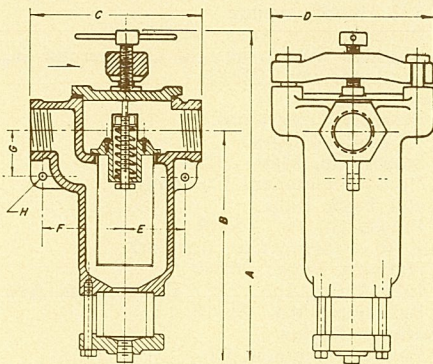
However, oil lubrication even in slight over supply will permit a certain amount of oil in the discharge air. This can be present in two forms. It can be present as mechanically entrained oil that is still in the liquid phase. It can also be present in such finely divided particles that it takes on many of the characteristics of a stabilized gas. We have experimented with this and found that when it appears as a "smoke", it can even be bubbled through water without condensing this smoke which still emerges as a smoke after its water bath. This led us to an early belief that we were dealing with a true aerosol and resulted in the design and development of our Class 26 series air filters which eliminated a sufficiently large percentage of oil in what we call the aerosol phase to condition the discharge air for most industrial applications. Class 26 air filters are supplied as a component of our F assemblies. When properly sized and selected, we have observed the discharge air emerging from these separators to be sufficiently oil free to not oil stain a sheet of paper momentarily held near it, such as might be applied in an air jet to separate sheets of paper on vacuum feed devices.

However, there are many applications where slight oil contamination of the discharge air is not too important but where under continuous service it is desirable to salvage all possible mechanically entrained oil. For this purpose our modified Class 75 series design separator has been developed and recent patents granted covering development work that was initiated some time ago by Kraissl Associates. This system uses one or more of our Class 75 series separators with special inserts that separate the majority of the mechanically entrained oil permitting it to drip into a visible sump through a rat trap hole. It is then passed through a fine filter screen which conditions the oil for re-use if there are no incompatible contaminants. These units are now supplied as a component of S assemblies.

As in all other aspects of life we must pay for what we get. To obtain the higher degree of oil elimination in our Class 26 series separators the second stage employs coalescing cartridge units on the approximate basis of one for every 20 cubic feet per minute of free air on pumps above 10 cfm. These cartridges work best when fully oil saturated but they will also filter out fine dust or similar particles in the discharge air. This can develop into a leather like surface

layer which resists the passage of air. These filter cartridges need occasional servicing either by cutting off this surface layer or putting in new filter packs if they have been too deeply infiltrated by dirt.

CLASS 75 SINGLE SEPARATORS

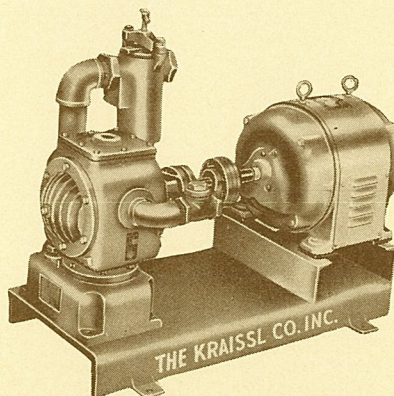


All dimensions subject to casting & assembly variations.

MODEL	NPT	BASKET DIA. LGH.	A	B	C	D	E	F	G	H
75-01	1/4									
75-1	3/8	1 1/8	3	9 3/8	6 1/8	4	3 1/2	1 1/2	2	7/8
75-3	1/2									
75-5	3/4	1 1/2	3 1/8	12 3/8	8 3/8	5 1/8	5	2 3/8	2 1/8	1 1/2
75-7	1									
75-9	1 1/4	1 1/8	6 3/8	14 1/8	10 3/8	7	5	2 1/4	3	1 7/8
75-11	1 1/2									

The Class 75 M series separators while not producing the same quality oil vapor removal, require practically no servicing. Possibly the only item to look for is to determine whether the oil is returning as indicated in the visible sump. If this is full of oil, it is not returning and possibly some dirt has clogged the filter screen. It is a simple matter to remove the sump and clean the screen.

We believe that most of our engineering contemporaries will agree with our thinking that lubrication should be on the slight over supply side with provision made for the removal of undesirable oil either as liquid or in the vapor phase when this is desirable or economically important.

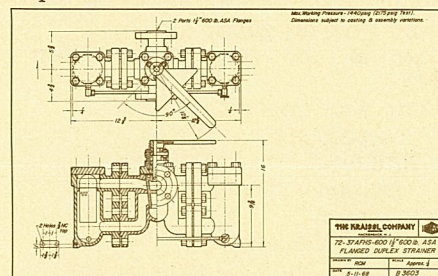


CLASS 25 WATER JACKETED AIR PUMPS
WITH CLASS 75 M SERIES SEPARATOR
AND RETURN OIL SYSTEM

CLASS 72 VERY HIGH PRESSURE DUPLEX SEPARATOR

Strange as it may seem the requirements for a very high pressure separator have so far been limited to the 1 1/2" size. It is furnished with 600 pound ASA flanges which reconcile with 1440 psig working pressure and 2175 psig test pressure.

The material of construction is limited to cast steel for this pressure range and is illustrated in the accompanying drawing which is an excerpt from our print B-3603 which can be furnished in the desired numbers on request.



CLASS 72 TRANSFER VALVES HAVE MANY APPLICATIONS

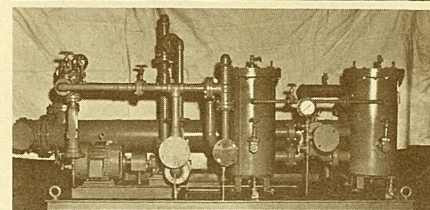
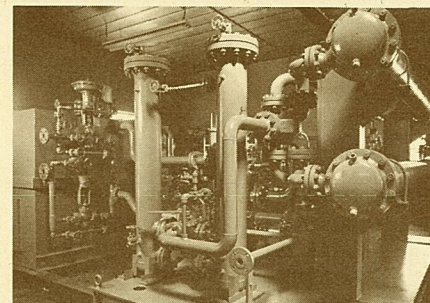
The need for this type of transfer valve is present when it is desired to divert the flow from one processing or conditioning unit to another of similar purpose so that the initial unit may be serviced, repaired or inspected without interference with the continuity of the operation.

Two such installations are shown in the following photographs and were engineered by Automatic Filter Systems, Inc. Division of Ember Products, Inc. Both are consoles designed for force feed lubrication of large capacity compressors.

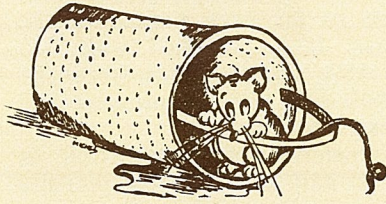
The first is designed to supply a lubricating capacity of 75 GPM at 25 psig to 24 GPM at 300 psig.

The second is designed for 80 GPM at 30 psig.

The consoles include auxiliary pumps, tanks, filters, coolers and of course, Kraissl transfer valves.



FOUND IN THE STRAINER BASKET



The chairman of the investigating committee tapped the block on the rostrum with his gavel.

"Are all the news camera men here?"

"Yes, your honor."

"All reporters?"

"Certainly."

"Television cameras?"

"Of course."

"Radio and Sound?"

"Yes"

"Then let the investigation proceed."



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

Mexico

Ingenieria Termo Industrial SA

Puebla 326-2

Mexico 7, D.F. Mexico

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